



Oil & Energy



PL318 Well 35/2-1R - Re-entry and Testing Peon

Final Well Report - Re-entry and Testing

March 2007

Partners:



REPORT

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Final Well Report 35/2-1R, Peon - Re-entry and testing

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Section C

Key words:

The prime objective of the operation was to re-enter and clean out the existing 35/1-1 well and perform a Drill Stem Test of the hydrocarbon bearings in the Peon reservoir. The plan was to permanently plug and abandoned the well after the drill stem test was completed.

Upon re-entering the well it was discovered that some gas bubbles were leaking up to the surface around the 30" conductor. The DVD recordings from the ROV showed that the gas flow was very low. Based on the short distance from the reservoir and the poor cement bonding detected behind the casings, decision was made to halt the operation and not go ahead to perform the planned Drill Stem Test operation. Decision was made to Plug and abandon the well leaving the wellhead in place.

Key words:

35/2-1 Peon, Re-entry, Test, , DST, Permanent plug and Abandonment, P&A

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1 General data

1.1 Re-entry and testing objectives

The prime objective of the operation was to re-enter and clean out the existing 35/1-1 well and perform a Drill Stem Test of the hydrocarbon bearings in the Peon reservoir. The plan was to permanently plug and abandoned the well after the drill stem test was completed.

1.2 Re-definition of well objective

Upon re-entering the well it was discovered that some gas bubbles were leaking up to the surface around the conductor. The DVD recordings from the ROV showed that the gas flow was very low. Based on the short distance from the reservoir and the poor cement bonding detected behind the casings, decision was made to halt the operation and not perform the planned Drill Stem Test operation.

An HAZOP was initiated to identify and evaluate risks involved to carry out a Plug and Abandonment operation. The operation was re-scheduled and re-planned based on current status of the well. The main objective was to re-establish the barriers of the well and Plug & Abandon the well permanently. However, decision was made to leave the wellhead intact to have the option to re-enter the well if needed at a later stage. A part of the P&A program included an inspection program with a ROV vessel to monitor the wellhead area systematic over time.

A Peon task force was initiated September 2006 to come up with a well design solution. This work is followed up in a phase 2 feasibility study project to pass DG2 in 1 September. 2007. The preliminary plan for a appraisal well is scheduled to Q2 or Q3 in 2008.

1.3 HSE expectations

Main focus: Good planning of all activities, both during design and operation.

Taking into account the change in well objective the project was from a HSE point of view satisfactory carried out both during design and operation.

HSE meetings were arranged on weekly basis internally on rig and with rig/land organisation. Weekly safety inspections were performed on board the rig.

HSE Goals and results:

Implementing of Best Practise “Trygt Boredekk”:

Best practise implemented for the following areas;

- Barriers and Sealing off areas
- Radio communication,
- Colour coding of pipe handling equipment.

Focus on verification and follow up of working environment for service companies:

Verifications were started after the completion of the Peon project.

Zero unplanned Emissions to the environment:

0 unplanned emissions were reported during the project

Zero Serious incidents:

2 serious (red) accidents were reported during the project (Ref. Reports below).

Synergi no.: 638833: Engine breakdown. RED RUH 1063/06

Engine breakdown on DG#3. Counter-weight on crankshaft loosened. Date and time of incident: 17.06.06 kl.0225. Running hours: 135889. (Details in Norwegian below).

Forløp:

Man merket vibrasjoner i riggen. Teknisk assistent kontrollerer maskinrom og ser hva som har skjedd. Kontrollrom ber boredekk redusere belastning. Teknisk assistent tar motor ut av tavle og stopper den. Starter deretter motor nr. 2 og legger denne inn på tavle.

Hva som har skjedd:

Balansevekt løsnet fra veivaksel på sylinder nr. 4 og balansevekt ble kastet ut på B side. Når balansevekten ble kastet ut slo den også løs stykker av motorblokk.

Mulig årsak:

Trethetsbrudd i en av 2 bolter som holder balansevekten på plass. En av boltene står knekt igjen i veiaksel. Den andre er bøyd rundt veivaksel.

Konsekvens:

Motor ute av drift i lenger tid 3 - 4 uker, minst. Vi har bare 3 motorer i drift.

Synergi no.: 641819: Gas occurrence when re-entering well 35/2 - 1 Peon.

18.06.2006: Small amounts of gas bubbles occurred from seabed, 2 metres from the wellhead area. (Details in Norwegian below).

Forløp:

Boreriggen Deepsea Trym gjorde den 13.06.2006 en reentry på denne brønn 35/2 - 1 Peon for å gjennomføre en planlagt produksjonstest. Ifm. med klargjøring av brønnen for testing så ble det den 18.06.2006 registrert at små mengder gassbobler kom opp fra havbunnen ca 2 m fra brønnhode-senter.

Den 21.06.2006 ble det så kjørt sementlogger som konkluderte med dårlig/manglende sementkvalitet bak 7" liner som penetrere reservoaret.

Tiltak utført:

Brønnen ble kontinuerlig overvåket for å avdekke eventuell økning i gassforekomst.

Hydro besluttet den 22.06.2006 å kansellere den planlagte produksjonstesten og gjøre en permanent forlating av brønnen (P&A). Videre overvåking av brønnen er fastsatt i overvåkingsprogram vedlagt i Synergisaken.

Reporting of Unscheduled Events (RUH):

The RUH reporting during the project has been satisfying, with an average of 6 RUH a day.

- Number of RUH reported: 292
- Number of Quality incidents:126
- Number of HSE incidents:166

- Number of Near misses: 166
- Number of HSE Accidents: 0
- Number of personal injuries: 0
- Number of yellow cases in Synergi: 0
- Number of Red incidents in Synergi: 2 (Synergi no.: 638833, 641819).

1.4 Location History

Exploration Well 35/2-1 Peon was drilled in July/August 2005. The field is located to the north/west of the Agat discovery and the target of the well was the Quaternary Pleistocene Naust sandstones. A gas discovery was proven in the PL 318 licence and a 7" liner was set at 711m. Decision was made in August 2005 to temporarily abandon the well and re-enter the well during the summer 2006 to perform a Drill Stem Test. For more details regarding the drilling operation in 2005, please refer to the drilling program and the final well report for the 35/2-1 Peon drilling operation. For the 35/2-1R Re-entry and testing operations in 2006, separate Re-entry and Testing programs were prepared.

1.5 Re-entry and testing summary

The planning of the re-entry and production test was carried from November 2005 to the start in June 2006. A Re-entry and Preliminary Plug and Abandonment program and Drill Stem Testing program was prepared.

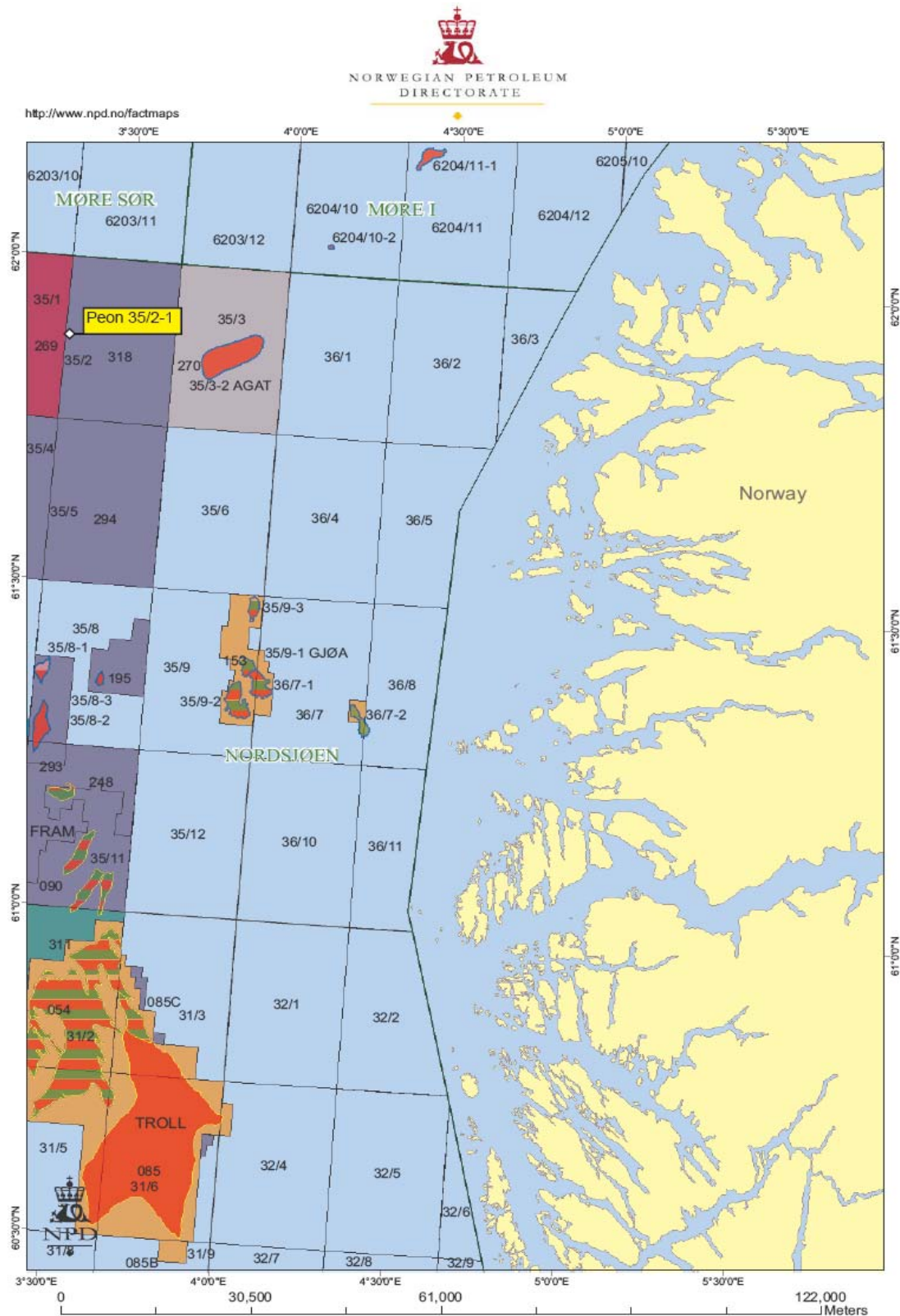
The re-entry program was to pull the retrievable Peak VMB packer and drill out the cement to +/- 670m. Run casing scrapers to clean out remaining cement prior to mill a 4 m window in the 7" liner. Perform a final cleanout run and run the test string prior to perform the drill stem test.

During the operation gas bubbles were observed outside the 30" conductor. The first observations showed small bubbles, but after the BOP was installed the gas flow slightly increased and moved coming up between guidepost 3&4. After this observation decision was made to stop the planned operations to evaluate and re-establish the barriers. Prior to commence the operation a HAZOP was conducted. Decision was made to cut the 7" casing at 561m to get 1.15 mud in the annulus behind the 7" liner. Once 1.15 sg mud was pumped circulation was first lost but the gas bubbles eventually stopped flowing. Based on this it was concluded that the gas most likely came from the reservoir. Decision was made to permanently plug and abandon well but keeping the wellhead intact to be able to re-enter it if the leak over time came back.

A temporary plug and abandonment program with the 18 5/8" wellhead intact was carried out. The 7" liner inside 9 5/8" liner was removed. The 7" liner was section milled down to 579m. An ICP packer was set as a foundation prior to set a barite plug and a cement plug in open hole and up in 9 5/8" liner. The cement inside 9 5/8" liner was dressed off below 9 5/8" shoe.

9 5/8" liner hanger was cut and retrieved with the PBR prior to cut 9 5/8" liner at 549m. Pulled the liner hanger out of the hole without having any drag. When pulling out the remaining of the 7" liner the liner had to be jarred heavily but managed finally to pull the liner free.

1.6 Area Location Map



1.7 Drilling operational time

Time Estimate Deepsea Trym 35/2-1 Peon Re-entry & Testing									
Main Activity	Sub Activity	Estimate Hrs	Actual Hrs	A/E Hrs	Start A/E 07-jun-06	18:30	Finished	Status	Days
					Day	Date	Time		
Arrive on Location	Rig in transit	14,0	10,5	15,0	to	08-jun-06	05:00	-0,2	
A/E: 59,1 hrs	Anchoring / Pre-tensioning	26,0	23,0	27,0	fr	09-jun-06	09:00	-0,1	
2 timer overfret BOP and riser	Retrieve Net guard - Deploy ROV basket Remove Corrosion C	4,3	4,0	5,3	fr	09-jun-06	13:00	-0,2	
pgn. black out test.	ROV check W/H for debris	0,5	0,5	0,6	fr	09-jun-06	13:30	-0,2	
	Move Rig to Safe Zone	0,5	0,5	0,6	fr	09-jun-06	14:00	-0,2	
	Run permanent guide base.	6,9	9,0	8,6	fr	09-jun-06	23:00	-0,2	
					fr	09-jun-06	23:00		
					fr	09-jun-06	23:00		
					fr	09-jun-06	23:00		
	Total for Arrive on location	52,2	52,5	57,1	fr	09-jun-06	23:00	-0,2	
Run BOP's and riser	X-23 Maintenance BOP	10,0	10,0	10,0	lo	10-jun-06	09:00	-0,2	
	Black out test	2,0	0,5	1,0	lo	10-jun-06	09:30	-0,3	
	X-23 Maintenance BOP	10,0	11,0	10,0	lo	10-jun-06	21:00	-0,2	
	Make up bottom hole assemblies for drilling out cement	5,5	5,5	0,0	se	11-jun-06	02:30	0,0	
	X-23 Planned maintenance, Service active heave compensator	3,5	3,5	0,0	se	11-jun-06	06:00	0,2	
	X-23 Maintenance BOP, Noded	14,0	14,0	0,0	se	11-jun-06	20:00	0,8	
	Prep to run riser. Made up 2 joint of riser.	4,0	4,0	0,0	ma	12-jun-06	00:00	0,9	
	X-23 Maintenance BOP, Noded	18,0	18,0	0,0	ma	12-jun-06	18:00	1,7	
A/E : 38,5	Run BOP on Marine Riser	19,0	26,0	24,0	ti	13-jun-06	20:00	1,8	
2 timer overfret frs arrival o	Move Rig onto location	0,5	0,5	0,6	ti	13-jun-06	20:30	1,8	
Ny A/E : 40,5	Land BOP	2,0	2,5	2,2	ti	13-jun-06	23:00	1,8	
	Pressure test wellhead connector to 135 bar.	1,0	0,5	2,2	ti	13-jun-06	23:30	1,7	
BOP maint. 20 hrs	Waited on the weather to unbolt the inner outer barrel	0,0	4,0	0,0	on	14-jun-06	03:30	1,9	
Extra A/E X-23 20 hrs	Install Divertor	1,0	3,0	2,2	on	14-jun-06	06:30	1,9	
	L/D Riser Handling Equipment	2,0	1,0	2,3	on	14-jun-06	07:30	1,9	
	RIH and set 13 3/8 extended wear bushing Func. Test BOP	6,0	5,5	6,0	on	14-jun-06	13:00	1,8	
	Run in w/BOP test tool. PR. test connector to 250 bar.	4,0	4,5	0,0	on	14-jun-06	17:30	2,0	
	Total for Run BOP's	102,5	114,5	60,5	on	14-jun-06	17:30	2,0	
Re-enter & Pull Packer	Make up packer RT	1,0	0,5	1,3	on	14-jun-06	18:00	2,0	
A/E : 11,3	Function test diverter system and flush through	3,0	1,0	0,0	on	14-jun-06	19:00	2,0	
	RIH with RT to top plug at 425 m	3,0	2,0	3,8	on	14-jun-06	21:00	2,0	
	Displace riser to mud	2,0	2,0	1,0	on	14-jun-06	23:00	2,0	
	Unable to release the PEAK plug.	10,0	6,0	0,0	to	15-jun-06	05:00	2,2	
	Rotated string and pulled the plug into 20" ext. Joint with OP	1,0	2,0	1,3	to	15-jun-06	07:00	2,3	
	POOH and release and L/D plug & RT	4,0	5,0	4,0	to	15-jun-06	12:00	2,3	
	Total for Re-enter & Pull Packer	24,0	18,5	11,3	ma	15-jun-06	12:00	2,3	
Cement Clean-out runs	M/U 13 3/8" x 20" clean-out BHA	3,0	3,0	3,8	to	15-jun-06	15:00	2,3	
A/E : 38,5	RIH to 419 m	3,0	2,0	3,8	to	15-jun-06	17:00	2,2	
	Wash down to tag TOC @ 429 m drilled cement to 430 m.	1,0	1,5	1,0	to	15-jun-06	18:30	2,2	
	Flow checked and perf. Pfr drill	0,0	3,0	0,0	to	15-jun-06	21:30	2,4	
	Drilled cement from 429 m to 437 m 5,6 m/hr.	4,5	5,0	5,7	fr	16-jun-06	02:30	2,3	
	Perform SCR new mud (kill and mud pump)	3,0	2,0	0,0	fr	16-jun-06	04:30	2,4	
	Drill cut from 436-475 m Tag top 9 5/8 PBR @ 486 m	3,5	2,5	4,0	fr	16-jun-06	07:00	2,3	
	Circulate hole clean	2,0	1,0	2,5	fr	16-jun-06	08:00	2,3	
	Pool to 103 m	2,5	3,5	3,0	fr	16-jun-06	11:30	2,3	
	Repaired the upper racking arm.	0,0	0,5	0,0	fr	16-jun-06	12:00	2,3	
	L/D-Rack BHA	1,5	2,0	1,8	fr	16-jun-06	14:00	2,3	
	M/U 8 1/2" bit to clean out 9 5/8" liner	2,0	2,5	2,4	fr	16-jun-06	16:30	2,3	
	RIH to 475 m	1,5	1,5	1,8	fr	16-jun-06	18:00	2,3	
	Wash down to 495 m and performed choke drill and SCR.	0,5	1,5	0,6	fr	16-jun-06	19:30	2,4	
	Wash/ Drill possible cut fr. 495 m & tag 7" PBR @ 505 m	1,0	1,0	1,2	fr	16-jun-06	20:30	2,4	
	Circulate hole clean	2,0	0,5	2,4	fr	16-jun-06	21:00	2,3	
	Circulated through the manual and auto choke.	0,0	2,5	0,0	fr	16-jun-06	22:30	2,3	
	Lubricate to above the BOP and POOH L/D-Rack BHA	4,0	2,0	4,4	lo	17-jun-06	00:30	2,2	
	Total for cement clean-out runs 13 3/8" and 9 5/8"	35,0	36,5	38,5	lo	17-jun-06	00:30	2,2	
Casing scraper and PBR m	M/U WF 9 5/8" PBR ass. and 13 3/8" casing scraper	1,0	1,5	1,2	lo	17-jun-06	02:00	2,2	
A/E : 15,7	RIH on 5" DP to 450 m	1,5	1,0	1,5	lo	17-jun-06	03:00	2,2	
	Scrape 13 3/8" csg (9 5/8" TB packer area) & dress 9 5/8" PBR	1,0	2,0	1,2	lo	17-jun-06	05:00	2,3	
	Circulate. POOH.	1,5	3,0	2,0	lo	17-jun-06	08:00	2,3	
	Inst. 3 m pup joint above stab. Re-run the scraper and PBR mill	10,0	11,0	0,0	lo	17-jun-06	19:00	2,8	

Main Activity	Sub Activity	Estimate	Actual	AFE	Start AFE	17-jun-06	18-jun-06	Status
	MU WF 9 5/8" scraper ass. X 7" PBR mill & 6" bit	1,0	0,0	1,1	10	17-jun-06	20:00	2,7
	RIH on 5" DP to 486 m	1,5	1,5	1,5	10	17-jun-06	21:30	2,7
	Scrape 9 5/8" liner to 505 m and dress 7" PBR	1,0	0,0	1,2	10	17-jun-06	22:00	2,7
	Circulate hole clean SCR with the BJ pump.	2,0	1,5	2,0	10	17-jun-06	23:30	2,7
	Lubricate to above the BOP and POOH L D-Rack BHA	4,0	2,0	4,0	10	18-jun-06	01:30	2,6
	Total for casing scraper and PBR mill	24,5	24,0	15,7	10	18-jun-06	01:30	2,6
Run 9 5/8" tie-back AFE : 42,1	Installed the casing tong.	1,0	1,0	1,0	10	18-jun-06	02:30	2,6
	Pull bore protector	5,0	4,5	5,5	10	18-jun-06	07:00	2,5
	Run washnool and clean wellhead area	5,0	4,0	0,0	10	18-jun-06	11:30	2,7
	Rigged up to run casing	1,0	1,0	2,5	10	18-jun-06	12:30	2,7
	PU and make up make shoe	2,0	2,0	2,5	10	18-jun-06	13:30	2,6
	Run 9 5/8" tie back and 9 5/8" casing hanger. Pressure test.	6,0	7,0	13,0	10	18-jun-06	20:30	2,4
	Unable to pressure test the Seal stem. Pooh.	3,0	3,5	0,0	ma	19-jun-06	00:00	2,5
	Run mill and flush tool	7,0	7,0	0,0	ma	19-jun-06	07:00	2,8
	Set 9 5/8" seal assy with lock ring. Test to 220 bar.	7,0	9,0	12,5	ma	19-jun-06	16:00	2,7
	Run 9 5/8" wear bushing.	5,0	4,5	5,5	ma	19-jun-06	20:30	2,6
	Planned maintenance. Service anti collision system	1,0	1,0	0,0	ma	19-jun-06	21:30	2,7
	Total to Run 9 5/8" tie-back	43,0	44,0	42,1	ma	19-jun-06	21:30	2,7
Clean out 7" Liner AFE : 21,1	MU 7" Liner clean-out BHA with 6" bit	1,0	1,0	1,0	ma	19-jun-06	22:30	2,7
	RIH to 475 m	1,5	2,5	1,9	ti	20-jun-06	01:00	2,7
	Wash down to 505 m.	0,5	2,0	0,6	ti	20-jun-06	02:00	2,7
	Drill cut from 505 to ~528 m (distance for bridge plug between	2,0	2,0	3,0	ti	20-jun-06	04:00	2,7
	Failure of BHI gas detector data acquisition	0,5	0,5	0,0	ti	20-jun-06	04:30	2,7
	Drill cut from 528 to ~ 640 m (distance for bridge plug between	6,0	6,0	7,0	ti	20-jun-06	10:30	2,6
	Circulate hole clean. POOH to 9 5/8" and pump hi vis	2,0	4,0	2,5	ti	20-jun-06	14:30	2,7
	Lubricate to above the BOP and POOH L D-Rack BHA	4,0	3,5	5,0	ti	20-jun-06	18:00	2,6
	6" Mill cracked. Changed to 6" Bit	0,5	0,5	0,0	ti	20-jun-06	18:30	2,7
	Run SPS 7" scraper ass. with 6" bit to 519 m for 6" clean out	3,0	3,0	0,0	ti	20-jun-06	21:30	2,8
	300 litres gain on trip tank. Observe well circulate bottoms up.	5,5	5,5	0,0	on	21-jun-06	03:00	3,0
	Run SPS 7" scraper ass. with 6" bit to TD for 6" clean out run	6,0	7,0	0,0	on	21-jun-06	10:00	3,3
	Total for cement clean-out runs	32,5	36,5	21,1	on	21-jun-06	10:00	3,3
Cased hole CBL AFE : 32	RU USIT/CBL	3,2	2,0	4,0	on	21-jun-06	12:00	3,2
	Run USIT/CBL inside 7" liner. logged inside 9 5/8" to seabed	2,0	10,0	2,5	on	21-jun-06	22:00	3,5
	Charged centralizer and run USIT/CBL inside 9 5/8" liner	2,0	6,0	2,5	to	22-jun-06	04:00	3,7
	Run cup tester for 9 5/8" casing to 7" PBR. Test annulus to 80	6,5	8,5	0,0	to	22-jun-06	10:30	3,9
	Run cup tester for 7" liner. String in and test 7" PBR down	8,5	8,5	0,0	to	22-jun-06	19:00	4,3
	Set 7" Bridge Plug @ 617 m	7,5	7,5	0,0	fr	23-jun-06	02:30	4,6
	CHDT cancelled	0,0	0,0	23,0	fr	23-jun-06	02:30	3,7
	Total CBL and testing casing/liner	29,7	40,5	32,0	fr	23-jun-06	02:30	3,7
Section mill 7" casing AFE : 292,5	MU 7" x 16 1/8" cutting assembly, w marine swivel and	4,0	3,5	5,2	fr	23-jun-06	06:00	3,6
	RIH and land in swivel in well head	3,0	3,0	3,9	fr	23-jun-06	09:00	3,5
	Prepare for cut of 7" liner, verify line-up and monitor well for	1,0	1,0	1,3	fr	23-jun-06	10:00	3,5
	Cut 7" casing at 561 m until penetration of 7" liner.	2,0	2,5	2,6	fr	23-jun-06	12:30	3,5
	Monitor well, observe gas with ROV, chase KM into annulus	4,0	4,0	5,2	fr	23-jun-06	16:30	3,5
	Complete cut of 7" casing and cut upwards approx 0,5 m.	1,0	0,0	1,3	fr	23-jun-06	17:30	3,4
	Pump 4 m3 LCM pill flow check well	3,0	2,5	3,9	fr	23-jun-06	20:00	3,4
	POOH to top of liner and pump 5 m3 LCM pill	4,0	5,0	5,2	10	24-jun-06	01:00	3,4
	POOH with 7" cutting assembly and lay out stam	4,0	4,5	5,2	10	24-jun-06	05:30	3,3
	Make up BHA with cement stinger	0,5	0,5	0,7	10	24-jun-06	06:00	3,3
	RIH with cement stinger to 495 m	3,0	2,5	3,9	10	24-jun-06	08:30	3,3
	Circulate bottoms up at 450 m and 565 m Flow check well	8,0	8,5	10,4	10	24-jun-06	17:00	3,2
	POOH with cement stinger.	3,0	2,5	3,9	10	24-jun-06	19:30	3,1
	MU 7" x 9 1/2" Section mill	2,0	1,0	2,6	10	24-jun-06	20:30	3,1
	RIH with 7" - 9 1/2" section mill to 379 m	3,0	2,0	3,9	10	24-jun-06	22:30	3,0
	Perform Planned Maintenance	2,5	2,5	3,3	10	25-jun-06	01:00	3,0
	Continue to RIH with Section Mill to 561 m. Establish	3,0	3,0	3,9	10	25-jun-06	04:00	2,9
	Wait on supply vessel to unload bulk and cargo.	3,0	3,0	0,0	10	25-jun-06	07:00	3,0
	Section mill 7" - 9 1/2" from 561 m to 564,5 m.	16,0	13,0	20,8	10	25-jun-06	20:00	2,7
	POOH w/circ. Change Cutters	6,0	6,0	7,8	ma	26-jun-06	02:00	2,6
	RIH with 7" - 9 1/2" section mill and locate casing cut	3,0	3,0	3,9	ma	26-jun-06	05:00	2,6
	Section mill 7" - 9 1/2" from 564,5 m to 566,5 m.	14,0	15,0	18,2	ma	26-jun-06	20:00	2,5
	POOH w/circ. Change Cutters	4,0	4,5	5,2	ti	27-jun-06	00:30	2,4
	RIH with 7" - 9 1/2" section mill and locate casing cut	3,0	2,5	3,9	ti	27-jun-06	03:00	2,4
	Section mill 7" - 9 1/2" from 566,5 m to 573 m.	10,0	11,5	13,0	ti	27-jun-06	14:30	2,3
	POOH	4,5	5,0	5,9	ti	27-jun-06	19:30	2,3
	Run SPS 9 5/8" well protector, jet sub and magnet inside riser	4,0	7,5	5,2	on	28-jun-06	03:00	2,4
	and clean up BOP							

Main Activity	Sub Activity	Estimate	Actual	A/E	Start A/E	Start Date	End Date	Status
	Run Bull Nose, SPS jet sub and magnet inside riser and clean up BOP. Pump high visc.	3,0	3,0	3,9	on	28-jun-06	06:00	2,3
	Monitor gain and cross circulate at BOP. POOH.	4,0	8,5	5,2	on	28-jun-06	14:30	2,5
	Run 3 1/2" stinger to 570 m and circulate bottoms up	6,0	9,0	7,8	on	28-jun-06	23:30	2,5
	POOH with 3 1/2" stinger.	3,0	5,5	3,9	to	29-jun-06	05:00	2,6
	Run SPS 9 5/8" well protector, jet sub and magnet inside riser and clean up BOP	4,0	7,0	5,2	to	29-jun-06	12:00	2,7
	Run SPS 9 5/8" well protector, jet sub and magnet inside riser and clean up BOP	4,0	3,5	5,2	to	29-jun-06	15:30	2,6
	Run SPS 9 5/8" well protector, jet sub and magnet inside riser and clean up BOP	4,0	3,5	5,2	to	29-jun-06	19:00	2,5
	Test BOP and Top Drive	12,0	13,5	15,6	fr	30-jun-06	08:30	2,4
	RIH with junk mill and magnets for 7" and 9 5/8" csg to 557	12,0	20,5	15,6	le	01-jul-06	05:00	2,6
	RIH with junk mill and magnets for 7" and 9 5/8" csg to 560	7,0	8,0	9,1	le	01-jul-06	13:00	2,6
	RIH with junk mill and magnets for 7" and 9 5/8" csg to 561	7,0	7,0	9,1	le	01-jul-06	20:00	2,5
	RIH with junk mill and magnets for 7" and 9 5/8" csg to 561	7,0	7,5	9,1	se	02-jul-06	03:30	2,4
	RIH with junk mill and magnets for 7" and 9 5/8" csg to 561	7,0	5,5	9,1	se	02-jul-06	09:00	2,3
	RIH with junk mill and magnets for 7" and 9 5/8" csg to 562	7,0	5,5	9,1	se	02-jul-06	14:30	2,1
	Planned Maintenance	2,5	2,5	3,3	se	02-jul-06	17:00	2,1
	RIH with junk mill and magnets for 7" and 9 5/8" csg to 585	8,0	10,0	10,4	ma	03-jul-06	03:00	2,1
	RIH with 7" - 9 1/2" section mill to 585 m	4,0	4,5	5,2	ma	03-jul-06	07:30	2,1
	Section mill 7" - 9 1/2" from 575 m to 577 m	2,0	2,0	2,6	ma	03-jul-06	09:30	2,0
	POOH w/circ. L/D mill assembly	6,0	4,5	7,8	ma	03-jul-06	14:00	1,9
	Total Cut and Section Mill 20 m 7" Liner	228,0	259,5	292,5	ma	03-jul-06	14:00	1,9
Run SPS clean up AFE : 58,9	Run SPS 9 5/8" well protector, jet sub and wash BOP / WH	6,0	4,0	7,8	ma	03-jul-06	18:00	1,7
	M/U SPS magnet and clean out 7" and 9 5/8"	1,0	1,0	1,3	ma	03-jul-06	19:00	1,7
	#1 - RIH to 542 m with magnets for 7" and 9 5/8" casing	7,0	6,0	9,1	ti	04-jul-06	01:00	1,6
	#2 - RIH to 577m with magnets for 7" and 9 5/8" casing	7,0	7,0	9,1	ti	04-jul-06	08:00	1,5
	#3 - RIH to 577m with magnets for 7" and 9 5/8" casing	8,0	8,0	10,4	ti	04-jul-06	16:00	1,4
	#4 - RIH to 577m with magnets for 7" and 9 5/8" casing	8,0	8,5	10,4	on	05-jul-06	00:30	1,3
	Run SPS 9 5/8" well protector, jet sub, scraper and 9 5/8" magnets inside riser and wash BOP	7,0	7,5	9,1	on	05-jul-06	08:00	1,3
	Run AGR junk basket to top of 7" PBR.	8,0	6,5	9,5	on	05-jul-06	14:30	1,1
Run SPS clean up.		46,0	44,5	58,9	on	05-jul-06	14:30	1,1
	Install inflatable plug							
	M/U Peak inflatable plug	2,5	2,5	3,3	on	05-jul-06	17:00	1,1
	RIH to 570 m - bottom of element.	2,5	2,5	3,3	on	05-jul-06	19:30	1,1
AFE : 26	Failed to set plug #1 correctly.	3,5	3,5	4,6	on	05-jul-06	23:00	1,0
	Pull out of hole with the running tool.	2,5	2,5	3,3	to	06-jul-06	01:30	1,0
	M/U Peak inflatable plug #2.	0,5	0,5	0,7	to	06-jul-06	02:00	1,0
	RIH to 570 m - bottom of element.	2,5	2,5	3,3	to	06-jul-06	04:30	1,0
	Set the plug and hyd. release the running tool. (top plug 566 m	3,5	3,5	4,6	to	06-jul-06	08:00	0,9
	Pull out of hole with running tool.	2,5	2,5	3,3	to	06-jul-06	10:30	0,9
		0,0	0,0	0,0	to	06-jul-06	10:30	0,9
	Install inflatable plug	20,0	20,0	26,0	to	06-jul-06	10:30	0,9
	Pick up and RIH with 3 1/2" DP with cut off end to set barite.	5,5	5,5	7,2	to	06-jul-06	16:00	0,8
	Pump 1,15 brine spacer. Set 400 liter 1,68 barite plug from 563.	1,5	1,5	2,0	to	06-jul-06	17:30	0,8
	Pull above the barite plug and circ bottoms up	1,0	1,0	1,3	to	06-jul-06	18:30	0,8
	RIH to 550 and set 300 liter barite plug #2	1,0	1,0	1,3	to	06-jul-06	19:30	0,8
Barite plug #1 & #2 AFE : 55,9	Pull above plug and circ bottoms up	1,0	1,0	1,3	to	06-jul-06	20:30	0,8
	POOH and rack back the stinger	2,5	2,5	3,3	to	06-jul-06	23:00	0,7
	Cut & slip	1,5	1,5	2,0	fr	07-jul-06	00:30	0,7
	Perform planned maintenance	2,5	2,5	3,3	fr	07-jul-06	03:00	0,7
	M/U and run in with 6" mill to TOC	3,5	3,5	4,6	fr	07-jul-06	06:30	0,6
	Circulate bottoms up	1,5	1,5	2,0	fr	07-jul-06	08:00	0,6
	POOH & L/D 6" BHA	4,0	4,0	5,2	fr	07-jul-06	12:00	0,6
	RIH with stinger. Set barite plug #3. Wait on barite to settle	6,0	6,0	7,8	fr	07-jul-06	18:00	0,5
	Circulate and POOH.	3,5	3,5	4,6	fr	07-jul-06	21:30	0,5
	RIH and tag barite plug. Circulate bottoms up and POOH	8,0	8,0	10,4	le	08-jul-06	05:30	0,4
	Barite plugs	43,0	43,0	55,9	le	08-jul-06	05:30	0,4
Retrieve PBR and mill slips AFE : 39	Rig up wireline for running side entry sub	3,0	3,0	3,9	le	08-jul-06	08:30	0,3
	M/U puncher assy	1,0	1,0	1,3	le	08-jul-06	09:30	0,3
	RIH and punch hole below the 7" packer	1,5	1,5	2,0	le	08-jul-06	11:00	0,3
	Circulate out gas, flow check	8,0	8,0	10,4	le	08-jul-06	19:00	0,2
	POOH & L/D punch ass. Rig down wireline	2,0	2,0	2,6	le	08-jul-06	21:00	0,2
	Make up cutter assembly with nogo	1,5	1,5	2,0	le	08-jul-06	22:30	0,1
	RIH and tag top of PBR	1,5	1,5	2,0	se	09-jul-06	00:00	0,1
	Cut hanger, between hanger and packer	1,0	1,0	1,3	se	09-jul-06	01:00	0,1
	POOH with cutter	3,0	3,0	3,9	se	09-jul-06	04:00	0,1
	Make up and RIH with spear	3,0	3,0	3,9	se	09-jul-06	07:00	0,0
	Latch into PBR.	1,0	0,5	1,3	se	09-jul-06	07:30	0,0

Main Activity	Sub Activity	Estimate	Actual	AFE	Start AFE	07-jul-06	10:30	Status
	Circ bottom up, POOH and lay down the PBR.	3,5	3,5	4,6	so	09-jul-06	11:00	0,0
			0,0		so	09-jul-06	11:00	0,0
	Punch and cut 7" hanger and retrieve PBR	30,0	29,5	39,0	so	09-jul-06	11:00	0,0
Retrieve 7" liner	M/U spear	2,0	2,0	2,6	so	09-jul-06	13:00	-0,1
AFE : 34,5	RIH to top of 7" packer	1,0	1,0	1,3	so	09-jul-06	14:00	-0,1
	Latch into 7" packer/liner	1,0	1,0	1,3	so	09-jul-06	15:00	-0,1
	POOH	3,0	3,0	3,9	so	09-jul-06	18:00	-0,1
	R/U casing handling eq.	3,5	3,5	4,6	so	09-jul-06	21:30	-0,2
	Lay down 7" liner	0,5	0,5	0,7	so	09-jul-06	22:00	-0,2
	L/D 7" csg. running eq. (prep. 9 5/8")	1,0	1,0	1,3	so	09-jul-06	23:00	-0,2
	RIH and set the wear bushing, POOH	6,0	5,0	7,8	ma	10-jul-06	04:00	-0,3
	M/U 5 1/2" clean out assembly and RIH to 495m	3,5	4,0	4,6	ma	10-jul-06	08:00	-0,3
	Wash from 495m to top Barite plug @ +/- 566 m.	2,0	2,0	2,6	ma	10-jul-06	10:00	-0,3
	Circulate hole clean	1,0	1,0	1,3	ma	10-jul-06	11:00	-0,4
	POOH and L/D BHA	2,0	2,0	2,6	ma	10-jul-06	13:00	-0,4
	Retrieve 7" liner	26,5	26,0	34,5	ma	10-jul-06	13:00	-0,4
Cement plug # 1	M/U cement stinger and RIH to 565 m	3,0	3,0	3,9	ma	10-jul-06	16:00	-0,4
AFE : 41	Set cement plug from 565 to 480 m	1,0	1,0	1,3	ma	10-jul-06	17:00	-0,4
	Pull above TOC and circulate out excess cement	1,5	1,5	2,0	ma	10-jul-06	18:30	-0,5
	POOH and L/D cement stinger	2,0	2,0	2,6	ma	10-jul-06	20:30	-0,5
	BOP test	9,0	9,0	11,7	ti	11-jul-06	05:30	-0,6
	WOC and maintenance	3,0	3,0	3,9	ti	11-jul-06	08:30	-0,6
	M/U 5 1/2" assembly to tag cement	2,0	2,0	2,6	ti	11-jul-06	10:30	-0,7
	RIH to 465 m	1,5	1,0	2,0	ti	11-jul-06	11:30	-0,7
	Wash down and tag TOC @ +/- 480 m in 9 5/8" casing	0,5	0,5	0,7	ti	11-jul-06	12:00	-0,7
	Dress cement down to 561m	4,0	4,0	5,2	ti	11-jul-06	16:00	-0,8
	Circulate hole clean	1,5	1,5	2,0	ti	11-jul-06	17:30	-0,8
	POOH	2,5	2,5	3,3	ti	11-jul-06	20:00	-0,8
		0,0	0,0	0,0	ti	11-jul-06	20:00	-0,8
	Cement plug # 1	31,5	31,0	41,0	ti	11-jul-06	20:00	-0,8
Retrieve 9 5/8" Tieback	Fail to Retrieve Wear Bushing, wash well head.	0,0	0,0	0,0	on	12-jul-06	02:00	-0,6
	Retrieve Wear Bushing.	3,0	3,0	3,9	on	12-jul-06	05:00	-0,6
AFE : 42,3	M/U 18 3/4" MPT	1,0	1,0	1,3	on	12-jul-06	06:00	-0,6
	RIH and pull 9 5/8" seal assembly/release lock ring	2,0	2,0	2,6	on	12-jul-06	08:00	-0,6
	Flowcheck, POOH and lay down seal-assy.	2,5	2,5	3,3	on	12-jul-06	10:30	-0,7
	M/U 9 5/8" csg hanger retrieval tool and spear	3,5	3,5	4,6	on	12-jul-06	14:00	-0,7
	Down time, repaire trolley	0,0	0,0	0,0	on	12-jul-06	14:30	-0,7
	RIH and engage 9 5/8" csg hanger	2,0	2,0	2,6	on	12-jul-06	16:30	-0,7
	Pull 9 5/8" tieback casing on landing string	1,5	1,5	2,0	on	12-jul-06	18:00	-0,7
	Released the casing from the spear	0,5	0,5	0,7	on	12-jul-06	18:30	-0,7
	Install casing equipment	0,5	0,5	0,7	on	12-jul-06	19:00	-0,7
	Break out csg hanger and pull 9 5/8" tie-back casing	1,0	1,0	1,3	on	12-jul-06	20:00	-0,7
	Laid down the casing handling equipment.	1,0	1,0	1,3	on	12-jul-06	21:00	-0,8
	Clean out run	6,5	6,5	8,5	to	13-jul-06	03:30	-0,8
	Run Unit/CBL	5,5	5,5	7,2	to	13-jul-06	09:00	-0,9
	POOH due too tool failure, Ran back in hole to logging point	0,0	0,0	0,0	to	13-jul-06	12:00	-0,8
	Logged , POOH and rigged down schumberger.	2,0	2,0	2,6	to	13-jul-06	14:00	-0,8
					to	13-jul-06	14:00	
					to	13-jul-06	14:00	
	Retrieve 9 5/8" Tieback	32,5	42,0	42,3	to	13-jul-06	14:00	-0,8
Retrieve PBR and mill slips	RIH with DP for the punching job.	1,0	1,0	1,3	to	13-jul-06	15:00	-0,8
AFE : 38,4	Rig up wireline for running side entry sub and M/U puncher	3,5	3,5	4,6	to	13-jul-06	18:30	-0,9
	RIH and punch hole below the 9 5/8" packer	2,0	2,0	2,6	to	13-jul-06	20:30	-0,9
	Circulate out gas, flow check	3,0	3,0	3,9	to	13-jul-06	23:30	-0,9
	POOH & L/D punch ass. Rig down wireline	2,0	2,0	2,6	fr	14-jul-06	01:30	-1,0
	RIH to below 500 m and circulate out gas.	3,0	3,0	3,9	fr	14-jul-06	04:30	-1,0
	Lubricate out of hole with DP.	1,0	1,0	1,3	fr	14-jul-06	05:30	-1,0
	Make up cutter assembly with nogo	1,0	1,0	1,3	fr	14-jul-06	06:30	-1,0
	RIH and tag top of 9 5/8" PBR	1,5	1,5	2,0	fr	14-jul-06	08:00	-1,0
	Cut hanger, between hanger and packer	1,0	1,0	1,3	fr	14-jul-06	09:00	-1,0
	POOH with cutter.	3,0	3,0	3,9	fr	14-jul-06	12:00	-1,1
	Make up and RIH with spear	3,0	0,0	3,9	fr	14-jul-06	18:00	-1,0
	Latch into PBR.	1,0	1,0	1,3	fr	14-jul-06	19:00	-1,0
	Circ, POOH and lay down the PBR.	3,5	4,5	4,6	fr	14-jul-06	23:30	-1,0
			0,0		fr	14-jul-06	23:30	-1,0
	Punch and cut 9 5/8" hanger and retrieve PBR.	29,5	33,5	38,4	fr	14-jul-06	23:30	-1,0

Main Activity	Sub Activity	Estimate	Actual	AFE	Start AFE	17-jul-06	18-jul-06	Status
Cut 9 5/8" Liner	MU spear and RIH	2,0	4,5	2,6	10	15-jul-06	04:00	-0,9
AFE : 21,5	Attempt to pull 9 5/8" liner	1,0	1,0	1,3	10	15-jul-06	05:00	-0,9
	Pull out of the hole and rack back spear asstb.	3,0	3,0	3,9	10	15-jul-06	08:00	-1,0
	M/U 9 5/8" x 16 1/8" cutting assembly, w/marine swivel and	2,0	2,5	2,6	10	15-jul-06	10:30	-1,0
	Not able to test cutters due to obstruction in cutting tool. Fixed	0,0	2,5	0,0	10	15-jul-06	12:00	-0,9
	Made up rest of BHA	1,0	1,0	1,3	10	15-jul-06	13:00	-0,9
	RIH and land in swivel in well head	1,0	2,5	1,3	10	15-jul-06	14:30	-0,9
	Prepare for cut of 9 5/8" liner, verify line-up and monitor well	1,0	1,0	1,3	10	15-jul-06	15:30	-0,9
	Cut 9 5/8" liner at 528 m until penetration of 9 5/8" liner.	0,5	0,5	0,7	10	15-jul-06	16:00	-0,9
	Circulate bottoms up to check for gas. Monitor well	2,0	2,5	2,6	10	15-jul-06	18:30	-1,0
	POOH	3,0	3,5	3,9	10	15-jul-06	22:00	-1,0
		0,0	0,0	0,0	10	15-jul-06	22:00	-1,0
	Cut 9 5/8" liner	16,5	12,5	21,5	10	15-jul-06	22:00	-1,0
Retrieve up part 9 5/8" liner	R/U casing handling eq.	0,0	0,0	0,0	10	15-jul-06	22:00	-1,0
AFE : 29,3	M/U spear	1,0	2,0	1,3	10	16-jul-06	00:00	-0,9
	RIH to top of 9 5/8" packer	1,5	1,5	2,0	10	16-jul-06	01:30	-1,0
	Latch into 9 5/8" packer/liner	0,5	0,5	0,7	10	16-jul-06	02:00	-1,0
	Attempted to work 9 5/8" casing free.	1,0	2,5	1,3	10	16-jul-06	04:30	-0,9
	Check derrick for loose items after jarring, circ	1,0	2,0	1,3	10	16-jul-06	06:30	-0,9
	POOH	3,0	2,5	3,9	10	16-jul-06	09:00	-0,9
	Change BHA and RIH	4,0	4,5	5,2	10	16-jul-06	13:30	-1,0
	Work 9 5/8" casing free	2,0	2,0	2,6	10	16-jul-06	15:30	-1,0
	POOH	4,0	3,5	5,2	10	16-jul-06	19:00	-1,1
	Check derrick for loose items after jarring, circ	2,0	2,5	2,6	10	16-jul-06	21:30	-1,1
	Lay down 9 5/8" liner and rigged down the cog equipment	2,5	6,0	3,3	ma	17-jul-06	03:30	-1,0
	Clean out run	6,5	6,0	0,0	ma	17-jul-06	09:30	-0,7
	Retrieve upper part of 9 5/8" liner	29,0	35,5	29,3	ma	17-jul-06	09:30	-0,7
Retrieve lo part 9 5/8" liner	Make up 9 5/8" spear and RIH	5,0	5,0	6,3	ma	17-jul-06	14:30	-0,8
	Start circ.latch into 9 5/8" liner, pull free.	9,0	7,5	11,7	ma	17-jul-06	22:00	-0,9
AFE : 38,4	Circ. POOH. Inspect derrick after jarring, installed casing tong	9,0	9,0	11,7	ti	18-jul-06	07:00	-1,1
	Lay down 9 5/8" liner	3,5	2,0	4,6	ti	18-jul-06	09:00	-1,2
	R/D casing handling eq.	2,0	1,0	2,6	ti	18-jul-06	10:00	-1,2
	Check derrick for loose items after jarring, circ	1,0	1,0	1,3	ti	18-jul-06	11:00	-1,2
	Retrieve lower part of 9 5/8" liner	29,5	25,5	38,4	ti	18-jul-06	11:00	-1,2
AFE : xxx	Make up underreamer and scraper assembly and RIH	6,5	6,5	0,0	ti	18-jul-06	17:30	-1,0
	Perform underreaming from 540 to 560 m	1,0	1,0	0,0	ti	18-jul-06	18:30	-0,9
	Circulate clean	1,5	2,5	0,0	ti	18-jul-06	20:00	-0,9
	Scrape 13 3/8" casing	2,5	2,5	0,0	ti	18-jul-06	22:30	-0,8
	POOH and lay down underreamer and scraper assembly.	6,5	6,5	0,0	on	19-jul-06	05:00	-0,5
	Pick up and break down the 9 5/8" spear assembly.	2,0	2,0	0,0	on	19-jul-06	07:00	-0,4
	Open hole to 14 1/2" and clean up run	20,0	10,0	0,0	on	19-jul-06	07:00	-0,4
Run USIT/CBL 13 3/8"	Rig up Wireline and run USIT/CBL in 13 3/8"	5,0	4,5	13,0	on	19-jul-06	11:30	-0,8
AFE : 13		0,0	0,0	0,0	on	19-jul-06	11:30	-0,8
		0,0	0,0	0,0	on	19-jul-06	11:30	-0,8
	Run USIT/CBL in 13 3/8"	5,0	4,5	13,0	on	19-jul-06	11:30	-0,8
Cement plug # 2	M/U cement stinger and RIH to 561 m, circ bottoms up.	4,0	5,5	5,2	on	19-jul-06	17:00	-0,8
AFE : 55,9	Set cement plug from 561 to 476 m	1,0	1,0	1,3	on	19-jul-06	18:00	-0,8
	Pull above TOC and circulate out excess cement	1,0	1,0	1,3	on	19-jul-06	19:00	-0,8
	Function test the BOP	1,0	1,0	1,3	on	19-jul-06	20:00	-0,8
	POOH with the cement stinger.	3,0	3,0	3,9	on	19-jul-06	21:00	-0,9
	WOC	17,0	17,0	28,6	to	20-jul-06	14:00	-1,4
	M/U 12 1/4" assembly to tag cement inside 13 3/8" casing	1,0	0,5	1,3	to	20-jul-06	14:30	-1,4
	RIH to 450 m	2,5	2,5	3,3	to	20-jul-06	17:00	-1,5
	Wash down and tag TOC @ +/- 461 m in 13 3/8" casing	1,5	0,5	2,0	to	20-jul-06	17:30	-1,5
	Dress cement down to 496m. Good cement to be confirmed	3,0	2,5	3,9	to	20-jul-06	20:00	-1,6
	POOH and L/D 12 1/4" BHA	3,0	2,0	3,9	to	20-jul-06	22:00	-1,7
	Cement plug # 2	38,0	34,5	55,9	to	20-jul-06	22:00	-1,7
Cement plug # 3 and P&A	Change equipment and to u 3 1/2" cement stinger	0,5	0,5	0,7	to	20-jul-06	22:30	-1,7
AFE : 164,5	Run in hole with 3 1/2" cement stinger on 5" Drillpipe	2,5	2,5	3,3	to	21-jul-06	00:00	-1,7
	Wash to id and circulate to condition mud prior to cement	1,5	1,0	2,0	to	21-jul-06	01:00	-1,8
	Set balanced cement plug 496m-418m. TOC @20"x13 3/8"	1,0	1,0	1,3	to	21-jul-06	02:00	-1,8
	POOH to TOC and circulate out excess cement (+17m)	2,0	1,0	2,6	to	21-jul-06	03:00	-1,9
	POOH with cement stinger to surface. L/D 3 1/2" DP.	4,0	4,0	5,2	to	21-jul-06	07:00	-1,9
	While waiting on cement, rig down IRA	8,0	7,5	10,4	to	21-jul-06	14:30	-2,0
	M/U jet sub and RIH to 407m - WOC tot. 18 hrs	1,5	1,5	2,0	to	21-jul-06	16:00	-2,0
	Wash BOP and well head area. WOC tot. 18 hrs	1,0	1,0	1,3	to	21-jul-06	17:00	-2,1
	Pull out of the hole with jet sub on 5" DP. WOC 18 hrs	1,0	2,0	1,3	to	21-jul-06	18:00	-2,1

Main Activity	Sub Activity	Estimate	Actual	AFE	Start AFE	Stop AFE	Status
	MU 12 1/4" assembly and tag cement with 10 ton.	2,5	2,5	3,3	dr	21-jul-06	20:30
	Displ. riser. Pull out of the hole with bit. Laid down excess DP.	2,0	5,0	2,6	lo	22-jul-06	01:30
	Prepare to pull BOP	5,0	5,0	6,5	lo	22-jul-06	06:30
	WOW. NO close standby due to fog.	6,0	4,5	0,0	lo	22-jul-06	11:00
	Pull BOP and riser	16,0	15,0	20,8	se	23-jul-06	03:00
	Disconnect LMRP. Clean out and inspect LAP	30,0	33,0	39,0	ma	24-jul-06	14:00
	RJH with retrieving tool and retrieve the permanent guide	8,0	8,0	10,4	ma	24-jul-06	20:00
	Run in the hole with the net guard.	5,0	4,5	6,5	ti	25-jul-06	00:30
	Repaired the drill string compensator	0,0	1,0	0,0	ti	25-jul-06	01:30
	Install netguard on WH and fill up with corrosion / inhibitor	2,0	2,5	2,6	ti	25-jul-06	04:00
	Laid down excess HWDP and drill pipe	2,0	2,0	0,0	ti	25-jul-06	06:00
	Perform seabed survey with ROV	0,0	0,0	0,0	ti	25-jul-06	06:00
	De-ballast rig	5,0	5,5	6,5	ti	25-jul-06	13:30
	Pull anchors	17,5	15,5	20,8	on	26-jul-06	06:00
	Transit to Troll. Release rig	12	15,5	17,6	on	26-jul-06	22:30
					on	26-jul-06	22:30
	Cement plug # 3 and P&A	136,0	144,5	164,5	on	26-jul-06	22:30
	Total time Re-entry and P&A:	1104,4	1174,0	1228,9			
	Total time Testing	0,0	0,0	0,0			
	Total time Re-entry P&A + Testing:	1104,4	1174,0	1228,9			

Planned	Actual	AFE
Days	Days	Days
46,0	48,9	52,4

Budget days	
Total	Turnout
51,2	0,0

1.8 Down time distribution

The original planned re-entry and test operation was stopped @ 23 June 2006.
Total operational time for the operation was:

Time Start operation:	08 June 2006 – 05:00	
Time Re-scheduled operation:	23 June 2006 - 12:30	20,3 days
<u>Time Finished operation:</u>	<u>26 July 2006 – 12:30</u>	<u>28,0 days</u>
Total Operation		48,3 days
<u>Down time due to well failure</u>		<u>28, 0 days/ 672 hrs</u>

Down time for Well /Contractors:

Total hours down time: 63,5 hrs.

1.9 AFE vs Actual costs

Actual costs per 17.01.2007 as reported in the Billing Only costs for the Drill Stem Test performed June - August 2006	
Cost elements	Actual
* Employee relat. costs	5 576 412,91
** Employee relat. costs	5 576 412,91
* Rig costs	44 869 078,12
** Rig costs	44 869 078,12
* Rig support costs	5 647 574,18
** Rig support costs	5 647 574,18
* Fuel/luboil	1 593 555,01
* Bits	307 580,32
* Casing/casing equipment	569 074,17
* Wellhead	967 679,39
* Cement/cement addit.	190 375,54
* Mud/mud chemicals	1 168 873,65
** Consumable costs	4 797 138,08
* Other transport	738 803,96
* Standby vessel	5 432 327,06
* Helicopter transport	771 487,52
* Supplyboat	10 370 946,52
** Transportation costs	18 409 345,11
* Drilling	2 421 321,00
* Cutting of casing	1 095 076,80
* Completion costs	7 289 615,82
* Casing operations	1 371 605,74
* Mud logging	1 233 889,92
* Cementing/press.test	1 004 598,54
* El.logging	2 951 132,36
* Prod.testing	6 805 942,02
* Rov/diving	4 253 826,08
* Misc.rental & op.costs	2 078 460,74
** Service contracts	22 585 504,38
* Rig positioning	243 076,00
** Survey costs	243 076,00
* Warehouse costs	807 078,48
** Warehouse costs	807 078,48
*** All cost elements	119 650 613,75

2 Summary of Drill Stem test preparations and operation

For details regarding the planned test operation on 35/2-1R Peon refer to the individual test program. The test was planned to be tested as a open hole completion through a 4m section milled window. Included in the Drill Stem Test preparations were all the procedures to conduct the the test operation

2.1 Odfjell planning

Prior to start the operation Odfjell Drilling was contracted by Hydro to coordinate rig specific activities related to the BOP maintenance and prepare an execution plan to have the rig ready for the Drill Stem Test. This included:

- Deck plan and load out list for the test equipment
- Pressure test lines and burner boom
- Install low flow Peon well Control Equipment
- Mobilise and install fire fighting equipment for the test operation
- Perform a rig survey

Included in the scope Odfjell Drilling conducted a **Coil Tubing study**, which described how to install a Coil Tubing unit on the rig. Coil Tubing was identified as the last a contingency in case of hydrates were plugging the well. The purpose of the work was to identify need for modifications and have the rig ready to take on board the Coil Tubing unit. The work also included close corporation with third party companies. The coil-tubing unit was scheduled to be stand-by and ready for shipment to the rig from Mongstad base.

Included in the scope was to prepare a project plan and a load out list including a deck plan with all the test equipment and CT equipment placed on a drawing on their respective places on the rig.

2.2 Gas leak observation report Well flow Dynamics

Well Flow dynamics the initial blow out simulations during the planning of the well. When the gas bubbles was observed Well Flow Dynamics was contacted to assist the operations. The flow model was updated and simulations were run to quantify the flow and identify risks. The full report of their work is attached in the appendix section of this report.

2.3 Summary report Well Flow Dynamics

By studying the video of the gas bubbles taken by the ROV, the flow rate was estimated to be 10 liters per second as a maximum at seabed conditions. This is equivalent to a rate of 0.04 MSm³/d at surface conditions

Simulations were performed to evaluate the size of a potential micro annulus that would result in the observed rate. A channel with a diameter of 0.5" in internal diameter would cause enough friction to limit the flow to 2 liters per second at seabed (these calculations were performed as an exercise to evaluate the required friction from the bottom hole to the seabed to give sufficient pressure drop. A number of different configurations is however possible with combinations of restrictions and sections with larger flow areas)

Simulation performed by WFD suggested that losses would be seen when opening the wellbore (cutting liner) with 1.15 sg mud on the inside and a possible channel with gas flow on the outside

Simulations showed that the gas flow at seabed through a 1" id channel would stop if continuous circulation of 1.15 sg mud was maintained

Simulations showed that unless a filter cake was built or pack-off between reservoir and seabed was obtained, the gas flow to the seabed could potentially restart if the micro annulus was not displaced to heavier mud

1.27 sg mud will balance the reservoir from seabed with seawater column above (on the annulus side)

1.62 sg mud will balance the hydrostatic column in the micro annulus with 1.15 sg mud in the wellbore to drill floor

The 7" liner was cut at 561 m tvd rkb, the cutting operations went well

As communication was made from the wellbore into the formation, an instant loss of 1 m³ of 1.15 sg mud was seen

During circulation of 7 m³/min with 1.15 sg mud, a loss rate of approximately 6 m³/hr was observed (85% loss rate) and the gas flow at seabed was substantially reduced

An LCM pill was pumped and the well was taken from returns through the choke line to open returns up the riser, and full returns were obtained

Gas flow at seabed stopped

P & A operations commenced including:

- mill down into reservoir
- set bridge plug above reservoir
- place barite plug above bridge plug
- retrieve 7" and 9 5/8" liners
- cement open hole and complete P & A

3 Logging table Wireline

Below is a summary of the Schlumberger cement bond logging performed on Peon.

The following cement bond logs were acquired in Peon well 35/2-1 in June/July 2006 to document the cement bonding behind the casings:

21- June-2006

7 inch, 32 lbm/ft liner : Isolation Scanner, Cement Bond Log/Variable Density log (CBL/VDL)

Data acquired from 625 metres to 507 metres

Conclusions – 7”:

The 7 inch pipe is clearly in good condition with no serious metal losses in evidence. Clear undistorted manufacturing patterns are visible on the thickness and radius images. In conditions of significant wall loss or corrosion such patterns are rendered much less clearly discernible. The thickness and radius curves can be seen to approximate the expected values.

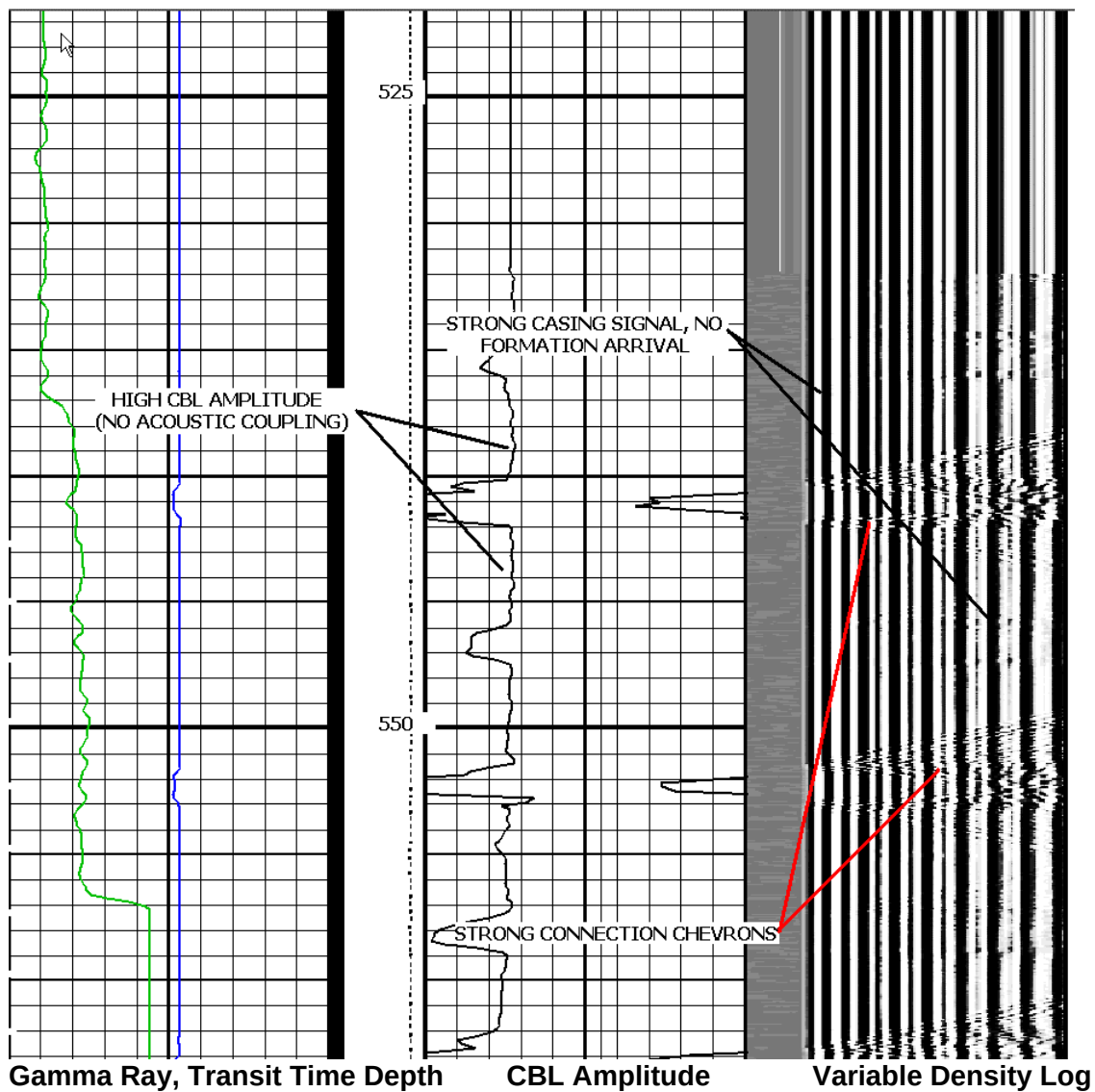
In terms of cement evaluation, all measurements indicate a lack of cement throughout virtually the entire logged interval. The CBL amplitude is consistently high and very strong casing signals are visible on the VDL. The USIT measurements also indicate virtually free pipe (see figure 2, 3). As detailed above, it is possible that the poorer signal caused by borehole debris or inner wall roughness may be overestimating the volume of debonded cement and actual cement which appears on the cement map and bond index. The black high impedance 'spots' will be interpreted by the software as cement.

The additional Isolation Scanner measurements also indicate an absence of cement with the SLG (Solids, Liquids, Gas). The Isolation Scanner indicates allular gas above 594 meters. It can be assumed with certainty that no effective cement presence is in place above this depth and that no zonal isolation exists.

The standard USIT impedance/cement measurements and the Isolation Scanner appear to indicate the presence of increased solids below 594 meters although these may in fact be inner wall roughness effects as implied by the more erratic first echo amplitude response. However, even if real, the volume of cement is still unlikely to be adequate for effective zonal isolation. This condition is validated by the high-resolution repeat section and also CBL/VDL response (noticeable lowering of the CBL amplitude).

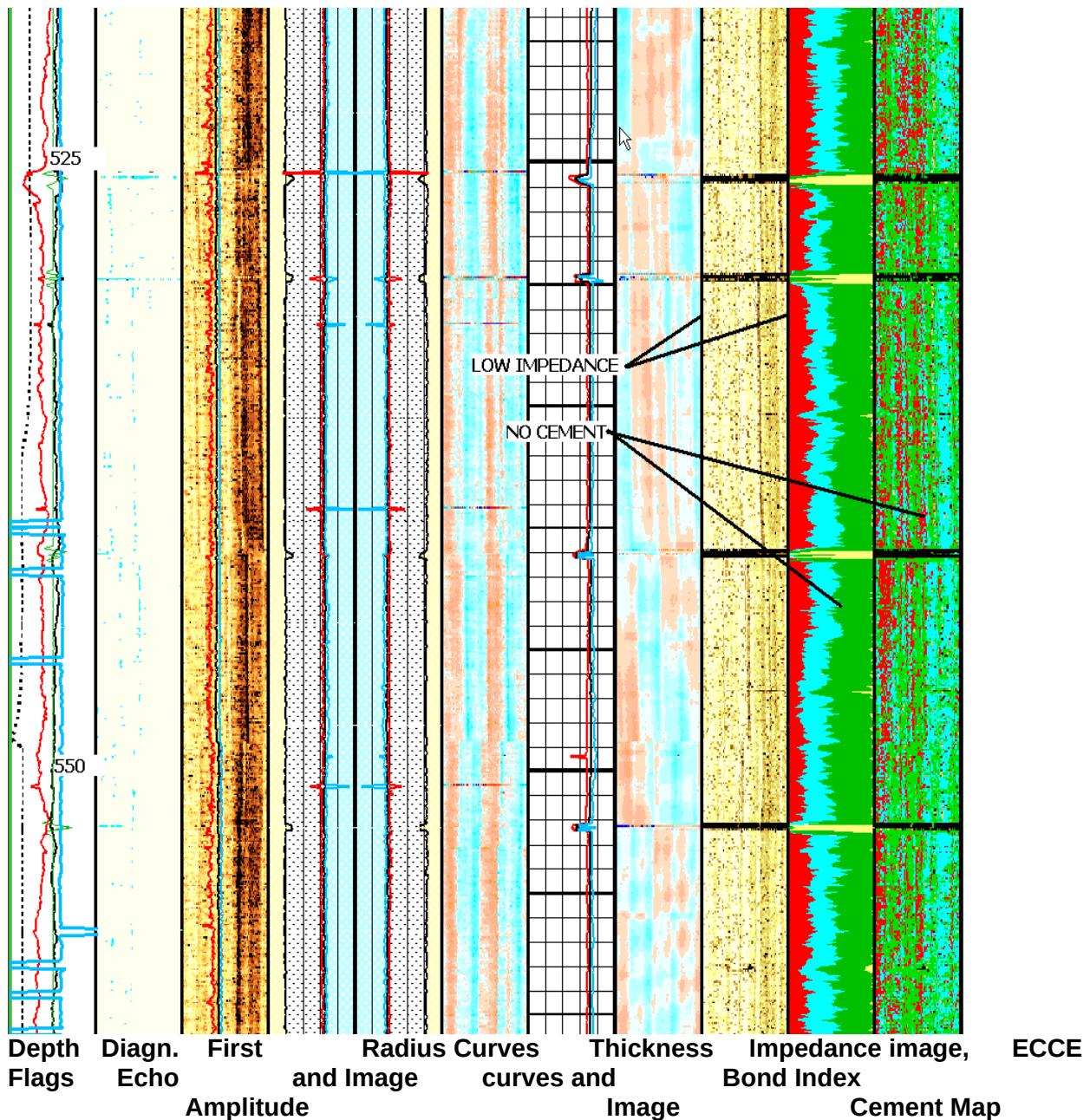
In summary there appears to be little or no cement in place outwith the 7 inch liner with possibly gas in the annulus above 594 metres and a possible minor volume of cement/solids and liquid below this depth (see figure 5).

3.1 Figure 2 : 7 inch CBL/VDL



CBL/VDL response indicates a general lack of cement/solids with a high CBL amplitude and strong casing signal on the VDL. A lack of cement is also suggested by the lack of formation arrivals on the VDL and very clear collar chevrons.

3.2 Figure 3 : USIT measurement impedance(Cement) response in 7 inch pipe.



The USIT agrees with the CBL/VDL throughout the 7 inch section indicating a lack of cement. Impedances are generally low but with some noise which is possibly triggering the 'microbonding logic' (green)

9.625 inch, 53.5 lbm/ft casing : Isolation Scanner, Cement Bond Log/Variable Density Log (CBL/VDL)
Data acquired from 502 metres to 406 metres

Conclutions – 9 5/8”:

13-Jul-2006

9.625 inch, 53.5 lbm/ft casing, Ultrasonic Imaging Tool (USIT), Cement Bond Log/Variable Density Log (CBL/VDL). Data acquired from 549 metres to 486 metres.

19-July-2006

13.375 inch, 72 lbm/ft casing. UltraSonic Imaging Tool (USIT), Cement Bond Log/Variable Density Log (CBL/VDL). Data acquired from 535 metres to 418 metres.

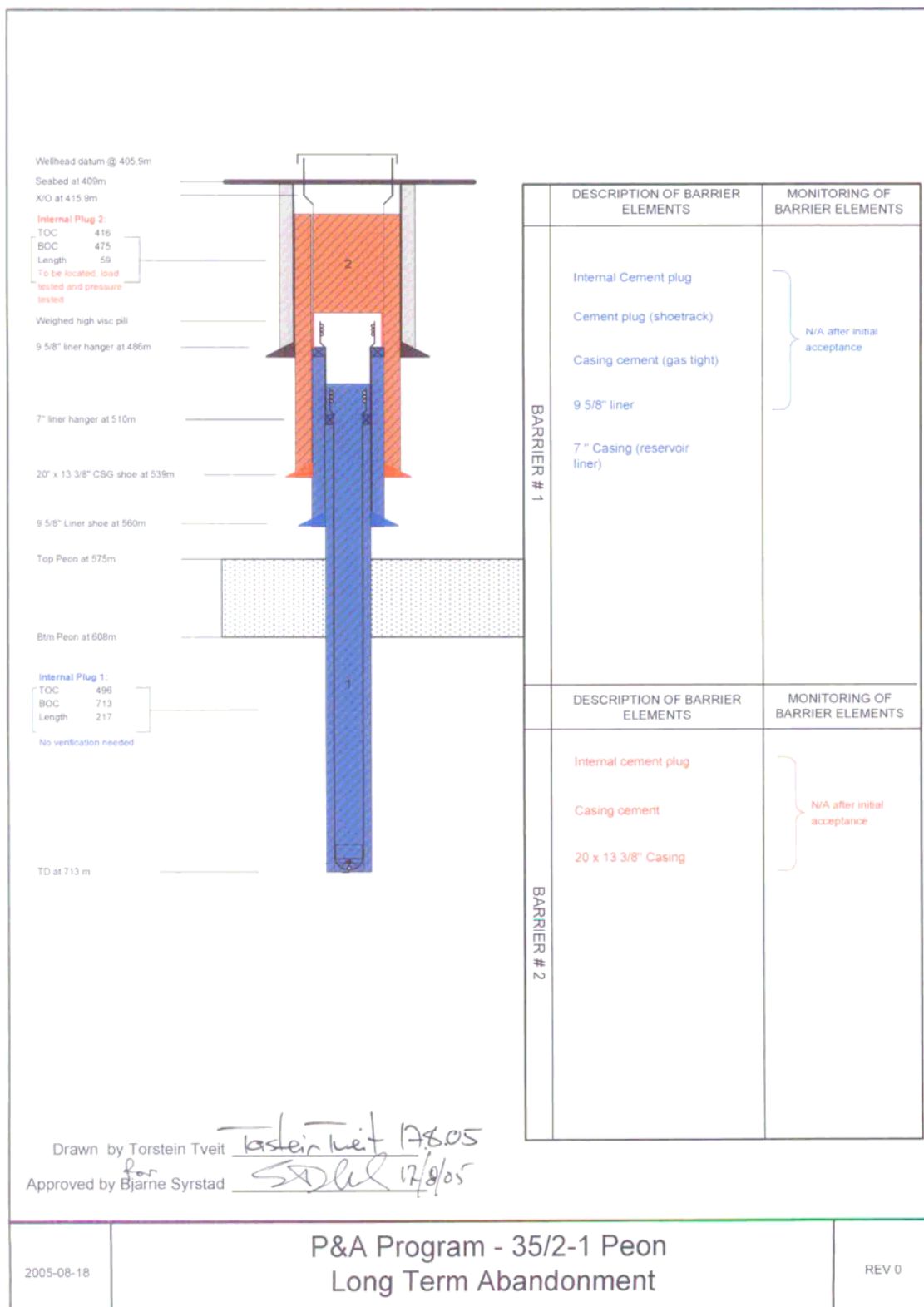
The main conclusion after the logging was that there was no cement bonding in the 7” and 9 5/8” casings. The cement in the 13 3/8” was according to the logs questionable.

For more details please refer to the Schlumberger report covering the CBL/USIT logs

4 Casing and cementing

4.1 Casing schematic when the rig arrived 2006

Schematic according to P&A program 17/8-2005



4.2 LOT/FIT

No leak off or FIT was taken during the operation.

During the drilling campaign in 2005 the 13 3/8" FIT was measured to 1,30 sg and the 9 5/8" FIT was measured to 1.30.sg.

4.3 Cementation

Based on the finding of the CBL/USIT logs decision was made by the Deepsea Trym rig group to initiate a task force to work on the cementing issues on 35/2-1 Peon.

Information regarding the cement operation is found in:

- Peon Final Report – October 10th, 2006. Doherty, Dajani, Louvvierre, Dieker, Ellis
- Peon Well Review and recommendations - Presentation
- 35/2-1 Peon Re-entry plugs

4.3.1 Cementing operation section summary overview

Due to integrity problems in the well the decision was made not to perform a Drill Stem Test and permanently plug and abandon the well.

Three consecutive 1.95 sg gas tight cement plugs were set and each plug was set and tagged successfully.

1. Plug #1 was an 85m plug set from 566m – 481m. The 7" 32# casing was milled and pulled prior to setting of the plug, and an inflatable packer with barite plug was set in the open hole section. We pumped 3 m3 un-weighted gelled spacer, along with 3.51 m3 1.95 sg gas tight cement. The plug was set and tagged successfully. The plug was dressed down to 561m afterwards, so the pulling of the 9 5/8" could commence.

2. Plug #2 was an 85m plug set from 561m – 476m. The 9 5/8" 53.5# casing was milled and pulled prior to setting of the plug, and the open hole was opened to 14 1/2". We pumped 3 m3 un-weighted gelled spacer, along with 7.21 m3 1.95 sg gas tight cement. The plug was set and tagged successfully. The plug was dressed down to 496m afterwards.

3. Plug #3 was a 78m plug set from 496m – 418m. The plug was set entirely inside the 13 3/8" 72# casing up to the 20" x 13 3/8" X-Over. We pumped 5 m3 unweighted gelled spacer, along with 6.1 m3 1.95 sg gas tight cement. The plug was set and tagged successfully.

Due to the small temperature variations in the well, the same cement system was utilized for all three plugs.

4.3.2 P&A cementing table

1. Peon Reentry – P&A Cementing Table - Completed

Cementing Table

Operation Description	Slurry Type	Planned Top (m MD)	Depth Bottom (m MD)	Volume (m3)	Slurry Density (SG)	Temp BHST/C T (°C)	Thickening Time 30 Bc (hours)	Fluid Loss (cc/30 min)	Excess %	Mix Water Type	Spacers/ Flow regimes	Cmt Additives	Conc. (LHK. %BWOC) Class G
P&A Plug 1	Gas tight Class G cement	481	566	3.51	1.95	10 / 9	3:10	49	0	SW	Gelled Spacer 3 cubes	FP-16LG CD-34L BA-58L FL-67LE	0.2 0.8 8 2.75
P&A Plug 2	Gas tight Class G cement	476	561	7.21	1.95	10 / 9	3:10	49	0	SW	Gelled Spacer 3 cubes	FP-16LG CD-34L BA-58L FL-67LE	0.2 0.8 8 2.75
P&A Plug 3	Gas tight Class G cement	418	496	6.1	1.95	10 / 9	3:10	49	0	SW	Gelled Spacer 5 cubes	FP-16LG CD-34L BA-58L FL-67LE	0.2 0.8 8 2.75

4.4 Long Term P&A

4.4.1 Non-conformances

The table below list up the identified non-conformances on this well.

Reference	Description	NH-Synergi
Activity regulation § 76 with references to NORSOK D-010 5.4.2.	Drilling without riser margin in 12 ¼" and 8 ½" hole section	521857
ODUN-SB-10-P01-H02- 2.2	Unable to obtain 4m3 kick margin according to ODUN-SB10-H02 – 2.2 Casing design	533021
Activity regulation § 79 with reference to NORSOK D-010 9.4.2 cement plugs table 15.22	Unable to obtain 200 m cement above 9 5/8" casing shoe. The 9 5/8" shoe will only be 167 m below seabed. Cannot fulfill due to the distance between the reservoir and sea bed is too shallow according to. ODUN-SB10-P01-H01, 4.4.2.	532261
Activity regulation § 76 with references to NORSOK D-010 9.4.2 casing cement table 15.22	Unable to obtain 200 m top surface cement plug in P&A.. Ref. Ref. ODUN-SB10-P01-H08, 4.1.4	532265
Ref. ODUN-SB10-P01-H01-4.1 Barrier definition / general	P&A barrier definitions are not according to ODUN-SB10-H01 – 4.1 Barriers definitions / general and not able to get distance between P&A plugs	533181
June 2006	Re-entry and Permanent P&A	
Activity regulation § 76 With reference to NORSOK D-010	Pressure testing of barrier plugs not complying to ODUN-SBO10-P01-H04 Chapter 2.13 and K-15886 Plug as Barrier requirement	641582

4.4.2 Introduction

The P&A design is based on ODUN-SB10-P01-H-08 Drilling and Well Activities – Abandonment Requirements and Guidelines.

4.4.3 Description of geo-mechanic effects of P&A and subsidence

Preliminary geo-mechanical analysis indicated a subsidence in the reservoir of 0,5m – 2,2m. A study was initiated to develop a model describing the compaction of the reservoir during production and field life. The study included a recommended Plug and Abandonment design for well 35/2-1 to compensate for the subsidence. The objective of the P&A design was to de-couple the casing in the reservoir and the casing in the overburden to avoid high stresses fracturing the cement and formation causing communication to the seabed. .

4.4.4 Well Status prior to P&A

During clean out of the temporary abandoned well 35/2-1 Peon gas bubbles were observed outside the 30" Conductor at the seabed. The well was continuously monitored at the seabed to observe if any sign of increase in the flow. CBL/USIT logs were run to verify cement quality and the cement bond behind 7" and 9 5/8" liners were found to be of poor quality. The 7" liner was cut at 561 m to establish communication and circulate in heavy mud. The well was first losing mud prior to bridge of the formation circulation lost circulation material. Once circulation with 1.15 sg mud was established the well first went on losses. Attempts were made to pump LCM material and once a filter cake was developed the gas bubbles at surface stopped. This indicated that the gas was coming from the reservoir.

Based on this the conclusion was that the barriers were lost with a micro annulus from the reservoir to the seabed. Decision was made to permanently plug the well back leaving the wellhead intact.

4.5 Peon Overburden Barrier

Secondary barrier:

- 80m cement inside 13 3/8" 540m – 420m
- 13 3/8" casing with cement in the 17 1/2" X 13 3/8" annulus from 539m to seabed at 409m

Testing and verification:

The cement in the 13 3/8" casing will be verified with CBL log. In case of the logs indicates poor cement quality the log will be used to determine compensating measures.

Pressure testing:

The plug will not be pressure tested to avoid putting pressure to the formation.

4.6 Compensating measures and inspections

The wellhead will not be cut when leaving the Peon location to be able to re-enter the well.

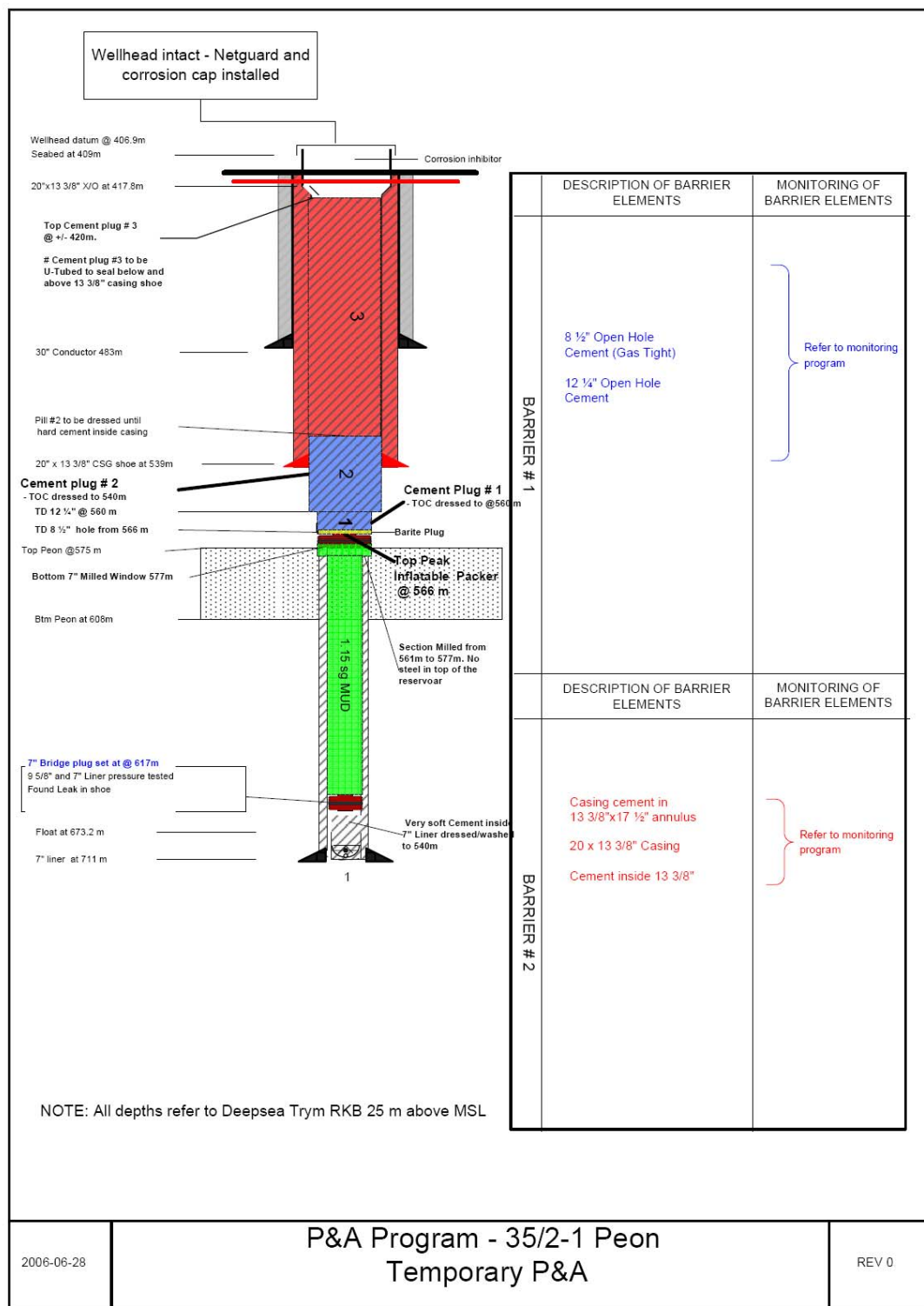
A separate monitoring program is prepared and the well will be inspected with a minimum in inspection intervals of:

1. year inspection:

- 1 month
- 3 months
- 6 months
- 12 month

After 1 year the well the inspection program will be evaluated if a yearly inspection program is sufficient. This decision will be based on the experience of the 1st. year inspection program.

4.7 Final Schematic Long Term Plug and Abandonment – 26/7-2006



4.8 Mud summary

13 3/8" x 9 5/8" x 7" Drilling Out Cement & Milling - P & A:
Operational Summary/Hole Condition/Problems

RIH to top of Peak Plug @ 425m and displaced the well to 1.15 sg CaCO₃ mud. Pulled Peak Plug. M/U 12 1/4" BHA and RIH to top of cement @ 431m. Drilled cement from 431 to 484m. Scraped 13 3/8" csg. and tagged top of 9 5/8" PBR @ 486m. Scraped 9 5/8" csg. and circulated hole clean.

M/U 8 1/2" BHA & RIH to 486m, drilled through PBR and cement to 504m. M/U 6" bit & 9 5/8" Scrape assembly and scraped from 486m to 504m, dressed PBR and drilled to 511m. The 9 5/8" Tieback was run & set from 505m to 409m, before 9 5/8" wearbushing was set. RIH with seal assembly and had problems getting a good pressure-test on it. After a Hivis pill swept the hole, the seal assembly was set and positively tested.

The 7" Clean out assembly was RIH and the cement drilled from 511m to 640m before the 7" scraper run scraped the relevant area. Two Hi-vis pills were pumped to clean out all the cement, proving a significant amount of fine & pieces up to 3cm in diameter coming over the shakers.

Performed wireline CBL runs #1 & #2. Performed 9 5/8" cup test to 80 bars, and 7" cup test to 80 bars.

Ran in hole with 7" cutter assembly and cut the 7" liner @ 561m. Immediate downhole losses appeared up to 7m³/hr in static condition, but stabilized in time. A 15m³ Hivis pill, 70m³ of CaCO₃ Kill Mud @ 1.27sg along with an 8m³ LCM Pill w/ 50 kg/m³ of various LCM materials was premade prior to the cut, but the LCM pill was quickly altered to 200 kg/m³ @ 1.20sg. 4m³ was pumped in the first attempt, and 6m³ in the second attempt. When pumping the second time, the string plugged up and the pill was circulated through the circulating sub.

The cutter assembly was then pulled out and a stinger was RIH to 496m, right above the cut. The well was then circulated and the pump rate increased in steps from 200 to 1750 ltr/min without any downhole losses. The stinger was tripped to 567m, 6m below the cut, and pump rate increased in steps from 200 to 1500 ltr/min without losing before being pulled out.

The section mill assembly was run to 561m and the 7" liner milled to 575m with one trip to redress the mill. At 575m the mill slipped inside the liner so the hole was circulated and the string POOH. Some downhole losses appeared when first milling and another LCM Pill @ 1.18sg w/ 150 kg/m³ LCM materials was prepared but not pumped. The mill was again redressed and run back to cut the last two metres. However, the assembly would not pass the top of the cut at 561m and was pulled out. The BOP was then cleaned and tested before a series of trips were made with a clean out mill and a variety of string magnets to remove swarf from the well.

Two PEAK plugs were run before 3 x Barite plugs @ 1.68sg (Refer to appendices) were pumped with Brine spacers in front and behind. The 7" Liner was perforated on the next run, before a 7" Spear assembly cut the PBR and the 7" Liner was pulled out of the well.

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The well was then cleaned out experiencing heavy mud in returns from the Barite plugs, before Cement plug #1 was pumped & set. The plug was tagged & dressed and the Seal assembly along with the 9 5/8" Tieback was pulled out of well. Again the well was cleaned prior to punching a hole in the 9 5/8" casing. The hanger was cut and the PBR retrieved before the 9 5/8" casing was cut again. The 9 5/8" casing was also retrieved before the open hole was under reamed to 14 1/2".

Another two cement plugs were pumped which were both tagged and dressed off before the well was displaced to seawater and the well operations completed.

Mud Properties/Drilling Fluid Technical Performance**Mud Weight**

The well was displaced to CaCO₃/NaCl/Polymer/MEG fluid with 1.15sg mudweight which was kept to TD without incidents. No excessive weight was produced from the cement drilled out. No premix was bled in while drilling or scraping cement. In fact, most of the clean out operation was performed with 140 mesh screens on shakers, partially due to the minor contamination challenges the cement caused and to avoid the Calcium Carbonate to be screened out of the newly built system. 110 mesh screens were used for the milling operations. As gas bubbles were seen at the sea bed and communication from the reservoir to the seabed was a possibility Kill Mud at 1.27 sg was prepared in case mud was lost from the well and up a micro-annulus to the seabed, this being the weight required to kill the well without the hydrostatic effect of mud in the riser.

Rheology

The Rheology was kept in the low side of the programmed specifications while cleaning and scraping the well. Due to the great differences between the actual temperature of the fluid (+/- 16°) and the test temperature of 50°, maintaining the profile in the low end produced the most relevant reference point. Several hivi pills were pumped, but were caught and directed into reserve pits when reaching topside. No direct adjustments were necessary during this phase. When milling all the hi-vis sweeps were retained in the mud system to raise the overall viscosity. The Yield point while milling was around 18-19 Pa at flow line temperature. These high viscosities in a purely polymer viscosified fluid gave some difficulties with maintaining good mud pump suction and avoiding foaming and air entrapment.

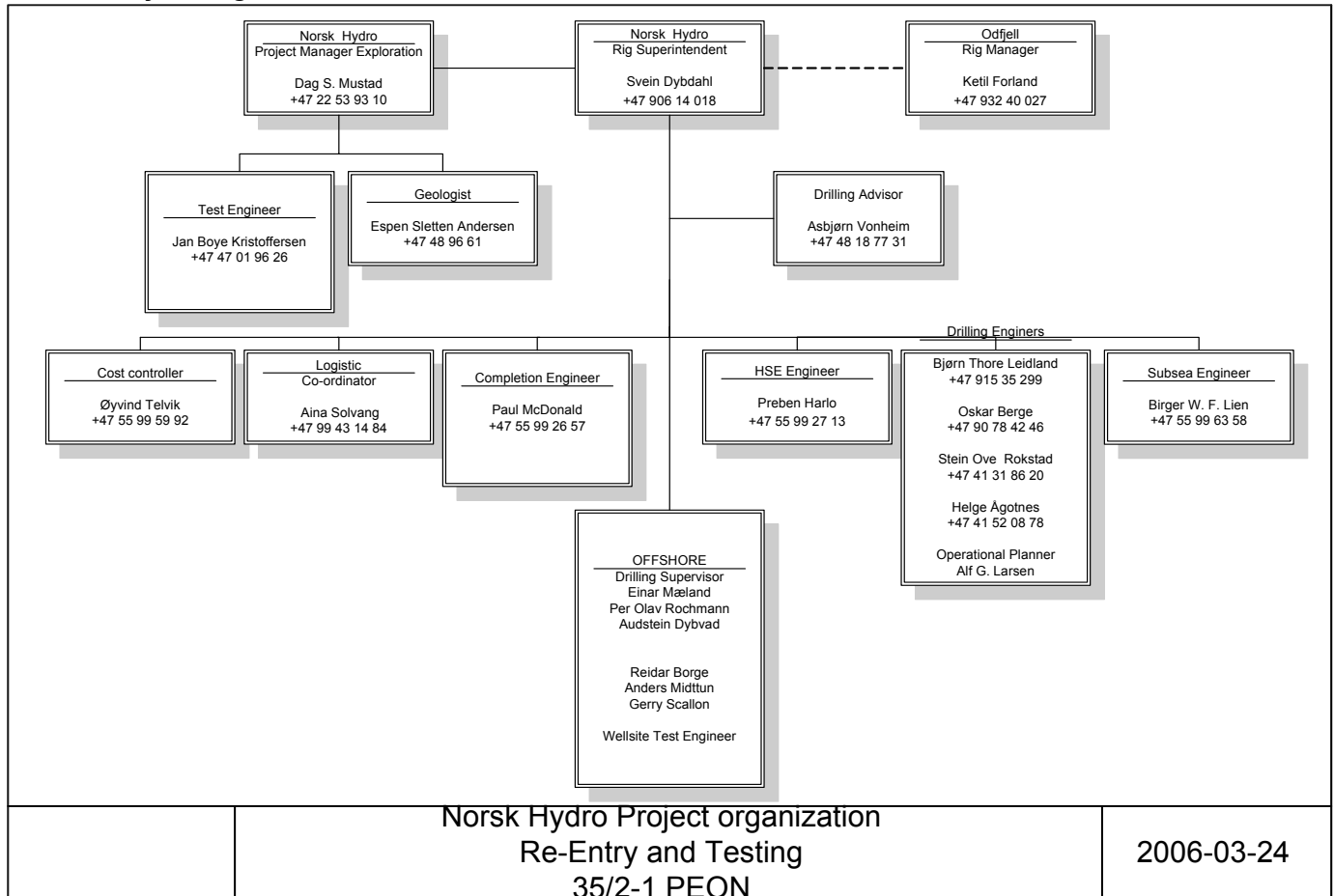
Inhibition

The actual mixed fluid had a concentration of 135 g/ltr NaCl prior to displacing the well. When drilling out the cement in the first stage, the amount decreased gradually to between 110 – 125 g/ltr. 40m³ of mud with higher NaCl concentrations were built and added to system once, and the system remained stable for the rest of the section. No signs of Gas Hydrates were seen.

Hole Cleaning

The hole cleaning hasn't been optimum while drilling the cement. Considered pumping HiVis pill every time there's a bottom up, to get all the cement out of the hole. After drilling out the 7" Liner two Hivi pills of 10m³ each were pumped to clean the well. A significant amount of cement cuttings from fine to 3cm large in size came over the screens. The restrictions of the clean-out string in the 7" liner restrict the available pump rate to around 1000 to 1500 lpm and thus give very low annular velocities in the riser. The practise of circulating a hives pill at 2500 lpm once the string had been pulled back inside the 9 5/8" casing greatly improved the hole cleaning. When milling the rheology was increased and when practicable one mud pump was used to boost the riser. With 100 lpm on the drill string and 1500 lpm on the riser there was a reasonably amount of steel recovered to surface while running the section mill but a good deal was left in the hole and a series of trips with mill and magnets were needed to clean out the hole before cutting the last two metres.

4.9 Project organisation



4.10 Contractor Data

Addresser	Navn	e-post adresse	e-post	hardkopi
Petroleumstilsynet Postboks 599, 4003 Stavanger*		postboks@ptil.no	✓	✓
Oljedirektoratet, Postboks 600, 4003 Stavanger*		postboks@npd.no	✓	✓
Partner - Petoro		Licence web	✓	✓
Partner - Idemitsu		Licence web	✓	✓
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Mongstad Base	J. Kardal	jermund.kardal@hydro.com	✓	
Borekontraktør, Odfjell Drilling	K. Forland	kif@odfjelldrilling.com	✓	
Plattformsjef Deep Sea Trym			✓	
Boreleder, Deepsea Trym			✓	
Geolog, Deepsea Trym			✓	
Boresjef, Odfjell Drilling			✓	
BJ Services	T. Ellis	tellis@bjservices.co.uk	✓	
Baker Hughes Inteq	K. Flåm	kenneth.flaam@inteq.com	✓	
Baker Drilling Fluids	S. Sørbø	reidar.ree@bakerhughes.com	✓	
Dril Quip	T. Lunder	torstein_lunder@dril-quip.com	✓	
Brønnarkiv for 35/2-1 Peon - Testing		filing@petrobank.no	✓	

5 Operation

5.1 Introduction

The following chapters are outlined according to the sequences of the operations with reference to Bore and the time estimate.

A drilling program covering the Re-entry and Preliminary P&A operation and a Drill Stem Test program was prepared prior to start up the operation. The original plan was to re-enter the well, conduct a drill stem test and permanently plug and abandon the well. However, as discussed during the re-entry operation decision was made to Plug and Abandon the well without performing the drill stem test. The decision was made based on gas bubbles was observed coming up on the outside of the 30" conductor. During the operation to re-establish the barriers the gas stopped bubbling when 1.15 mud was pumped in the 7" Liner/8 1/2" annulus through the hole cut in the 7" Liner at 561 m. This indicated that there was a communication from the reservoir to the surface. A Plug and abandonment program to re-establish the barriers was prepared and sent to PTIL.

The schematic of the final P&A can be found in chapter 1.xx above.

5.2 Preparations

Prior to move the rig from Troll a BOP maintenance program scheduled and carried out with some modifications to the original maintenance program. In addition the heavy lift test equipment was taken onboard and sea fastened on Troll prior to move the rig to the Peon location. All the heavy lift equipment was taken onboard according to a planned lifting schedule and rig lay out plan. For more details refer to Odfjell Drillings summary report of the BOP maintenance and a summary of the test equipment installation.

Due to problems with one of the bonnets the rig was moved to Peon without having finished the planned BOP maintenance. The remaining of the Troll BOP maintenance was carried out and finished at Peon. The additional costs to maintain the BOP on Peon has been charged on Troll X-23 project and a split have been agreed between the two projects.

5.3 Arrival on location

Reference documents:

The anchor handling operation from Troll well 31/2-X-23 to 35/2-1 Peon is described in detail in the following documents:

1. Scope of work – Rig move of Deepsea Trym from Troll 31/2-X23 to 35/2-1 Peon
2. *Rapport etter oppankring Deepsea Trym (35/2-1 Peon)*

Operational summary:

The operation was carried out without any personnel injuries or any damage to equipment. Deepsea Trym was manned with qualified personnel during the operations

The navigation software and hardware was function tested and operated according to plan.

The actual operation was carried out in 52,5 hours which was 4,6 hours ahead of the 57,1 hours original schedule.

Weather conditions:

The weather conditions was very good during the anchor handling and departure, transit, and arrival on the location was carried out in the same weather window.

Observations:

These observations are described in more details in the Hydro report “ Rapport etter oppankring Deepsea Trym (35/2-1 Peon)

1. Unclear communication between Odfjell and Mongstad base
2. Swivels were planned to be installed on 4 anchors. After the anchors where disconnected on the boat the anchors already had swivels installed. This could have been avoided if this was included in the Scope of Work and verified against the anchor log on the rig.
3. During the offshore anchor handling meeting it came up that there was a planned operation in Maysi on anchor chain #8 to change from Fat Kenter to Slim Kenter . This operation included that 800m chain to be moved to Anchor handling vessel, AHV. The operation was not planned in - “Scope of Work - Rig move from Troll X-23 to 35/2-1 Peon”.
4. Chain was driven up above guide wheel on winch #6 causing twist in the chain. Need better routines when to stop to remove twist in the anchor chains. Lost time 4 hours.
5. During start-up meeting offshore it was brought up that Rolls Royce recommendation was to run the anchor winches in Low gear. The running speed in low gear is 10/15 m min. Need to communicate this to the rig group in order to incorporate in the time estimate.
6. During testing of the tension it was observed variation on all of the tension gauges compared to hydraulic readings. Tension cells have to be calibrated prior to next rig move.
7. Bourbon Surf managed to cut the anchor on the wrong place on the tail end on anchor #10.

Status follow up Synergi reports:

Below is a list of the synergies reported.

- A. Odfjell Synergi 101 516: Anchor line no 2, damage to 400 meter pennant when grappling pennant to buoy off anchor.
- B. Odfjell Synergi 101 517: Anchor line no 3, loss of 400 meter pennant when buoying off anchor at Peon.
- C. Odfjell Synergi 101 562: Transfer of anchor no 8 from Mærsk Asserter to Bourbon Charisma, causing 3 hours delay.
- D. Odfjell Synergi 101 563: Length of anchor line (chain) specified as horizontal length, causing confusion.
- E. Odfjell Synergi 101 695: AH equipment (Chaser ring) not loaded on AHV as specified in SoW Loading List.
- F. Odfjell Synergi 101 696: Transfer of buoy and pennant wire from Mærsk Asserter to Bourbon Charisma, causing 1 hour delay.
- G. Odfjell Synergi 101 697: Lack of capacity in DST chain locker for anchor chain no 8, causing 3 hours delay.
- H. Odfjell Synergi 101 698: Transfer of chaser rings from rig to Bourbon Surf, causing 1 hour delay.

5.4 Comments and experiences

Most of the actions from the mentioned reports could have been avoided if there had been a closer dialogue between Odfjell onshore representative and the offshore marine team. It is vital that the Offshore team, represented by the OIM, is involved in the complete planning phase until a final Scope is presented and the vessels are briefed. Participation in the anchoring meeting is mandatory, but this does not exclude further involvement. Action points stated in this report will be on the agenda for the next anchor-handling meeting.

5.5 Running of BOP and Riser

The remaining of the planned BOP maintenance after X-23 was performed on the Peon location and the down time of total 32 hours were allocated on Troll well 31/2-X-23. The reason for the down time was problems to retrieve one of the bonnets in one of the BOP rams prior to leave Troll.

The BOP and riser was run in 26 hours, which was 2 hours more than the planned AFE. The operation was carried out according to TOP procedure for running marine riser and BOP. The rig waited on weather (WOW) for 4 hours to get near standby which was required prior to unbolt the inner/outer barrel of the slip joint. The rig was moved over the template and the BOP was landed. Locked the well head connector and performed a 25 ton pull test on the connector. The connector was pressure tested to 5/135 bar.

Installed the wear bushing in the wellhead and function tested the BOP control systems on yellow and blue pod. Ran in hole with the BOP test tool and tested the wellhead connector against the middle pipe ram to 250 bar.

5.5.1 Comments and experiences

Comments from Odfjell on the preparations and the running of the BOP

A total of 114,5 hours was reported after the operation was finished.

Down time:

- 32 hours down time due to maintenance on the BOP left over from Troll well 31/2-X-23.
- WOC 4 hours

The operation took 82,5 which was 20 hours longer than an AFE of 60.5 hours.

5.6 Re-enter and Pull 13 3/8" Packer

The 13 3/8" Peak packer was set during the temporary P&A in 2005. The packer had been in the well close to 1 year and was set due to the pressure test of the cement top plug failed. The packer was installed in a non-corrosive fluid.

Made up 13 3/8" Peak running tool and ran in the hole 20 m below RKB. The diverter system was function tested and the diverter overboard lines were flushed and cleaned. Ran in the hole to 415 m with the Peak-retrieving tool. The upper annular preventer was closed and circulated seawater over the choke. Pumped a 5 m3 hi-vis pill and displaced the well to 1.15 sg mud. Reduced the pump rate to 125 l/min and latched on to the Peak plug leaving 7 bar pressure in the string. Turned 1,5 turns to the right and observed a pressure drop from 7 to 5 bar over a period of 7 minutes.

Closed the annular preventer and attempted several to pull the Peak packer free. Worked the string with 10 ton down with and 35 ton over-pull, while turning the string with 5-20 rpm. Attempted to circulate down the string to verify communication through the plug without any success.

Managed to pull the packer free with 45 tons over pull while rotating with 45 rpm. Continued to pull out of the hole and laid down the plug and running tool.

The plug was disassembled in Peaks workshop and the 13 3/8" VMB plug was packed with Cement. Peak engineering has prepared a report on the plug, which includes pictures of parts filled with cement.

It is evident that the 13 3/8" Peak packer was set in cement since the packer was filled with cement. Details regarding the 13 3/8" VMB Peak packer can be found in the disassembly report with reference Peak Well Solution AS NCR No: 77813. The case is also logged in Synergi with reference number #77813.

Comments and experience:

Because the plug was set in cement it was difficult to remove the plug from the well and there was no communication though the drill pipe / running tool and through the plug. This caused the plug to be pulled with vacuum below the plug, which explains the force of 55 ton over-pull. During the removal of the plug the running tool was damaged.

VMB plug filled with cement:



The down time should not be allocated on Peak Well Services but should be codes as Hydro down time.

The actual operation time was 18,5 hours compared to 11.3 hours

- Down time - 6 hours

5.7 13 3/8" casing and 9 5/8" liner cement clean operation

The operation was performed without any accidents.

Operational time distribution:

- Planned operation: 15,7 hours
- Actual operation: 24.0 hours

5.7.1 Run 1 - 12 1/4" assembly to clean out cement in 9 5/8"

Made up the 12 1/4" bottom hole assembly and ran in the hole with 12 1/4" bottom hole assembly on 5" drill pipe from 340 m to 419 m. Washed from 419 m to 429 m prior to tag hard cement at 429 m with 3 ton. Drilled cement from 429 m to 430 m and drilling had to stop due to strong smell of gas in the shaker room. The well was flow checked and a small gain was observed in the trip tank. Closed the upper annular preventer and closed the diverter system. Continued to flow check with the BOP closed and confirmed the well was stable. As a precaution bottoms up were circulated taking the return through the choke line and flow checked the well. The well was found to be static.

Continued to drill firm cement from 442 m to 457 m prior to record slow pump rates. Drilled soft cement from 457 m to 468 m and drilled firm cement from 468 m to 486 m. Circulated the well clean and flow checked prior to lubricate out of the hole from 482 m to 390 m. Flow checked the well and continued to pull out of the hole to surface.

Comments and experience

When temporary abandoning the well in 2005, the formulation of the fluid the well was:

- A mix of KCl brine and drill water with a concentration of KCl salt at 160 kg/m³.
- pH of 10,5
- 3% Pelagic 50 (BOP fluid) for corrosion prevention
- 0,1% glutaraldehyde (biocide) were added to the fluid.

With high salt content, high ph, and Glutaraldehyde (biocide) preventive measures were taken to avoid bacteria growth during the long term P&A.

According to Baker Hughes Drilling fluids there is no indications that the mud was contaminated and caused the gas with extreme odor. In theory none of the chemicals used will react to form any kind of organic solvent.

5.7.2 Run 2 – 8 1/2" assembly, 9 5/8" cement clean out

The objective of the run was to clean out the cement in 9 5/8" casing.

Made up the 8 1/2" bottom hole assembly and ran in the hole too 445 m. Recorded slow circulation rates with mud pump # 1 and #3 and performed choke drill with the crew.

Tagged 9 5/8" PBR and drilled soft cement in 9 5/8" liner from 486 m to 505 m and circulated the well clean. Performed choke drill with manual and auto choke using Mud Pump #3 with 4 1/2" liners installed. Flow checked the well prior to lubricate out of the hole from 503 m to 390 m. Continued to pull out of the hole with the 8 1/2" bottom hole assembly from 390 m to 127 m.

The operation went according to plan and the actual hours used were 36,5 compared with planned AFE of 38,5 hours.

A total of 0,5 hours down time was spent to repair the upper racking arm.

5.7.3 Run 3 – 13 3/8" casing scraper

The objective of the run was to work 13 3/8" casing scraper and polish 9 5/8" liner hanger PBR with a Weatherford PBR mill assembly. casing scraper

Made up the 13 3/8" casing scraper and 9 5/8" PBR milling assembly on 5" drill pipe and ran in the hole from 418 m. Worked the 13 3/8" casing scraper from 418 m to 475 m.

Polished the 9 5/8" PBR with 3-4 ton and 50 RPM. Circulated the well clean prior to flow check the well. Lubricated out of the hole from 475 m to 385 m and continued to pull out of the hole to surface.

5.7.4 Run 4 – 9 5/8" Tie Back mill and 8 3/8" stabilizer

The operation was delayed with 11 hours due to the first BHA was run without having the wrong space out when making up the BHA.

Made up a 3 m drill pipe pup joint between the 9 5/8" tie back mill and the 8 3/8" stabilizer and ran in the hole with the scraper and mill assembly down to 477 m. Washed down from 477 m to top of the 9 5/8" PBR at 486 m. Worked the PBR Mill through the PBR area from 487 m to 490 m using 5-7 ton weight and 50 - 70 rpm.

Dressed off top of the PBR with the top dress mill. Circulated the well clean and performed choke drill with mud pump #3. Flow checked the well prior to lubricate out of the hole from 475 m to 385 m. Continued to pull out of the hole on 5" drill pipe from 385 m to the surface and laid down the bottom hole assembly.

5.7.5 Run 5 – 7" PBR mill including 9 5/8" casing scraper

Made up the 9 5/8" casing scraper and 7" PBR mill assembly and ran in the hole to 94 m. Ran in hole with the 9 5/8" scraper and 7" mill assembly on 5" drill pipe 486 m. Worked the 9 5/8" casing scraper from 486 m - 504 m and polished 7" PBR with 2-3 ton weight and 50 RPM rotation. Circulated the well clean, recorded SCR and performed choke drill with the BJ. kill pump. Flow checked the well prior to lubricate out of the hole from 480 m to 385 m and pulled out of the hole from 385 m to the surface. Laid down the scraper and the mill bottom hole assembly.

5.8 9 5/8" Tie back

The Tie back operation was run according to plan. DrilQuip supplied the 9 5/8" wellhead and Weatherford supplied the 9 5/8" seal stem assembly. The assembly drawings can be found in Weatherfords equipment documentation.

Operational time distribution:

- Planned operation: 42,1 hours
- Actual operation: 44,0 hours

5.8.1 Run 6 - 9 5/8" Tie back

Made up 13 3/8" wear bushing running tool and retrieved 13 3/8" the wear bushing. Made up a jet sub on 5" drill pipe and ran in hole to to 410 m and washed the wellhead area.

Made up 9 5/8" Weatherford seal stem to #53,5 9 5/8" P100 casing down to 78 m. Made up 9 5/8" DrilQuip casing hanger and installed 9 5/8" casing running tool including 9 5/8" seal assembly. Ran in the hole with 9 5/8" casing running tool on 5 1/2" HWDP. Entered the PBR and sheared Weatherford shear locator sub with 20 ton. The 9 5/8" casing hanger was landed in the well head and sat down 15 ton weight.

Pressure tested the surface lines to 80 bar and pressure tested down the 9 5/8" X 13 3/8" annulus against the seal stem to 80 bar.

Pressure tested down the string inside the seal stem to 50 bar. Released the casing running tool and pressure tested down the annulus against the seal assembly to 220 bar.

Attempted to pressure test down the string inside the seal stem to 80 bar. The pressure leaked off at 45 bar and leveled out at 15 bar. Re-tested the seal stem in steps of 5 bar. The pressure leaked off at 25 bar and leveled out at 15 bar.

Pulled out of the hole with the 9 5/8" casing hanger running tool on 5 1/2" HWDP. Observed the seal assembly still attached to the running tool. Laid out the seal assembly and the casing hanger running tool.

5.8.2 Run 7 – Mill and flush adapter

Installed the mill and flush adapter on the multi purpose tool including 2 stands of 5" HWDP and a bull nose below. Ran in the hole with the mill and flush tool on 5" drill pipe. Worked the mill and flush tool at 407,9 m. Pumped a 10 m3 hi-vis pill and circulated the well clean. Flow checked the well and pulled out of the hole.

5.8.3 Run 8 – 9 5/8" Seal Assembly Running tool

Made up the Seal Assembly Running Tool (SART) on 5" HWDP, which included a bull nose in the end. Installed the Seal Assembly and ran in hole with SART to 407,92 m on 5 1/2" drill pipe. Closed the middle pipe ram and sat the Seal Assembly with 220 bar. Opened the MPR and sheared out of the seal assembly with 45 ton over pull. Tested the seal assembly to 220 bar and pulled out of the hole and laid the SART tool and the remaining of the bottom hole.

5.8.4 Run 9 - 9 5/8" wear bushing.

Made up 9 5/8" wear bushing to the running Tool and ran in hole with the Wear Bushing on 5 1/2" HWDP. Landed Wear Bushing at 407,92 m with 20 ton. Pulled out of hole with running tool.

5.9 Cement clean out of 7" liner

Objective of the clean out operation:

- Clean out 7" liner to minimum +/- 630m depending logging tool rat hole requirement
- Circulate out cement and run casing scraper
- 7" Liner cleaned to run cased hole MDT

Operational time distribution:

- Planned operation: 21,1 hours
- Actual operation: 36,5 hours

5.9.1 Run 10 – Cement clean out run 7" liner

Made up 6" bottom hole assembly including 6" bit, 5 7/8" stabilizer, 4 3/4" DC and jar. Ran in the hole while picking up 3 1/2" drill pipe and ran in hole to 465 m on 5 1/2" drill pipe.

Broke circulation and increased the flow rate in stages to 1500 lpm with a pressure of 53 bar. Washed inside 7" liner from 465 m to 530 m and no firm cement was found. The BHI gas detector shut down and the system had to be re-set. Continued to wash cement inside 7" liner from 530 m to 594 m. No firm cement was drilled and residual cement was found on the shakers.

Washed cement inside 7" liner from 594 m to 640 m. Drilled firmer cement with 2-3 tons weight on bit. Reamed one stand from 640 m and flow checked the well prior to pull out of hole lubricating from 640 m to 490 m. Pumped 7 m3 high viscous pill and observed large amount of cement cuttings at surface. Pumped another 9 m3 hi vis pill and circulated bottoms up. Pulled out of hole from 490 m to surface while lubricating out of the hole.

5.9.2 Run 11 – 6" mill assembly and casing scraper

Picked up 6" Mill and 7" casing scraper assembly. When picking up found a crack in the mill and replaced the mill to a 6" bit. Ran in hole with 6" bit and 7" casing scraper assembly to 515 m. Broke circulation in steps to 1000 lpm - 29 bar. Washed and worked the casing scraper from 515 m to 541 m.

Observed approximately 300 liters gain in the active system. Consequently the well was shut in closing annular and the diverter system. Lined up the well to the trip tank and observed the well. The choke line pressure increased from 1,1 bar to 1,3 bar. Opened up the diverter and opened the choke prior to bleed off the choke line pressure prior and closing the choke. The choke line pressure was reading 0,9 bar and the kill line pressure was reading 1,2 bar.

Bottoms up were circulated from 541 m using mud pump #3 taking suction from the trip tank. Took returns through choke line via poor the boy de-gasser and back to trip tank. No increase in gas or increase in mud volume was observed. Flow checked the well and lined up through the choke line for 15 min. Opened up the annular and flow checked the well for 15 min up the riser with return to the trip tank.

Ran in hole with the 6" casing scraper assembly from 541 m to 640 m. Closed the annular preventer and circulated bottoms up with 15 spm taking the return through the choke line at. Flow checked the well up the choke line. Opened the annular preventer and flow check the well over the trip tank. The well was found to be stable.

Worked the casing scraper in 7" liner from 640 m to 585 m three times.

Function tested the BOP and flow checked the well prior to lubricate out of the hole from 590 m to 497 m. Pumped 7 m3 high viscous pill and circulated 1,5 times bottoms up. Continued to lubricate out of the hole from 497 m to the surface and laid down 6" casing scraper assembly.

5.10 Cased hole CBL

A separate logging program was prepared taking all logging specific requirements into account. In addition prepared Odfjell the rig specific operational plans. HAZIDs were performed with the crews.

Logging objectives:

- Determine the cement quality behind the 7" liner for the CHDT, and well test.
- Determine the position of the casing collars in the 7" liner.
- Recover a high quality water sample from the Peon formation
- Find formation pressure in the sand unit around 615 m.

For details regarding the logging please refer chapter 4 and the logging report prepared by Schlumberger.

Made up 9 5/8" Cup Tester and ran in the hole to 496 m. Closed upper annular preventer and pressure tested 9 5/8" casing to 80 bar/10 min. Lubricated out of hole with cup tester to 385 m holding 2,5 bar on drill pipe. Flow checked the well for 15 min and continued to pull out of hole to surface. Laid down 9 5/8" Cup Tester

5.10.1 Logging run #1 – IBC-CBL

Conducted pre-job with the onshore rig group and the rig crew. Rigged up wire line equipment and ran in the hole with Schlumberger IBC-CBL logging tool on 7-46 electric line. Logged downward with CBR-GR to 625 m logged upward with IBC-CBL upwards from 625 to 539 m.

The logging tools stopped functioning due to computer problems on surface. Ran in the hole to re-log from 625 m but the sub in IBC tool failed and had stopped spinning. Restarted the computer and logged IBC-CBL upwards from 625 to 576 m. Cement was confirmed from 625 m to 595 m but only traces of cement above 595 m. Stopped logging due to down hole system error. Continued to log up to 496 m.

Ran in the hole 625 m with the logging string m and performed repeat log up to 510 m with high resolution with a logging speed of 150 ft/hour. Continued to log out of hole inside 9 5/8" casing from 510 m to the seabed prior to pull out to the surface.

5.10.2 Logging run #2 – IBC-CBL

Changed from 7" centralizes to 9 5/8" on the logging string. The tool was checked prior to run in the hole with IBC-CBL to 510 m. Logged the main pass with IBC-CBL in 9 5/8" casing from 510 m to the well head. The logging had to be stopped due to down hole system error. Continued to log and repeated the pass from 510 m to 475 m logging 9 5/8" PBR - Seal Stem area. Decision was made to pull out of the hole with IBC-CBL logging tool and rigged down wire line equipment.

5.10.3 Run #12 – 9 5/8" Cup tester

To confirm the casing test 9 5/8" cup tester was run. Made up 9 5/8" Cup Tester and ran in the hole to 496 m. Closed upper annular preventer and pressure tested 9 5/8" casing to 80 bar/10 min. Lubricated out of hole with cup tester to 385 m holding 2,5 bar on drill pipe. Flow checked the well for 15 min and continued to pull out of hole to surface. Laid down 9 5/8" Cup Tester.

5.10.4 Run#13 – 7" Cup tester

Made up 7" Cup Tester and ran in the hole to 520m.

Closed upper annular and pressure tested 7" Liner hanger to 80 bar /10 min. Continued to run in the hole with 7" Cup tester to 630 m.

Closed upper annular and pressure tested 7" Liner to 80 bar /10 min.

Lubricated out of hole with 7" cup tester to 385 m holding 3 bar on drill pipe.

Flow checked the well for 15 min and continued to pull out of hole to the surface and laid down 7" cup tester.

5.10.5 Run # 14 – 7" Wire line bridge plug

Rigged up wire line equipment to run 7" Bridge Plug. It was not possible to make up the 7" Bridge Plug to the setting tool due to damaged threads in the connection. The 7" bridge plug had to be removed.

Ran in the hole with 7" Bridge Plug on 7-46 electric wire line and correlated depth with CCL. Continued to run in hole with wire line to 626 m and lost weight at 626 m. Picked up the string and attempted to pass 626 m. The planned setting depth for the 7" plug was at 628 m. Decision was made to set the 7" plug at one joint higher at 617 m. Pulled out of hole with wire line setting tool.

Closed the shear seal ram and pressure tested the Bridge Plug to 80 bar / 10 min. Rigged down wire line equipment.

6 Gas bubbles observation around 30" conductor

6.1 Introduction

During the operation after arriving too Peon it was observed gas bubbles around the 30" wellhead. This chapter summaries the events from when the operation started until decision was made to P&A the well.

Oceaneering has recorded all sub sea operations from the rig arrived location until the rig left the location. These DVD's are available in Documentum and are filed under 35/2-1R Peon well folders. When the gas bubbles changed characteristic decision was made to find the root cause and check the barrier condition of the well. The gas bubbles had changed characteristic over a two day period from very small gas bubbles spread around the 30" conductor to the gas bubbles coming up more concentrated outside the 30" conductor between guide-post 3 and 4 as described in figure below. After this observation one theory discussed was that after the BOP was run could have caused the movement and vibration in the casing and wellhead system.

6.2 Change in gas bubble characteristic after 9 5/8" tie-back was run

After the 9 5/8" tie-back was installed as part of the pre-test preparation, the first report ROV reporting monitoring of gas outside the 30" conductor pipe was reported 14.09.2006. The flow changed characteristic and was there after closely monitored by the ROV every day. The gas had changed in intensity initial from a slug flow coming up through several small holes in the seabed around the conductor into one main gas flow coming up through one main hole close to the conductor. The gas was now flowing continuously with a higher rate and increased erosion of sediments associated with the gas. A video of the gas flow was sent to the onshore operation team for further evaluation.

Based on the evaluation of the data sent from the rig, 3. party evaluation and simulations, it was concluded that the gas could come from the reservoir. But based on the flow rate it had to be some restriction along the casing sections.

6.3 Summary of video recording of the gas bubbles

09.06:

Video cut @ 09:30 Remove the netguard. Gas coming out from the top of the netguard
Video cut @ 19:52 Landing Retrievable Guide Base (RGB)
Video cut @ 18:22 Gas bubbles, no sign of erosion around the Well Head conductor
Video cut @ 20:09 Gas bubbles, ROV parked with the RGB
Video cut @ 23:27 Brushing the well head. No gas bubbles observed.
Video cut @ 23:37 Inspected deal areas in the wellhead. Observing gas bubbles.

11.06:

Video cut @ 11:43 Inspection of RGB. No gas observed.

12.06:

1st. time the ROV reports gas in their log.
Video cut @ 22:06 Installed VX ring. Observing a lot of gas bubbles. Not reported in Oceaneering report

17.06:

Video cut @ 08:25 Inspection WH/BOP. Bulls-eye were stable and observed some erosion around the 30" conductor. Some gas bubbles observed outside the 30" conductor. The gas is still active the channel have blocked further gas.

6.4

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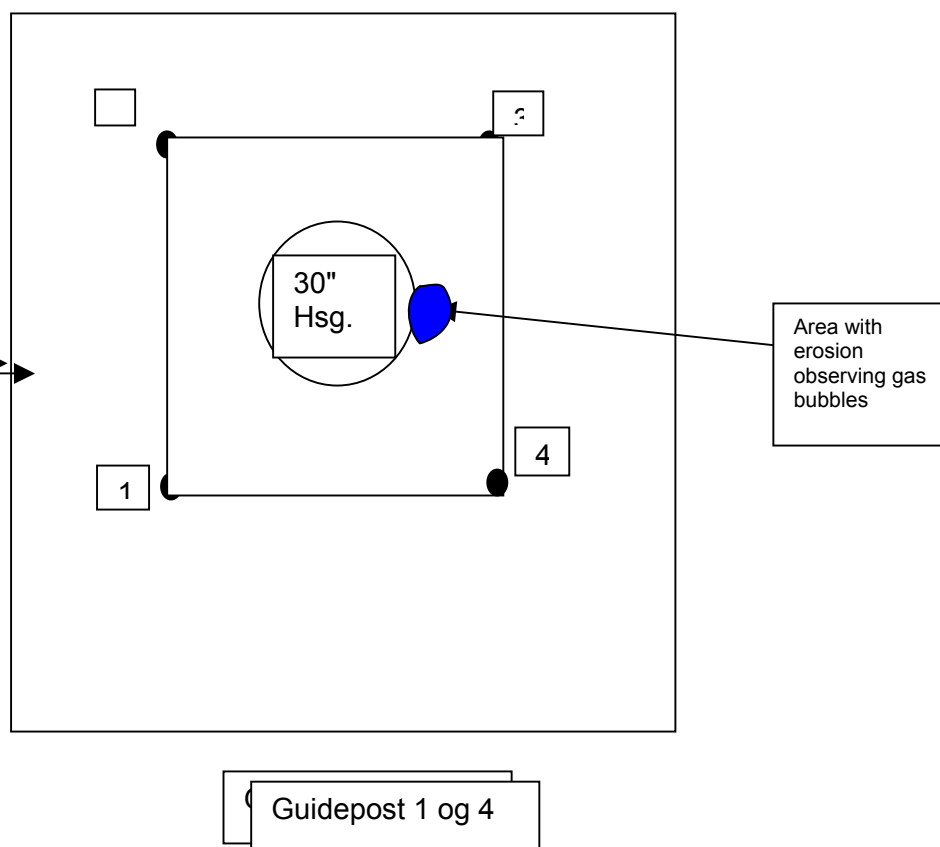
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OP was undertaken to address all relevant risks and consequences of the gas bubbles coming up around the 30" conductor and to set some criteria to continue the Drill Stem Test or to plug and abandon the well. The HAZOP that was conducted is attached to this report in the appendix section.

6.5 Involvement from Well Flow Dynamics

One of the actions after the video was evaluated was to contact Well Flow Dynamics to assist the operation. The kill models prepared during the planning phase were updated.

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4. Analysis of situation

4.1 General

Well Flow Dynamics arrived on Hydro's location at Sandsli, Bergen on the 21st of June, 2006. The video observations from the ROV indicate a relatively low flow rate of gas at seabed. Assumption was made that the flowpath for the gas release is from the reservoir up on the outside of the casing strings. Smaller gas bubbles rise from a concentrated area outside, and on one side of the 30" conductor. Simulations were performed in order to evaluate the size of a potential channel from the reservoir to the seabed corresponding to the observed flow.

4.2 Inflow performance

Figure 4.1 shows the deliverability of the well based on the reservoir parameters in Table 1.1, using the Forchheimer equation for inflow performance with 1 Darcy permeability, 17 m net pay, zero skin and 0.02 1/mmscf/d turbulent skin.

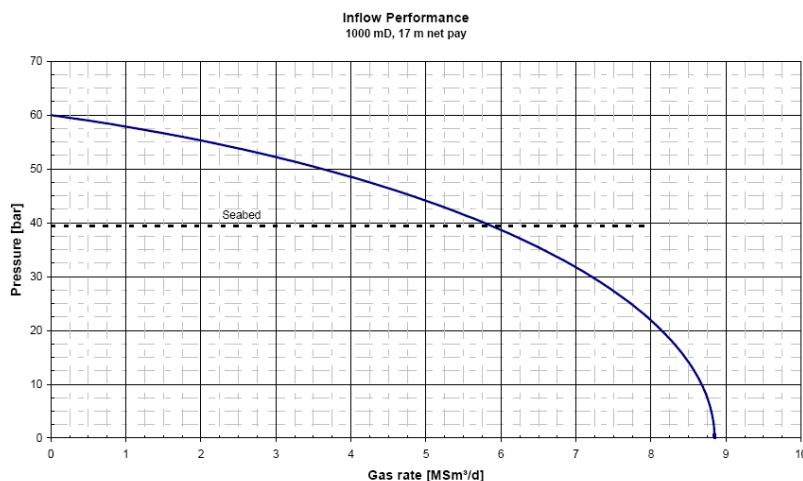


Figure 4.1: Forchheimer IPR curve for 1000 mD and 17 m net pay.

4.3 Smaller flow path/channel from reservoir to seabed

By visually analyzing the video taken by the ROV of the gas release at seabed, it is apparent that the rate could be in the area of 1 - 10 liters per second, seabed conditions. One liter at the seabed equals 43 liters at standard conditions.

6.6 Risk assessment and HAZOP

The risk register was reviewed and a separate Risk assessment/HAZOP was held. The objective was to get a clear picture of the situation and possible solutions when planning the forward operations. The HAZOP report is included in the appendix section.

7 Revised Plug and abandonment program

A revised Plug and Abandonment program was prepared and approved internally in Hydro prior to be sent to PTIL. The Plug and Abandonment program also included an inspection program of the wellhead, which has the Hydro Synergi reference # 641582. The cement plugs were not pressure tested, only load tested, due to the risks of expanding the gas channel and further braking down the formations. . A logging program was initiated to verify the quality of the cement bonding behind 13 3/8" in addition to 9 5/8" and 7" casing.

The final program was a result of several meetings between onshore and offshore. The plans were presented and reviewed by Hydro Drilling Superintendents, Hydro Drilling Technology department and Senior management to assure the operations were planned according ALARP principles.

7.1 Sequence of events from revised P&A program.

1. Cut 7" liner @ 561 m.
2. Flow check/monitor.
3. Section mill 7" liner from 561 to 577 m.
4. Run in and install Inflatable Packer (ICP) in open hole @ 571 m
5. Set Barite plug on top of ICP. Dress off as required
6. Cut 7" Liner hanger and retrieve 7" PBR
7. Pull and retrieve remaining 7" liner.
8. If not able to pull 7" Liner then mill or cut remaining part of the 7" liner.
9. Set cement plug from +/- 570 m to as high as possible into 9 5/8" liner . WOC and dress off cement to +/- 561 m (Check hydrostatic vs. FIT).
10. Retrieve 9 5/8" Tieback.
11. Cut 9 5/8" liner hanger @ 540 m. Retrieve 9 5/8" PBR
12. Pull upper part of the 9 5/8" liner.
13. If not able to pull 9 5/8" casing mill 9 5/8" liner
14. Pull lower part of the 9 5/8" liner
15. If not able to pull or casing mill then cut 9 5/8" liner in sections from 540 to 560 m.
16. Set cement plug from 561 to 420 m. U-tube or consider to hesitate squeeze the cement in place. Wait on cement.
17. Dress cement inside 13 3/8"
18. Run 13 3/8" CBL log to verify cement in 13 3/8" casing
19. If able to qualify the cement on the outside of the 13 3/8" casing set a cement plug inside 13 3/8" casing to +/- 20" x 13 3/8" XO (enough spacing to cut 30 well head housing)
20. If not able to qualify the 13 3/8" casing section then mill 13 3/8" as required an set cement plug
21. Wait on cement . Run in and dress off cement
22. Top up 13 3/8" casing to same depth as point 19
23. Leave well head and install corrosion cap an Netguard
24. Implement inspection program after the rig have left the location to monitor for gas leakage

7.2 Run #15 – Cut 7" Casing at 561 m

The objective was to cut hole in the 7" liner at 561m to circulate inn 1.15 sg mud behind the the annulus of the 7" liner. The plan was to section mill 7" liner down 579m, which was according to the original P&A program to have minimum 4m distances between the overburden casings and the 7" liner in the reservoir.

Held pre-job meeting and made up a 7" Smith casing cutting assembly including a circulation sub and non-ported float. Ran in the hole with the string spaced out to 561 m and recorded parameters prior to land the marine swivel in the wellhead. Sat down 7 tons weight and closed upper the annular preventer. Recorded new off bottom parameters and slow circulation rates through the choke line.

Cut the 7" liner at 561 m with 100 - 120 rpm, 350 lpm and 138 bar and recorded loss of 0,7 - 0,8 m3 in active system. Circulated 2 times bottoms up when active volumes stabilized and recorded 0,8% gas in mud returns.

Continued to cut 7" liner and the pump pressure dropped from 161 bars to 70 bars after the torque increased by 2 kNm. Stopped the pumps and string rotation and observed a loss to the formation of 4 - 9 m3/hour. Continued to circulate at 100 lpm - 22 bar to keep mud volume constant.

Stopped the circulation and closed the diverter and opened up the annular preventer. Flow checked the diverter line and observed well to be stable over the trip tank.

Got losses up to 4- 6m3

Circulated the long way with 100 lpm and got losses up to 4 - 6 m3/hour to the formation. Flow checked the well and prepared to pump LCM pill. Pumped 4 m3 1.20 s.g. LCM pill at 260 lpm and 21 bar and displaced the pill with mud. Flow checked the well and confirmed the well stable for 45 min.

Pulled slowly out of hole without lubricating from 561 m to 500 m and flow checked the well for 30 min. Pumped 6 m3 of 1,20 s.g LCM pill and displaced the LCM pill with mud. The string plugged up and the pump pressure increased from 11 to 53 bar. Dropped a 1 7/8" steel ball and pressured up the string to 140 bar and sheared the circulation sub. Continued to displace LCM to 100 m above the bottom of the string. Flow checked the well prior to pull out of the hole.

Pulled out of hole with the casing cutting assembly, racked back the Marine swivel and laid down the 7" x 16 1/8" casing cutter. Marks were found on the cutter confirming that the 7" casing had been cut.

7.2.1 Run #15 – 3 1/2" stinger to establish circulation

Made up 3 1/2" stinger including a non ported float and ran in the hole on 3 1/2" drill pipe to 496 m. Established circulation at 220 lpm and 10 rpm and observed slight losses of 0,2 m/hr. The losses decreased to zero. Increased the flow in 100 lpm steps from 300 lpm to 1300 lpm and observed slight losses at 1300 lpm. Reduced the flow to 300 lpm and increased the flow rate in steps to 1750 lpm when having full returns.

Continued to run in the hole with 3 1/2" stinger to 565 m and established circulation at 100 lpm and 10 rpm, and increased the flow rate in 100 lpm steps up to 1500 lpm having full returns. Flow checked the well prior to lubricate and pull out of the pull out of the hole.

8 Decision to P&A the well

8.1 Introduction

Based on the fact that the gas bubbles stopped when heavy mud was displaced with 1.15 mud. The conclusion was that it is most likely that the gas is coming from the reservoir and that the barriers were lost. Main focus was know to re-establish barriers and abandon the well. The strategy was to remove the 7" liner, set an inflatable packer as foundation prior to set a cement plug in the open hole below 9 5/8" shoe. The cement plug and the barite plug should seal the reservoir when retrieving the 9 5/8" liner. Once the 9 5/8" was removed the plan was to set a cement plug into the 13 3/8" casing. The idea was to have some natural squeeze by the hydrostatic head of the volume. The plan was not to do a squeeze cement job below 13 3/8" shoe not to risk to expand any fracture channel.

For the same reason there was no plans to pressure test the cement plugs risking to develop horizontal fractures which could further develop into vertical fractures having communication to the seabed. Norwegian Geotechnical Institute (NGI) have done substantial work to describe Borehole stability and Casing integrity and Borehole stability analysis. These analyses have been documented in several reports to identify risks and understanding failure mechanisms.

7", 9 5/8" and 13 3/8" casings were logged with USIT/CBL in order to gather data to evaluate the cement jobs behind the casings. Both 7" and 9 5/8" liners poor cement jobs with no bonding to the formation. The logs also showed that the annulus were filled with gas. For more details regarding the cement bond log refer to the Schlumberger logs and interpretations of the logs.

The 13 3/8" casing was also logged with CBL/USIT to document the status of the 13 3/8" the cement behind the 13 3/8" casing.

Decision was made leave the 13 3/8" casing in place leaving the 18 5/8" wellhead in place to have the flexibility to re-enter the well if need over time. A monitor program is in place and the well will be inspected as follows:

The first year:

- After 1, 3, 6 and 12 months

After one 1:

- Based on the results after 1. year of inspections, inspection intervals will be once every year.

The final P&A program is attached in the appendix section to this report.

8.1.1 Run 16 - 7" Section milling

Made up a 7" x 9 1/2" section Smith milling assembly, which included a non ported float and a circulation sub. Tested the 7" x 9 1/2" section mill on surface pumping 1000 lpm - 8 bar and continued to run in the hole from 379 m to 570 m.

Held pre-job meeting with the crew prior to start 7" section milling focusing on well control issues and milling procedures. Filled the pipe and broke circulation with 170 lpm - 6 bar and boosted the riser with 1000 lpm. Increased flow rate in steps up to 800 lpm -18 bar.

Stopped the pumps while off loading the supply vessel according to well control and volume control procedures. Broke circulation in steps to 1000 lpm - 21 bar and moved the string up and down in order to locate cut at 561 m. Increased the flow to 1100 lpm / 24 bar and located cut at 561 m.

Boosted the riser with 1000 lpm and started section prior to start milling with 500 lpm - 10 bar. Milled 0,5 m of 7" liner and increased the flow rate to 1000 lpm - 25 bar. Continued to mill with 120 rpm and 3-4 ton weight on the cutters.

Experienced losses at 562,5m and reduced the flow rate from 1000 lpm to 700 lpm. Moved the pipe up and down 1,5 m to remove swarf and pumped 4 m3 high viscous pill. Increased the flow to 1100 lpm - 24 bar with full returns.

Continued milling from 562,5 m to 564,5 m. Got 5 bar gradual increase in the pump pressure and losses to the formation indicating the hole was packing. Picked off bottom and stopped pumping and moved the string 10m up and down for three times to remove swarf prior to start pumping. Increased the flow in steps to 950 lpm-22 bar and pumped high viscous mud pill. Flow checked the well and pulled out of hole from 561 m to 501 m to above the 7" liner. Pumped 3 m3 high viscous pill down the string and 5 m3 down the choke line and circulated bottoms up.

Pulled out of hole with the section milling assembly and inspected the bottom hole assembly. The cutters were changed on the 7" section milling tool and the cutters were found to be worn 3-4 mm. 2-3 m above the cutters the bottom hole assembly had circumferential marks.

8.1.2 Run 17 – 7" Section milling from 562,5 m – 566,3 m

Ran in hole with the 7" x 9 1/2" section mill assembly to 562 m. Broke to 1000 lpm and 22 bar pressure and boosted the riser. Rotated the string with 130 rpm and 2,7 - 4 kNm torque and the assembly took weight at 564,5 m. Continued to section mill from 565 m to 566,3 m with low ROP which was most likely caused by a 7" Casing Collar at 565 m. The milling torque became erratic varying between 2,7 and 7 kNm. Picked off bottom several times and changed the milling parameters without making any progress.

Flow checked the well and pulled out of hole with the milling assembly. Inspected the bottom hole assembly and changed cutters on the section mill.

8.1.3 Run 18 – 7" Section milling from 566,3 - 576 m

Re-arranged the bottom hole assembly and ran in hole with the 7" x 9 1/2" section milling assembly to 587 m without experiencing any restriction in the 7" liner. Positioned the cutters at 565 m and established circulation in steps up to 1000 lpm and boosted the riser with 1000 lpm. Continued to section mill 7" liner from 566,3 m to 569 m while pulling the string off bottom without any rotation every 1 m milled. At 569m the hole packed off and the pumps rotary were stopped. Pulled the BHA into 7" liner to clean the hole above.

Ran back in the hole and re-established circulation to 1000 lpm and pumped high viscous pill to clean the hole. Continued to section mill 7" liner from 569 m to 575 m and pulled the string off bottom. Stopped rotation while pumping 3-4 m3 high viscous pill every 1 m.

Ran back into the hole and continued to section mill 7" liner from 575 m to 576 m. The pressure increased again and the string had to be picked off bottom while working the string without any flow or rotation inside the 7" liner. Ran back into the hole while circulating to 582 m without taking any weight on the cutters at top of the 7" liner 576 m.

Decision was made to pump 4 m3 high viscous pill and circulated bottoms up at 1000 lpm while 1500 lpm boost on the riser. Flow checked the well and lubricated out of hole.

At surface the cutters were found to be in place but the cutters were stuck in retracted position. The wear on the cutters was reported as normal.

8.2 Clean out assemblies

8.2.1 Run 19 – BOP clean out run #1

Based on the problems experienced during the milling operation decision was made to perform a clean out run. A lot of steel had accumulated during the milling operation. It was only a fraction of the steel that had come over the shakers. This was caused by the low flow rate was giving poor hole cleaning. Decision was also made not to increase the viscosity of the mud, which was based on the increased risk of fracturing the formation.

Made up the BOP clean out assembly which included the Well Protector, jetting sub and Well Sweep Magnets. Ran in hole to 447 m on 5" drill pipe. Established a circulating rate of 3000 lpm - 26 bar. Reduced flow rate to 1500 lpm - 10 bar and reciprocated and rotated the string at 12 rpm up through the BOP.

Flow checked the well prior to pull out of the hole. The string swabbed when pulling out of the hole indicating that the Well Protector tool was packed with swarf inside the 9 5/8" casing. Observed 150 l gain on trip tank. Continued to pull carefully out of the hole while rotating the string with 12 rpm. Performed a new flow check with the Well Protector above the well head. The 150 l gain on trip tank went back into well bore when the Well Protector was above the well head. Pulled out of hole with the BOP clean out assembly and found the Well Protector and Well Sweep Magnets completely packed with metal swarf from the 7" liner. The rubber element on Well Protector were partly damaged. The Well Protector rupture disc was not bursted.

Comments on fix from SPS

8.2.2 Run 20 – Bop Clean out run #2

Made up a new BOP clean out assembly with bull nose, jetting sub and Well Sweep Magnets and ran in the hole to 410 m.

Established circulation to 1500 lpm - 17 bar and boosted the riser with 1500 lpm. During the circulation observed gain in active system. Stopped the pumps and shut in the well on the lower annular and closed the diverter. Changed over to the trip tank and observed the well on the Trip Tank. Circulated down the kill line while taking the returns up the choke line with a rate off 200 lpm - 10 bar. Opened the lower annular preventer and checked for flow over the diverter line. Opened up the diverter and checked that the trip tank was stable. Boosted the riser with 1500 lpm. and got gas readings of 4% in the return. Shut in the well on lower annular and closed the diverter. Observed no flow in the diverter lines.

Opened the diverter and annular preventer and flow checked the well. Circulated with 1000 lpm - 6 bar and got 2% gas reading in the return. Shut in the well on the lower annular and closed the diverter due to an increase in the trip tank of 900 l. Observed no flow in the diverter lines. Opened the annular and continued to circulate bottoms up with 1000 lpm - 6,5 bar. Maximum recorded gas was 0,4% and increased the flow rate in steps to 1500 lpm - 9,5 bar and reciprocated the jet sub through the BOP area.

Flow checked the well and pulled out of hole with the BOP clean out assembly. Laid out the magnets and the jetting sub. The Magnets were partly filled with swarf.

8.2.3 Run 21 – 3 1/2" stinger

Changed to 3 1/2" equipment and cleaned the rig floor and trip tank. Ran in hole with 3 1/2" cement stinger on 3 1/2" drill pipe and with non-ported float. Continued to run in hole on 5" drill pipe. Stood up at 559 m and set down 2 ton. Attempted to pass 559 m and set down 8 ton with 10 ton.

Closed the lower annular and circulated bottoms up with 90 lpm - 9 bar taking the returns up the choke line to the poor boy and recorded kill pressure of 4.7 bar. Continued to circulate with 130 lpm and 8,8 bar recording Kill line pressure of 5 bar.

Closed the diverter, opened the lower annular and flow checked the well on the trip tank. Opened the diverter and flushed the choke and kill lines to remove possible swarf in the lines. Circulated through the string with 160 lpm - 7 bar and increased the flow to 400 lpm - 14 bar and pulled out to 555 m. Made an attempt to run in the hole to 560 m, but observed losses and had to reduce the flow to 160 lpm - 10 bar and stopped pumping. Displaced the riser while pumping down the kill line and flow checked the well. Lubricated out of the hole with 3 1/2" cement stinger to 525 m.

Continued to pull out of hole with the 3 1/2" cement stinger while lubricating. The cement stinger was packed with swarf and only the upper circulation ports were open.

8.2.4 Run 22- BOP clean out assembly #1

Made up the BOP clean out assembly Well Protector, jetting sub and Well Sweep Magnets and ran in the hole with BOP clean out assembly to 400 m on 5" drill pipe prior to test the

BOP. Ran Well Protector into 9 5/8" casing in steps in order to verify no swabbing of the tool.

Circulated bottoms up with 3000 lpm - 25 bar with 30 rpm at 1,4 kNm and circulated with 1500 l/min through the boost. Cleaned the BOP with 1500 lpm - 10 bar and made one pass inside the BOP. During the BOP clean up the BOP rams were operated. Continued to clean the BOP until no swarf was seen at surface. Flow checked the well and pulled out of hole with the BOP clean out assembly. Emptied the well protector and cleaned the magnets. Well protector was full and a total of 44 kg of swarf was recovered.

8.2.5 Run 23- BOP clean out assembly #2

Ran in hole with BOP clean out assembly to 415 m on 5" drill pipe boosted the riser with 1500 lpm while cleaning the BOP. Circulated with 1500 lpm and 30 rpm and worked the cleanout assembly three times inside the BOP. Flow checked the well and pulled out of hole the hole with the BOP clean out assembly.

Cleaned the well protector and magnets. Well protector was empty and a total of 5,5 kg of swarf was recovered.

8.2.6 Run 24- BOP clean out assembly #2

Ran in the hole with BOP clean out assembly #2 to 412 m on 5" drill pipe. Boosted the riser with 1500 lpm while cleaning the BOP and circulated with 1500 lpm while working the BOP clean out tool 3 times inside the BOP. No rotations due to magnets were inside the BOP. Flow checked the well and pulled out of hole. The Well protector was close to empty and a total of 2 kg of swarf was recovered.

Based on the latest recovery it was concluded that the hole more was clean enough to test the BOP.

8.2.7 Run 25 – BOP Test Tool

Made up the BOP Test Tool with 5" and ran in the hole to 390 m. The string was plugged at 180 m and circulated down the string to clear pipe. Landed the BOP test Tool on the Well Head and tested the BOP to 10 bar/5 min and 135 bar/10 min.

Pull out of hole with the BOP test tool to 150 m and observed the BOP test tool packied off inside the riser. Turned the string and pulled slowly out of the hole. Pulled out of the hole to surface but did not find any swarf on the BOP test tool.

Pressure tested the Kelly Cock and Kelly hose on the DDM.

8.2.8 Run 26 – Clean out assembly w/ 6" junk mill

Made up clean out assembly with 6" junk mill, drill collars, 2 x 6" magnets, circulation sub, 4 3/4" drill collar, jar. Ran in hole with clean out assembly to 525 m and increased circulation to 160 lpm and 10 bar. The pressure increased to 13,5 bar. Pulled out of the to 510 m and increased flow to 1500 lpm - 238 bar rotating with 50 rpm - 1,4 kNm torque.

Washed down from 508 m to 557 m and reduced the flow to 1250 lpm at 515 m due to increased pressure. At 557 m the pump pressure increased by 4 bar and the flow was reduced to 500 lpm - 38 bar. Worked the string attempting to clean the hole. Lubricated out of hole from 553 m to 500 m and established circulation at 1250 lpm - 175 bar.

Washed down from 500 m to 557 m and reduced flow to 1000 lpm - 110 bar at 544 m. Experienced increase in pressure to 114 bar due to string packing off. Flow checked the well and lubricated out of the hole.

Laid out and cleaned the 6" magnets and 8,34" magnets, which were full of metal swarf.

8.3 Run 27 – Clean out assembly w/ junk mill

Made up new clean out assembly with 6" junk mill, drill collars, circulation sub, 4 3/4" drill collar, jar, 2 x 6" magnets, non ported float and 7 x 8,34" magnets. Ran in the hole with the clean out assembly to 494 m and established circulation at 1250 lpm - 174 bar and boosted the riser with 1500 lpm. Ran in the hole from 494 m to 532 m with 1200 lpm - 166 bar. Washed down from 532 to 560 m and observed 4 bar increase in the pump pressure. Attempted to work the string down and stopped the pumps. Flow checked the well and . Lubricated and cleaned the magnets and recovered 30 kg swarf.

8.4 Run 28 – Clean out assembly w/ 6" junk mill

Made up new clean out assembly comprising 6" junk mill, drill collars, circulation sub, 4 3/4" drill collar, jar, 2 x 6" magnets, non ported float and 7 x 8,34" magnets. Ran in the hole to 494 m established circulation at 1250 lpm - 174 bar and boost riser with 1500 lpm. Ran in the hole from 494 m to 532 m with 1200 lpm - 166 bar and washed down from 532 to 560 m. Observed 4 bar increase in the pump pressure. Attempted to work the string down. Flow checked and lubricated out of the hole to 128 m. 13:00 Cleaned the magnets and recovered 30 kg swarf.

8.5 Run 29 – Clean out assembly w/6" junk mill

Ran in hole with to 532 m and established circulation at 1200 lpm - 178 bar while boosting the riser with 1500 lpm. Washed down from 532 to 561 m where the pump pressure dropped by 10 bar. The pressure came back up after the connection. Continued to wash and work the string with 50 rpm and got 4 bar pressure increase. Flow checked the well lubricated out of hole with the clean out assembly to 128 m.

Cleaned the magnets and recovered 60 kg swarf.

8.6 Run 30 – Clean out assembly w/6" junk mill

Ran in hole with the same clean up assembly to 541m. Circulated with 1150 lpm – 131 bar and circulated the riser with 1500 lpm. Lubricated out of hole with the clean out assembly to 128 m.

Cleaned the magnets and recovered 40 kg swarf.

8.7 Run 31 – Clean out assembly w/6" junk mill

Ran in the hole with the clean out assembly to 542 m. Established circulation at 1130 lpm - 132 bar while boosting the riser. Washed down from 541 to 561 m with 60 rpm – 100 rpm while observing 4 bar pressure build prior to pick off bottom. Lubricated out of hole with the clean out assembly to 128 m.

Cleaned the magnets and recovered 41 kg swarf.

8.8 Run 32 – Clean out assembly w/6" junk mill

Ran in the hole to 542 m and circulated at 80 lpm - 7 bar to keep the nozzles clean. Continued to run in hole from 542 m to 562,5 m and applied 1 ton weight and increased the flow to 1200 lpm 172 bar and attempted to clean the hole with 120 rpm - 2,7 kNm observed 2 bar pressure build up Flow checked the well lubricated out of hole with the clean out assembly to 128 m.
Cleaned the magnets and recovered 42 kg swarf.

8.9 Run 33 – Clean out assembly w/6" junk mill

Ran in hole with the clean out assembly to 542 m.
Circulation with 1200 lpm - 168 bar and rotated with 135 rpm - 2,7 kNm. Washed down from 542 m to 562,5 m and observed 4 bar pressure build up.
Reduced the flow rate to 160 lpm - 10 bar and took 3 ton weight on top of the 7" at 576,3 m where the 7" liner was cut. Turned the string at 10 rpm and entered the 7" liner. Run in hole to 585 m and took 3 ton.
Pulled out of the hole to 551 m and made an attempt to increase the flow rate but the pump pressure was above reference values.
Made a second attempt to wash past 585 m but did not manage and sat down 3 ton weight. Flow checked the well. Lubricated out of the hole with the clean out assembly to 390 m and pulled to 128m .

Laid down the magnets and recovered 40 kg of swarf after clean out. Continued to pull out and laid down the milling assembly.

8.10 Run 34 – BOP Clean out assembly

Made up 7" section milling BHA and function tested the cutters with 1100 lpm - 10 bar. Ran in hole with the 7" x 9 1/2" section milling assembly to cut at 574 m. Increased the flow to 1000 lpm/ 26 bar to activate knives and section milled 7" liner from 574 m to 577 m. Worked and reamed the cut area from 577 m to 562 m.
Pumped a 4 m³ 1,15 sg high viscous pill down the drill string. Flow checked the well for 15 min. and lubricated out the the hole and laid down the assembly.

8.11 Run 35 – BOP clean out tool

Made up the BOP clean out assembly comprising jetting sub and Well Sweep Magnets. Ran in the hole to 412 m and staged up the pumps to 1500 lpm - 20 ba. Pulled back 4 m to 408 m and observed the pump pressure decreased to 12bar.
Cleaned the BOP with 1500 lpm while boosting the riser.

Flow checked the well and pulled out of hole and laid down the BOP clean out tool. The Well protector was emptied and a total of 37,5 kg was recovered.

8.12 Run 36 – BOP clean out tool

Made up the clean out assembly with 5 3/4" junk mill, drill collar, circulation sub, drill collars, 2 x 6" magnets, non ported float and 7 x 8,34" magnets. Ran in the hole to 542 m

Staged the pumps up to 700 lpm - 68 bar. The pressure increased to 72 bar. Worked the string to reduce the pressure increase. Observed the same pressure.

Laid down magnets made up to the bottom hole assembly and recorded a total of 25 kg swarf.

8.13 Run 37 – BOP clean out BHA

Ran in the hole with the same clean up assembly to 532 m.

Staged up the pumps to 1000 lpm - 115 bar and washed down to 580 m observing a 4 bar pressure increase. Pulled the string back to 561 m and ran in the hole to 586 m and observed 4 bar pressure increase circulating with 160 lpm. Racked back one stand and flow checked the well prior to lubricate out of the to 106 m

8.14 Run 38 – Well Clean out BHA

Made up the magnets further down in the bottomhole assembly for more effective cleaning over the setting area of the open hole inflatable packer. Ran back in the hole with the clean up assembly from 98 m to 503 m. Staged up the pumps to 1000 lpm - 121 bar and washed down to 576 m. Rotated and reciprocated the string in the cutting Area and observed the pressure increase to 4 bar when the magnets where located at the top cut at 561 m. The pressure fell back to normal when the magnets passed the top cut the string to get the magnets into the top cut. Had to Stop the pumps due to a losses. Flow checked the well and added defoamer in to to the trip tank due to foam development. Lubricated out of the hole and laid down the BHA. Recovered a total of 63 kg swarf.

8.15 Run 39 – Well Clean out BHA

Ran in the hole with the same clean out assembly to 551 m and Staged up the pumps to 1000 lpm - 120 bar and washed down to 576 m. Worked the string in the cut area. Racked back one stand and flow checked the well. Lubricated out of the hole to 98 m And laid down the clean out assembly.

Recovered a total of 22 kg swarf.

8.16 Run 40 – BOP Clean out BHA

Made up BOP and riser clean up assembly and ran in hole with the Bop and riser clean up assembly to 410 m. Washed the BOP area with 1500 lpm - 10 bar two times inside the BOP prior to circulate bottoms up and POOH and laid down and cleaned the magnets, riser brush and well protector.

Recovered a total of 10 kg swarf.

8.17 Run 41 – Well clean out BHA

Made up new bottom hole assembly consisting of a mule shoe and a junk trapper and ran in the hole and tagged top of PBR at 504 m. Circulated and washed the well from 504 m to 383 m. Flow checked the well and added de-foamer to the trip tank and pulled out of the hole.

Recovered a total of 1 kg swarf.

8.18 Run 42 – Inflatable packer 1

The intention of the Peak inflatable packer was to serve as a foundation when setting cement and barite plugs to seal off the reservoir with reference to the final P&A drawing.

Picked up the inflatable packer and filled it with brine. Confirmed no leakage through the packer and ran in the hole to 570. Circulated to open the Inflate Access Valve and the pressure dropped at 72 bar. Continued to pump up the inflatable packer with 250 l and observed a sudden pressure drop to 36 bar. Bled off the pressure and sat down 2 ton on the plug for 20 min.

Attempted to hydraulically release the plug circulating through the Inflate Pressure Limit Valve. Observed a pressure drop at 59 bar. Pulled the string up 0,5 m to verify release from the running tool and no over pull was observed but experienced flow restriction when circulating.

Due to a negative confirmation that the Inflatable Packer was set it was pushed down to 577 m applying 1 ton weight above the free down weight. Attempted to release the plug mechanically with no success. Pressured up the drill string to 170 bar and the plug released hydraulically. Pulled out of the hole with the drill string from 577 m to 474 m.

Experience:
Refer to Peak report on follow up on this operations

8.19 Run 42 – Inflatable packer 1

Continued to pull out of hole with running tool. Picked up the second inflatable plug and filled it with brine. Ran in the hole with the second inflatable plug to 570 m.

The packer space out was:

Top Packer : 566,41 m.
Bottom element: 570 m.
Top element : 567,10 m.

Pumped down the drill string to open the Inflate Access Valve. Observed the drill string moved with the rig heave which verified that the plug was set. Bled off the pressure and sat down 2 ton on the plug. Attempted to hydraulically release the plug by pumping down the drill string and through the Inflate Pressure Limit Valve without any success. Turned the drillstring 8 turn and mechanically released the packer.

Flow checked the well and pulled out of the hole with the running tool.

Exsperience:
This was the second time the ICP release mechanism failed.

8.20 Run 43 – 3 ½" DP stinger to Pump Barite plug

Prior to this operation the barite plug formulation was test in Baker Hughes Drilling fluids lab. In addition the barite plug design was tested at West abs facilities and the plug was found to holding gas, which was an additional advantage when pumping and setting up the the cement plugs. The barite slurry was pumped settled out. For more details refer to Baker Fluids End of well report and West labs thirds party test report.

Made up a 3 1/2" stinger and ran in the hole to 563 m and pumped 2 m3 of 1,15 sg brine which contained 5 % MEG. Prior to mix and pump 450 l of 1,68 sg barite slurry displaced

the hole with the slurry which included 2060 l Brine. Pulled up to 540 m and circulated bottoms up prior to run in the hole to 550 m. Pumped 2 m³ of 1,15 sg Brine containing 5 % MEG as spacer. Mixed and pumped 350 l of 1,68 sg barite pill which was displaced with 1940 l Brine. Pulled out of the hole 520 m and circulated bottoms up prior to lubricated out of the hole with the cement stinger.

8.21 Run 44 – Flat bottom mill to dress off barite plug

Made up the bottom hole assembly consisting of a flat bottom junk mill, drill collars and a jar. The objective of the assembly was to dress off the barite plug. Ran in the hole to 566 m but no barite plug was found. Pulled back to 558 m and circulated bottoms up. Pulled back to 548 m and flow checked the well and lubricated out of the hole.

8.22 Run 45 – 3 ½" stinger to set Barite plug #2 and #3

Made up 3 1/2" stinger and ran in the hole to 563 m. Pumped 2 m³ of 1,15 sg Brine containing 5 % MEG prior to mix and pump 1000 l of 1,68 sg barite slurry. The pill was displaced with 1885 l Brine. Pulled above the barite pill up to 491 m and circulated bottoms up. Waited on the barite to settle out while performing rig maintenance.

Ran in the hole from 491m to 550 m with the 3 1/2" cement stinger and pumped 2 m³ of 1,15 sg Brine containing 5 % MEG. Mixed and pumped 500 l of 1,68 sg barite pill and displaced it with 1876 l Brine. Pulled back to 490 m and circulated bottoms up. Flow checked the well and lubricated out of the hole

8.23 Run 46 - Flat bottom mill to dress barite plug

Made up a bottom hole assembly consisting of flat bottom junk mill, drill collars and jar and ran in the hole to tag the barite plug.

Continued to run in the hole to 566 m. and tagged the barite plug with 1 ton twice. Pulled back to 559 m and circulated bottoms up and lubricated out the hole with the flat bottom mill.

8.24 Run 47 – to punch hole in 7" liner with wire line

Ran in the hole with 5" drill pipe to punch hole below the 7" liner packer to release any trapped gas below the liner hanger. Rigged up the wire line equipment and made up the the perforation guns.

Ran in the hole with the perforation guns on wire line to 400 m through the drill pipe. Closed the upper ram on the BOP and opened the kill and choke lines. Continued to run in the hole with the perforation guns to 517 m. Fired the guns while monitoring the well head pressure on the drill pipe and choke line. A sudden pressure increase was observed after a fast evacuation out of the 7" liner. Circulated gas out the well with constant drill pipe pressure. Observed 1 m³ gain on the trip tank when the gas expanded up to the surface.

The volumes came back to normal after the gas was circulated out and no indications of losses were observed. Continued to circulate bottom up two times when having stable volume in the return and the well was confirmed stable when lined up over the trip tank. Cross-circulated down the choke line and up the kill line prior to pull out of the hole with the wire line perforation guns inside the drill pipe. Opened up the BOP ram and flow checked over the trip tank and the well was found to be stable. Laid down the perforating string and the side entry sub.

8.25 Run 48 – Drill pipe run to circulate

Ran in the hole from 452 m to 500 m with 5" drill pipe only to circulated bottoms up. Circulated down the drill pipe and taking the return up the choke line maintaining constant drill pipe pressure. No gain or any sign of gas was observed in the return. Cross circulated down the choke line and up the kill line prior to opened the BOP and flow check the well for 15 min.

The well was confirmed stable and continued to circulate bottoms up down the drill string and up the riser. Lubricated out of the hole with the 5" drill pipe.

8.26 Run 49 – 7" liner hanger cutting assembly

Made up the 7" liner cutting assembly and ran in the hole with the cutting assembly. Landed with the stop sub on top of the 7 " PBR at 504 m.

Activated the knives on the cutter assembly and rotated the drill string in order to cut the 7" liner liner hanger below the packer element. Flow checked the well and circulated bottoms up prior to lubricate out of the hole.

8.27 Run 50 – 7" grapple assembly

Made up the grapple assembly to retrieve the 7" PBR and ran in the hole with the grapple assembly to 506 m. Latched into the PBR and pulled it free with 5 ton overpull. Flow checked the well and circulated bottoms up. Lubricated out of the well and laid down the 7" PBR.

The PBR was cut according plan. Please refer to Weatherford operational summary of this operations.

8.28 Run 51 – 7" Liner fishing assembly

Made up the bottom hole assembly with a new grapple and ran in the hole with the grapple assembly to 509 m. Latched into the liner and pulled the 7" liner free, with 38 ton over pull. Flow checked the well and lubricated out of the hole with the grapple assembly and the 7" liner.

Observed the 9 5/8" wear bushing was recovered on the 7" liner packer. Laid down the grapple assembly and rigged up the 7" casing running equipment and laid down the 7" liner. Rigged down the casing running equipment and dismantled the grapple assembly.

8.29 Run 52 – to set 9 5/8" Wear bushing run

Made up the 9 5/8" wear bushing to the Multi Purpose Tool (MPT) and run in the hole with the 9 5/8" wear bushing on the MPT to 407,9 m. Sat down 13 ton and pulled out of hole. Observed 8 ton over-pull when releasing the wear bushing and pulled of the hole.

8.30 Run 53 – 8 1/2" bit and magnets

Made up the bottom hole assembly consisting of 8 1/2" bit, drill collar and 3 x magnets. Ran in the hole with the bottom hole assembly to 500 m and circulated and washed the well from 500 m to 566 m. Circulated bottoms up and flow checked the well and lubricated out of the hole. Laid down the bit and the magnets.

8.31 Run 54 – 3 ½" Cement stinger to set Cement plug #1

The idea was to set a plug above the inflatable packer and up to and inside the 7" liner. The height of the cement inside the 9 5/8" liner was designed to give sufficient cement volume and then dress the cement off 1 m below the 9 5/8" shoe..

Made up the 3 1/2" stinger and ran in the hole. Pumped 3000 l of spacer containing 5 % MEG. Mixed and pumped 3510 l of 1,95 sg cement slurry. Displaced it with 245 l spacer and 1710 l mud. Pulled up to 470 m and circulated bottoms up and flow checked the well prior to lubricate out of the hole with the 3 1/2" stinger.

8.32 Run 55 – BOP Test tool

Made up the BOP Test tool. And ran in hole. Washed the BOP and pressure tested the BOP to 10/135 bar on the yellow pod from the drillers panel. Continued to pressure test the BOP on the yellow pod from the drillers panel. Tested the BOP to 10/135 bar and pulled out of hole with the BOP test tool.

Pressure tested the Kelly Cock and the Kelly hose on the DDM to 35 bar/5 min and 345 bar/10 min.

8.33 Run 56 – 12 ¼" bit to clean out cement

Made up 12 ¼" bottom hole assembly for drilling out the cement and ran in the hole with the bottom hole assembly to 444 m. Waited on cement while performing rig maintenance. Ran in the hole tagged top of cement at 491 m and drilled cement from 491 m to 561 m. Circulated bottoms up and flow checked the well and lubricated out of the hole.

Made up and ran in hole with DrilQuip Multi Purpose tool (MPT) to retrieve 9 5/8". Washed the wellhead and sat down 11 ton and pulled up 2 m while observing 4 tons drag. Repeated the same procedure twice while observing the same drag. Pulled out of the hole and observed that the MPT was packed with cement without being latched on to the Wear Bushing.

8.34 Run 57 – Jet sub to clean up well head area

Decision was made to make up a jetting sub to wash and clean the Well Head area. Ran in the hole to 410 m and cleaned the wellhead area using the the jetting sub.

Pulled out of hole with the jetting sub and laid down the jetting sub.

8.35 Run 58 – Multi purpose tool

Made up the MPT (Multi Purpose Tool) and ran in the hole with the MPT. Washed the Well Head and sat down 10 ton and pulled out of hole. 27 ton over pull was observed when the MPT was pulled out of the hole.

Laid down the Wear Bushing and removed the anti seal lugs on the MPT tool. Ran in the hole with the MPT to retrieve the 18 3/4" Seal Assembly. Closed the lower annular preventer (LAP) and recorded up and down weight prior to opened the LAP. Washed the drill string in the hole and sat down 13 ton on the seal assembly and stopped the pumps when the MPT latched into the seal assembly.

Closed the lower annular preventer and pulled out of the hole with the seal assembly with 70 ton over pull. Monitored the well for 15 min for any pressure build in the choke line. Opened the LAP flow checked the well for 10 min. Pulled out of the hole with the Multi purpose tool and laid down the Seal Assembly .

8.36 Run 59 – 9 5/8" spear for 9 5/8" tie back

Made up the spear assembly for retrieving the 9 5/8" Tieback and Installed 9 5/8" thong. Repaired the Trolley Chain on the Cat Walk and continued to make up the bottom hole assembly for retrieving the 9 5/8" casing. Ran in the hole with the spear too 412,5 m and engaged into 9 5/8" Casing /Tieback string and pulled it free with 10 ton over pull. Continued to pull out of the hole with the 9 5/8" tie back string and released the spear from the 9 5/8" casing / Tieback. 0 and down the 9 5/8" casing. Retrieved and laid down the 9 5/8" casing /Tieback.

8.37 Run 60 – Clean up assembly

Made up the bottom hole assembly for cleaning the well. Ran in the hole with the clean out assembly from 50 m to 454 m. Washed and cleaned the well from 454 m to 560 m. Continued to wash the well from 560 m to 540 m and lubricated out of the hole from 540 m to 394 m. Flow checked the well prior to pull out of the hole with the clean out assembly from 394 m.

8.38 9 5/8" USIT/CBL logging run #1

Rigged up to run wire line the logging, made USIT/CBL cement bond logging tools. Ran in the hole to 558 m but the USIT logging tool where not functioning and after some troubleshooting pulled out of the hole with the logging string. Continued to troubleshoot at the surface and confirmed it was confirmed that the USIT rotation sub had failed and the USIT rotation sub was replaced with a new one.

8.39 9 5/8" USIT/CBL logging run #2

Ran in the hole to 558 m with the USIT/CBL logging tool. The USIT logging tool failed again and consequently the logging was only conducted with the CBL logging sensor. Logged the 9 5/8" twice from 558 m to 485 m. Pulled out of the hole from 485 m with the logging tool and rigged down the logging equipment.

8.40 9 5/8" puncher on logging run #3

Ran in the hole with 5" drill pipe to 433 m and rigged up the wire line surface equipment and made up the puncher guns with 9 5/8" bullets and charges. Made up the side entry sub to the drill string to have pressure control while punching hole. Closed the Upper Pipe RAM (UPR) on the BOP and ran in the hole with the perforation guns to 494 m inside the drill pipe. Fired the guns while circulating with constant drill pipe pressure but no pressure build was observed.

Circulated bottoms up two times with constant drill pipe pressure and flow checked the well over the trip tank and confirmed the well was stable. Cross-circulated down the choke line and up the kill line prior to open the Upper Pipe Ram (UPR) on the BOP. Flow checked the well for 15 min and continued to circulate down the drill string and up the riser. Flow checked the well again for 15 min and pulled the wire line punching tool through the drill pipe. Rigged down the wire line equipment and laid down the perforation guns.

8.41 Run 61 –5" DP to confirm no gas in the well

Since no gas was observed when punching hole in the 9 5/8" liner decision was made to run in the hole to circulate bottoms up.

Ran in the hole from 433 m to 507 m with the 5" drill pipe and closed the Upper Pipe Ram (UPR) on the BOP. Circulated bottoms up taking the return over the choke line while maintaining constant drill pipe pressure. No gain in the mud pits or any gas was observed in return. Opened the UPR and flow checked the well for 10 min and circulated bottoms up

taking the return up the marine riser. Flow checked the well for 10 min prior to lubricate out of the hole with the 5" drill pipe from 507 m to the surface.

8.42 Run 62 – 9 5/8" cutting assembly

Decision was made to continue the planned operation and cut the 9 5/8" liner hanger below the PBR.

Made up the Smith cutting assembly for the 9 5/8" PBR and ran in the hole landed the stop sub on top of the 9 5/8" PBR at 486 m. Activated the knives and rotated the drill string in to cut the 9 5/8" PBR. Observed a torque peaked after 6 min, which indicated that the knives had cut through the 9 5/8" PBR.

Flow checked the well and pulled out of the hole with the cutting assembly and laid down the stop sub and the cutting knives.

8.43 Run 63 - 9 5/8" retrieving assembly

Made up the 9 5/8" PBR retrieving assembly and ran in the hole to 486 m. Latched into the 9 5/8" PBR and pulled it free with 70 ton pull. Flow checked the well for 10 min and circulated bottoms up. Confirmed the well was stable and lubricated out of the hole to 382 m and continued to pull out of the hole from 382 m to the surface.

Released the grapple from the 9 5/8" PBR racked back the retrieving assembly.

8.44 Run 64 – 9 5/8" Liner retrieving assembly

Made up the retrieving assembly for the 9 5/8" liner. Ran in the hole with the 9 5/8" liner retrieving assembly to 473 m. Latched into the 9 5/8" liner with the grapple and sat down 10 tons. Worked the drill string in steps of 50 ton to max 250 ton up weight. Jared two times with 50 ton and four times with 70 ton over-pull with out having any success. Released the grapple from the 9 5/8" liner. Flow checked the well for 10 min and confirmed the well was stable.

Inspected the Derrick for loose items after jarring and pulled out of the hole with the 9 5/8" liner retrieving assembly. Laid down the 9 5/8" liner retrieving assembly.

8.45 Run 65 – 9 5/8" Cutting assembly

Made up the 9 5/8" cutting assembly and tested the cutters at surface. Observed plugged flow path to the knife activator piston. Ran in the hole with the 9 5/8" cutting assembly and landed the stop sub on the 9 5/8" liner at 491,26 m. The cutters were activated and rotated the drill string while cutting the 9 5/8" liner. The pump pressure dropped from 62 bar to 48 bar confirming the liner to be cut. Flow checked the well and circulated bottoms up taking the return up the choke line. Opened the Upper Pipe Ram and flow checked the well for 10 min prior to circulate bottoms up and flow check the well. Lubricated out of the hole to 389 m and continued to pull out of the hole too the surface. Laid down the stop sub and the cutters.

8.46 Run 66 – 9 5/8" spear assembly for 9 5/8" liner

Made up the spear assembly to retrieve the 9 5/8" liner and ran in the hole to 473 m. Latched into the 9 5/8" liner with the grapple and sat down 10 ton weight

Worked the drill string and pulled up to max 195 ton over pull and jarred 10 times with max 70 ton over pull without any success. Released the spear from the 9 5/8" liner and

inspected the derrick for loose items after working the jar. Lubricated and pulled out of the hole.

8.47 Run 67 - 9 5/8" spear assembly run on HWDP

Laid down the Pack Off tool and the circulation sub and installed a bull nose. Changed to 5 1/2" HWDP handling equipment and ran in the hole with the bottom hole assembly on 5 1/2" HWDP to 432 m. 480 m and latched into the 9 5/8" liner with the spear and sat down 5 ton. Worked the drill string up to max 265 ton over pull. Jared 10 times with max 90 ton over pull. Lubricated the 9 5/8" liner out from 494 m to 389 m with 55 ton drag and pulled out of the hole with the 9 5/8" liner retrieving assembly. Checked the Derrick and Top Drive for loose items after jaring. Laid down the 9 5/8" Liner retrieving assembly and released the grapple from the 9 5/8" liner.

Rigged up the 9 5/8" casing handling equipment and laid down the 9 5/8" Liner. Rigged down the 9 5/8" casing handling equipment.

8.48 Run 68 – 8 1/2" cleanout assembly

Made up the 8 1/2" clean out assembly and ran in to hole on 5" drill pipe to 503 m. Washed down from 503 m to 560 m circulating with 1600 LPM. Pulled out of the hole to 527 m and circulated the hole clean with 3200 LPM. Lubricated and pulled out of the hole and laid down the drilling jar and racked the clean out assembly in the derrick.

8.49 Run 69 – 9 5/8" casing spear assembly

Made up the 9 5/8" casing spear assembly and ran in the hole with the 9 5/8" casing spear assembly on 5 1/2" x 5" HWDP from 43 m to 527 m. Broke the circulation and recorded slow circulation rates with mud pump #3. Engaged the casing spear to the 9 5/8" liner and closed the lower annular preventer. Worked the liner from 560 m to 557 m with 270 ton over-pull. Not able to work the 9 5/8" liner due to rig heave. Worked the liner from 557 m to 552 m with 270 ton overpull. Released the casing spear and racked back 1 stand 5" HWDP. Picked up 1 single 5" HWDP and engaged the casing spear and circulated. Lubricated out of the hole with the 9 5/8" liner from 531 m to 360 m. Inspected the top drive and the derrick for loose items after jarring. Pulled out of the hole with the 9 5/8" liner from 360 m to 131 m and installed the casing tongs pulled out of the hole with the 9 5/8" liner from 131 m and released the 9 5/8" casing spear. Laid down the spear and the fishing jar and rigged up the 9 5/8" casing handling equipment and rigged up and laid down the 9 5/8" liner. Inspected the top drive and the derrick for loose items.

8.50 Run 70– 12 1/4" bit and 14 1/2" Under-reamer assembly

Made up the under-reamer assembly comprising a 12 1/4" bit, 14 1/2" under-reamer and 13 3/8" casing scraper assembly. Ran in the hole with the 14 1/2" under-reamer and 13 3/8" casing scraper assembly on 5 1/2" x 5" HWDP 535 m and reamed up the hole from 12 1/4" to 14 1/2" from 540 m to 560 m. Circulated the well clean and flow checked the well. Circulated down a 2 1/8" ball with 200 LPM and sheared the ball seat and opened the circulation sub with 55 bar. Circulated and worked the 13 3/8" casing scraper from 536 m to 417 m and ran back to 536 m. Circulated the hole clean and flow checked the well. Lubricated and pulled out of the hole with the 14 1/2" under-reamer assembly from 560 m. Laid down the 14 1/2" under-reamer and 13 3/8" casing scraper assembly. Picked up the 9 5/8" casing spear assembly from deck. Broke and laid down on the deck.

8.51 13 3/8" Wire line logging run #4

Rigged up to run wire line and made up USIT/CBL tools. Logged with USIT/CBL in the 13 3/8" casing and pulled out of the hole and rigged down the wire line equipment.

The results of the logs showed that there was poor cement bond behind the 13 3/8" casing. Decision was made to continue to P&A the well according to plan without removing the 13 3/8" casing. The 13 3/8" had the 18 5/8" well head intact in case the well have to be re-entered on a later stage.

8.52 Run 71 – 3 1/2" cement stringer

Ran in the hole with 3 1/2" stinger on 5" drill pipe to 494 m. Picked up the cement stand and pressure tested the cement hose to 200 bar and racked back the cement stand. 16:30 Ran in the hole from 494 m to 551 m. Broke the circulation and washed down and tagged top of the cement at 561 m. Pulled out of the hole to 551 m and circulated the well clean. Made up the cement stand and ran in the hole from 551 m to 561 m. Mixed and pumped a 1,95 sg balanced cement plug from 561 m to 476 m. The height of the cement should give a naturally squeeze below the 13 3/8" shoe. Pulled out of the hole with the cement stinger from 561 m to 465 m and circulated bottom up. Pulled out of the hole from 465 m to 425 m and function tested the BOP on the blue pod from the auxiliary panel. Pulled out of the hole with the cement stinger from 425 m to surface. Rigged down the BJ kill pump system and laid down excess pipe and equipment from the derrick while waiting on the cement.

8.53 Run 72 – 12 1/4" dress off assembly

Made up the 12 1/4" rotary assembly and ran in the hole on 5 1/2" HWDP x 5" drill pipe to 455 m. Washed down from 455 m and tagged the cement at 476 m. Drilled soft cement from 476 m to 478 m and continued to drill firm cement from 478 m to 496 m. Circulated bottom up and flow checked the well and pulled out of the hole and racked back the 12 1/4" assembly.

8.54 Run 73 – 3 1/2" cement stinger to set cement plug #3

Ran in the hole with the cement stinger on 3 1/2" x 5" drill pipe from surface to 495 m. Circulated bottom up and pressure tested the cement lines to 200 bar. Mixed and displaced a 1,95 sg balanced cement plug from 496 m to 418 m.

Pulled out of the hole with the cement stinger from 496 m to 417 m and circulated bottom up. Pulled out of the hole and laid down the cement stinger while waiting on cement.

8.55 Run 74 – Jet sub to clean BOP

Made up and ran in the hole with the jet sub on 5" drill pipe x 5 1/2" HWDP to 407 m. Washed the BOP with the sub circulating with 3200 LPM and rotating with 10 RPM. Operated the rams and the annular preventer to remove debris and cement. Pulled out of the hole with the jet sub from 407 m to surface.

8.56 Run 75 – 12 1/4" cement dress off assembly

Made up the 12 1/4" bottom hole assembly and ran in the hole 411 m. Circulated with 700 LPM and washed down from 411 m and tagged cement at 420 m. Drilled cement from 420 m to 421 m with 5 ton WOB and verified firm cement with 10 ton weight. Displaced the kill/choke lines and the riser to seawater and flushed the diverter overboard lines with seawater. Pulled out of the hole with the 12 1/4" bottom hole assembly 411 m to 30 m.

Racked the 12 1/4" bottom hole assembly. Laid down the cement stand and one stand 5" drill pipe.

8.57 Run 76 – Pull marine riser and BOP

Cleaned and cleared the rig floor and prepared to pull the BOP. Pulled the diverter and installed the slip joint landing tool to the slip joint inner barrel. The rig was unable to obtain near stand by due to fog. Installed the riser tension wire #6 and collapsed the inner barrel. Disconnected the BOP at 12:30 hrs and removed 4 guide wires. Pulled the rig 40 m to the port side from the wellhead. Disconnected the pod saddles and kill/choke lines. Hung off and secured the support ring and pulled out and laid down the slip joint. Pulled the BOP and riser from 374 to the surface. Landed the BOP on the BOP carrier performed planned maintenance on the BOP according to maintenance program.

8.58 Run 77 - Remove permanent guide base

Moved the permanent guide base running tool from the deck to the moon pool and installed guide ropes on guide wire 1 and 3. Ran in hole with the PGB running tool on 5 1/2" HWDP x 5" drill pipe to 390 m and moved the rig over to the well center. Latched on to the Permanent Guide Base (PGB) with the running tool and pulled the PGB free with 7 ton over pull.

Moved the rig to 40 m port from the well head and continued to pull the PGB to the surface. Secured the PGB to the guide base trolley and removed the guide wires. Moved the guide base trolley out on the deck and pulled the PGB off the PGB.

8.59 Run 74 – Net guard installation

Installed and secured the net guard to the guide base trolley and moved it to the moon pool. Installed the net guard running tool and ran in with the net guard on 5 1/2" HWDP x 5" drill pipe to 390 m. Moved the rig to the well center but was unable to operate the drill string compensator. Performed fault finding and landed the net guard. Installed the inhibitor hot stab with the ROV and pumped 0,7 m3 corrosion inhibitor fluid into the wellhead. Released the net guard running tool and pulled out to the surface with the landing string.

8.60 Marine operations – Acbhor handling

De-ballasted the rig from 21,3 m to 9,0 m and performed Anchor handling in the following order:

1. Anchor #7 off bottom 13:35 hrs, on bolster 16:12 hrs. Havilia Force
2. Anchor #8 off bottom 14:25 hrs, on deck 20:38 hrs. Mærsk Asserter
3. Anchor #4 off bottom 14:30 hrs, on deck 16:12 hrs. Bourbon Charisma
4. Anchor #3 off bottom 14:31 hrs, on bolster 18:25 hrs. Bourbon Surf
5. Anchor #6 off bottom 17:17 hrs, on bolster 20:31 hrs. Havilia Force
6. Anchor #5 off bottom 18:49 hrs, on bolster 21:29 hrs. Bourbon Charisma
7. Anchor #2 off bottom 21:40 hrs, on deck 22:01 hrs. Bourbon Surf
8. Anchor #10 off bottom 02:34 hrs, on deck 03:38 hrs. Mærsk Asserter.

8.61 Rig Transit

Rig in transit to the Troll 31/2-M-24 location, with Mærsk Asserter in anchor line #10, and Bourbon Surf in anchor line #2.

Moved the anchor #8 from Mærsk Asserter to Bourbon Carisma.

Prior to arrival on Troll the OIM on Troll was notified according to procedure 48 hrs before coming to Troll. Prepared for anchor handling on Troll M-24 location.

9 Appendix
9.1 Appendix – Well Flow Dynamics report

Report

Peon Gas Migration Incident

Exploration well 35/2-1

Norsk Hydro

04 October 2006

www.wellflow.com

Norsk Hydro Peon Gas Migration to Seabed Exploration well 35/2-1

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ABSTRACT:

The Peon exploration well 35/2-1 was drilled during the summer of 2005 with the semi submersible rig Deepsea Trym. The rig returned to the well in June 2006 to re-enter the well and perform well test operations followed by plugging and abandoning the well. Upon re-entering the well, the ROV discovered gas flow on the outside of the 30" conductor at the seabed.

This report summarizes the operations from the gas migration incident until successful kill on Hydro's Peon well in June 2006.

KEY WORDS:

Workover, Well Control, Contingency, Dynamic Kill, Shallow Gas

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Summary

- By studying the video of the gas bubbles taken by the ROV, the flow rate was estimated to be 10 liters per second as a maximum at seabed conditions. This is equivalent to a rate of 0.04 MSm³/d at surface conditions
- Simulations were performed to evaluate the size of a potential micro annulus that would result in the observed rate. A channel with a diameter of 0.5" in internal diameter would cause enough friction to limit the flow to 2 liters per second at seabed (these calculations were performed as an exercise to evaluate the required friction from the bottom hole to the seabed to give sufficient pressure drop. A number of different configurations is however possible with combinations of restrictions and sections with larger flow areas)
- Simulation performed by WFD suggested that losses would be seen when opening the wellbore (cutting liner) with 1.15 sg mud on the inside and a possible channel with gas flow on the outside
- Simulations showed that the gas flow at seabed through a 1" id channel would stop if continuous circulation of 1.15 sg mud was maintained
- Simulations showed that unless a filter cake was built or pack-off between reservoir and seabed was obtained, the gas flow to the seabed could potentially restart if the micro annulus was not displaced to heavier mud
- 1.27 sg mud will balance the reservoir from seabed with seawater column above (on the annulus side)
- 1.62 sg mud will balance the hydrostatic column in the micro annulus with 1.15 sg mud in the wellbore to drill floor
- The 7" liner was cut at 561 m tvd rkb, the cutting operations went well
- As communication was made from the wellbore into the formation, an instant loss of 1 m³ of 1.15 sg mud was seen
- During circulation of 7 m³/min with 1.15 sg mud, a loss rate of approximately 6 m³/hr was observed (85% loss rate) and the gas flow at seabed was substantially reduced
- An LCM pill was pumped and the well was taken from returns through the choke line to open returns up the riser, and full returns were obtained
- Gas flow at seabed stopped
- P & A operations commenced
- Further plan after WFD personnel left Hydro's offices:
 - mill down into reservoir
 - set bridge plug above reservoir
 - place barite plug above bridge plug
 - retrieve 7" and 9 5/8" liners
 - cement open hole and complete P & A

1. Background Data

1.1 Peon Development

The Peon gas field is located in PL 318 and PL 269. Field development startup is scheduled for 2010. Figure 1.1 shows the location of the Peon field.

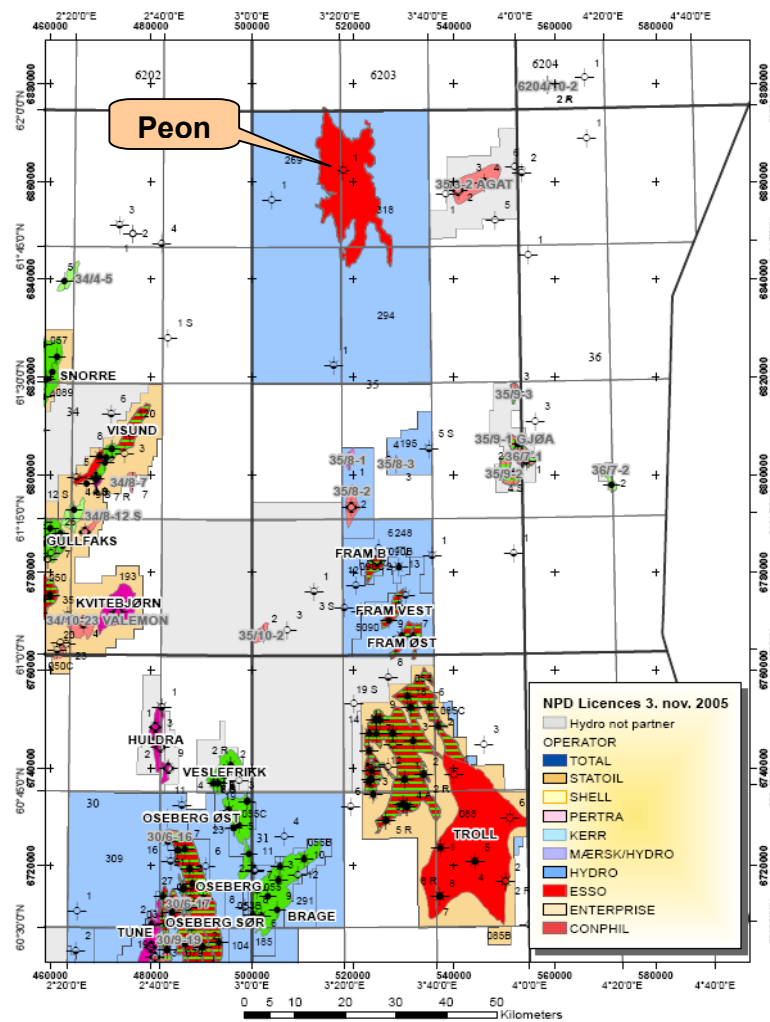


Figure 1.1: Peon Development

Peon is an extremely shallow gas field with top reservoir at 574 m tvd rkb and seabed at 409 m tvd rkb. Reserve span is 30-70 GSm³ of gas, with 53 GSm³ expected.

1.2 Drilling rig for testing and P & A

The semi submersible rig Deepsea Trym was used for the drilling, testing and P & A operations.



Figure 1.2: Deepsea Trym

1.3 Fluid column

The Peon exploration well 35/2-1 was drilled during the summer of 2005. Figure 1.3 shows a schematic of the reservoir and Figure 1.4 shows the composite log with the gas column from 575 m to 584 m tvd rkb (RKB – MSL = 25 m).

The reservoir section was drilled with a 1.15 sg water based mud.

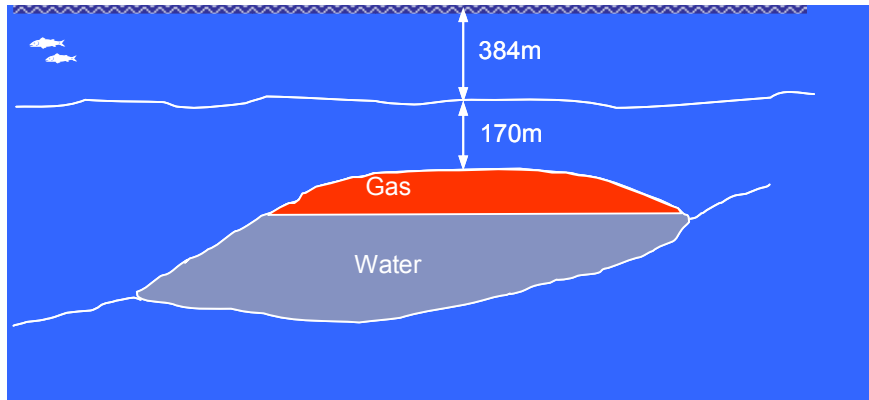


Figure 1.3 Reservoir schematic

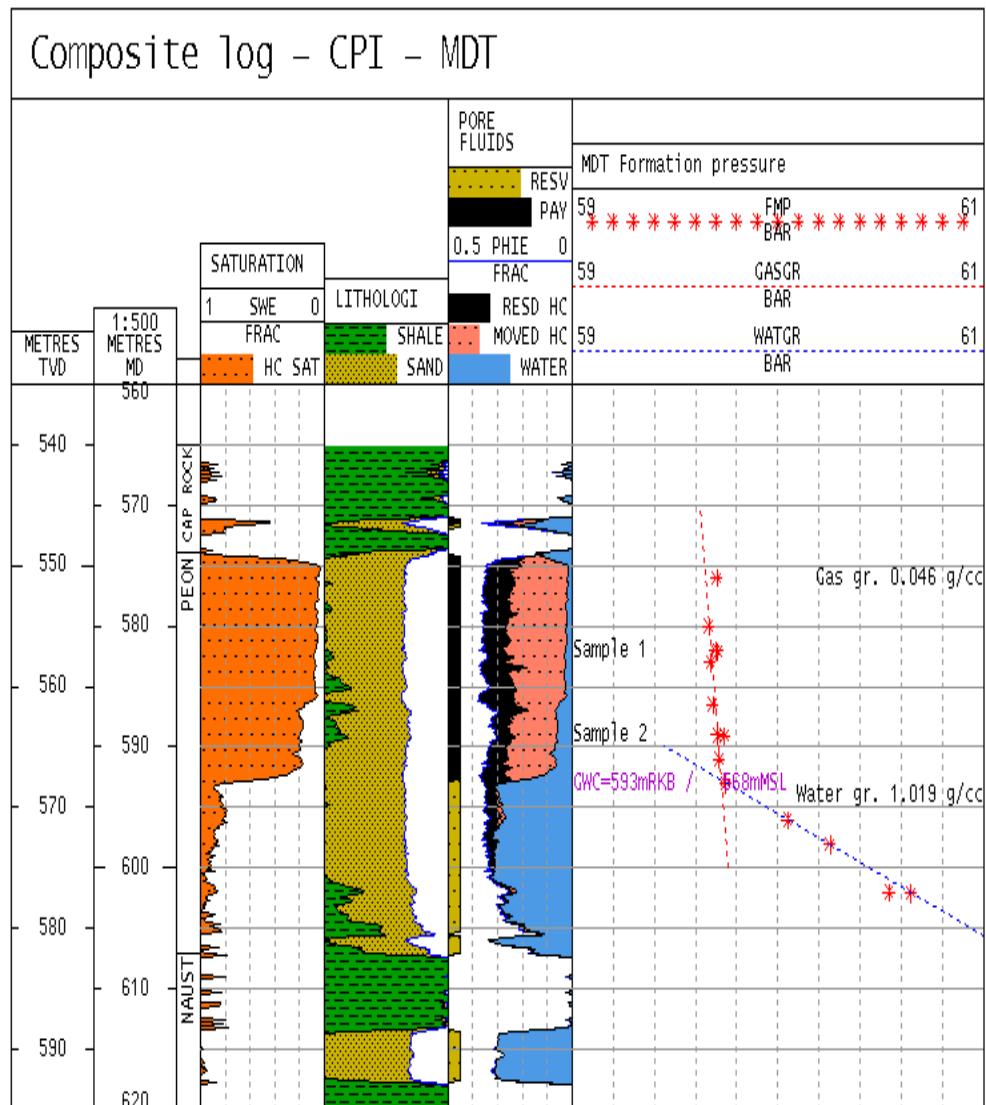


Figure 1.4: Composite log

1.4 Casing and mud program

The Peon 35/2-1 exploration well was cased according to Figure 1.5. A 30" conductor was drilled and set, and a 20" x 13 3/8" set was set, to hold reservoir pressure. A 9 5/8" liner was set at top reservoir. The reservoir section was drilled with a 6" pilot hole, which was opened to 8 1/2". A 7" production liner was run. See Figure 1.5.

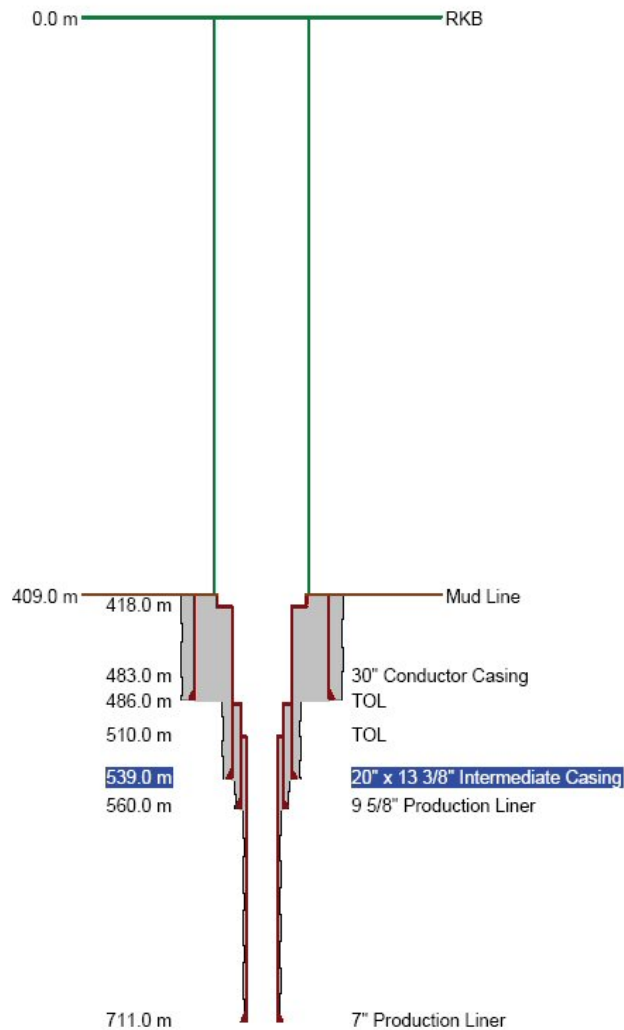


Figure 1.5: Casing configuration (before 9 5/8" tie back)

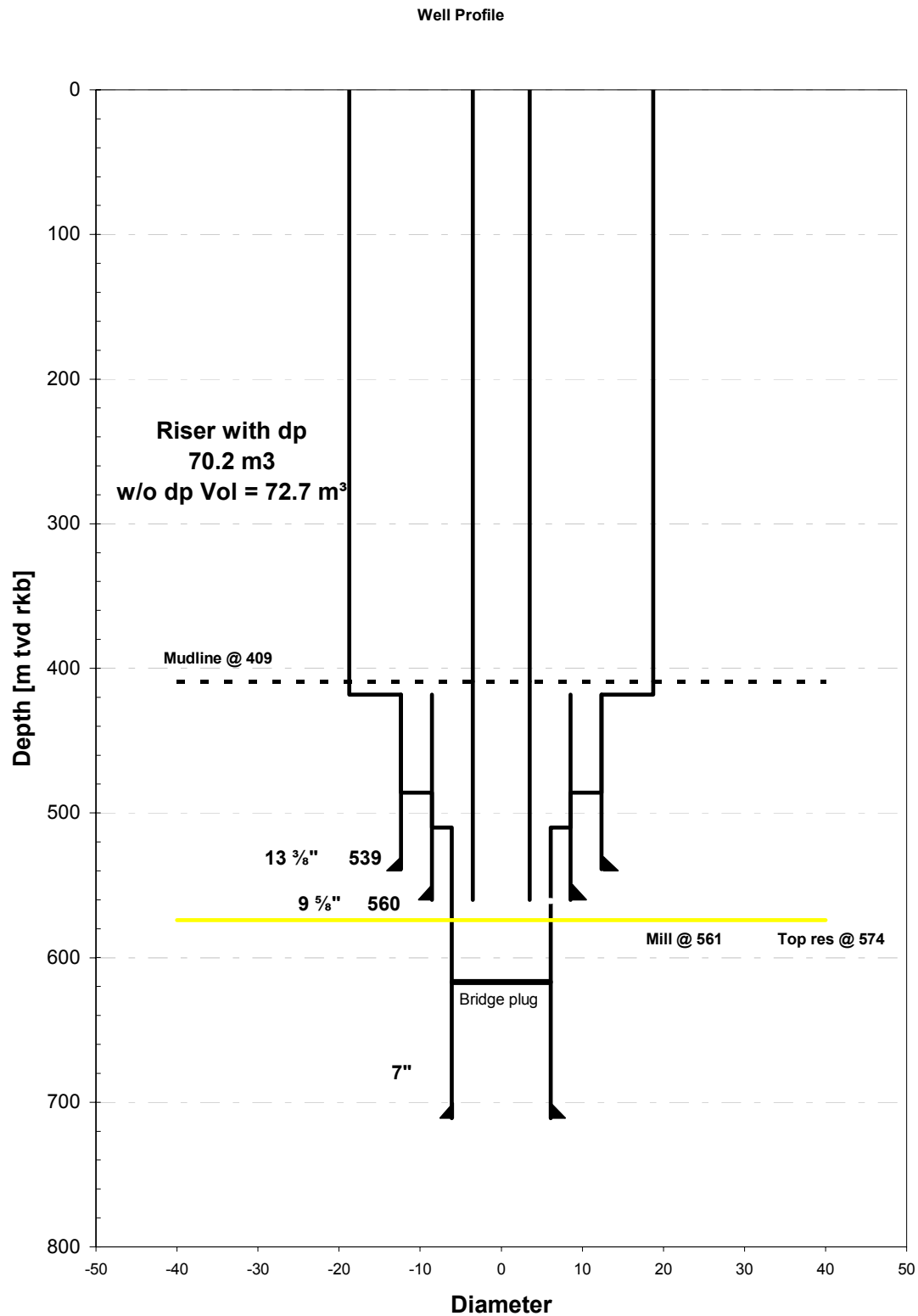


Figure 1.6: Volumes

1.5 Reservoir and well data

Table 1.1 shows the reservoir data observed in well 35/2-1. Thickness is measured, permeability is estimated.

Table 1.1: Reservoir data, Peon reservoir, 35/2-1 exploration well

Property	Value
Reservoir thickness, m tvt	19
Top reservoir, m tvd rkb	574
Reservoir pressure, bar	60
Reservoir pressure, sg	1.066
Reservoir temperature, °C	13
Permeability, base case, mD	1000
Net Pay (90%), m	17
Skin factor, S	0
SkinD, 1/mmscf/d	0.02

1.6 Pressure gradient

Figure 1.7 shows the pressure gradients for the 35/2-1 well. During drilling of the well, an FIT indicated that the formation will handle an equivalent mud weight of 1.3 sg.

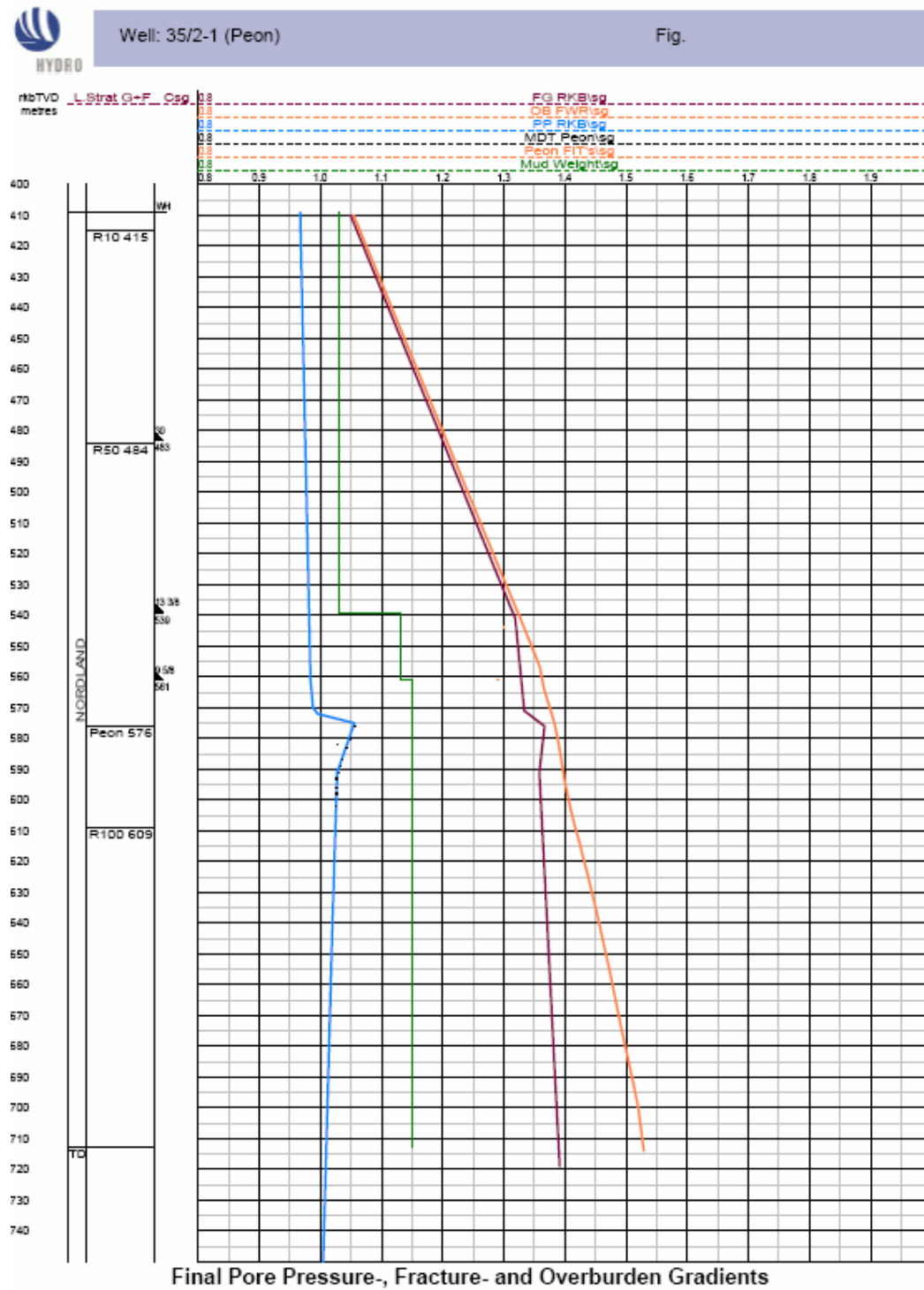


Figure 1.7: Pressure gradients

1.7 Reservoir fluid

The fluid used in the simulations in this project is a dry gas containing mostly methane.

2. Testing and P & A

The Peon 35/2-1 well was successfully drilled and temporarily abandoned during the summer of 2005. In June 2006 the rig Deepsea Trym returned to test the hydrocarbon bearing formation and then, permanently plug and abandon the well.

2.1 Operational plan

The operation sequence for the re-entry, testing and P & A is as follows:

- Re-enter and clean out cement
- Run cement bond and USIT-log
- Run cased hole wireline sampling MDT
- Section mill 7" casing
- Clean out and run PBR polish mill
- Flow/buildup test
- Plug and abandon well

2.2 Observations upon rig arrival

As the rig arrived and the ROV was utilized, a gas leak was observed around the 30" conductor. On the 18th June 2006, a change in flow pattern was observed, as the gas appeared to come up through one channel.

3. Potential sources

Several possible options are present with regards to the cause of the gas flow exiting at the seabed.

- In-situ hydrate dissociation
- Shallow gas flow
- Reservoir gas flowing through permeable channel to shallow gas stringer
- Reservoir gas flow on outside of casing

3.1 In-situ hydrate dissociation

The seabed is within the equilibrium envelope of gas hydrates. As the well was drilled, the area around the wellbore was heated up and may quite possibly have moved outside the equilibrium curves, thus causing hydrates to be dissociated and gas to be liberated. During the formation of hydrates, 1 unit of water bonds with approximately 180 standard units of gas. At seabed conditions, this equals approximately 4 units of gas – hence, 1 m³ of hydrate will release approximately 4 m³ of gas at the seabed. The nature of hydrates is, however, such that

reformation of hydrates will occur very easily once the temperature is lowered and the conditions are such that water and gas once again are inside the hydrate equilibrium envelope. It is therefore highly unlikely, that gas is released as a result of hydrate dissociation one year after the well was drilled.

3.2 *Shallow gas flow*

When planning the location of the 35/2-1 well, attempts were made to avoid any potential shallow gas reservoirs. There is no guarantee however, that no shallow gas pockets have been penetrated, or that communication is not established between the well and a shallow gas pocket. It is clear though, that no shallow gas was observed during drilling of the well. If one assumes however, that the gas seepage to seabed has been ongoing since the well was drilled, and furthermore assuming a seepage rate of 5 liters per second, this constitutes a shallow gas reservoir of 100,000 Rm³. This again, with one meter thickness, yields a shallow gas pocket diameter of 360 m. It is however, not certain exactly how long gas has exited to seabed.

3.3 *Reservoir gas flowing through permeable channel to shallow gas stringer*

The gas observed at the seabed may be coming from a shallow gas stringer that is in connection with the reservoir.

3.4 *Reservoir gas flow on outside of casing*

The Peon gas reservoir is very shallow with a very short overburden formation as a consequence. With a poor cement job on the outside of the casing, it is quite likely that reservoir gas is flowing up through a micro-annulus on the outside of the casing strings. A cement bond log and USIT-log run on 21st June confirmed that the cement job was good in the water bearing part of the reservoir, but very poor bonding was seen in the gas bearing section.

4. Analysis of situation

4.1 General

Well Flow Dynamics arrived on Hydro's location at Sandsli, Bergen on the 21st of June, 2006. The video observations from the ROV indicate a relatively low flow rate of gas at seabed. Assumption was made that the flowpath for the gas release is from the reservoir up on the outside of the casing strings. Smaller gas bubbles rise from a concentrated area outside, and on one side of the 30" conductor. Simulations were performed in order to evaluate the size of a potential channel from the reservoir to the seabed corresponding to the observed flow.

4.2 Inflow performance

Figure 4.1 shows the deliverability of the well based on the reservoir parameters in Table 1.1, using the Forchheimer equation for inflow performance with 1 Darcy permeability, 17 m net pay, zero skin and 0.02 1/mm³/d turbulent skin.

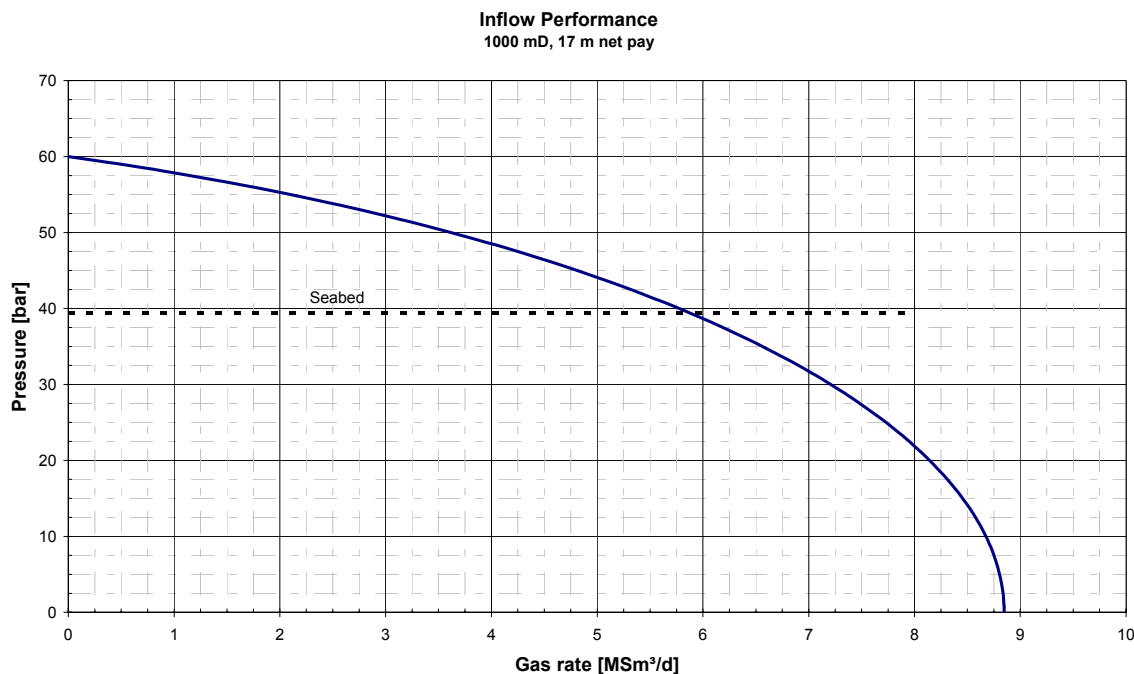


Figure 4.1: Forchheimer IPR curve for 1000 mD and 17 m net pay.

4.3 Smaller flow path/channel from reservoir to seabed

By visually analyzing the video taken by the ROV of the gas release at seabed, it is apparent that the rate could be in the area of 1 - 10 liters per second, seabed conditions. One liter at the seabed equals 43 liters at standard conditions.

Simulations were performed in order to estimate a potential size of a channel resulting in the observed flow. Assumptions were made that the flowpath consists of one channel and that the channel had a uniform size from the reservoir to seabed.

Figure 4.2 and Figure 4.3 show the flowrate at actual (seabed pressure and temperature) and standard conditions respectively, for diameters ranging from 0 to 1".

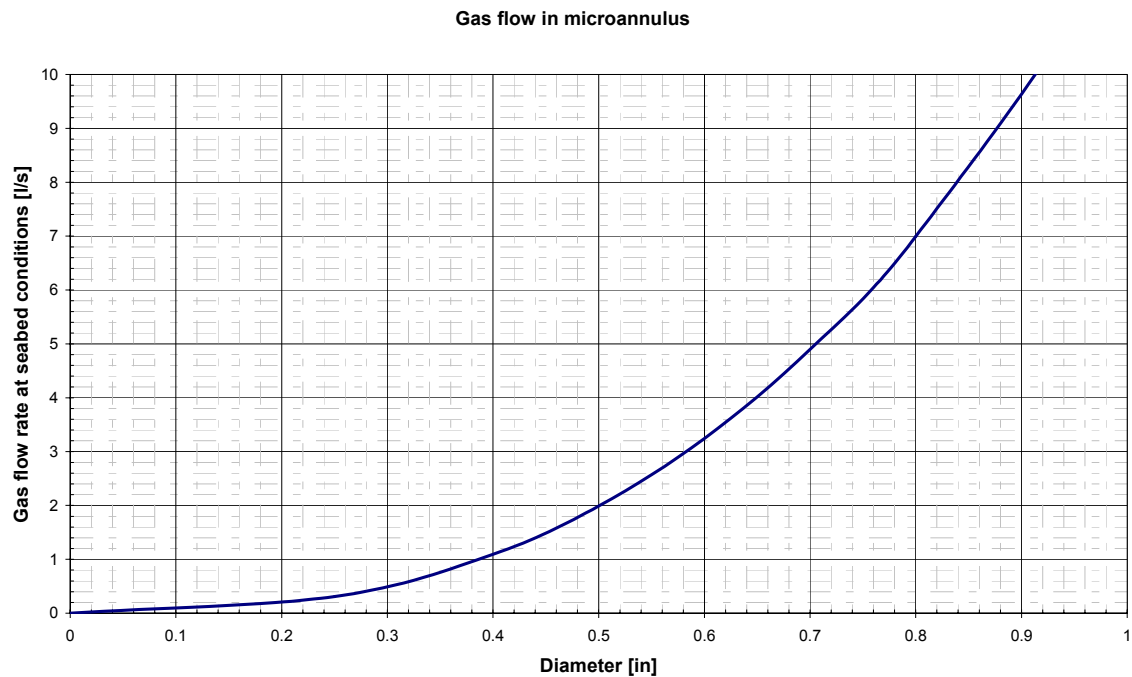


Figure 4.2: Actual gas flow rate in liter/min at seabed as a function of a pipe diameter

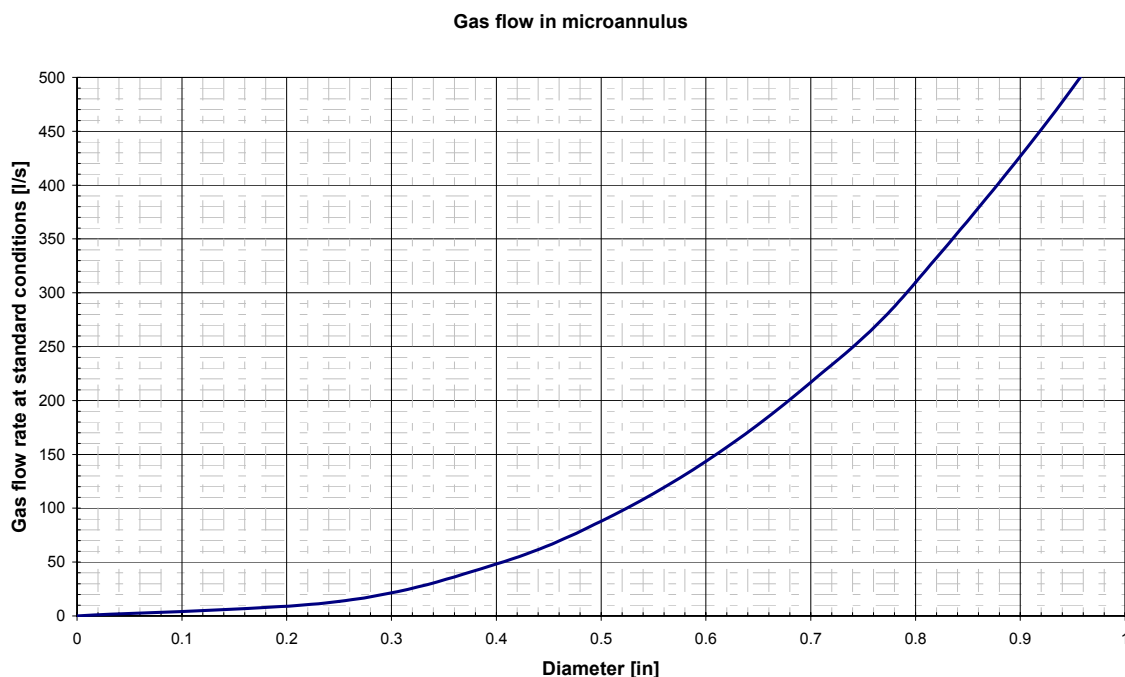


Figure 4.3: Gas flow rate at standard conditions (1 atm and 15 °C) as a function of a pipe diameter

4.4 Fully open flow behind casing

A high rate case could occur if the gas was flowing in the annulus between the initial hole sections and the casings, indicating no cement is restricting the flow. Total volume of this micro annulus, with no cement left, is 19 m³. This would result in a gas flow rate of 360 l/s at the seabed or 1.8 MSm³/d at surface conditions. This is very much higher than the rates observed by the ROV.

4.5 Combination of channels and restrictions

The two simulated scenarios are only examples of possible configurations. Most likely, in the event of a path from the reservoir to the seabed, this will consist of a combination of restrictions (sections with good cement) and larger flow areas. Estimating the potential volumes is difficult at present due to potential wash out etc.

5. Forward plan

5.1 21st June 2006

5.1.1 Operational plan

The current plan – as per 21st June – is to perform pressure tests down the well in order to establish or eliminate that there is a leak into the wellbore. Next operational step if conclusion is that no leak is present is to cut the 7" casing immediately above the reservoir top and attempt to kill the gas flow by exposing the reservoir to 1.15 sg mud.

5.1.2 Shut-in pressure

The gas density/gradient at reservoir conditions is 49.2 kg/m³ resulting in a potential shut-in pressure of 59 bar at seabed and 57 bar at surface with total gas evacuation.

5.1.3 Static pressure gradients and kill mud

The reservoir pressure is 60 bar or 1.066 sg at 574 m tvd rkb. Hence, a mud weight of 1.15 sg will balance the reservoir pressure assuming a full column to surface (including riser). However, since the reservoir potentially is open to seabed outside the annulus, the mud weight has to be increased in order to balance the reservoir. Minimum mud weight required to balance the reservoir pressure is 1.27 sg with a water column on top of the kill mud. See Figure 5.1

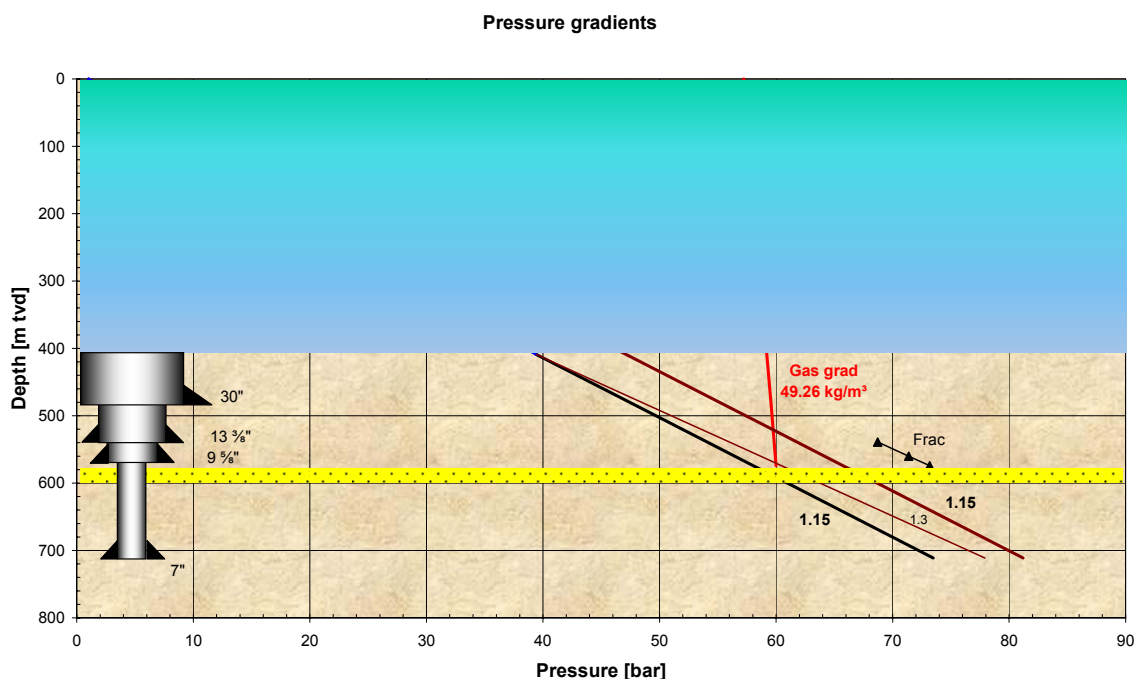


Figure 5.1: Static pressure gradients

5.1.4 Considerations

Considerations should be made to not apply unnecessary stress on the formations and the flow channel when the 7" casing is cut, this in order to avoid increasing the flowpath further. Furthermore, consideration should be made to the point made in 5.1.3 and shown in Figure 5.1, i.e. that a 1.15 sg mud does not give a riser margin. With a continuous open flowpath to the seabed from the reservoir, it will not be hydrostatically sufficient to displace this flowpath to 1.15 sg mud – to accommodate for 384 m of seawater column a 1.27 sg mud should be applied. This mud may be applied in stages, i.e. a lighter mud weight followed by a heavier.

5.2 22nd June 2006

5.2.1 Cutting liner vs perforating

Pros and cons wrt cutting vs perforating were discussed with the rig.

- In case of gas influx into the well, the shear ram is not qualified for cutting and sealing wireline
- Perforation guns will exert additional pressure on the formation
- No possibility to circulate when using wireline

Decision was made to plan for cutting the 7" casing.

5.2.2 Mud program for kill operation

Plans are made to pump/lubricate a staged kill job. As communication is obtained with the reservoir, the 1.15 sg mud column (to surface) will exert a 6 bar over pressure on the formation. Furthermore, with the seabed as exit point for the channel flowpath on the outside of the casing, chances are that the mud will U-tube and the column in the well will drop. This will be filled as the well is put on the triptank at surface. If no bridging or packoff is seen, the mud will continue to fill the channel on the outside up to the seabed. At this point, a pill of higher density mud should be pumped into the wellbore. A mud weight of 1.27 sg will balance the reservoir pressure of 1.066 sg with a 384 m 1.02 sg seawater column. Target is to displace the entire annulus channel to this mud weight. This mud pill should be displaced with a 1.15 sg mud.

5.2.3 Simulation of kill operation

A simulation model was set up simulating the situation where only 1.15 sg mud is circulated/U-tubed around on the backside. A 1" diameter flow channel is used in the simulations. Figure 5.2 shows the pressure profile down the well and up the micro annulus prior to milling. Note that this is a dynamic situation, the pressure profile in the micro annulus does not represent a static situation as the well is flowing gas.

As the 7" liner is cut right above the reservoir, the 1.15 sg mud will immediately exit the wellbore and u-tube up the micro annulus. As can be seen from Figure 5.3, the gas flow at the seabed is expected, based on the simulations, to stop after 70 seconds. At this point, the entire micro annulus is displaced to 1.15 sg mud, and the well appears dead. This is however, not the case.

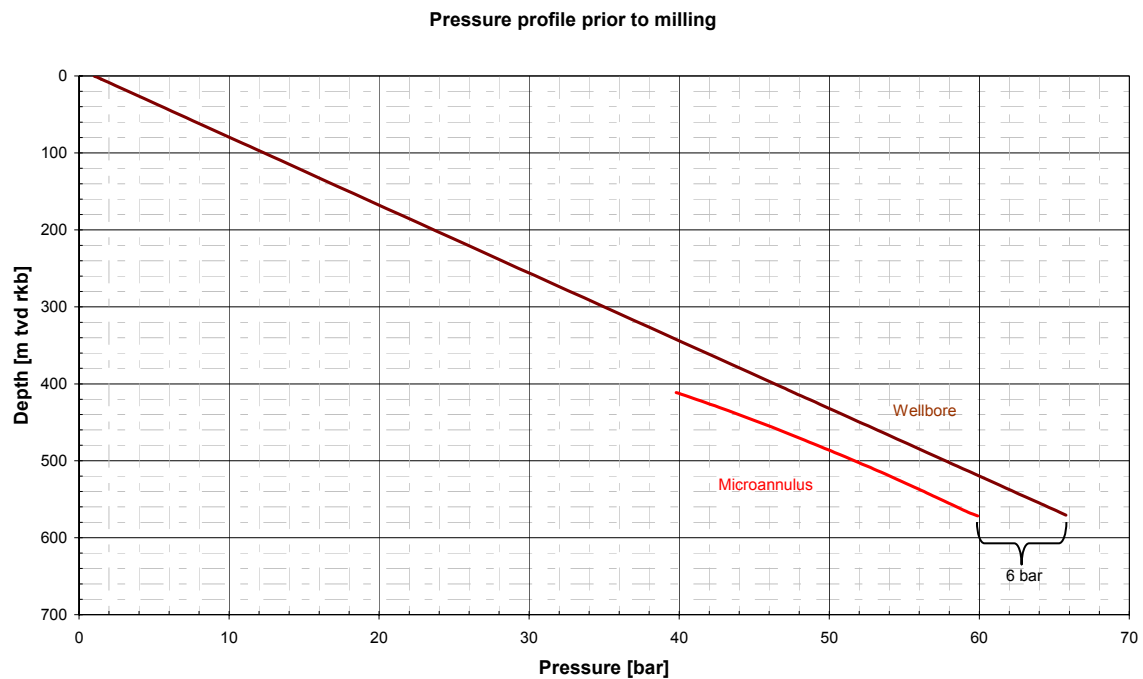


Figure 5.2: Pressure profile in wellbore and micro annulus before milling operation

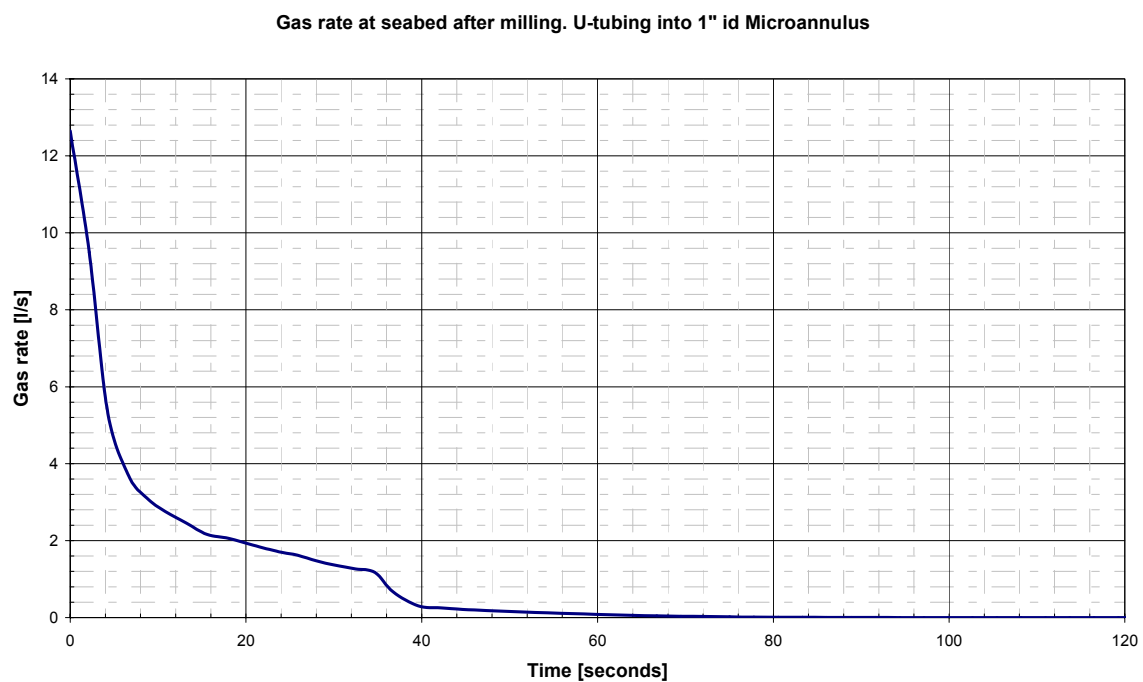


Figure 5.3: Gas rate at seabed vs time after communication between wellbore and micro annulus is established

Unless a packoff is obtained, the well will not be stable with 1.15 sg mud to surface. The mud column will drop and if 1.15 sg mud is refilled a constant u-tube situation will force mud to be produced up the micro annulus out on the seabed. Figure 5.4 shows the situation where the well is left with 1.15 sg mud both in the wellbore and in the micro annulus and where the mud column in the well is allowed to drop until static equilibrium is reached. Balancing the mud column on the micro annulus side means that the mud column drops approximately 50 meters and the bottomhole static pressure drops below the reservoir pressure. At this point, the well starts flowing again and an unstable situation is once again the case.



Figure 5.4: Gas restarts at seabed 3 hours after well has U-Tubed and stabilized (approximately 50 meters of air in top of riser).

5.2.4 Static situation after kill

In order to obtain a balanced situation in the micro annulus, a mud with minimum density of 1.27 sg is required. This will however, still be underbalanced in relation to the 1.15 sg mud from rkb to the cut point in the wellbore and some u-tubing may occur. The mud weight required in the micro annulus in order to balance 1.15 sg in the entire well is 1.62 sg, as can be seen from Figure 5.5.

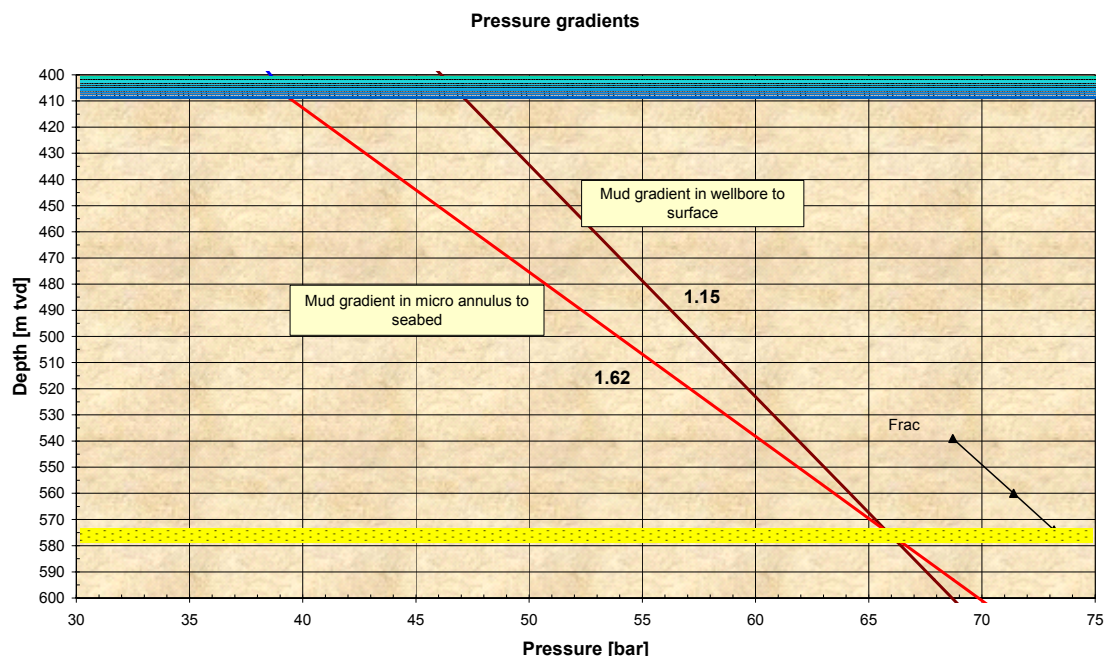


Figure 5.5: *Balanced situation, micro annulus and wellbore*

5.3 23rd June 2006

By morning meeting: Well successfully tested, ready to enter well and cut @ 561 m tvd rkb. A plug is set @ 617 m in the 7" liner. The plan is to close the BOP annular preventer around drillpipe, will pump mud through drillpipe and take returns up choke line. Presented to team and rig: 1.27 sg will kill annulus hydrostatically, but will not be in balance with 1.15 sg in wellbore. 1.624 sg in micro annulus will balance wellbore.

5.3.1 Cutting casing

The casing was milled at noon with an instant loss of 1 m³.

5.3.2 Circulating bottoms up, losses observed

According to plan, the well was, after milled, circulated (down drill pipe and up annulus and choke line) to get bottoms up to ensure no gas. During circulation, a continuous loss of 6 m³/hour was monitored. Pumping rate is 7 m³/hour, i.e. a loss rate 85 %.

The pump rate of 115 l/min (0.72 bpm) is not sufficient to cause any significant pressure drop down the drillpipe, nor up the annulus, and the bottom hole pressure/ECD should be close to 66 bar, i.e. substantially below the specified FIT of 1.3 sg at the shoe. It is not believed that the formation can absorb such volumes of mud without fracturing.

The total volume outside the casings and inside the original drilled hole is approximately 19 m³ when the cement is disregarded. Hence, to fill up this volume would take 3 hours and 50 minutes at the current pumping rate.

5.3.3 Pumping lost circulation material

The continuous loss when circulating was tried cured by injecting an LCM pill dimensioned for a loss rate of more than 7 m³/hr.

Table 5.1: 200 kg/m³ LCM pill

Component	Density
Mica (F/M)	40 kg/m ³
Check-Loss	60 kg/m ³
LC-Lube	50 kg/m ³
Nut-Plug (F/M)	50 kg/m ³

16:13 meeting with rig:

Static on trip tank. Stable well. No circulation. Reduced gas flow on seabed. Reduced to a very low rate. Gas flow stopped after annular preventer opened. New circulation introduced losses of 6 m³/hr. 2 bar lower pump pressure

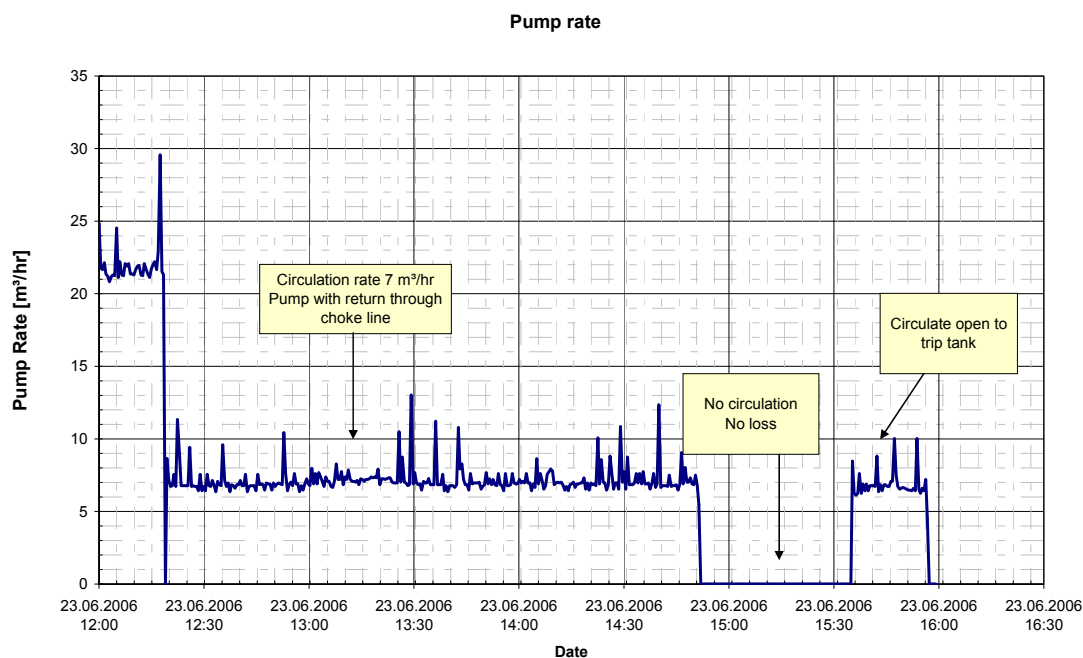


Figure 5.6: Pump rate

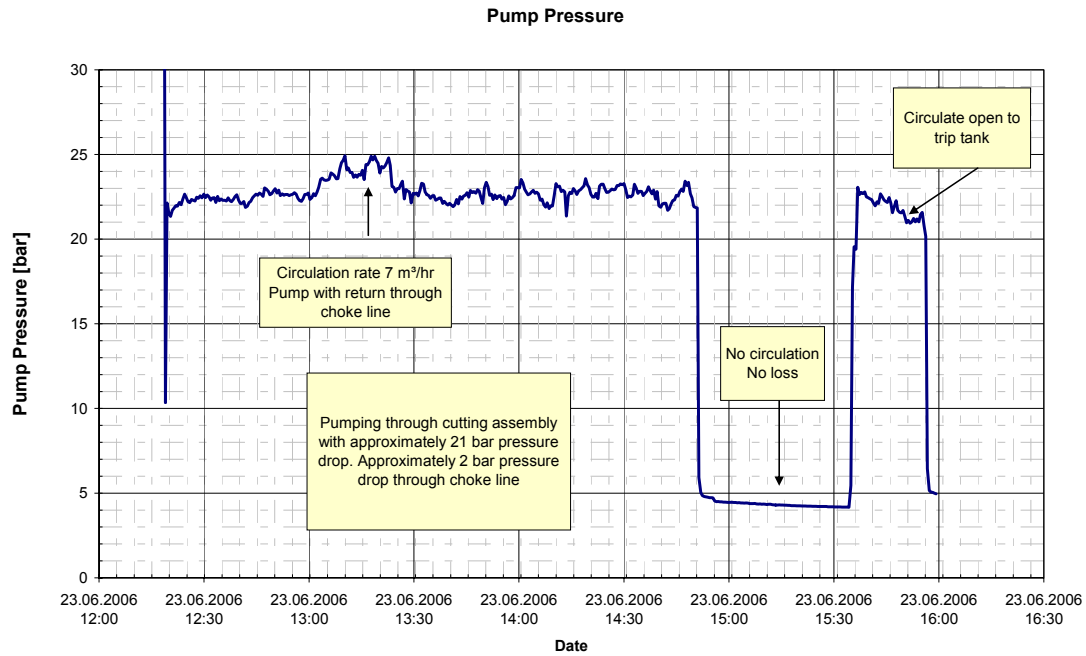


Figure 5.7: Pump pressure

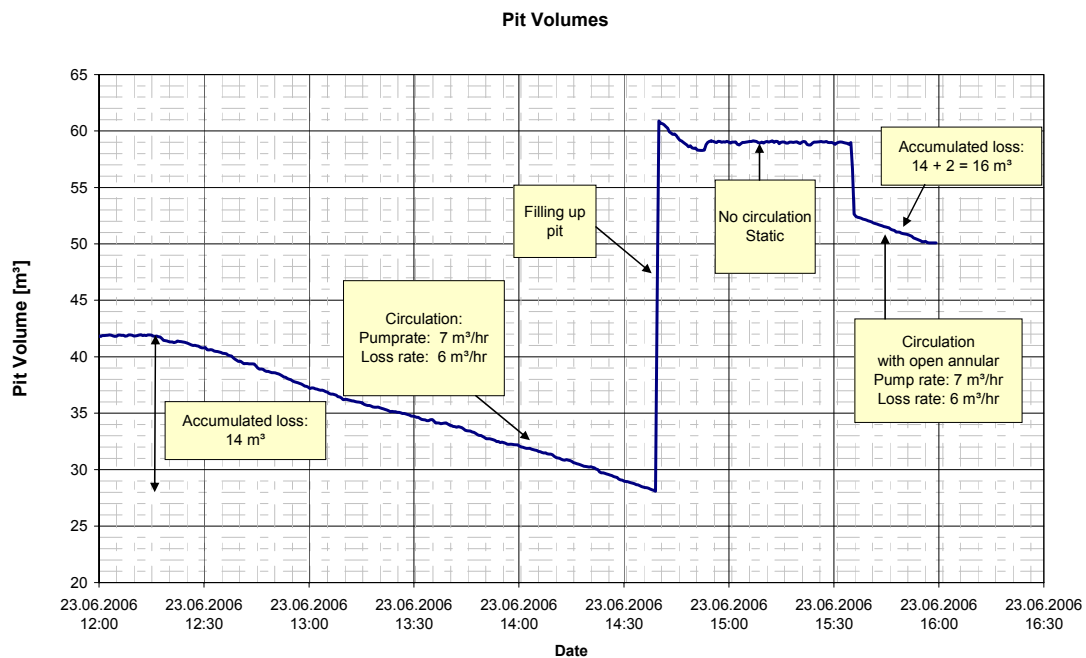


Figure 5.8: Losses

5.4 24th June 2006

Morning meeting: Circulation was attempted but a loss rate of 6-8 m³/hr was observed. A 4 m³ LCM pill was pumped with losses, until full returns suddenly were seen. Stopped pumping LCM. Got losses again and continued pumping remaining 5 m³ LCM pill. String was plugged, but opened circulation port. No gas is now seen at the seabed. Forward plan is to attempt to obtain circulation rate equal to what is necessary during milling operations, then proceed with P & A operations (mill and cement).

5.4.1 Cutting vs milling for P & A

Concern was raised about the effect heavy metal cuttings might have on the mud weight, and that cutting the hanger and pulling the casing might be preferable. As the total weight of steel milled does not exceed 1000 kg's, this will however have negligible effect on the total mud density (80 Sm³ in total in the annulus). Furthermore, if cutting the hanger, there is no guarantee that the liner stump can be pulled free, if this is the case, it could also be difficult to mill it as it might spin. Hence, decision was made to mill the casing from the existing cut and down to inside the reservoir.

5.5 25th June 2006

Morning meeting: 800 l/min required to open knives for milling. 800 l/min circulation rate with full returns confirmed ok. At midnight, some signs of gas bubbles at seabed, stable now. 70 m³ 1.27 sg kill mud ready and available. Important to constantly monitor seabed through ROV camera during milling operations. Be prepared to mix and pump LCM pill if losses are seen. If losses and gas flow to seabed, consider pumping kill mud.

5.5.1 Cementing

A window will be milled into the reservoir to accommodate for subsidence during the production phase of the field. After a successful milling operation, an inflatable plug will be positioned above the reservoir (573 m) and a cement plug will be set from top reservoir up to top 7" liner. As this cement sets, the effective weight of the cement equals fresh water gradient (1.0 sg). The effective wellbore pressure at the reservoir will therefore drop compared to a continuous 1.15 sg column. As can be seen from Figure 5.9, this drop is not large (1 bar) and the well is still well overbalanced (65.4 bar).

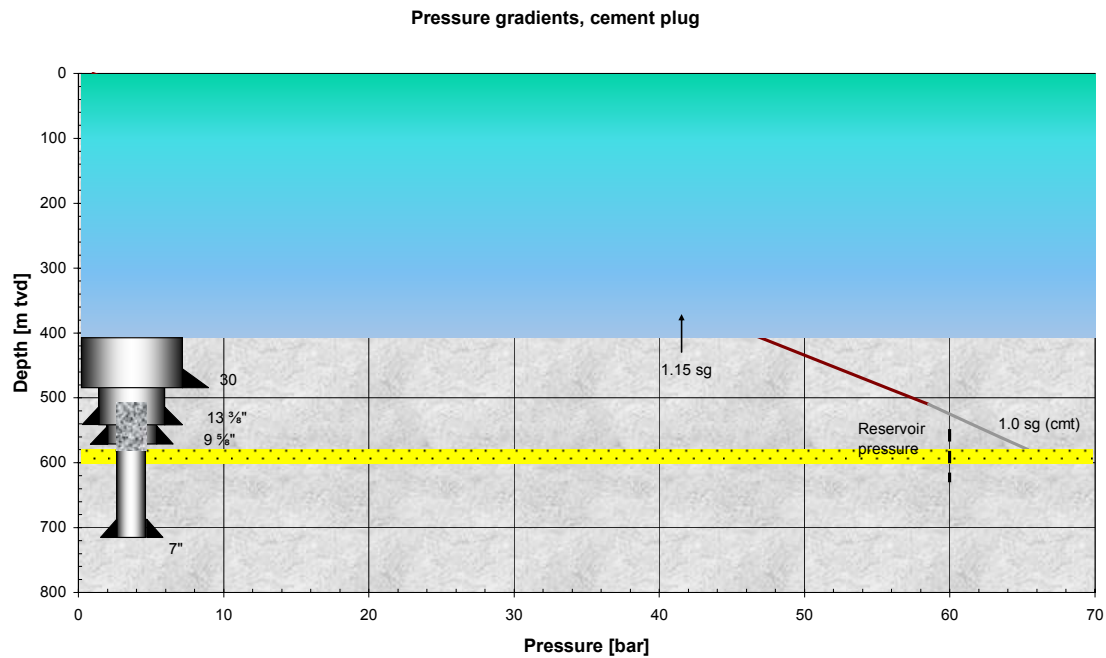


Figure 5.9: Pressure gradient after cementing.

5.6 26th June 2006

Morning meeting: Have milled from 561 – 567 m in 3.5 hrs. Pumping rate is 1100 l/min. Cuttings preventing higher ROP. Experience losses at 23.5 bar circulating pressure.

Meeting 10:00

Slow progress. Consideration is made to set a barite plug on top of bridge plug as this may seal better to formation than cement. Plan is then to remove 7" and 9 5/8" and set cement plug (P & A).

A. Simulation model



For the dynamic simulations, OLGA-WELL-KILL version 4.17 was applied. The simulator is tailor-made for well kill simulations and has been used in a number of on-site applications for blowout and well control. The development started in 1989 (during an underground blowout in the North Sea) based on the OLGA pipeline simulator. The model is a fully dynamic simulator that is capable of handling three different fluid phases simultaneously. The model is capable of handling non-Newtonian fluids; i.e. the viscosity is depending on the shear-rate. The OWK simulator handles a number of different flow configurations, e.g. annular flow, flow through bit nozzles, valves, pipe joints etc. See www.wellflow.com for more information.



Reservoir fluid characterization and property generation was performed by PVTsim. This is the market leading fluid characterization and simulation software. See www.calsep.com for more info.

B. References

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9.2 Appendix – HAZOP Gas bubbles and leak around 30” conductor

HAZOP Gas bubbles on sea bed – Well Peon 35/2-1 , Deep Sea Trym



Sandsli 21.06.06

Position	Name:
Senior engineer	Oskar Berge
Project engineer	Bjørn Tore Leidland
Drilling engineer	Helge Ågotnes
Drilling engineer	Jan Terje Alvestad
Operational planner	Alf Georg Larsen
Subsea engineer	Birger W Lien
Drilling Superintendent	Henning Sandhåland
Drilling Superintendent	Roar Hansen
Toolpusher Rig	Ronny Solheim
Drilling Supervisor Rig	Per Olav Rockmann
Drilling Supervisor	Einar Mæland
Project Risk coordinator	Helge Rosenlund
Well Flow Dynamics	Thomas Selbekk
Well Flow Dynamics	Morten Haug Emilsen
Tecnical adviser	Andy Holden

Risk Assessment		USIT logging
		Pressure testing 9 5/8" and 7" liner with Cup tester
		Set bridge plug in 7" casing @ 630 m
		Cut 7" liner above the reservoir
		Cased hole MDT sampling
		Cut and section mill 7" liner.
Procedure		Operation plans.

		Logging program
		Re-entry program
		Table top for shallow gas handling
		Risk register.

Activity:

Operational sequence	Identified HAZARD/ Unscheduled event	Existing risk reducing measures/Barriers	Further action needed (incl. need for contingency plan)	Need for further analysis?	Need for contig. plan?
1.Perform USIT / CBL logging	- Increase in leakage on the sea bed during the operation. - Stuck logging string. (BOP not qualified to cut & seal cable) (No risk of getting stuck in this case)	Probability reducing: - Qualify barriers. - Monitor sea bed with ROV. - Pull cable head above BOP before closing shear ram. Consequence reducing: - Tabletop shallow gas preparedness.	- Reevaluate all barriers from last year. - Mob. Backup ROV - Investigate possible to take gas sample with the ROV. - - If any increase in flow on seabed: Stop the operation and prepare for cutting 7" liner below 9 5/8" shoe. - Prepare for perforating with equipment. - Prepare for kill mud and excess mud capacity on the rig. - Prepare plan for mud displacement prior to disconnect the riser.	Contact Well Flow Dynamics for evaluation.	Ref. updated decision tree

Operational sequence	Identified HAZARD/ Unscheduled event	Existing risk reducing measures/Barriers	Further action needed (incl. need for contingency plan)	Need for further analysis?	Need for contig. plan?
2. Identify leakage with cup tester.	- Increase in leakage on the sea bed. - Stress / charge the formation above limit.	Probability reducing: - Qualify barriers - Establish procedure for stepwise pressure increases. - Pressure testing section by section. Total 3 tests. - Focus on volume control. - Insure pipe is vented during the test. - Evaluate using the FIT pump for pressure testing. - Monitor seabed with the ROV. - Ran in without float - Lubricate when pulling out. - Max pressure 80 bar. Consequence reducing: - Table top shallow gas preparedness	- If any increase in flow on seabed: Stop the operation and prepare for cutting 7" liner below 9 5/8" shoe. Alt. perforating		Ref. updated decision tree
3. Set bridge plug in the 7" liner @ 630 m	Increase in leakage on the sea bed.	Ref wire line operation	- If any increase in flow on seabed: Stop the operation and prepare for cutting 7" liner below 9 5/8" shoe. Alt. perforating		Ref. updated decision tree

Operational sequence	Identified HAZARD/ Unscheduled event	Existing risk reducing measures/Barriers	Further action needed (incl. need for contingency plan)	Need for further analysis?	Need for contig. plan?
			-		
4. Evaluate	Evaluate results after plug installed		- Evaluate objectives and future plans		
5. Cut 7" liner .	- Increase in leakage on the sea bed - Decrease in leakage on the sea bed - Stress / charge the formation above limit. - Alternative perforating. Decision to cut is based on BOP shear ram not proper qualified for cutting / sealing cable. With cutting equipment circulation is also option to perform well control during the cutting sequence.	Probability reducing: - Focus on volume control. - Monitor seabed with the ROV - Monitor well closely prior to pulling out. - Use annular swivel and well control during cutting. - Monitor static kill line pressure during milling. - Circulating sub installed in the string. To be actuated prior to pulling out only if needed. - LCM material on the rig. Consequence reducing: - Table top shallow gas preparedness - Monitor choke line friction.	- If any increase in flow on seabed: Stop the operation and prepare for cutting 7" liner below 9 5/8" shoe. - If any decrease in flow during / after cutting evaluate to P&A the well - Evaluate the depth for cutting the 7" liner to obtain efficient communication for mud up annulus. - No coupling and centralizers in the cutting area if possible. - Verify correct space out in the BOP to be able to activate the shear ram. - Red Baron to verify minimum flow not to actuate the cutter knives.		Ref. updated decision tree
6. Evaluate	Evaluate results after plug installed		- Evaluate objectives and future plans		
7.Perform MDT logging	- Increase in leakage on the sea bed.	Probability reducing: - Focus on volume control. - Monitor seabed with the ROV. - No sampling from MDT into	- If any increase in flow on seabed: Stop the operation and prepare for cutting 7" liner below 9 5/8" shoe.		Ref. updated decision

Operational sequence	Identified HAZARD/ Unscheduled event	Existing risk reducing measures/Barriers	Further action needed (incl. need for contingency plan)	Need for further analysis?	Need for contig. plan?
	- Stuck logging string. (BOP not qualified to cut & seal cable)	well bore - Centralize the logging tool to avoid getting stuck in the cutting area. - Pull cable head above BOP before closing shear ram. - Consequence reducing: - Table top shallow gas preparedness	- Use conventional cable head with weak point for MDT		tree
5.Section milling 7" liner for DST	- Increase in leakage on the sea bed - Decrease in leakage on the sea bed - Stress / charge the formation above limit.	Probability reducing: - Focus on volume control. - Monitor seabed with the ROV - Monitor well closely prior to pulling out. - Use annular swivel and well control during cutting. - Monitor static kill line pressure during milling. - Consequence reducing: - Table top shallow gas preparedness - Monitor choke line friction.	- If any increase in flow on seabed: Stop the operation and prepare for cutting 7" liner below 9 5/8" shoe. - If any decrease in flow during / after cutting evaluate to P&A the well		

Operational sequence	Identified HAZARD/ Unscheduled event	Existing risk reducing measures/Barriers	Further action needed (incl. need for contingency plan)	Need for further analysis?	Need for contig. plan?
5. DST	Ref. separate Hazop for DST				

9.3 Appendix – Plug and Abandonment program



HYDRO

CONFIDENTIAL

No.: 1
Rev.: 0
Our date: 2006-06-22
Page: 1 of 12

TEMPORARY PLUG AND ABANDONMENT PROGRAMME

WELL 35/2-1 PEON

DEEPSEA TRYM

**LICENCE PL 318
BLOCK NO. 35/2**

Hydro ASA (60 %), Idemitsu (20 %), Petoro (20 %)

APPROVED FOR DISTRIBUTION BY:

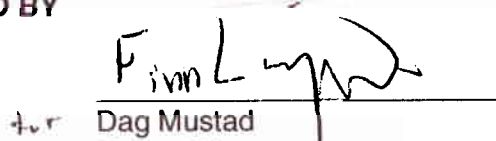


Richard D. Jones
Vice President
Production Drilling
Mobile Units

ACCEPTED BY

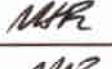
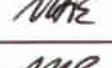


Svein Dybdahl
Drilling Superintendent
Mobile Units



for Dag Mustad
Project Manager
Development Norway

QUALITY CONTROL

SECTION	REV. NO.	AUTHOR	CHECKED BY
1. Non-conformance	0	B.T. Leidland 	for S. Hovda 
2. Barrier status & testing	0	B.T. Leidland 	S. Hovda 
3. Well status operational sequence	0	B.T. Leidland 	S. Hovda 
4. Operation hazard	0	B.T. Leidland 	S. Hovda 
5. Operation limitations	0	B.T. Leidland 	S. Hovda 
6. Attachment	0	B.T. Leidland 	S. Hovda 
7. References	0	B.T. Leidland 	S. Hovda 

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1 Steering Documentation

1.1 Non-conformance

All activities shall be conducted according to Hydro requirements. Any non-conformances shall be handled according to STO4 - Handling of Non-conformances in O&E Norway . The non-conformance processing includes registration in Hydro Synergi HSE management system with a unique case number.

The table below list up the identified non-conformances on this well.

Reference	Description	NH-Synergi
Activity regulation § 76 with references to NORSOK D-010 5.4.2.	Drilling without riser margin in 12 ¼" and 8 ½" hole section	521857
ODUN-SB-10-P01-H02- 2.2	Unable to obtain 4m3 kick margin according to ODUN-SB10-H02 – 2.2 Casing design	533021
Activity regulation § 79 with reference to NORSOK D-010 9.4.2 cement plugs table 15.22	Unable to obtain 200 m cement above 9 5/8" casing shoe. The 9 5/8" shoe will only be 167 m below seabed. Cannot fulfill due to the distance between the reservoir and sea bed is too shallow according to. ODUN-SB10-P01-H01, 4.4.2.	532261
Activity regulation § 76 with references to NORSOK D-010 9.4.2 casing cement table 15.22	Unable to obtain 200 m top surface cement plug in P&A.. Ref. Ref. ODUN-SB10-P01-H08, 4.1.4	532265
Ref. ODUN-SB10-P01-H01-4.1 Barrier definition / general	P&A barrier definitions are not according to ODUN-SB10-H01 – 4.1 Barriers definitions / general and not able to get distance between P&A plugs	533181
June 2006	Re-entry and Permanent P&A	
Activity regulation § 76 With reference to NORSOK D-010	Pressure testing of barrier plugs not complying to ODUN-SBO10-P01-H04 Chapter 2.13 and K-15886 Plug as Barrier requirement	641582

1.2 Requirements

The table below shows the subjects that are requirements in the program.

SUBJECT	Drilling Sector	Customer	NPD
Target specifications with tolerances		X	X
Formation evaluation program excluding optional logs/cores		X	X
H2S level of preparedness	X		X
Casing design with tolerances	X		
Tubing design with tolerances	X		
Drill pipe design with tolerances	X		
Minimum cement height in annulus	X		
Minimum formation integrity values	X		
Non-conformances	X		X

Non-conformance with Customer's requirements shall be agreed upon and approved by the customer in writing. NPD shall be informed of changes in requirements as indicated in the table by the approving authority of the non-conformance.

1.3 Guidelines

The remaining topics (in this program) not listed under requirements (previous page), are guidelines.

1.4 Appendices

Appendices are only supplementary information, and do therefore not require any non-conformance action.

1.5 Conflicts

In case of conflicts between this document and the Drilling Sector's Requirements, this program shall prevail when requirements are listed as approved non-conformances.

In case of conflicts between this program and the Drilling Sector's Guidelines, this program shall always prevail.

1.6 Introduction

The P&A design is based on ODUN-SB10-P01-H-08 Drilling and Well Activities – Abandonment Requirements and Guidelines.

1.7 Description of geo-mechanic effects of P&A and subsidence

Preliminary geo-mechanical analysis indicated a subsidence in the reservoir of 0,5m – 2,2m. A study was initiated to develop a model that described the compaction of the reservoir during production over the field life. The study included a recommended Plug and Abandonment design for well 35/2-1 to compensate for the subsidence.

The objective of the P&A design is to de-couple the casing in the reservoir and the casing in the overburden to avoid high stresses fracturing the cement and formation causing communication to the seabed. .

2 Well status prior to P&A and operational P&A summary

2.1 Well Status prior to P&A

During clean out of the temporary abandoned well 35/2-1 Peon gas bubbles were observed outside the 30" Conductor at the seabed. The well was continuously monitored at the seabed to observe if any sign of increase in the flow. CBL/USIT logs were run to verify cement quality and the cement bond behind 7" and 9 5/8" liners were found to be of poor quality. The 7" liner was cut at 561 m to establish communication and circulate in heavy mud. The well was first losing mud prior to bridge of the formation circulation lost circulation material. Once circulation was with 1.15 sg mud was established the gas bubbles at surface stopped indicating that the gas was coming from the reservoir.

Based on this the conclusion was the barriers were lost with a micro annulus to the seabed. Decision was made to plug the well.

2.2 Operational summary of the planned P&A operation

With reference to the status and the non-conformances as described above the well will be permanently plugged and abandonent with the following operational steps. Included in the plan is a monitoring program which includes an option not to cut the well head in order to be able to re-enter the well if gas leak is observed at a later stage.

1. Cut 7" liner @ 561 m.
2. Flow check/monitor.
3. Section mill 7" liner from 561 to 577 m.
4. Run in and install Inflatable Packer (ICP) in open hole @ 571 m
5. Set Barite plug on top of ICP. Dress off as required
6. Cut 7" Liner hanger and retrieve 7" PBR
7. Pull and retrieve remaining 7" liner.
8. If not able to pull 7" Liner then mill or cut remaining part of the 7" liner.
9. Set cement plug from +/- 570 m to as high as possible into 9 5/8" liner . WOC and dress off cement to +/- 561 m (Check hydrostatic vs. FIT).
10. Retrieve 9 5/8" Tieback.
11. Cut 9 5/8" liner hanger @ 540 m. Retrieve 9 5/8" PBR
12. Pull upper part of the 9 5/8" liner.
13. If not able to pull 9 5/8" casing mill 9 5/8" liner
14. Pull lower part of the 9 5/8" liner
15. If not able to pull or casing mill then cut 9 5/8" liner in sections from 540 to 560 m.
16. Set cement plug from 561 to 420 m. U-tube or consider to hesitate squeeze the cement in place. Wait on cement.
17. Dress cement inside 13 3/8"
18. Run 13 3/8" CBL log to verify cement in 13 3/8" casing
19. If able to qualify the cement on the outside of the 13 3/8" casing set a cement plug inside 13 3/8" casing to +/- 20" x 13 3/8" XO (enough spacing to cut 30 well head housing)
20. If not able to qualify the 13 3/8" casing section then mill 13 3/8" as required an set cement plug
21. Wait on cement . Run in and dress off cement
22. Top up 13 3/8" casing to same depth as point 19
23. Leave well head and install corrosion cap an Netguard
24. Implement inspection program after the rig have left the location to monitor for gas leakage

3 Barrier Status and testing

With reference to figure 1 - 35/2- 1 Peon Permanent Plug and Abandonment this chapter refer too P&A design and status including barrier description and testing.

3.1 Preparations prior to P&A

3.1.1 Preparations to remove 7" Liner

Prior to start the plug back operation the 7" Liner will be section milled down to +/- 577m, minimum 2m below the reservoir to decouple the 7" Liner in the reservoir from the overburden. The idea is that the overburden and the reservoir can move independently when subsidence will occur in the reservoir during production lifetime of the field.

An Inflatable Packer (ICP) will be set at +/- 1 m above the first sand at 571m in the Peon Reservoir (571 m) and spot a Barite plug on top of the ICP. The objective of the barite plug this is to serve as an additional temporary seal above the Peon reservoir during removal of the 7" liner. The volume below the ICP and the remaining 7" Liner is filled with 1.15 mud.

3.1.2 Preparations to remove 9 5/8" Liner

As soon as the 7" Liner has been removed above the reservoir then the 9 5/8" Liner will be removed. The objective is to remove the 9 5/8" Liner since there are indications that the cement behind the casing is of poor quality.

A secondary objective is to be able to run cement bond and USIT logs to be able to verify the cement behind 13 3/8". Based on the results of the logs then be able to section mill and cement parts of the 13 3/8" casing.

3.2 Peon Reservoir Barrier

Primary Barrier:

- The primary barrier comprise of two cement plugs above the reservoir.
- Cement plug #1 will be set with the 9 5/8" still intact and cemented inside 9 5/8" Liner and dressed down 1m below original 9 5/8" setting depth too 561m.
- Cement plug #2 will be set above plug #1 inside 13 3/8" and dressed of to 540m off.

Pressure testing:

The cement plugs will be load tested. None of the above cement plugs will be pressure tested in order, refer to non-conformance Synergi #641582 to avoid and minimise stress to the formation. The worst case is to open up the communication channel to the surface.

3.3 Peon Overburden Barrier

Secondary barrier:

- 80m cement inside 13 3/8" 540m – 420m
- 13 3/8" casing with cement in the 17 1/2" X 13 3/8" annulus from 539m to seabed at 409m

Testing and verification:

The cement in the 13 3/8" casing will be verified with CBL log. In case of the logs indicates poor cement quality the log will be used to determine compensating measures.

Pressure testing:

The plug will not be pressure tested to avoid putting pressure to the formation.

3.4 Compensating measures and inspections

The wellhead will not be cut when leaving the Peon location to be able to re-enter the well.

A separate monitoring program is prepared and the well will be inspected with a minimum in inspection intervals of:

1. year inspection:

- 1 month
- 6 months
- 12 month

After 1 year the well the inspection program will be evaluated if a yearly inspection program is sufficient based on a yearly base based on the experience of the 1st. year inspection program.

3.5 Well control actions

The Upper Annular Preventer will be closed while releasing the 9 5/8" seal assembly, in case of trapped pressure in annulus. If gas/pressure is experienced the Annular Preventer will also be closed when pulling the seal stem out of the PBR seal assembly and one annular volume outside 9 5/8" casing will be circulated prior to pull the 9 5/8" Tie Back

The Upper Annular Preventer will also be closed while punching or cutting the 7" and 9 5/8" liners, in case of trapped pressure in annulus. An annular Swivel will be used for cutting the casing. The effect of frictional pressure in kill and choke lines when cutting with closed annular valve must be taken into account, due to a rather low FIT pressure below 13 3/8" casing. If gas/pressure is experienced minimum one annular volume outside 7" and 9 5/8" casing will be circulated prior to pull the liners.

During the operations care should be taken not to exert the formation for high pressures risking fracturing the formation.

4 Operational Hazard

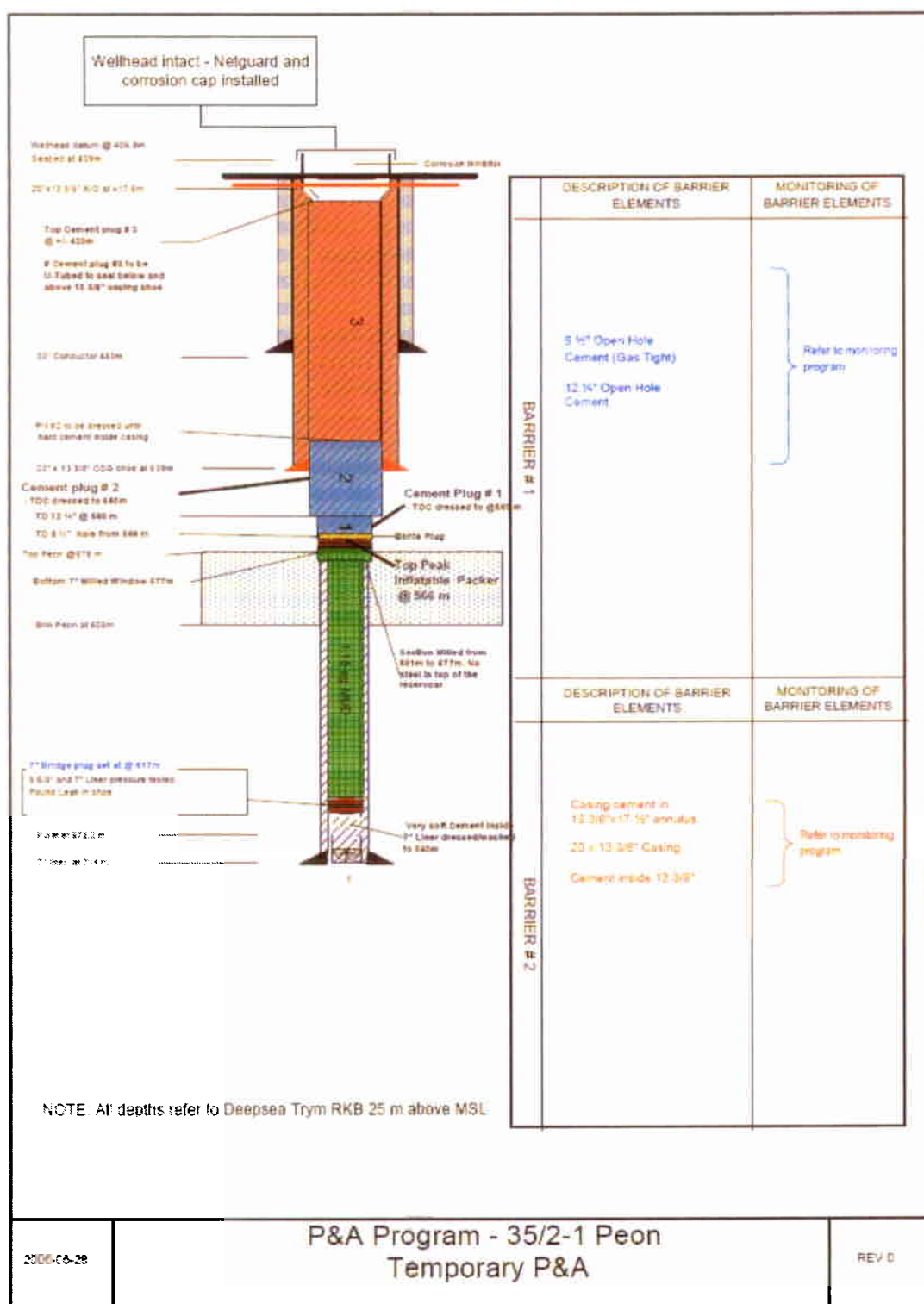
- Trapped gas behind 7" and 9 5/8" casing annulus.
- Take a gas influx
- Gas in riser due to short distance to the BOP
- Fracture formation during milling and cement operations
- Exert pressure to the micro annulus too surface and further expansion
- Risk to fracture overburden in all operations

5 Operational Limitations

Leave the well head for future access to the well while monitoring the well. Netquard will be installed and a inspection program will be implemented.

6 Attachment

6.1 Figure 1 – 35/2-1 Peon Permanent P&A - August 2005



7 References

1. Norsk Hydro Division Requirements and Procedures- "NHO-DB10-H08"
2. NPD Drilling Regulations.
3. NORSOK Drilling Standards – "D-010"
4. 35/2-1 Drilling Program - Rev 0 and 1 - 2005
5. 34/2-1 Peon Re-Entry and preliminary P&A Program Rev 0 and 1 - 2006

9.4 Bore Drilling Database

GENERAL INFORMATION

Well : 35/2-1 R **PO** : 1
Field : PEON **Country** : NORWAY **Wellbore Type** : WELLBORE
Licence : PL 318 **Installation** : DEEPSEA TRYM
UTM zone : 31 **Central Median** : 3' E **Horiz. Datum**: ED50

Location coordinates:		Surface	Target
UTM	North [m]:	6862221,28	
UTM	East [m]:	518024,19	
Geographical	North :	61 53'26.68"	
Geographical	East :	03 20'34.36"	

Water Depth: 384,0 m **Reference Point Height:** 25,0 m
Formation at TD: No formation data found.

Operator:	NORSK HYDRO PRODUKSJON AS	Share: 60,00 %
Partners:	IDEMITSU PETROLEUM NORGE AS	Share: 20,00 %
	PETORO AS	20,00 %

Total depth (RKB) :	m MD	0,0 m TVD
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TIME SUMMARY	Start Time	: 2006-06-07 18:30:00
	Spudding date	: 2005-07-21
	Abandonment date	:

Main operation	Hours	Days	%
MOBILIZATION	79,0	3,3	6,7
DRILLING	282,0	11,8	23,9
FORMATION EVALUATION LOGGING	7,5	0,3	0,6
PLUG AND ABANDONMENT	748,0	31,2	63,4
DOWNTIME DRILLING	47,5	2,0	4,0
DOWNTIME FORM. EVAL. LOGGING	3,0	0,1	0,3
DOWNTIME PLUG AND ABANDONMENT	13,0	0,5	1,1
Sum:	1180,0	49,2	

Hole and casing record

Casing/Tubing	Track	Depth [m MC]
9 5/8"		489

Well status: Permanently abandoned Exploration Well

CONTRACTORS:

Mwd/Lwd Contractor :	BAKER HUGHES INTEQ
Rig Contractor :	ODFJELL DRILLING BERGEN A/S
Wireline Logg Contractor :	SCHLUMBERGER OFFSHORE SERVICES LTD

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 1 **Date:** 2006-06-07**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 0,00 sg**Stop time Description**

18:30 No activity on this well. The activity is reported on the well 31/2-X-23 Y3H

23:59 Rig in transit to the well 35/2-1 with the vessels Bourbon Surf connected to anchor chain #10 and Havila Force to the anchor chain #2.

* Prepared to drill out the remaining part of the ram change close cylinder. Changed the wire on the blue pod winch. Calibrated the topdrive/dolly position indicator. Connected the deluge system for the well test system. Inspected the equipment for installation of the well test air compressors.

Daily report no : 2 **Date:** 2006-06-08**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 0,00 sg**Stop time Description**

05:00 Rig in transit to the well 35/2-1 with the vessels Bourbon Surf connected to anchor chain #10 and Havila Force to the anchor chain 2.

* Pressure tested the Top drive kelly valves to 35/345 bar.

23:59 Anchor handling.
Anchor #5 on seabed 12:28 hrs. Northern Chaser. Anchor #6 on seabed 15:46 hrs. Northern Challenger.
Anchor #10 on seabed 18:20 hrs. Bourbon Surf. Anchor #2 on seabed 19:40 hrs. Havila Force.
Anchor #4 on seabed 22:08 hrs. Northern Chaser. Anchor #3 on seabed 23:54 hrs. Havila Force.
Resat anchor #6 at 20:35 hrs.

* Changed corroded fittings on the drill string compensator control lines in the derrick. Moved the shear ram booster system from the upper pipe ram to the shear ram. Removed the cut off ram change close cylinder from the ram body and installed the middle pipe ram bonnet.

Daily report no : 3 **Date:** 2006-06-09**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 0,00 sg**Stop time Description**

01:30 Anchor #8 on seabed 00:39 hrs. Bourbon Surf. Anchor #7 on seabed 00:46 hrs. Northern Challenger.
Resat anchor #5 at 01:13 hrs.

09:00 Ballasted the rig from 8,5 m 21.30 m and performed final tension.

* Pulled the rig 40 m to port. Inspected the net guard with the ROV. Installed the transponder 10m off the well at 90 degrees direction. Made up the net guard retrieving tool. Pressure tested the stand pipe manifold to 35/345 bar.

10:00 Ran in with the net guard retrieving tool to 390 m.

10:30 Moved the rig to the Well centre.

11:30 Engaged the net guard running tool and pulled the net guard free with 12 ton overpull.

12:00 Pulled the rig 40 m to port.

13:00 Pulled out with the net guard from 390 m to 30 m.

14:30 Pulled out and landed the net guard on the guide base trolley. Secured the net guard on the trolley and released the running tool. Skidded the net guard to the main deck. Laid down the net guard running tool.

* Held pre-job/safety meeting prior to handle the net guard on the cellar deck.

16:00 Secured the permanent guide base to the guide base trolley and moved to underneath the rotary. Installed the PGB running tool.

* Held pre-job/safety meeting prior to handle the PGB.

17:00 Ran in with the PGB to 393 m.

17:30 Moved the rig to the Well centre.

20:00 Installed the PGB.

* Inspected the direction of the guide base after installation and found it to be approximately 30 degrees to the right of the rig heading.

20:30 Pulled the rig 40 m to port.

23:00 Pulled out and laid down the PGB running tool.

23:59 Carried out planned maintenance of the BOP.

Daily report no : 4 **Date:** 2006-06-10**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 0,00 sg**Stop time Description**

09:00 Carried out planned maintenance of the BOP.

* Performed 690 bar body test on all rams. Pressure tested the BOP valves to 5/135/240 bar. Pressure tested the BOP hydraulic system to 207 bar. Function tested the acoustic system. Pressure tested the choke manifold to 5/135 bar. Function tested the emergency anchor release system.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 4 **Date:** 2006-06-10**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 0,00 sg

Stop time	Description
09:30	Performed planned black-out test.
21:00	Carried out planned maintenance of the BOP.
	* Performed fault finding on the shear ram booster system. Installed the BJ kill pump system. Function tested the crown - floor saver system. Changed choke manifold valve #8. Calibrated the dolly retract and extend functions.
23:59	Made up bottom hole assemblies for drilling cement

Daily report no : 5 **Date:** 2006-06-11**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 0,00 sg

Stop time	Description
02:30	Made up bottom hole assemblies for drilling the cement plugs.
06:00	Performed planned maintenance.
	* Serviced the active heave compensator.
20:00	Repaired the shear ram booster system.
	* Changed the shear ram booster pumps. Found that the shuttle valves for the booster system were rated to 207 bar working pressure, whereas the shear ram booster system is rated to 345 bar working pressure. Located and transferred parts from the West Venture and Visund. Parts found not be suitable.
23:59	Rigged up to run the BOP. Made up 2 riser joints.
	* Held pre-job/safety meeting prior to pick up the riser.

Daily report no : 6 **Date:** 2006-06-12**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
18:00	Repaired the shear ram booster system.
	* Received correct fittings from shore and connected the 345 bar shuttle valves to the shear ram booster system. Function tested the system.
	Pressure and function tested the BJ kill pump. Pressure tested the I-BOP and the stab valve to 5/135 bar.
23:00	Moved the BOP below the rotary and connected the riser to the BOP
	* Inspected the Well head connector. Installed the pod wires and ran the guide wires through the BOP funnels.
	Held pre-job/safety meeting prior to rig up to run the BOP.
23:59	Ran the BOP and riser to 63 m.

Daily report no : 7 **Date:** 2006-06-13**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
13:30	Ran the BOP and riser from 63 m to 374 m.
	* Pressure tested the kill and choke line to 5/135 bar every 5. joint.
17:00	Installed the slip joint. Connected the kill and choke line and pressure tested to 5/250 bar. Turned the riser and BOP 30 deg clockwise to adjust for the PGB being positioned 30 degrees right of the rig heading.
	* Held pre-job/safety meeting prior to pick up the slip joint.
23:30	Installed the support ring and pod hose saddles. Moved the rig to above the well head and installed the guide wires. Slacked off the riser tension wires and turned the BOP to the right to align with the PGB. Landed the BOP at 22:25 hrs. Locked the connector and performed a 25 ton pull test. Pressure tested the connector to 5/135 bar.
	* Bull's eye readings prior to landing: Riser 2 deg. port. BOP centre.
	Bull's eye readings after landing: Riser 2 deg. starboard. BOP 1,5 deg. aft.
	Pumped 48 litre SW. to pressure up to 135 bar against the PEAK plug at 425 m.
23:59	Waited on the weather, to obtain near stand by for work above open sea, in order to stroke out the slip joint inner barrel.

Daily report no : 8 **Date:** 2006-06-14**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
03:30	Waited on the weather, to obtain near stand by for work above open sea, in order to stroke out the slip joint inner barrel.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 8 **Date:** 2006-06-14**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
03:30	* Weather: 00:00 hrs Wind - 12 m/s. Dir. - 281 deg. Sign waves - 2,7 m. Max waves - 4,6 m. 01:00 hrs Wind - 11 m/s. Dir. - 290 deg. Sign waves - 2,7 m. Max waves - 4,3 m. 02:00 hrs Wind - 11 m/s. Dir. - 290 deg. Sign waves - 2,6 m. Max waves - 4,2 m. 03:00 hrs Wind - 12 m/s. Dir. - 290 deg. Sign waves - 2,8 m. Max waves - 4,5 m.
07:30	Stroked out the slip joint inner barrel. Installed hoses for air and water for the slip joint. Installed the diverter. Laid out the Riser handling equipment.
08:00	Installed the BX elevator and made up the wear bushing.
10:00	Ran in the hole with the wear bushing and landed in the well head.
	* Function tested the shear ram from both pods and with the acoustic system.
11:30	Function tested the BOP with the yellow pod from the drillers panel and with the blue pod from the auxiliary panel.
13:00	Released the running tool and pulled out to surface. Laid down the running tool.
15:00	Made up the BOP test tool. Ran in the hole and landed the BOP test tool in the wellhead.
15:30	Pressure tested the well head connector against the middle pipe ram to 250 bar.
17:30	Pulled out of the hole and laid down the BOP test tool.
18:00	Made up the 13 3/8" PEAK plug running tool and ran in the hole to 20 m.
19:00	Function tested the diverter system and flushed the overboard diverter lines.
21:00	Ran in the hole with the 13 3/8" PEAK plug retrieving tool to 415 m.
23:00	Closed the upper annular preventer and circulated 5 m3 seawater through the rig choke. Opened the UAP. Pumped a 5 m3 havis pill and displaced the well to 1,15 sg mud. Flushed the kill and choke lines.
	* Held pre-job meeting prior to displace the well to 1,15 sg mud.
23:59	Circulated with 2000 LPM at 422 m. Reduced the pump rate to 125 LPM and latched on to the Peak plug leaving 7 bar pressure in the string. Verified latch with 20 ton down weight and 15 ton overpull. Turned the string 1,5 turn to the right. Observed a slow pressure drop from 7 to 5 bar in 7 minutes.
	* Latched on to the PEAK plug at the third attempt. Held pre-job/safety meeting prior to latching on to the PEAK plug.

Daily report no : 9 **Date:** 2006-06-15**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
06:00	Closed the upper annular preventer and made several attempts to pull the PEAK plug free. Worked the plug with 10 ton down weight and 35 ton overpull while turning the string to the right with 5 to 20 RPM. Attempted several times to pump down the string to verify communication through the plug with no success. This indicating that the ball valve in the PEAK plug were closed.
09:30	Pulled the PEAK plug free with 45 ton overpull. Rotated the running tool with 5 RPM.
	* Pulled with constant overpull until the plug passed the 13 3/8" x 20" casing crossover at 417,8 m. Flow checked 15 min - well static. Broke the drill pipe connection with the rig tongs, as it was out of reach of the iron roughneck, after the plug was pulled into the 20" casing. Held pre-job/safety meeting prior to pull the plug free and to use the rig tongs.
11:30	Pulled out of the hole with the PEAK plug.
12:00	Laid down the PEAK plug and the running tool.
12:30	Cleaned and cleared the drill floor.
15:00	Made up the 12 1/4" bottom hole assembly
	* Held pre-job/safety meeting prior to make up the 12 1/4" bottom hole assembly.
15:30	Ran in the hole with the 12 1/4" bottom hole assembly on 5" drill pipe from 129 m to 340 m.
16:00	Flushed and pressure tested the test stand pipe to 345 bar.
	* Stopped the trip to enable personnel in the riding belt to bleed the air out of the test stand pipe prior to pressure testing.
17:00	Ran in the hole with the 12 1/4" bottom hole assembly on 5" drill pipe from 340 m to 419 m.
18:00	Washed down from 419 m to 429 m and tagged the cement with 3 ton.
18:30	Drilled cement from 429 m to 430 m.
19:30	Stopped drilling due to smell of gas in the shale shaker. Flow checked the well and observed a small gain in the trip tank. Closed the upper annular and the diverter. Flow checked the well - well stable.
	* Measured inside the shaker for HC and H2s gas. No gas recorded.
20:00	Circulated bottoms up through the choke line and flow checked the well. Well static.
	* Measured inside the shaker for HC and H2s gas. No gas recorded.
21:00	Circulated the riser.
	* Measured inside the shaker for HC and H2s gas. No gas recorded.
21:30	Held pit drill with the night crew.
	* Changed screens on the shaker while there was no circulation, due to bad smell in the shaker while circulating.
23:59	Drilled firm cement from 430 m to 442 m.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 10 **Date:** 2006-06-16**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
02:30	Drilled firm cement from 442 m to 457 m.
04:30	Recorded slow pump rate up the riser and up the choke line with the mud pumps and the BJ kill pump.
07:00	Drilled firm cement from 457 m 468 m and soft cement from 468 m to 486 m.
08:00	Circulated the well clean.
09:30	Flow checked the well and lubricated out of the hole with the 12 1/4" bottom hole assembly on 5" drill pipe from 482 m to 390 m.
10:30	Flow checked the well and pulled out of the hole with the 12 1/4" bottom hole assembly on 5" drill pipe from 390 m to 129 m.
11:30	Pulled out of the hole with the 12 1/4" bottom hole assembly from 129 m to 103 m
	* Removed the diverter insert packer.
12:00	Changed the shear pin on the upper racking arm.
12:30	Pulled out of the hole with the 12 1/4" bottom hole assembly from 103 m to 46 m.
14:00	Laid down the 12 1/4" bottom hole assembly.
14:30	Inspected the pipe racking system and the top drive for loose items.
16:30	Made up the 8 1/2" bottom hole assembly and ran in the hole to 127 m.
	* Circulated the riser to adjust the mud properties.
18:00	Ran in the hole with the 8 1/2" bottom hole assembly on 5" drill pipe from 127 m to 445 m.
19:30	Recorded slow circulation rates with mud pup # 1 and 3. Performed choke drill.
20:30	Tagged the 9 5/8" PBR and drilled soft cement from 486 m to 505 m.
21:00	Circulated the well clean.
22:30	Performed choke drill with the manual and auto choke using the mudpump #3. Flow checked the well - well static.
23:30	Lubricated out of the hole with the 8 1/2" bottom hole assembly on 5" drill pipe from 503 m to 390 m.
23:59	Pulled out of the hole with the 8 1/2" bottom hole assembly from 390 m to 127 m.

Daily report no : 11 **Date:** 2006-06-17**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
00:30	Pulled out of the hole with the 8 1/2" bottom hole assembly from 127 m to surface.
02:00	Made up the 13 3/8" scraper and 9 5/8" PBR mill assembly and ran in the hole to 70 m.
	* Painted one pipe white.
03:00	Ran in the hole with the scraper and mill assembly on 5" drill pipe from 70 m to 418 m.
05:00	Scraped the 13 3/8" casing from 418 m 475 m. Polished the 9 5/8" PBR with 3-4 ton and 50 RPM.
	* Control of the tally indicated the tie back mill lacked 3,3 m to enter the PBR fully.
	Closed the middle pipe ram on the white painted pipe when landed on the PBR.
05:30	Circulated the well clean.
06:30	Flow checked the well and lubricated out of the hole from 475 m to 385 m.
08:00	Pulled out of the hole with the scraper and mill assembly on 5" drill pipe from 385 m to surface.
	* Observed 1/16" wear on the bottom of the Tieback mill and no signs of wear on the top dress mill.
	Observed no mark from the middle pipe ram on the white painted pipe.
08:30	Inspected the pipe racking system and the top drive for loose items.
10:00	Made up one 3 m pup between the 9 5/8" tie back mill and the 8 3/8" stabilizer. Ran in the hole with the scraper and mill assembly assembly to 73 m.
11:30	Ran in the hole with the 13 3/8" scraper and mill assembly on 5" drill pipe from 73 m to 477 m.
14:30	Washed down from 477 m to the top of the 9 5/8" PBR at 486 m. Milled the PBR with the tie back mill from 487 m to 490 m using 5-7 ton weight and 50 - 70 rpm. Dressed off the top of the PBR with the top dress mill.
	* Closed the middle pipe ram and the upper annular on the white painted pipe.
15:00	Circulated the well clean.
16:00	Performed choke drill with mudpump #3. Flow checked the well.
17:00	Lubricated out of the hole from 475 m to 385 m.
19:00	Pulled out of the hole with the scraper and mill assembly on 5" drill pipe from 385 m to surface.
	* Observed marks on the tieback mill and the top dress mill indicating the top dress mill had landed on top of the PBR.
	Measurement of the distance between the mark from the middle pipe ram on the white painted pipe, to the top dress mill, indicated top PBR at 486,68 m.
20:00	Made up the 9 5/8" scraper and 7" PBR mill assembly and ran in the hole to 94 m.
21:30	Ran in the hole with the 9 5/8" scraper and 7" mill assembly on 5" drill pipe from 94 m to 486 m.
22:00	Scraped the 9 5/8" casing from 486 m 504 m. Polished the 7" PBR with 2-3 ton weight and 50 RPM rotation.
	* The pipe tally indicated top of the 7" PBR at 504 m. 6" bit at 512 m.
22:30	Circulated the well clean.
23:30	Recorded SCR and performed choke drill with the BJ. kill pump. Flow checked the well.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 11 **Date:** 2006-06-17**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg**Stop time Description**

23:59 Lubricated out of the hole from 480 m to 385 m.

Daily report no : 12 **Date:** 2006-06-18**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg**Stop time Description**

01:00 Pulled out of the hole with the 9 5/8" scraper and 7" PBR mill assembly from 385 m to surface. Laid down the scraper and the mill.

* Observed marks on the tieback mill and the top dress mill indicating the top dress mill had landed on top of the PBR.

02:00 Cleaned and cleared the rig floor. Installed the 9 5/8" casing tong.

02:30 Installed the 13 3/8" wear bushing running tool.

06:30 Retrieved the wear bushing.

* Circulated with 3000 LPM prior to, and when landing the running tool in the wear bushing. Observed no overpull.

07:00 Laid out the wear bushing and the wear bushing running tool.

* Observed a lot of cement cutting on the top of the wear bushing running tool. Both the O-rings on the wear bushing were missing and all 8 shear pins sheared.

08:30 Ran in the hole with the jet sub on 5" drill pipe to 410 m.

10:00 Washed the well head area.

* 3000 LPM - 110 bar.

11:00 Pulled out of the hole with the jet sub from 410 m to surface.

12:30 Cleaned the rig floor and rigged up to run the 9 5/8" tie back casing.

* Held pre-job/safety meeting prior to run the casing. Circulated down the kill line and up the choke line to function test the BJ kill pump.

15:00 Made up the 9 5/8" seal stem and ran the 9 5/8" casing to 78 m.

19:00 Made up the 9 5/8" casing running tool with seal assembly and ran in the hole with the casing on 5 1/2" HWDP. Entered the PBR and sheared the locator sub with 20 ton. Landed the hanger in the well head and sat down 15 ton weight.

* Circulated 200 LPM prior to land the hanger. Observed the pressure increase from 5 to 11 bar when the seal stem entered the PBR. Bottom of the seal stem: 489,0 m.

20:30 Pressure tested the surface lines to 80 bar. Pressure tested down the annulus against the seal stem to 80 bar. Pressure tested down the string inside the seal stem to 50 bar. Released the casing running tool and pressure tested down the annulus against the seal assembly to 220 bar.

* Volume versus pressure recorded during pressure testing:
Down the choke line against the fail safe valve, 80 bar - 14 liter. Down the choke line against outside the seal stem, 80 bar - 36 liter
Down the string against inside the seal stem, 50 bar - 113 liter. Down the choke line against the seal assembly, 220 bar - 32 liter.
Pumped and bleed back the same amount of liquid on each test.

22:00 Attempted to pressure test down the string inside the seal stem to 80 bar. The pressure leaked off at 45 bar and leveled out at 15 bar. Re-tested the seal stem in steps of 5 bar. The pressure leaked off at 25 bar and leveled out at 15 bar.

* Volume versus pressure recorded during pressure testing:
Down the string against inside the seal stem first attempt, 45 bar - 90 liter. Second attempt, 5 bar - 42 L. 11 bar - 48 L. 20 bar 72 L. 25 bar - 89 L.
Pumped and bleed back the same volume on each test.

23:59 Pulled out of the hole with the 9 5/8" casing hanger running tool on 5 1/2" HWDP. Observed the seal assembly still attached to the running tool. Laid out the seal assembly and the casing hanger running tool.

* Observed no overpull when pulling the casing hanger running tool out of the hanger. Observed a lot of cement cutting on the top of the running tool and behind the seal assembly.

Daily report no : 13 **Date:** 2006-06-19**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg**Stop time Description**

02:00 Installed the mill and flush adapter on the multi purpose tool with 2 stand 5" HWDP and bullnose below.

03:00 Ran in the hole with the mill and flush tool on 5" drill pipe.

05:30 Worked the mill and flush tool at 407,9 m. Pumped a 10 m3 havis pill and circulated the well clean. Flow checked the well.

07:00 Pulled out of the hole with the mill and flush tool from 464 m to surface.

07:30 Picked up the Seal Assembly Running Tool (SART) with two stands 5" HWDP and bull nose below.

10:30 Installed the Seal Assembly and ran in hole with SART to 407,92 m on 5 1/2" drill pipe.

* Ran Seal Assembly with lock ring pre-installed.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 13 **Date:** 2006-06-19**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
13:00	Closed the middle pipe ram and sat the Seal Assembly with 220 bar. Opened the MPR and sheared out of the seal assembly with 45 ton over pull. Tested the seal assembly to 220 bar.
	* Pumped 31 litres and bled back same.
15:00	Pulled out of the hole with the SART and laid out the bottom hole assembly.
16:00	Laid out the OWS casing tong and cleaned and cleared the drill floor.
17:00	Made up the Wear Bushing with Running Tool and 5 1/2" HWDP.
18:30	Ran in hole with the Wear Bushing and installed Diverter Packer. Landed Wear Bushing at 407,92 m with 20 ton.
20:30	Pulled out of hole with running tool and laid out same.
21:30	Perfomd planned maintenance on anti collision system.
22:30	Made up 6" bottom hole assembly with 6" bit, 5 7/8" stabilizer, 4 3/4" DC and jar.
23:59	Ran in hole with 6" bottom hole assembly to 138 m picking up 3 1/2" drill pipe.

Daily report no : 14 **Date:** 2006-06-20**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:00	Continued to run in hole with 6" bottom hole assembly from 138 m to 465 m on 5 1/2" drill pipe.
02:00	Filled pipe and increased pump rate in stages to 1500 lpm 53 bar.
03:30	Wash down inside 7" liner from 465 m to 530 m. No firm cement.
	* 1500 lpm - 53 bar, 50 rpm - 3,39 kNm.
04:00	Failure of BHI gas detector data aquisition. Re-set the surface data aquisition system.
07:00	Continued to wash down inside 7" liner from 530 m to 594 m. No firm cement, but residual cement on shakers.
11:00	Continued to wash down inside 7" liner from 594 m to 640 m. Drilled cement from 620 to 622 m. 2 - 3 ton weight on bit. Reamed one stand at 640 m and flow checked the well.
	* 1500 lpm - 60 bar, 50 rpm - 2,7 kNm.
12:00	Pulled out of hole from 640 m to 490 m while lubricating.
15:00	Pumped 7 m3 high viscous pill and observed large amount of cement cuttings at surface. Pumped another 9 m3 hi vis pill and circulated bottoms up.
	* 3000 lpm - 190 bar, 40 rpm
18:00	Pulled out of hole from 490 m to surface while lubricating. Laid out the 6" bottom hole assembly and cleaned and cleared the rig floor.
	* Racked back 3 1/2" DP
18:30	Picked up 6" Mill and scraper assembly. Found crack in the mill and changed mill to 6" bit.
21:00	Ran in hole with 6" bit and scraper assembly to 515 m. Broke circulation in steps to 1000 lpm - 29 bar.
	* Filled string before entreing BOP and compensated through BOP. Rotated with 10 rpm while entering 7" PBR.
21:30	Washed and scraped from 515 m to 541 m.
	* 1000 lpm - 29 bar, 50 rpm - 2,7 kNm.
22:00	Observed approximately 300 litres gain in the active system. Shut in the well with annular and closed diverter. Lined up the well to trip tank and observed the well. Choke line pressure increased from 1,1 bar to 1,3 bar.
	* No volume increase observed in diverter system. Kill line pressure 1,4 bar.
23:00	Opened the diverter. Opened the choke and bled off choke line pressure and then closed the choke. Choke line pressure 0,9 bar, kill line pressure 1,2 bar.
23:59	Circulated bottoms up from 541 m, pumping from trip tank with mud pump #3. Took returns through choke line via poor boy degasser and back to trip tank. No gas or volume increase observed.
	* 15 spm / 138 lpm - 7,5 bar. 4 bar kill line pressure during circulation. Pumped a total of 700 strokes.

Daily report no : 15 **Date:** 2006-06-21**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:00	Flow checked the well up choke line 15 min. Opened the annular and flow checked the well for 15 min up the riser.
01:30	Slide down with 6" scraper assembly from 541 m to 640 m.
02:30	Closed the annular and circulated bottoms up through choke line at 15 spm.
03:00	Flow check the well up the choke line. Opened the annular and flow check up the the riser.
04:00	Scraped the 7" liner from 640 m to 585 m three times.
	* 1000 lpm - 33 bar, 50 rpm - 2 kNm.
04:30	Function tested the BOP and flow checked the well.
05:00	Pulled out of hole from 590 m to 497 m while lubricating.
06:00	Pumped 7 m3 high viscous pill and circulated 1,5 times bottoms up.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 15 **Date:** 2006-06-21**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
06:00	* 1000 lpm - 27 bar, 2500 lpm - 135 bar.
10:00	Pulled out of hole from 497 m to surface while lubricating. Laid out the 6" scraper assembly. Cleaned and cleared the rig floor.
12:00	Held pre-job meeting and rigged up wireline equipment.
13:30	Ran in hole with IBC-CBL logging tool on 7-46 electric line. Logged down CBR-GR to 625 m.
14:00	Logged IBC-CBL upwards from 625 to 539 m.
	* Logged at 800 ft / hour
15:00	Tool stopped working. Ran in hole to re-logged from 625 m. Sub in IBC tool stopped spinning. Restarted computer.
15:30	Logged IBC-CBL upwards from 625 to 576 m. Cement confirmed from 625 m to 595 m. Traces of cement above 595 m.
16:30	Stopped logging due to down hole system error.
17:00	Logged up to 496 m.
19:30	Ran back to 625 m and performed repeat log to 510 m, with high resolution at 150 ft/hour.
20:30	Continued to log out of hole inside 9 5/8" casing from 510 m to sea bed.
22:30	Pulled out to surface and changed from 7" centralisers to 9 5/8". Checked tools.
23:59	Ran in hole with IBC-CBL to 510 m.

Daily report no : 16 **Date:** 2006-06-22**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:30	Logged main pass with IBC-CBL in 9 5/8" casing from 510 m to well head.
02:00	Stopped logging due to down hole system error.
02:30	Logged repeat pass from 510 m to 475 m to log 9 5/8" PBR - Seal Stem area.
03:30	Pulled out of hole with IBC-CBL logging tool to surface.
04:30	Rigged down wireline equipment.
05:00	Made up 9 5/8" Cup Tester.
07:00	Ran in hole with 9 5/8" Cup Tester to 496 m.
08:30	Closed upper annular and pressure tested 9 5/8" casing to 80 bar/10 min.
	* Pumped 55 liters and got 55 liters in return.
09:30	Lubricated out of hole with cup tester to 385 m holding 2,5 bar on drill pipe.
10:30	Flow checked the well for 15 min and continued to pull out of hole to surface.
11:30	Laid down 9 5/8" Cup Tester and picked up 7" Cup Tester.
12:30	Ran in hole with 7" Cup Tester to 520 m.
13:30	Closed upper annular and pressure tested 7" Liner Hanger to 80 bar /10 min.
	* Pumped 49 liters and got 49 liters in return.
14:30	Ran in hole with 7" Cup Tester to 630 m.
15:30	Closed upper annular and pressure tested 7" Liner to 80 bar /10 min.
	* Pumped 49 liters and got 49 liters in return.
17:30	Lubricated out of hole with cup tester to 385 m holding 3 bar on drill pipe.
	* ROV installed extra camera on seabed for observation of well head.
19:00	Flow checked the well for 15 min and continued to pull out of hole to surface and laid down cup tester.
21:00	Rigged up wireline for running 7" Bridge Plug and prepared bottom hole assembly.
22:30	Could not make up Bridge Plug to setting tool. Damage in thread connection had to be removed by use of lathe.
23:30	Ran in hole with 7" Bridge Plug on 7-46 electric wireline and correlated depth with CCL. Continued to run in hole to 626 m.
23:59	Lost weight at 626 m. Picked up string and attempted to pass 626 m. Planned setting depth 628 m. Decided to set plug one joint higher at 617 m.

Daily report no : 17 **Date:** 2006-06-23**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
00:30	Set Bridge Plug at 617 m.
	* Lost 350 lbs of cable weight when setting plug.
01:00	Pulled out of hole with setting tool.
02:30	Closed the shear seal ram and pressure tested the Bridge Plug to 80 bar / 10 min. Rigged down wireline equipment.
	* Pumped 42 liters and got 42 liters in return.
03:00	Prepared to run 7" casing cutter and held prejob meeting.

DAILY REPORT

Well: 35/2-1 R

PO: 1

Daily report no : 17 Date: 2006-06-23

Midnight depth : 713 m MD Estimated PP: 1,06 sg Mud weight: 1,15 sg

Stop time	Description
06:00	Made up 7" casing cutter assembly with circulation sub and non ported float.
08:00	Ran in hole with cutter assembly to 561 m.
10:00	Took parameters prior to landing marine swivel. Landed out marine swivel in well head and set down 7 ton. Close upper annular and took new parameters including slow circulation rates through choke line.
	* Prior to landing: Up/down weight 50 ton, 60 rpm - 2,85 kNm. After landing: 60 rpm - 4 kNm
11:00	Cut 7" liner at 561 m with 100 - 120 rpm, 350 lpm and 138 bar.
12:00	Recorded loss of 0,7 - 0,8 m3 in active system. Stopped rotation and cutting. Circulated 2 times bottoms up and active volumes stabilised. Recorded 0,8% gas in returns.
12:30	Continued to cut 7" liner. Pump pressure dropped from 161 bar to 70 bar after torque increased by 2 kNm. Stopped pumping and rotating and observed a loss to the formation of 4 - 9 m3/hour.
15:00	Continued to circulate at 100 lpm - 22 bar to keep mud volume constant.
	* ROV reported a starting decrease in gas leakage rate at seabed at 14:55 hours. At 15:30 only minor gas observed.
16:00	Stopped circulation, closed diverter and opened annular. Flow checked the diverter line and observed well stable on the trip tank. Circulated the long way with 100 lpm and got losses with 4 - 6 m3/hour to the formation.
16:30	Flow checked the well.
17:30	Prepared to pump LCM pill.
19:00	Pumped 4 m3 1.20 s.g. LCM pill at 260 lpm and 21 bar and displaced with mud.
	* LCM: Mica F/M 55 kg/m3, Checkloss 38 kg/m3, LC Lube 55 kg/m3, Nut plug F/M 14 kg/m3, CaCO3 C/F 30/10 kg/m3
20:00	Flow checked the well and confirmed well stable for 45 min.
21:30	Pulled slowly out of hole without lubricating, from 561 m to 500 m. Flow checked the well 30 min stable.
22:00	Pumped 6 m3 1,20 s.g. LCM.
23:00	Displaced LCM with mud. String plugged and pump pressure increased from 11 to 53 bar.
23:59	Dropped 1 7/8" ball and let ball fall to bottom of string. Pressured up the string to 140 bar and sheared the circulation sub. Continued to displace LCM to 100 m above the bottom of the string. Flow checked the well.

Daily report no : 18 Date: 2006-06-24

Midnight depth : 713 m MD Estimated PP: 1,06 sg Mud weight: 1,15 sg

Stop time	Description
01:00	Flow checked the well prior to pulling out of hole.
05:30	Pulled out of hole with the cutting assembly. Racked back the Annular and Marine swivel. Laid out the 7" x 16 1/8" casing cutter. Marks on the cutter confirmed that the 7" casing has been fully cut.
07:00	Made up 3 1/2" stinger and non ported float, and ran in hole on 3 1/2" drill pipe to 496 m.
08:00	Established circulation at 220 lpm and 10 rpm and observed slight loss of 0,2 m/hr which then decreased to zero.
10:30	Increased flow in 100 lpm steps from 300 lpm to 1300 lpm. Observed slight loss trend at 1300 lpm.
13:00	Reduced flow to 300 lpm and increased flow rate in steps to 1750 lpm with full returns.
	* 1750 lpm - 18 bar.
13:30	Ran in hole with stinger to 565 m.
16:30	Established circulation at 100 lpm and 10 rpm, and increased flow in 100 lpm steps to 1500 lpm with full returns.
	* 1500 lpm - 15 bar. Calculated ECD 1,17.
17:00	Flow checked the well.
19:00	Pulled out of hole with stinger to surface while lubricating.
20:30	Held tool box meeting and made up the 7" x 9 1/2" section mill assembly with non ported float and circulation sub. Tested the section mill by pumping through at 1000 lpm - 8 bar.
22:30	Ran in hole with the section mill assembly to 379 m.
23:59	Performed planned rig maintenance. Changed the upper fast line spooler block and megged the DDM motor.

Daily report no : 19 Date: 2006-06-25

Midnight depth : 713 m MD Estimated PP: 1,06 sg Mud weight: 1,15 sg

Stop time	Description
01:00	Continued rig maintenance.
	* 00:30 ROV reported small gas bubbles at well head. Stopped after approx 1/2 hour.
02:00	Ran in hole with section mill from 379 to 570 m.
02:30	Held pre job meeting prior to start section milling.
04:00	Filled pipe and broke circulation with 170 lpm - 6 bar. Boosted riser with 1000 lpm. Increased flow rate in steps to 800 lpm - 18 bar. Stopped pumping due to loading from supply vessel disturbing volume control in the active system.
	* Up weight 59 tons, Down weight 55 tons. 50 rpm ROV reported occasional gas bubbles at well head.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 19 **Date:** 2006-06-25**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
07:00	Waited on supply vessel to unload bulk and cargo.
08:30	Broke circulation on steps to 1000 lpm - 21 bar.
09:30	Moved string up and down in order to locate cut at 561 m. Increased flow to 1100 lpm / 24 bar and located cut at 561 m.
12:00	Boosted riser with 1000 lpm and started section milling with 500 lpm - 10 bar. After 0,5 m the flow rate was increased to 1000 lpm - 25 bar. Milled at 120 rpm and 3-4 ton weight on cutter.
13:30	Reduced flow from 1000 lpm to 700 lpm due to losses. Moved pipe up and down 1,5 m to remove swarf and pumped 4 m3 high viscous pill.
15:00	Increased flow to 1100 lpm and 24 bar with full returns.
16:30	Continued milling from 562,5 m to 564,5 m.
	* 1100 lpm - 24 bar, 120 rpm - 3,4 kNm.
17:00	Got 5 bar gradual increase in pump pressure and loss to the formation, indicating string packing off with swarf.
19:00	Picked up the string off bottom and stopped pumping. Moved the string up and down 10 m, three times. Started pumping and increased in steps to 950 lpm and 22 bar. Pumped high viscous pill.
19:30	Flow checked the well.
20:30	Pull out of hole from 561 m to 501 m, to above the 7" liner.
22:30	Pumped 3 m3 high viscous pill down the string and 5 m3 down the choke line, and circulated bottoms up.
	* No additional swarf / cuttings was returned to surface.
23:59	Pulled out of hole with the section milling assembly to 378m.
	* 9 - 10 kg swarf recovered by midnight. Theoretical cut 170 kg.

Daily report no : 20 **Date:** 2006-06-26**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
02:00	Continued to pull out of hole with the section milling assembly.
02:30	Inspected the bottom hole assembly and changed cutters on section mill. Cutters worn by 3-4 mm. Approximately 2-3 m above the cutters the bottom hole assembly had circumferential scratches marks.
05:00	Ran in hole with the 7" x 9 1/2" section mill assembly to 562 m.
05:30	Broke circulation in steps up to 1000 lpm and 22 bar pump pressure. Boosted riser with 1000 lpm.
07:00	Rotated string with 130 rpm and 2,7 - 4 kNm. Took weight at 564,5 m and section milled to 565 m.
	* Max gas 0,3%, Upweight 56 ton, down weight 59 ton.
	06:30 pump pressure increased with 3 bar. Stopped pump, pulled off bottom and moved string up/down 10 m 3 times.
12:00	Section milled from 565 m to 566,3 m.
20:00	Lost progress in section milling at 566,3 m. 7" Collar at 565 m. Milling torque became erratic between 2,7 and 7 kNm. Picked off bottom several times and changed milling parameters without achieving progress.
23:30	Flow checked the well and pulled out of hole with the section milling assembly.
23:59	Inspected the bottom hole assembly and changed cutters on section mill.
	* Cutters worn by 3-4 mm and width of marks confirmed milling of 7" collar. The taper mill at the bottom of the string was as new.

Daily report no : 21 **Date:** 2006-06-27**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
00:30	Continued to prepare to re-run the bottom hole assembly.
02:30	Ran in hole with the 7" x 9 1/2" section mill assembly to 587 m and verified no restriction inside 7" liner.
	* 1000 lpm - 20 bar.
03:00	Positioned cutters at 565 m and established circulation down the string in steps up to 1000 lpm. Boosted riser with 1000 lpm.
	* 1000 lpm - 20 bar. Up weight 55 ton. Down weight 58 ton. 50 rpm - 2,7 kNm.
04:00	Continued to section mill 7" liner from 566,3 m to 569 m. Pulled string off bottom and stopped rotation every 1 m milled and pulled cutters up towards 561 m.
04:30	At 569 m the string packed off. Stopped pumping and rotation and pulled string up into 7" liner.
05:00	Ran back to cutting depth and established circulation at 1000 lpm and pumped high viscous pill.
12:00	Continued to section mill 7" liner from 569 m to 575 m. Pulled string off bottom, stopped rotation and pumped 3-4 m3 high viscous pill every 1 m.
	* 110 kg swarf recovered by 06:00 since start of milling. Theoretical cut 430 kg.
13:00	Continued to section mill 7" liner from 575 m to 576 m. Got increase in pump pressure and picked up the string.
14:30	Worked the string and pulled the mill inside the 7" liner without pumping nor rotating. Ran back in hole with circulation to 582 m. Cutters did not take weight at 576 m.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 21 **Date:** 2006-06-27**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
15:30	Pumped 4 m3 high viscous pill and circulated bottoms up at 1000 lpm with 1500 lpm boost on the riser.
19:30	Flow checked the well and lubricated out of hole with the section milling assembly. At surface cutters were found in place but stuck in retracted position. Wear on cutters was 'normal'.
21:30	Made up the BOP clean out assembly with Well Protector, jetting sub and Well Sweep Magnets. Ran in hole to 447 m on 5" drill pipe.
23:00	Established circulation at 3000 lpm - 26 bar. Reduced flow to 1500 lpm - 10 bar and reciprocated and rotated the string at 12 rpm up through the BOP.
23:30	Flow checked the well prior to pulling out of hole.
23:59	String started swabbing when pulling out of hole indicating that the Well Protector tool was packed with swarf inside the 9 5/8" casing. Observed 150 l gain on trip tank.

Daily report no : 22 **Date:** 2006-06-28**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:30	Continued to pull carefully out of the hole with the bottom hole assembly and rotated string at 12 rpm. Performed new flow check with the Well Protector above the well head. The 150 l gained on trip tank went back into well bore when the Well Protector was above the well head.
03:00	Pulled out of hole with the BOP clean out assembly to surface.
03:30	Found Well Protector and Well Sweep Magnets completely packed with metal swarf. Rubber element on Well Protector partly damaged. The Well Protector rupture disc was not bursted.
04:30	Made up new BOP clean out assembly with bull nose, jetting sub and Well Sweep Magnets and ran in hole to 410 m.
05:00	Established circulation down the string at 1500 lpm - 17 bar and boosted the riser with 1500 lpm. Observed gain in active system.
05:30	Stopped pumping and shut in the well on the lower annular and diverter. Changed over to trip tank and observed the well.
	* Gained a total of 500 l. No returns observed on the diverter lines. Kill Line pressure dropped from 2,5 bar to 1,9 bar. Choke Line Pressure stable at 1,5 bar.
07:00	Observed the well on Trip Tank.
	* 150 kg swarf recovered by 06:00 since start of milling. Theoretical cut 710 kg.
08:00	Circulated down kill line taking returns up the choke line at 200 lpm - 10 bar. Opened the lower annular and checked for flow on diverterline.
08:30	Opened the diverter and checked stable trip tank. Started to boost the riser with 1500 lpm.
09:00	Got gas reading of 4% in the return flow. Shut in the well on lower annular and closed the diverter. Observed no flow in the diverter lines.
10:00	Opened the diverter and annular and flow checked the well stable.
10:30	Circulated down string in steps up to 1000 lpm - 6 bar. Got 2% gas reading in the return flow.
11:30	Shut in the well on the lower annular and closed the diverter due to increase in the trip tank of 900 l. Observed no flow in the diverter lines.
12:30	Opened the annular and continued to circulate bottoms up with 1000 lpm - 6,5 bar. Maximum gas 0,4%. Increased flow in steps to 1500 lpm - 9,5 bar and reciprocated the jet sub through the BOP area.
13:00	Flow checked the well.
14:00	Pulled out of hole with the BOP clean out assembly.
14:30	Laid out the magnets and the jetting sub. Magnets were partly filled with swarf.
15:30	Changed to 3 1/2" equipment. Cleaned the rig floor and cleaned the trip tank.
18:00	Ran in hole with 3 1/2" cement stinger on 3 1/2" drill pipe and with non-poerted float. Continued to run in hole on 5" drill pipe. Stood up at 559 m and set down 2 ton. Attempted to pass 559 m and set down 8 ton with 10 ton.
19:00	Closed the lower annular and circulated bottoms up with 90 lpm - 9 bar taking returns up the choke line to the poor boy. Kill line pressure 4,7 bar.
19:30	Circulated bottoms taking returns through choke line and poor boy with 130 lpm and 8,8 bar. Kill line pressure 5 bar.
20:00	Closed the diverter, opened the lower annular and flow checked.
20:30	Closed diverter lines and flow checked the well on trip tank.
21:00	Opened the diverter and flushed the choke and kill lines to remove possible swarf in the lines.
21:30	Circulated down the string at 160 lpm - 7 bar and increased to 400 lpm - 14 bar. Picked up string to 555 m and attempted to run inhole to 560 m, but observed losses. Reduced flow to 160 lpm - 10 bar and stopped pump.
23:00	Displaced the riser pumping down the kill line.
23:30	Flow checked the well.
23:59	Pulled out of hole with the 3 1/2" cement stinger while lubricating to 525 m.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 23 **Date:** 2006-06-29**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
04:00	Continued to pull out of hole with the 3 1/2" cement stinger while lubricating.
05:00	Laid out the cement stinger and cleaned the rig floor. The cement stinger was packed with swarf and only the upper circulation ports were open. Made up the BOP clean out assembly Well Protector, jetting sub and Well Sweep Magnets.
06:30	Ran in hole with BOP clean out assembly to 400 m on 5" drill pipe, prior to testing the BOP.
	* 157 kg swarf recovered by 06:00 since start of milling. Theoretical cut 710 kg.
07:30	Ran Well Protector into 9 5/8" casing in steps in order to verify no swabbing of the tool.
09:30	Circulated bottoms up at 3000 lpm - 25 bar with 30 rpm at 1,4 kNm. Continued to boost the riser with 1500 lpm while cleaning the BOP with pumping down the string at 1500 lpm - 10 bar. Made one pass inside the BOP and the operated the BOP pipe rams. Continued to clean the BOP. No swarf seen at surface.
10:00	Flow checked the well.
11:30	Pulled out of hole with the BOP clean out assembly.
12:00	Emptied the well protector and cleaned the magnets. Well protector was full and a total of 44 kg og swarf was recovered.
13:00	Ran in hole with BOP clean out assembly to 415 m on 5" drill pipe.
13:30	Boosted the riser with 1500 lpm while cleaning the BOP and pumping down the string at 1500 lpm with 30 rpm. Made three passed inside the BOP.
14:00	Flow checked the well.
15:00	Pulled out of hole with the BOP clean out assembly.
15:30	Cleaned the well protector and magnets. Well protector was empty and a total of 5,5 kg of swarf was recovered.
16:30	Ran in hole with BOP clean out assembly to 412 m on 5" drill pipe.
17:30	Boosted the riser with 1500 lpm while cleaning the BOP and pumping down the string at 1500 lpm. Made three passed inside the BOP. No rotation due to magnets inside the BOP.
18:00	Flow checked the well.
18:30	Pulled out of hole with the BOP clean out assembly.
19:00	Laid out the BOP clean out assembly. Well protector was empty and a total of 2 kg of swarf was recovered.
20:00	Made up the BOP Test Tool with 5" Jet sub.
22:00	Ran in hole with the BOP test tool to 390 m. String plugged at 180 m, pumped down the string to clear pipe.
22:30	Landed the BOP test Tool on the Well Head.
23:59	Tested the BOP to 10 bar/5 min and 135 bar/10 min.

Daily report no : 24 **Date:** 2006-06-30**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
03:00	Continued to test the BOP.
04:30	Pull out of hole with the BOP test tool to 150 m.
07:00	Observed the BOP test tool packing off inside the riser. Turned the string and pulled out of the hole slowly. Pulled out of hole to surface and found no swarf on the BOP test tool.
	* 209 kg swarf recovered by 06:00 since start of milling. Theoretical cut 710 kg.
08:30	Pressure tested the Kelly Cock and Kelly hose on DDM to 30 bar/5 min and 345 bar/10 min.
09:00	Broke out 6" magnets from scraper assembly.
11:30	Made up clean out assembly with 6" junk mill, drill collars, 2 x 6" magnets, circulation sub, 4 3/4" drill collar, jar, non ported float and 3 x 8,34" magnets.
13:30	Ran in hole with clean out assembly to 390 m.
14:00	Hydraulic hose broke on the iron rough neck.
14:30	Continued to run in hole with the clean out assembly to 525 m.
15:00	Broke circulation at 160 lpm and 10 bar. Pressure increased to 13,5 bar. Picked up the string to 510 m and increased flow to 1500 lpm - 238 bar. Rotated the string at 50 rpm - 1,4 kNm.
18:00	Washed down from 508 m to 557 m. Reduced flow to 1250 lpm at 515 m due to pressure increase. At 557 m the pump pressure increased by 4 bar and the flow was reduced to 500 lpm - 38 bar. Worked the string and attempted to clean the hole.
19:00	Lubricated out of hole from 553 m to 500 m.
20:00	Established circulation at 1250 lpm - 175 bar.
22:30	Washed down from 500 m to 557 m. Reduced flow to 1000 lpm - 110 bar at 544 m. Got pressure increase to 114 bar due to string packing off.
	* 1250 lpm - 178 bar, 60 rpm - 1,4 kNm.
23:30	Flow checked the well.
23:59	Pulled out of hole while lubricating to 542 m.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 25 **Date:** 2006-07-01**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
02:30	Lubricated out of hole with the clean out assembly to 373 m.
03:00	Flow checked the well.
04:30	Continued to pull out of hole with the clean out assembly.
05:00	Laid out and cleaned the 6" magnets and 8,34" magnets, which were full of metal swarf.
06:00	Made up new clean out assembly with 6" junk mill, drill collars, circulation sub, 4 3/4" drill collar, jar, 2 x 6" magnets, non ported float and 7 x 8,34" magnets.
	* 250 kg swarf recovered by 06:00 since start of milling. Theoretical cut 710 kg.
08:00	Ran in hole with the clean out assembly to 494 m.
08:30	Established circulation at 1250 lpm - 174 bar and boost riser with 1500 lpm.
09:00	Ran in hole from 494 m to 532 m with 1200 lpm - 166 bar.
	* 50 rpm - 1,4 kNm.
10:00	Washed down from 532 to 560 m and observed 4 bar increase in the pump pressure. Attempted to work string down. Stopped the pumps and flow checked the well.
12:00	Lubricated out of hole with the clean out assembly to 128 m.
13:00	Cleaned the magnets and recovered 30 kg swarf.
14:30	Ran in hole with the clean out assembly to 532 m.
15:00	Established circulation at 1200 lpm - 178 bar and boost riser with 1500 lpm.
	* 100 rpm - 2,7 kNm.
17:00	Washed down from 532 to 561 m. At 561 m the pump pressure dropped by 10 bar but came back up again after connection. Continued to wash and work the string with 50 rpm and got 4 bar pressure increase.
17:30	Flow checked the well.
19:00	Lubricated out of hole with the clean out assembly to 128 m.
20:00	Cleaned the magnets and recovered 60 kg swarf.
21:30	Ran in hole with the clean out assembly to 541 m.
22:30	Established circulation at 1150 lpm - 131 bar and boost riser with 1500 lpm.
23:30	Washed down from 541 to 561 m with 60 rpm - 1,4 kNm. Observed 4 bar pressure build up and went off bottom.
23:59	Flow checked the well.

Daily report no : 26 **Date:** 2006-07-02**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:30	Lubricated out of hole with the clean out assembly to 128 m.
02:30	Cleaned the magnets and recovered 40 kg swarf.
04:30	Ran in hole with the clean out assembly to 542 m.
05:00	Established circulation at 1130 lpm - 132 bar and boost riser with 1500 lpm.
06:00	Washed down from 541 to 561 m with 60 rpm and then 100 rpm. Observed 4 bar pressure build up and went off bottom.
	* 435 kg swarf recovered by 06:00 since start of milling. Theoretical cut 710 kg.
08:30	Lubricated out of hole with the clean out assembly to 128 m.
09:00	Cleaned the magnets and recovered 41 kg swarf.
10:00	Ran in hole with the clean out assembly to 542 m.
10:30	Established circulation at 80 lpm - 7 bar to keep the nozzles clean.
11:30	Ran in hole with the clean out assembly from 542 m to 562,5 m and set down 1 ton. Increased the flow to 1200 lpm 172 bar and attempted to clean hole with 120 rpm - 2,7 kNm. Observed 2 bar pressure build up.
12:00	Flow checked the well.
13:30	Lubricated out of hole with the clean out assembly to 128 m.
14:30	Cleaned the magnets and recovered 42 kg swarf.
17:00	Performed planned rig maintenance.
18:30	Ran in hole with the clean out assembly to 542 m.
19:00	Established circulation at 1200 lpm - 168 bar and rotated the string at 135 rpm - 2,7 kNm. Washed down from 542 m to 562,5 m. Observed 4 bar pressure build up.
20:30	Reduced the flow rate to 160 lpm - 10 bar and took 3 ton weight on top of 7" cut at 576,3 m. Turned the string at 10 rpm and entered the 7" liner. Slide down to 585 m and took 3 ton.
21:00	Pulled out to 551 m and attempted to increase flow but pump pressure was above reference values.
22:00	Made a second attempted to wash past 585 m but set down 3 ton.
22:30	Flow checked the well.
23:59	Lubricated out of hole with the clean out assembly to 390 m.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 27 **Date:** 2006-07-03**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:00	Pulled out of hole with the clean out assembly to 128 m.
01:30	Laid out the magnets. 40 kg of swarf was recovered.
03:00	Continued to pull out of hole with the bottom hole assembly. Racked the 4 3/4" drill collars in the derrick and laid out the milling assembly.
04:00	Picked up the assembly for section milling and function tested the cutters at 1100 lpm - 10 bar.
06:00	Ran in hole with the 7" x 9 1/2" section milling assembly to 530 m.
	* 562 kg swarf recovered by 06:00 since start of milling. Theoretical cut 710 kg.
07:30	Ran in the hole with the 7" x 9 1/2" section milling assembly to cut at 574 m. Increased the flow to 1000 lpm/ 26 bar to activate knives.
10:00	Section milled the 7" liner from 574 m to 577 m. Reamed the cut from 577 m to 562 m.
	* 1000 lpm - 22 bar, 130 RPM. Boosted the riser with 1500 lpm.
11:30	Pumped a 4 m3 1,15 sg high viscous pill down the drill string. Flowchecked the well for 15 min.
	* Boosted riser with 1500 LPM when the pill was above the BOP.
13:00	Lubricated out the the hole with the milling assembly to surface.
14:00	Laid down the 7" x 9 1/2" section milling assembly.
14:30	Made up the BOP clean out assembly, jetting sub and Well Sweep Magnets.
15:30	Ran in the hole to 412 m with the BOP clean out assembly.
16:30	Staged up the pumps to 1500 lpm - 20 bar, pulled back 4 m to 408 m and observed the pump pressure decreased to 12 bar.
	Cleaned the BOP with 1500 lpm while boosting the riser.
17:00	Flow checked the well.
	* Added defoamer to the trip tank.
17:30	Pulled out of hole with the BOP clean out assembly.
18:00	Laid out the BOP clean out tool. Well protector was empty and a total of 37,5 kg was recovered.
	* 595,5 kg kg swarf recovered since start of milling. Theoretical cut 811 kg.
19:00	Made up the clean out assembly with 5 3/4" junk mill, drill collar, circulation sub, drill collars, 2 x 6" magnets, non ported float, 7 x 8,34" magnets.
21:00	Ran in the hole to 542 m with the clean out assembly.
22:00	Staged the pumps up to 700 lpm - 68 bar. The pressure increased to 72 bar. Worked the string to reduce the pressure increase. Observed the same pressure.
23:59	Pulled out of the hole with the clean up assembly, while lubricating, to 106 m.

Daily report no : 28 **Date:** 2006-07-04**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:00	Laid out and cleaned the magnets on the bottom hole assembly. Recovered a total of 25 kg swarf.
	* 620,5 kg swarf recorded since start of milling. Theoretical cut 811 kg.
02:00	Ran in the hole with the same clean up assembly to 532 m.
04:30	Staged up the pumps to 1000 lpm - 115 bar. Washed down to 580 m and observed 4 bar of pressure increase. Pulled the string back to 561 m and slid down to 586 m. Observed 4 bar of pressure increase while circulating with 160 lpm.
	Racked back one stand and flow checked the well.
06:00	Lubricated out of the to 106 m
09:00	Re arranged the magnets further down in the bottomhole assembly for more effective cleaning of the setting area for the inflatable packer.
09:30	Ran in the hole with the clean up assembly from 98 m to 503 m.
12:00	Staged up the pumps to 1000 lpm - 121 bar and washed down to 576 m. Rotated and reciprocated the string in the cutting area. Observed a pressure increase of 4 bar when the magnets where located at the top cut at 561 m. Pressure fell back to normal when the magnets passed the top cut. Worked the string to get the magnets into the top cut. Stopped the pumps due to a loss.
12:30	Flowchecked the well and added defoamer to the trip tank.
14:00	Lubricated out of the hole to 98 m.
16:00	Laid out and cleaned the magnets. Recovered a total of 63 kg swarf.
	* 693 kg swarf recovered since start of milling. Theoretical cut 811 kg.
17:30	Ran in the hole with the same clean out assembly to 551 m.
20:30	Staged up the pumps to 1000 lpm - 120 bar and washed down to 576 m. Worked the string in the cut area. Racked back one stand and flow checked the well.
23:30	Lubricated out of the hole to 98 m.
23:59	Laid down the clean out assembly.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 29 **Date:** 2006-07-05**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
00:30	Continued to brake and lay down the clean up assembly. Recovered a total of 22 kg swarf.
	* 715 kg of swarf recovered since start of milling. Theoretical cut 810 kg swarf.
02:30	Made up BOP and riser clean up assembly.
	* Held pre-job meeting prior to making up the bottom hole assembly.
03:30	Ran in hole with the Bop and riser clean up assembly to 410 m.
05:00	Washed the BOP with 1500 lpm - 10 bar. Made two passes inside the BOP. Circulated bottoms up. Racked back one stand and flow checked the well.
	* Boosted the riser with 1500 lpm - 38 bar.
07:00	Pulled out of hole with the Bop and riser clean up assembly.
08:00	Laid down and cleaned the magnets, riser brush and well protector. Recovered a total of 10 kg swarf.
	* 725 kg of swarf recovered since start of milling. Theoretical cut 810 kg swarf.
09:00	Made up new bottom hole assembly consisting of a mule shoe and a junk trapper.
	* Cleaned and cleared the rig floor.
10:30	Ran in the hole with the bottom hole assembly. Tagged top of PBR at 504 m.
12:00	Broke circulation and washed the well from 504 m to 383 m.
	* Washing parameters: 1000 lpm - 8 bar and 10 rpm.
12:30	Flow checked the well and added defoamer to the trip tank.
13:00	Pulled out of hole with the bottom hole assembly.
14:30	Laid down the mule shoe and the junk trapper. Recovered a total of 1 kg swarf.
	* 726 kg of swarf recovered since start of milling. Theoretical cut 810 kg swarf.
17:00	Picked up the inflatable packer and filled it with brine. Confirmed no leakage of the packer.
19:30	Ran in the hole with the inflatable packer to 570 m.
22:00	Pumped down the drill string to open the Inflate Access Valve. Pressure dropped at 72 bar. Pumped up the inflatable packer with 250 l, observed a sudden pressure drop to 36 bar. Bled off the pressure and sat down 2 ton on the plug for 20 min.
22:30	Attempted to hydraulically release the plug by pumping down the string and thru the Inflate Pressure Limit Valve. Observed the pressure dropped at 59 bar. Pulled the drill string up 0,5 m to verify release. No over pull observed but experienced flow restriction when circulating.
23:00	Pushed the plug down to 577 m with 1 ton above the free down weight. Attempted to release the plug mechanically with no success. Pressured up the drill string to 170 bar and the plug released hydraulically.
23:59	Pulled out of the hole with the drill string from 577 m to 474 m.

Daily report no : 30 **Date:** 2006-07-06**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:30	Continued to pull out of hole with running tool.
02:00	Picked up the second inflatable plug and filled it with brine.
05:00	Ran in the hole with the second inflatable plug to 570 m. Top Packer : 566,41 m. Bottom element: 570 m. Top element : 567,10 m.
06:00	Pumped down the drill string to open the Inflate Access Valve. Observed the drill string moved with the heave motion of the rig, verifying that the plug was set.
	* Observed a pressure drop at 82 bar and pumped 230 l into the inflatable packer.
08:00	Bled off the pressure and sat down 2 ton on the plug. Attempted to hydraulically release the plug by pumping down the drill string and thru the Inflate Pressure Limit Valve with no success. Turned the drillstring 8 turn and mechanically released the plug.
10:30	Flow checked the well and pulled out of the hole with the running tool.
16:00	Picked up a 3 1/2" stinger and ran in the hole to 563 m.
17:30	Pumped 2 m3 of 1,15 sg Brine containing 5 % MEG. Mixed and pumped 450 l of 1,68 sg barite slurry. Displaced with 2060 l Brine.
18:30	Pulled up to 540 m and circulated bottoms up.
19:30	Ran in hole to 550 m with the 3 1/2" cement stinger. Pumped 2 m3 of 1,15 sg Brine containing 5 % MEG. Mixed and pumped 350 l of 1,68 sg barite pill. Displaced with 1940 l Brine.
20:30	Pulled up to 520 m and circulated bottoms up.
23:00	Lubricated out the hole with the cement stinger.
23:59	Performed cut and slip of the drill line.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 31 **Date:** 2006-07-07**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
02:30	Continued on slip and cut. Performed planned rig maintenance.
	* Changed a trip tank sensor.
	Changed a bushing on the cylinder support for the IRA.
	Greased and inspected the top drive, traveling block and dolly.
03:00	Made up the bottom hole assembly consisting of a flat bottom junk mill, drill collars and a jar.
06:30	Ran in hole with to 566 m to tag the barite plug with no successes.
08:00	Pulled back to 558 m and circulated bottoms up. Pulled back to 548 m and flow checked the well.
	* Observed no signs of barite in return.
12:00	Lubricated out of the hole with the 3 1/2" cement stinger.
	* Cleaned and cleared the rig floor.
14:00	Picked up a 3 1/2" stinger and ran in the hole to 563 m.
15:00	Pumped 2 m3 of 1,15 sg Brine containing 5 % MEG. Mixed and pumped 1000 l of 1,68 sg barite slurry. Displaced with 1885 l Brine.
15:30	Pulled up to 491 m and circulated bottoms up.
	* Observed no sign of the barite in return.
16:30	Waited on the barite to settle. Performed rig maintenance.
	* Rigged down the blind flange on the test line in the derrick.
	Checked the support plate on the IRA.
18:00	Ran in hole to 550 m with the 3 1/2" cement stinger. Pumped 2 m3 of 1,15 sg Brine containing 5 % MEG. Mixed and pumped 500 l of 1,68 sg barite pill. Displaced with 1876 l Brine.
19:00	Pulled back to 490 m and circulated bottoms up. Flow checked the well.
21:30	Lubricated out of the well with the 3 1/2" cement stinger.
22:00	Made up a bottom hole assembly consisting of flat bottom junk mill, drill collars and jar.
23:59	Ran in the hole with the bottom hole assembly to tag the barite plug.
	* Function tested the BOP.
	Circulated bottoms up.

Daily report no : 32 **Date:** 2006-07-08**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:30	Continued to run in the hole to 566 m. Tagged the barite plug with 1 ton. Pulled up and re tagged the plug at same depth.
	* Tagged the plug at 566 m using the laser as depth reference.
03:00	Pulled back to 559 m and circulated bottoms up.
	* Observed no sign of barite in return.
05:30	Flow checked the well and lubricated out the hole with the bottom hole assembly.
06:30	Ran in the hole with 5" drill pipe to perforate below the 7" liner packer.
09:30	Rigged up the wireline equipment and the perforation guns.
	* Held pre job meeting.
10:00	Ran in the hole with the perforation guns on wireline to 400 m through the drill pipe. Closed the upper ram on the BOP and opened the kill and choke line.
11:00	Continued to run in the hole with the perforation guns to 517 m. Fired the guns and monitored the well pressure on the drill pipe and choke line.
	* 5 min after perforation : 2 bar on the choke line and 0 bar on the drill pipe.
	10 min after perforation : 4 bar on the choke line and 0 bar on the drill pipe.
	Perforating area: 515,12 - 513,6 m. 20 shot fired.
12:30	Circulated gas out with constant drill pipe pressure. Observed 1 m3 gain on the trip tank when the gas expanded up to surface. Volumes back to normal after circulated out gas. No indication of losses. Continued to circulate bottom up two times after return volume was stable.
	* Circulation rates: 46 lpm - 4 bar. 91 lpm - 6 bar.
13:00	Flow checked the well on the trip tank. Stable well.
13:30	Cross circulated down the choke line and up the kill line.
14:30	Pulled out the perforation guns thru the drill pipe. Opened the ram on the BOP and flow checked on the trip tank. Broke connection on the drill pipe. Well stable.
16:00	Laid down the perforating string and the side entry sub.
18:00	Ran in the hole from 452 m to 500 m with the drill pipe. Circulated bottoms up down the drill pipe and up the choke line with constant drill pipe pressure. No gain or gas observed in the return. Cross circulated down the choke line and up the kill line.
19:00	Opened the BOP and flow checked the well for 15 min. Well stable. Circulated bottoms up down the drill string and up the riser.
21:00	Lubricated out of the hole with the 5" drill pipe.
22:30	Made up the 7" liner cutting assembly.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 32 **Date:** 2006-07-08**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg**Stop time Description**

23:59 Ran in the hole with the cutting assembly and landed the top of the 7 " PBR at 504 m with the stop sub.
 * Cutting depth: 5,24 m below top PBR. Between PCP hanger and packer assembly.

Daily report no : 33 **Date:** 2006-07-09**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg**Stop time Description**

01:00 Activated the knives on the cutter assembly and rotated the drill string in order to cut the 7" liner.
 02:00 Flow checked the well and circulated bottoms up.
 04:00 Lubricated out of the hole with the cutting assembly.
 * Observed wear on the cutter knives.
 06:30 Made up the grapple assembly to retrieve the 7" PBR.
 07:30 Ran in the hole with the grapple assembly to 506 m. Latched into the PBR and pulled the it free with 5 ton overpull.
 * Bottom grapple depth: 505,45 m.
 08:30 Flow checked the well and circulated bottoms up.
 12:00 Lubricated out of the well and laid down the 7" PBR.
 * Observed 10 ton over pull at 489 m and 409 m. Turned the string 1/2 turn anti clock wise to get the drill string free.
 13:00 Made up the bottom hole assembly with a new grapple.
 15:00 Ran in the hole with the grapple assembly to 509 m. Latched into the liner and pulled it free with 38 ton overpull.
 18:00 Flow checked the well and lubricated out of the hole with the grapple assembly and the 7" liner. Observed the 9 5/8" wear bushing was recovered on the 7" liner packer.
 * Experienced restrictions at 491 m and 390 m. Turned the string 1/2 turn anti clock wise to get the drill string free.
 21:30 Laid down the grapple assembly and rigged up the 7" casing running equipment.
 22:00 Laid down the 7" liner.
 * Observed 4 shot holes in the cross over. The perforation charge was set up with 20 shots.
 2 pup joints and 4 joints.
 23:00 Rigged down the casing running equipment .
 23:59 Dismantled the grapple assembly. Cleaned and cleared rig floor.

Daily report no : 34 **Date:** 2006-07-10**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg**Stop time Description**

02:00 Continued to clean and clear rig floor. Performed maintance of the rig.
 * Checked IRA, DDM, URA and IRN for loose items.
 03:30 Made up the 9 5/8" wear bushing to the Multi Purpose Tool (MPT).
 05:00 Ran in the hole with the 9 5/8" wear bushing on the MPT to 407,9 m. Sat down 13 ton and pulled out of hole. Observed 8 ton over pull when releasing the wear bushing.
 05:30 Pulled out of hole with the MPT.
 06:00 Made up the bottom hole assembly consisting of 8 1/2" bit, drill collar and 3 x magnets.
 08:00 Ran in the hole with the bottom hole assembly to 500 m.
 11:00 Circulated and washed the well from 500 m to 566 m. Circulated bottoms up and flow checked the well.
 13:00 Lubricated out of the hole with the bottom hole assembly.
 13:30 Laid down the bit and the magnets. Made up the 3 1/2" stinger.
 16:00 Ran in the hole with the 3 1/2" stinger.
 17:00 Pumped 3000 l of spacer containing 5 % MEG. Mixed and pumped 3510 l of 1,95 sg cement slurry. Displaced with 245 l spacer and 1710 l mud.
 18:30 Pulled up to 470 m and circulated bottoms up. Flow checked the well.
 * Observed no spacer or cement in the return.
 20:00 Lubricated out of the hole with the 3 1/2" stinger.
 20:30 Laid down the 3 1/2" stinger.
 21:00 Made up the BOP Test tool.
 23:00 Ran in hole with the BOP test tool. Washed the BOP.
 23:59 Pressure tested the BOP to 10/135 bar on the yellow pod from the drillers panel.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 35 **Date:** 2006-07-11**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
03:00	Continued to pressure test the BOP on the yellow pod from the drillers panel. Tested the BOP to 10/135 bar.
04:00	Pulled out of hole with the BOP test tool.
05:30	Pressure tested the Kelly Cock and the Kelly hose on the DDM to 35 bar/5 min and 345 bar/10 min.
06:30	Made up the bottom hole assembly for drilling out the cement.
07:30	Ran in the hole with the bottom hole assembly to 444 m.
12:00	Waited on the cement to set. Performed rig maintenance.
	* Greased the Choke Manifold.
	Washed the Top Drive.
	Checked and torqued up the link on the Top Drive.
12:30	Ran in the hole with the bottom hole assembly and tagged top of cement at 491 m.
	* Washed down with 800 lpm - 14 bar.
16:00	Drilled out cement from 491 m to 561 m.
	* Soft cement from 491 m to 495 m.
	Hard cement from 495 m to 520 m; WOB: 5 ton, ROP: 30 m/hr in the start and decreasing to 20 m/hr at 520 m.
	Hard cement from 520 m to 555 m; WOB: 10 ton, ROP: 30 m/hr in the start and decreasing to 20 m/hr at 555 m.
	Hard cement from 555 m to 561 m; WOB: 2 - 4 ton, ROP: 3 - 7 m/hr. Observed some increase in ROP and torque from 560 m to 561 m.
17:30	Circulated bottoms up.
	* Boosted the riser with 1600 lpm.
20:00	Flow checked the well and lubricated out of the hole with the bottom hole assembly.
21:00	Made up the Multi Purpose tool (MPT) for retrieving the 9 5/8" Wear Bushing.
21:30	Ran in the hole with the MPT.
22:00	Washed the wellhead and sat down 11 ton and pulled up 2 m. Observed 4 ton drag. Repeated the same procedure twice and observed the same.
23:00	Pulled out of the hole with the MPT tool. Observed the MPT was packed with cement and not latched on to the Wear Bushing.
23:30	Made up the jetting sub for washing the Well Head area.
23:59	Ran in the hole with the jetting sub to 410 m.

Daily report no : 36 **Date:** 2006-07-12**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:30	Washed the Well Head area with the jetting sub.
02:00	Pulled out of hole with the jetting sub.
	* Boosted the riser with 1500 lpm.
02:30	Laid down the jetting sub and made up the MPT (Multi Purpose Tool).
03:00	Ran in the hole with the MPT.
03:30	Washed the Well Head and sat down 10 ton and pulled out of hole. Observed 27 ton overpull.
04:00	Pulled out of the hole with the MPT.
05:30	Laid down the Wear Bushing and removed the anti seal lugs on the MPT tool.
07:00	Ran in the hole with the MPT for retrieving the 18 3/4" Seal Assembly.
08:30	Closed the lower annular preventor (LAP) and recorded up and down weight. Opened the LAP. Washed down the drill string and sat down the MPT with 13 ton on the seal assembly. Stopped the pumps when the MPT latched in to the seal assembly. Closed the LAP. Pulled the seal assembly with 70 ton overpull. Monitored the well for 15 min for pressure build up on the choke line. Opened the the LAP and flow checked the well for 10 min. Well stable.
09:30	Pulled out of the hole with the MPT.
10:00	Laid down the Seal Assembly and the MPT.
10:30	Cleaned and cleared the drill floor.
12:00	Made up the spear assembly for retrieving the 9 5/8" Tie-Back.
12:30	Installed casing thong.
13:00	Repaired the Trolley Chain on the Cat Walk.
13:30	Continued to make up the bottom hole assembly for retrieving the 9 5/8" casing.
15:30	Ran in the hole to 412,5 m with spear assembly. Engaged the 9 5/8" Tie-Back and pulled it free with 10 ton overpull.
18:00	Pulled out of the hole with the 9 5/8" Tie Back retrieving assembly.
	* Observed 10 ton drag while pulling out of the hole with the Tie-Back.
18:30	Released the spear from the 9 5/8" Tie-Back.
19:00	Rigged up the casing handling equipment.
20:00	Retrieved and laid down the 9 5/8" Tie-Back.
21:00	Laid down the casing handling equipment.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 36 **Date:** 2006-07-12**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
21:30	Made up the bottom hole assembly for cleaning the well.
23:00	Ran in the hole with the clean out assembly from 50 m to 454 m.
23:59	Washed and cleaned the well from 454 m to 560 m.
	* Washing parameters: 1600 lpm down the drill pipe and boosted the riser with 1600 lpm. 40 rpm and 80 rpm at 560 m.

Daily report no : 37 **Date:** 2006-07-13**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:00	Continued to wash the well from 560 m to 540 m.
	* Boosted the riser with 1600 lpm.
02:30	Lubricated out of the hole with the clean out assembly from 540 m to 394 m. Flow checked the well.
	* Boosted the riser with 1600 lpm.
03:00	Pulled out of the hole with the clean out assembly from 394 m to 50 m.
	* Boosted the riser with 1600 lpm.
03:30	Laid down the clean out assembly.
06:00	Rigged up the logging equipment.
	* Held safety pre-job meeting.
09:00	Ran in the hole with the USIT and CBL logging tool to 558 m.
09:30	Troubleshoot on the USIT logging tool at 558 m. No success.
11:00	Pulled out of the hole with the logging tool. Troubleshoot on the USIT logging tool and changed out the rotation sub on the USIT tool.
12:00	Ran in the hole to 558 m with the USIT and CBL logging tool.
12:30	The USIT logging tool failed and the logging was only conducted with the CBL logging tool. Logged twice from 558 m to 485 m.
	* Log indicated no cement from 530 m to 485 m. Log indicated some cement from 530 to 556 m.
13:00	Pulled out out of the hole from 485 m with the logging tool.
14:00	Rigged down the logging equipment.
15:00	Ran in the hole with 5" drill pipe to 433 m.
18:30	Rigged up the wireline equipment and the perforation guns. Made up the side entry sub to the drill string. Closed the Upper Pipe RAM (UPR) on the BOP.
	* Held pre-job meeting.
20:00	Ran in the hole with the perforation guns to 494 m trough the drill pipe.
	* Perforation area: 494 m to 495,5 m. Perforation charge: 20 shot.
20:30	Fired the guns while circulating with constant drill pipe pressure. Observed no pressure build up.
21:30	Circulated bottoms up two times with constant drill pipe pressure. Flow checked the well on the trip tank. Well stable.
	* Observed zero gain on the trip tank and no indications of loss.
22:00	Cross circulated down the choke line and up the kill line.
22:30	Opened the UPR on the BOP and flow checked the well for 15 min.
	* Well stable.
23:30	Circulated down the drill string and up the riser. Flow checked the well for 15 min.
	* Well stable.
23:59	Pulled out the perforation guns trough the drill pipe. Laid down the wireline equipment.

Daily report no : 38 **Date:** 2006-07-14**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:30	Continued to rig down the wireline equipment and the perforation guns.
02:00	Ran in the hole from 433 m to 507 m with the 5" drill pipe. Closed the Upper Pipe Ram (UPR) on the BOP.
03:00	Circulated bottoms up through the drill pipe and up the choke line with constant drill pipe pressure. No gain or gas observed in return.
03:30	Opened the UPR and flow checked the well for 10 min.
	* Well stable.
04:30	Circulated bottoms up trough the drill pipe and up the riser. Flow checked the well for 10 min.
	* Well stable.
05:00	Lubricated out of the hole with the 5" drill pipe from 507 m to 394 m

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 38 **Date:** 2006-07-14**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
05:30	Pulled out of the hole from 394 m with the 5" drill pipe.
06:00	Made up the cutting assembly for the 9 5/8" PBR.
	* Function tested the cutting assembly.
08:30	Ran in the hole to 475 m with the 9 5/8" cutter assembly.
	* Held pre-job meeting.
09:00	Ran in the hole with the cutting assembly and landed the stop sub on the 9 5/8" PBR at 486 m.
	* Cutting depth: 5,32 m below the top PBR. Between the the PCP hanger and the packer assembly.
09:30	Activated the knives and rotated the drill string in order to cut the 9 5/8" PBR. Observed the torque peaked after 6 min indicating the knives had cut trough the 9 5/8" PBR.
	* Observed the pump pressure increased gradually, indicating plugged flow path to the knife activator piston.
12:30	Flow checked the well and pulled out of the hole with the cutting assembly.
	* Observed wear on the cutter knives.
	Observed plugged flow path to the knife activator piston.
13:30	Laid down the stop sub and the cutting knives.
16:30	Made up the 9 5/8" PBR retrieving assembly.
18:00	Ran in the hole to 486 with the 9 5/8" PBR retrieving assembly.
19:00	Latched into the 9 5/8" PBR and pulled it free with 70 ton drag.
20:00	Flow checked the well for 10 min and circulated bottoms up. Well stable.
21:00	Lubricated out of the hole to 382 m with the retrieving assembly and the 9 5/8" PBR.
21:30	Pulled out of the hole from 382 m with the retrieving assembly and the 9 5/8" PBR.
23:30	Released the grapple from the 9 5/8" PBR racked back the retrieving assembly.
23:59	Made up the retrieving assembly for the 9 5/8" liner.

Daily report no : 39 **Date:** 2006-07-15**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
02:00	Continued to make up the retrieving assembly for the 9 5/8" liner.
03:30	Ran in the hole with the 9 5/8" liner retrieving assembly to 473 m.
	* Measured SCR down the drill pipe and up the Riser.
04:00	Latched into the 9 5/8 liner with the grapple. Sat down 10 ton.
	* Closed the Lower Annular Preventor and measured the SCR down the drill pipe and up the choke line.
05:00	Worked the drill string in steps of 50 ton to max 250 ton up weight. Jared two times with 50 ton and four times with 70 ton over pull. No success.
	* Pumped down the string and up the choke line with 91 lpm, while working the string. Monitored the tip tank. No signs of gain.
05:30	Released the grapple from the 9 5/8" liner. Flow checked the well for 10 min. Well stable.
	* Opened the lower annular preventor.
06:30	Inspected the Derrick for loose items after jaring.
07:30	Pulled out of the hole with the 9 5/8" liner retrieving assembly.
09:00	Laid down the 9 5/8" liner retrieving assembly.
10:30	Made up the 9 5/8" cutting assembly.
12:00	Tested the cutting knives at surface. Observed plugged flow path to the knife activator piston.
15:00	Ran in the hole with the 9 5/8" cutting assembly and landed the stop sub on the 9 5/8" liner at 491,26 m.
	* Cutting depth: 527,8 m.
	Closed the Upper Pipe Ram and measured the SCR.
15:30	Activated the knives and rotated the drill string in order to cut the 9 5/8" liner. Observed the pump pressure dropped from 62 bar to 48 bar.
16:30	Flow checked the well and circulated bottoms up through the drill pipe and up the choke line.
	* Well stable.
18:30	Opened the Upper Pipe Ram and flow checked the well for 10 min. Circulated bottoms up and flow checked the well.
	* Well stable.
19:30	Lubricated out of hole with the cutting assembly to 389 m.
20:30	Pulled out of the hole with the cutting assembly.
	* Held kick drill.
22:00	Laid down the stop sub and the cutting knives.
	* Observed wear on the cutting knives.
23:59	Made up the retrieving assembly for the 9 5/8" liner.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 40 **Date:** 2006-07-16**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:30	Ran in the hole with the 9 5/8" liner retrieving assembly to 473 m.
	* Measured the SCR down the drill string and up the Riser.
02:00	Latched into the 9 5/8" liner with the grapple. Sat down 10 ton.
	* Closed the Lower Annular Preventor and measured the SCR down the drill pipe and up the choke line.
04:30	Worked the drill string up to max 195 ton over pull. Jared 10 times with max 70 ton over pull. No success.
	* Pumped down the string and up the choke line with 91 lpm, while working the string. Monitored the tip tank. No signs of gain.
	Opened the lower annular preventor.
05:30	Released the grapple from the 9 5/8" liner.
	* Flow checked the well. Well stable.
06:30	Inspected the Derrick for loose items after jaring.
	* Circulated bottom up.
07:00	Lubricated out of the hole to 387 m with the 9 5/8" liner retrieving assembly.
08:00	Pulled out of the hole with the 9 5/8" liner retrieving assembly.
10:30	Laid down the Pack Off tool and the circulation sub. Installed the bull nose. Changed to 5 1/2" HWDP handling equipment.
12:30	Ran in the hole with the bottom hole assembly on 5 1/2" HWDP from 43 m to 432 m.
13:30	Ran in the hole with the bottom hole assembly on 5 HWDP from 432 m to 480 m.
	* Measured the SCR down the drill string and up the Riser.
14:00	Latched into the 9 5/8" liner with the grapple. Sat down 5 ton.
	* Closed the Lower Annular Preventor and measured the SCR down the drill pipe and up the choke line.
17:30	Worked the drill string up to max 265 ton over pull. Jared 10 times with max 90 ton over pull. Lubricated the 9 5/8" liner out from 494 m to 389 m with 55 ton drag.
	* Jared and worked string for two hours with 4 m progress. After 4 m progress the drag went down from 200 ton to +/- 50 ton.
19:00	Pulled out of the hole with the 9 5/8" liner retrieving assembly.
21:30	Checked the Derrick and Top Drive for loose items after jaring.
22:30	Laid down the 9 5/8" Liner retrieving assembly.
23:59	Released the grapple from the 9 5/8" liner.
	* 9 5/8" Liner retrieved: from 527,7 m to 491,3 m.

Daily report no : 41 **Date:** 2006-07-17**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
00:30	Released the grapple from the 9 5/8" liner.
01:30	Rigged up the 9 5/8" casing handling equipment.
02:30	Laid down the 9 5/8" Liner.
	* Observed no perforation holes in XO sub.
03:30	Rigged down the 9 5/8" casing handling equipment.
04:00	Made up the 8 1/2" clean out assembly.
05:00	Ran in to hole with the 8 1/2" clean up assembly on 5" drill pipe to 503 m.
07:30	Washed down from 503 m to 560 m with 1600 LPM. Pulled out to 527 m and circulated the well clan with 3200 LPM.
	* Flow checked prior to pull out of the hole.
08:30	Lubricated out of the hole with the 8 1/2" clean out assembly from 527 m to 394 m
09:30	Pulled out of the hole with the 8 1/2" clean out assembly from 394 m to 52 m.
10:00	Laid down the drilling jar and racked the clean out assembly in the derrick.
11:30	Made up the 9 5/8" casing spear assembly
15:30	Ran in the hole with the 9 5/8" casing spear assembly on 5 1/2" x 5" HWDP from 43 m to 527 m. Broke the circulation and recorded slow circulation rates with mud pump #3.
	* Re-torqued each connection on the 5 1/2" and 5" HWDP. Recorded up weight and down weight 75 ton.
17:00	Engaged the casing spear to the 9 5/8" liner and closed the lower annular preventer. Worked the liner from 560 m to 557 m with 270 ton overpull.
	* Jarred 4 times.
18:30	Unable to work the 9 5/8" liner due to rig heave and rig motion.
	* Opened the lower annular preventer.
21:00	Worked the liner from 557 m to 552 m with 270 ton overpull.
21:30	Released the casing spear and racked back 1 stand 5" HWDP. Picked up 1 single 5" HWDP and engaged the casing spear.
22:00	Worked the liner from 552 m to 539 m with between 270 and 100 ton overpull. The liner came free at 539 m. Pulled out to 531 m.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 41 **Date:** 2006-07-17**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg**Stop time Description**

23:30 Closed the lower annular preventer and flow checked the well through the rig choke for 15 minutes. Circulated bottom up through the rig choke.

23:59 Opened the UAP and circulated the well through the riser.

Daily report no : 42 **Date:** 2006-07-18**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg**Stop time Description**

00:30 Circulated the well.

02:30 Lubricated out of the hole with the 9 5/8" liner from 531 m to 360 m.

04:00 Inspected the top drive and the derrick for loose items after jarring.

04:30 Pulled out of the hole with the 9 5/8" liner from 360 m to 131 m.

05:00 Installed the casing tong.

06:30 Pulled out of the hole with the 9 5/8" liner from 131 m to 32 m.

07:30 Released the 9 5/8" casing spear. Laid out the spear and the fishing jar. Rigged up the 9 5/8" casing handling equipment.

09:00 Rigged up and laid out the 9 5/8" liner.

* Heated the Baker-locked connections.

10:00 Rigged down the casing handling equipment.

11:00 Inspected the top drive and the derrick for loose items.

15:00 Made up 12 1/4" bit, 14 1/2" under-reamer and 13 3/8" casing scraper assembly.

* Function tested the 14 1/2" under-reamer with 600 LPM. Verified full extension of the under-reamer arms.

17:30 Ran in the hole with the 14 1/2" under-reamer and 13 3/8" casing scraper assembly on 5 1/2" x 5" HWDP from 43 m to 535 m.

* Re-torqued all connections on the 5" and 5 1/2" HWDP.

18:30 Reamed the hole from 12 1/4" to 14 1/2" from 540 m to 560 m.

19:30 Circulated the well clean.

* Circulated the riser with 1600 LPM. Observed max gas 6,45%

20:00 Flow checked the well. Dropped the 2 1/8" ball and circulated with 200 LPM. Sheared the ball seat and opened the circulation sub with 55 bar.

22:30 Circulated and scraped the 13 3/8" casing from 536 m to 417 m and back down to 536 m.

* Rotated 70 RPM and circulated with 1600 LPM. Circulated the riser with 1600 LPM.

23:59 Circulated the hole clean. Flow checked.

* Circulated the riser with 1600 LPM.

Daily report no : 43 **Date:** 2006-07-19**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg**Stop time Description**

01:30 Lubricated out of the hole with the 14 1/2" under-reamer and 13 3/8" casing scraper assembly on 5 " x 5 1/2" HWDP from 560 m to 394 m

* Circulated the riser with 3200 LPM.

03:00 Pulled out of the hole with the 14 1/2" under-reamer and 13 3/8" casing scraper assembly from 394 m to 42 m.

* Circulated the riser with 3200 LPM.

05:00 Laid down the 14 1/2" under-reamer and 13 3/8" casing scraper assembly.

* Held pre-job/safety meeting.

07:00 Picked up the 9 5/8" casing spear assembly from deck. Broke and laid it back down on deck.

08:00 Rigged up to run wireline logging.

* Held pre-job/safety meeting.

11:00 Logged USIT/CBL in the 13 3/8" casing.

11:30 Rigged down the wire line equipment.

14:30 Ran in the hole with the cement stinger on 3 1/2" x 5" drill pipe from surface to 494 m.

15:00 Picked up the cement stand and pressure tested the cement hose to 200 bar. Racked back the cement stand.

16:30 Ran in the hole from 494 m to 551 m. Broke the circulation and washed down and tagged top cement at 561 m. Pulled out to 551 m and circulated the well clean.

17:00 Made up the cement stand and ran in the hole from 551 m to 561 m

18:00 Sat a 1,95 sg. balanced cement plug from 561 m to 476 m.

* Pumped 3,0 m3 1,03 sg. spacer, followed by 7,2 m3 1,95 sg. cement and 0,14 m3 1,03 sg. spacer behind. Displaced the plug with 1,7 m3 1,15 sg. mud.

18:30 Pulled out of the hole with the cement stinger from 561 m to 465 m.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 43 **Date:** 2006-07-19**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
19:00	Circulated bottom up.
	* Observed no cement or cement contaminated mud in the return.
20:00	Pulled out of the hole from 465 m to 425 m and function tested the BOP on the blue pod from the auxiliary panel.
21:00	Pulled out of the hole with the cement stinger from 425 m to surface. Cleaned and cleared the rig floor.
23:59	Rigged down the BJ kill pump system.

Daily report no : 44 **Date:** 2006-07-20**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
10:00	Laid down excess pipe and equipment from the derrick.
	* Laid down 5 joints 4 3/4" drill collar, 6 joints 6 1/2" drill collar and one 4 3/4" drilling jar. Broke and laid down the 14 3/8" Marine swivel and the 6 1/2" annular swivel stand. Laid down 53 joints 5" drill pipe.
14:00	Waited on the cement.
	* Performed planned rig maintenance on the drilling systems. Cleaned the diverter area to prepare for pulling the BOP.
14:30	Made up the 12 1/4" bottom hole assembly.
	* Held pre-job/safety meeting.
17:00	Ran in the hole with the 12 1/4" bottom hole assembly on 5 1/2" HWDP x 5" drill pipe from 45 to 455 m.
19:00	Washed down from 455 m and tagged the cement at 476 m. Drilled soft cement from 476 m to 478 m and firm cement from 478 m to 496 m.
	* ROP 30 m/hr at 478 reduced to 2 m/hr at 496 m. 10/15 ton WOB.
20:00	Circulated bottom up and flow checked the well.
21:30	Pulled out of the hole with the 12 1/4" bottom hole assembly on 5" drill pipe x 5 1/2" HWDP from 496 m to 45 m.
22:00	Racked back the 12 1/4" bottom hole assembly.
23:59	Ran in the hole with the cement stinger on 3 1/2" x 5" drill pipe from surface to 495 m.

Daily report no : 45 **Date:** 2006-07-21**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
01:00	Circulated bottom up. Pressure tested the cement lines to 200 bar.
	* Held pre-job/safety meeting prior to start cementing.
02:00	Sat a 1,95 sg. balanced cement plug from 496 m to 418 m.
	* Pumped 5,0 m3 1,03 sg. spacer, followed by 6,0 m3 1,95 sg. cement and 0,1 m3 1,03 sg. spacer behind. Displaced the plug with 1,6 m3 1,15 sg. mud.
02:30	Pulled out of the hole with the cement stinger from 496 m to 417 m.
03:00	Circulated bottom up.
	* Observed no cement or cement contaminated mud in return.
06:30	Pulled out of the hole with the cement stinger while laying out the 3 1/2" drill pipe from 417 m to surface.
	* Laid out 54 joints 3 1/2" drill pipe.
14:30	Waited on the cement.
	* Held pre-job/safety meeting. Dismantled and moved the intermediate racking arm from the derrick to the main deck for overhaul and repair.
16:00	Ran in the hole with the jet sub on 5" drill pipe x 5 1/2" HWDP to 407 m.
16:30	Washed the BOP with 3200 LPM pump rate, Rotated 10 RPM. Operated the rams and annular preventers.
18:00	Pulled out of the hole with the jet sub from 407 m to surface.
18:30	Made up the 12 1/4" bottom hole assembly.
20:00	Ran in the hole with the 12 1/4" bottom hole assembly on 5 1/2" HWDP x 5" drill pipe from 30 m to 411 m.
20:30	Circulated 700 LPM and washed down from 411 m. Tagged the cement plug at 420 m. Drilled cement from 420 m to 421 m with 5 ton WOB. Verified firm cement with 10 ton weight.
22:00	Displaced the kill/choke lines and the riser to seawater. Flushed the diverter overboard lines with sea water.
23:59	Pulled out of the hole with the 12 1/4" bottom hole assembly 411 m to 30 m.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 46 **Date:** 2006-07-22**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
00:30	Racked the 12 1/4" bottom hole assembly.
01:30	Laid down the cement stand and one stand 5" drill pipe. Cleaned and cleared the rig floor.
06:00	Prepared to pull the BOP.
	* Held pre-job/safety meeting. Cleaned the diverter box. Rigged up riser handling equipment. Pressure tested the kill and choke lines to 690 bar.
07:30	Pulled out the diverter and installed the landing string for the slip joint inner barrel.
11:00	Unable to obtain near stand by due to dense fog.
13:00	Installed the riser tension wire #6 and collapsed the inner barrel. Disconnected the BOP at 12:30 hrs. Removed the 4 guide wires.
	* Positioned the ROV to observe the indicator for the well head connector.
13:30	Pulled the rig 40 m port of the location.
17:00	Disconnected the pod hose saddles and kill/choke line yoke. Hung off and secured the support ring. Pulled out and laid down the slip joint.
	* Pulled the guide wires to surface.
23:59	Pulled the BOP and riser from 374 m to 156 m.

Daily report no : 47 **Date:** 2006-07-23**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
03:00	Pulled the BOP and riser from 156 m to surface. Landed the BOP on the BOP carrier.
	* Pulled the BOP through the splashzone at 02:20 hrs.
09:30	Performed planned maintenance on the BOP.
	* Washed and performed planned maintenance on the well head connector. Landed the BOP on the BOP carrier. Disconnected the LMRP and moved the BOP to parked position. Laid down 2 riser joints. Held pre-job/safety meeting with new crew at 07:00 hrs.
19:00	Performed planned maintenance on the BOP.
	* Dismantled, cleaned and inspected the lower annular preventer. Disconnected the guide beams for the intermediate racking arm and lowered down on deck.
23:59	Performed planned maintenance on the BOP.
	* Reassembled the LAP and prepared to pressure test the hydraulic system. Disconnected the mud hose and removed the mud goose neck and the wash pipe. High pressure cleaned the top drive.

Daily report no : 48 **Date:** 2006-07-24**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
13:30	Performed planned maintenance on the BOP.
	* Pressure and function tested the hydraulic system for the lower annular preventer. Cleaned and lubricated the riser connector. Connected the LMRP to the BOP stack and landed and secured the BOP in the parked position. Changed from low pressure to high pressure gauges on the standpipe and choke manifold. Started to overhaul the pneumatic fingers on the finger board.
15:00	Moved the permanent guide base running tool from the deck to the moon pool. Installed guide ropes on guide wire 1 and 3.
	* Held pre-job/safety meeting.
16:00	Ran in the hole with the PGB running tool on 5 1/2" HWDP x 5" drill pipe to 390 m.
16:30	Move the rig to the well centre.
17:00	Latched on to the PGB with the running tool and pulled the PGB free with 7 ton overpull.
18:00	Moved the rig to 40 m port of the location and pulled out with the PGB.
20:00	Secured the PGB to the guide base trolley and removed the guide wires. Moved the guide base trolley out on deck and lifted off the PGB. Moved out the PGB running tool.
21:30	Installed and secured the net guard to the guide base trolley. Moved to the moon pool. Installed the net guard running tool.
23:59	Ran in with the net guard on 5 1/2" HWDP x 5" drill pipe to 390 m.

Daily report no : 49 **Date:** 2006-07-25**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
00:30	Moved the rig to the well center.

DAILY REPORT**Well:** 35/2-1 R**PO:** 1**Daily report no :** 49 **Date:** 2006-07-25**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
00:30	* Arrival time and inventory for the anchor handling vessels: Mærsk Asserter. Arr. 24.07.06, 10:00. Fuel oil-132 m3, Diesel Oil -456 m3, Lub. Oil-92245 liter, Fresh Water-222 m3 Bourbon Charisma. Arr. 24.07.06, 13:55. FO-548 m3, LO-13477 liter, FW-526m3. Bourbon Surf. Arr. 24.07.06, 22:30. FO-891 m3, LO-25668 liter, FW-205m3. Havilia Force. Arr. 24.07.06, 23:30. FO-281 m3, LO-7056 liter, FW-390m3.
01:30	Unable to operate the drill string compensator. Performed fault finding.
04:00	Landed the net guard and installed the inhibitor hot stab with the ROV. Pumped 0,7 m3 corrosion inhibitor fluid into the wellhead.
06:00	Released the net guard running tool and pulled out with the landing string.
	* Laid down 30 joints 5 1/2" HWDP. Performed seabed survey with the ROV. Retrieved the transponder.
13:30	Deballasted the rig from 21,3 m to 9,0 m.
	* Laid down 14 joints 5 1/2" HWDP. Dismounted the BX-elevator and bails. Cleaned and cleared the drill floor and prepared to build scaffolding around the top drive. Inspected and reassembled the upper annular preventer. Loosened the bonnet bolts. Started to inspect the fail safe valves.
23:59	Anchor handling. Anchor #7 off bottom 13:35 hrs, on bolster 16:12 hrs. Havilia Force Anchor #8 off bottom 14:25 hrs, on deck 20:38 hrs. Mærsk Asserter Anchor #4 off bottom 14:30 hrs, on deck 16:12 hrs. Bourbon Charisma Anchor #3 off bottom 14:31 hrs, on bolster 18:25 hrs. Bourbon Surf Anchor #6 off bottom 17:17 hrs, on bolster 20:31 hrs. Havilia Force Anchor #5 off bottom 18:49 hrs, on bolster 21:29 hrs. Bourbon Charisma Anchor #2 off bottom 21:40 hrs, on deck 22:01 hrs. Bourbon Surf * Inspected the BOP ram cavities. Cleaned the mud pits. Build scaffolding and started to machine the top drive main shaft. Prepared the new dolly beams for the intermediate racking arm for installation.

Daily report no : 50 **Date:** 2006-07-26**Midnight depth :** 713 m MD **Estimated PP:** 1,06 sg **Mud weight:** 1,15 sg

Stop time	Description
06:00	Anchor handling. Anchor #10 off bottom 02:34 hrs, on deck 03:38 hrs. Mærsk Asserter.
	* Changed from 4 1/2" to 6 1/2" liners on mud pump #3.
17:00	Rig in transit to the Troll 31/2-M-24 location, with Mærsk Asserter in anchor line #10, and Bourbon Surf in anchor line #2.
	* Close the lower and middle pipe ram bonnets after inspection. Inspected the failsafe valves. Dismounted the lower inner kill and upper outer kill failsafe valves. Machined the top drive mainshaft to fit the replaceable wash pipe adapter ring. Installed new trolley beams for the intermediate racking arm.
20:00	Moved the anchor #8 from Mærsk Asserter to Bourbon Carisma.
22:30	Prepared for anchor handling and moved the rig to the Troll location.
	* Inventory for the anchor handling vessels and DeepseaTrym when arriving Troll 22:20 hrs: Mærsk Asserter. Fuel oil-108 m3, Diesel Oil -399 m3, Lub. Oil-92215 liter, Fresh Water-233 m3 Bourbon Charisma. FO-502 m3, LO-13467 liter, FW-522m3. Bourbon Surf. FO-848 m3, LO-25668 liter, FW-195m3. Havilia Force. FO-255 m3, LO-7056 liter, FW-382m3. Deepsea Trym. DO-274 m3, LO-6700 liter, FW-185m3.
23:59	No activity on this well. The activity is reported on the well 31/2-M 24

TIME DISTRIBUTION

Well: 35/2-1 R **PO:** 1 **Rig:** DEEPSEA TRYM **Depth:** 713,0 m MD
All sections

Operations	Hours	%	Hours	%	Acc. total
MOBILIZATION					
MOVING	27,0	2,29			
MOORING; RUNNING ANCHORS	28,0	2,37			
MOORING; PULLING ANCHORS	24,0	2,03			
Sum.			79,0	6,69	79,0
DRILLING					
BHA HANDLING/TESTING	22,0	1,86			
EQUIPMENT TEST	3,5	0,30			
TRIPPING IN CASSED HOLE	54,5	4,62			
DRILLING/MILLING OUT MECHANICAL PLUG	0,5	0,04			
OTHER	8,5	0,72			
WELLHEAD EQUIPMENT INSTALLATION	16,5	1,40			
CIRC. AND COND. MUD/HOLE	50,0	4,24			
CASING HANDLING/TESTING	16,5	1,40			
CEMENT EVALUATION	16,0	1,36			
DRILLING OUT CEMENT PLUG	9,0	0,76			
BOP HANDLING	9,0	0,76			
BOP RUNNING/RETRIEVING	28,5	2,42			
BOP TESTING	6,5	0,55			
WELLHEAD EQUIPMENT HANDLING	4,5	0,38			
SET/RELEASE MECHANICAL PLUG	11,0	0,93			
RIG MAINTENANCE	25,5	2,16			
Sum.			282,0	23,90	361,0
FORMATION EVALUATION LOGGING					
LOGGING	0,5	0,04			
LOGGING EQUIPMENT HANDLING/TESTING	3,5	0,30			
TRIPPING IN CASSED HOLE	3,5	0,30			
Sum.			7,5	0,64	368,5
PLUG AND ABANDONMENT					
BHA HANDLING/TESTING	77,5	6,57			
TRIPPING IN CASSED HOLE	125,0	10,59			
OTHER	34,0	2,88			
WELLHEAD EQUIPMENT INSTALLATION	15,5	1,31			
CIRC. AND COND. MUD/HOLE	132,0	11,19			
CASING HANDLING/TESTING	23,5	1,99			
TRIPPING FOR CEMENT JOB	42,5	3,60			
DRILLING OUT CEMENT PLUG	5,5	0,47			
BOP HANDLING	4,5	0,38			
BOP RUNNING/RETRIEVING	17,5	1,48			
BOP TESTING	22,0	1,86			
WELLHEAD EQUIPMENT HANDLING	9,5	0,81			
SET CEMENT PLUG	12,5	1,06			
PERFORATING	15,0	1,27			
TRIPPING OF CASING CUTTING EQUIPMENT	46,5	3,94			
CUT CASING/WELLHEAD	51,0	4,32			
CASING RETRIEVING	59,5	5,04			
RIG MAINTENANCE	54,5	4,62			
Sum.			748,0	63,39	1116,5
DOWNTIME DRILLING					
EQUIPMENT FAILURE AND REPAIR	43,5	3,69			

TIME DISTRIBUTION

Well: 35/2-1 R **PO:** 1 **Rig:** DEEPSEA TRYM **Depth:** 713,0 m MD
All sections

Operations	Hours	%	Hours	%	Acc. total
DOWNTIME DRILLING					
WAITING	4,0	0,34			
Sum.			47,5	4,03	1164,0
DOWNTIME FORM. EVAL. LOGGING					
EQUIPMENT FAILURE AND REPAIR	3,0	0,25			
Sum.			3,0	0,25	1167,0
DOWNTIME PLUG AND ABANDONMENT					
EQUIPMENT FAILURE AND REPAIR	9,5	0,81			
WAITING	3,5	0,30			
Sum.			13,0	1,10	1180,0
Reported time (100,0 % of well total 1180,0 hours) :					1180,0

HOLE DEVIATION

Well: 35/2-1 R **PO:** 1 **Reference point:** RKB ; 25,0 m ABOVE MSL
Waterdepth: 384,0 m **Vertical to:** 408,9 m **Total Depth:** m MD
Utm zone: 31 **Central Median:** 3° E **Horizontal datum:** ED50
Template Centre Coordinates, UTM: **North :** m, **East :** m
Wellhead Coordinates, UTM: **North :** 6862221,28 m, **East :** 518024,19 m
Official Surveys: N **Track :**
Coordinates are measured from the wellhead centre.

Depth MD [m]	Incli- nation [Deg]	Direc- tion [Deg]	Tool Type	#	Depth TVD [m]	Coordinates		Vert. Sect [m]	Dogleg [D/30m]	Build [D/30m]	Turn [D/30m]
						North [m]	East [m]				
409,00	0,00	0,00	MWD	1	409,00	0,00	0,00	0,00	0,00	0,00	0,00
428,90	0,98	110,72	MWD	1	428,90	-0,06	0,16	0,17	1,48	1,48	166,91
438,50	0,74	71,55	MWD	1	438,50	-0,07	0,29	0,30	1,94	-0,75	-122,41
450,40	0,44	53,71	MWD	1	450,40	-0,02	0,40	0,40	0,88	-0,76	-44,97
458,70	0,88	73,25	MWD	1	458,70	0,02	0,49	0,49	1,76	1,59	70,63
466,60	0,98	100,19	MWD	1	466,60	0,02	0,62	0,62	1,69	0,38	102,30
471,80	1,20	110,38	MWD	1	471,79	-0,00	0,71	0,71	1,69	1,27	58,79
486,60	0,51	114,60	MWD	1	486,59	-0,08	0,92	0,92	1,40	-1,40	8,55
497,20	0,36	103,13	MWD	1	497,19	-0,11	0,99	1,00	0,49	-0,42	-32,46
514,00	0,39	94,81	MWD	1	513,99	-0,13	1,10	1,11	0,11	0,05	-14,86
526,20	0,38	88,19	MWD	1	526,19	-0,13	1,18	1,19	0,11	-0,02	-16,28
548,10	0,17	133,05	MWD	1	548,09	-0,15	1,28	1,29	0,39	-0,29	61,45
590,00	0,23	89,27	MWD	1	589,99	-0,19	1,41	1,42	0,11	0,04	-31,35
619,50	0,30	107,17	MWD	1	619,49	-0,21	1,54	1,55	0,11	0,07	18,20
686,70	0,12	13,51	MWD	1	686,69	-0,20	1,72	1,74	0,15	-0,08	-41,81
706,00	0,09	41,23	MWD	1	705,99	-0,17	1,74	1,75	0,09	-0,05	43,09

BOTTOM HOLE ASSEMBLIES**Well: 35/2-1 R****PO: 1**

BHA no. 1:	No. / Element / Body OD(in) / Length(m)			Depth In: 429 m MD		Out: 486 m MD	
1	MXBCR18CDX	12,25	0,29	6	DRILL COLLAR STEEL	6,5	9,34
2	NEAR BIT STAB	12,125	1,93	7	JAR	6,5	12,90
3	DRILL COLLAR STEEL	8,0	9,43	8	DRILL COLLAR STEEL	6,5	9,33
4	STEEL STAB	12,125	2,31	9	HWDP	5,5	83,17
5	X-OVER	7,5	0,97				

Total Length: 129,67 m

BHA no. 2:	No. / Element / Body OD(in) / Length(m)			Depth In: 486 m MD		Out: 505 m MD	
1	R482	8,5	0,24	5	DRILL COLLAR STEEL	6,5	9,38
2	NEAR BIT STAB	8,38	1,49	6	JAR	6,5	12,90
3	DRILL COLLAR STEEL	6,5	9,32	7	DRILL COLLAR STEEL	6,5	9,33
4	STEEL STAB	8,375	1,44	8	HWDP	5,0	83,17

Total Length: 127,27 m

BHA no. 3:	No. / Element / Body OD(in) / Length(m)			Depth In: 505 m MD		Out: 511 m MD	
1	R482	6,0	0,24	5	X-OVER	6,5	0,56
2	NEAR BIT STAB	5,0	1,49	6	HWDP	5,0	55,63
4	CASING SCRAPER	13,375	12,31				

Total Length: 70,23 m

BHA no. 4:	No. / Element / Body OD(in) / Length(m)			Depth In: 512 m MD		Out: 512 m MD	
1	R482	8,5	0,24	4	CASING SCRAPER	13,375	12,31
2	NEAR BIT STAB	5,0	1,49	5	X-OVER	6,5	0,56
3	PUP JOINT	5,0	3,01	6	HWDP	5,0	55,63

Total Length: 73,24 m

BHA no. 5:	No. / Element / Body OD(in) / Length(m)			Depth In: 530 m MD		Out: 640 m MD	
1	BX447	6,0	0,35	3	POLISH MILL	4,625	9,68
2	NEAR BIT STAB	5,875	1,52	5	HWDP	5,0	83,17

Total Length: 94,72 m

BHA no. 6:	No. / Element / Body OD(in) / Length(m)			Depth In: 511 m MD		Out: 640 m MD	
1	BX447	6,0	0,35	6	JAR	4,75	9,09
2	NEAR BIT STAB	4,625	1,52	7	DRILL COLLAR STEEL	4,5	27,59
3	DRILL COLLAR STEEL	4,5	9,24	8	DRILL PIPE	3,5	87,51
4	STEEL STAB	4,625	1,98	9	X-OVER	6,375	0,42
5	DRILL COLLAR STEEL	4,75	9,18				

Total Length: 146,88 m

BHA no. 7:	No. / Element / Body OD(in) / Length(m)			Depth In: 541 m MD		Out: 541 m MD	
1	BX447	6,0	0,35	7	MAGNET SUB	5,84	1,31
2	NEAR BIT STAB	5,875	1,52	8	CASING SCRAPER	5,87	1,52
3	STRING MILL	5,91	1,53	9	PUP JOINT	3,5	3,04
4	PUP JOINT	3,5	3,05	10	DRILL COLLAR STEEL	4,5	27,59
5	PUP JOINT	3,5	2,46	11	DRILL PIPE	3,5	97,23
6	CASING SCRAPER	5,87	1,92	12	X-OVER	5,0	1,10

Total Length: 142,63 m

BHA no. 8:	No. / Element / Body OD(in) / Length(m)			Depth In: 496 m MD		Out: 496 m MD	
1	OTHER	8,5	0,69				

Total Length: 0,69 m

BOTTOM HOLE ASSEMBLIES**Well: 35/2-1 R****PO: 1**

BHA no. 9:	No. / Element / Body OD(in) / Length(m)		Depth In: 630 m MD		Out: 630 m MD	
1	OTHER	8,5 0,62	3	DRILL PIPE	3,5 87,51	
2	DRILL COLLAR STEEL	4,75 46,01	4	X-OVER	6,5 1,10	

Total Length: 135,24 m

BHA no. 10:	No. / Element / Body OD(in) / Length(m)		Depth In: 614 m MD		Out: 614 m MD	
1	CASING CUTTER	5,75 1,55	8	X-OVER	8,0 0,51	
2	CIRCULATING SUB	4,75 0,58	9	OTHER	15,75 1,75	
3	DRILL COLLAR STEEL	4,75 27,59	10	X-OVER	8,0 1,30	
4	DRILL PIPE	3,5 29,17	11	X-OVER	6,5 2,15	
5	X-OVER	6,5 1,10	12	PUP JOINT	5,0 2,92	
6	FLOAT SUB	6,75 0,95	13	OTHER	8,75 4,87	
7	DRILL PIPE	5,0 91,63				

Total Length: 166,07 m

BHA no. 11:	No. / Element / Body OD(in) / Length(m)		Depth In: 565 m MD		Out: 565 m MD	
1	DIVERTER SUB	3,5 2,14	3	X-OVER	6,5 1,10	
2	DRILL PIPE	3,5 116,72	4	FLOAT SUB	6,75 0,95	

Total Length: 120,91 m

BHA no. 12:	No. / Element / Body OD(in) / Length(m)		Depth In: 561 m MD		Out: 565 m MD	
1	TAPERMILL	6,0 1,02	8	CIRCULATING SUB	4,75 0,58	
2	X-OVER	4,75 0,50	9	DRILL COLLAR STEEL	4,75 73,61	
3	SHORT DRILL COLLAR	4,25 1,79	10	JAR	4,75 9,09	
4	X-OVER	4,69 0,70	11	X-OVER	6,5 1,10	
5	STEEL STAB	6,0 1,10	12	FLOAT SUB	6,75 0,95	
6	X-OVER	4,625 0,36	13	HWDP	5,0 83,61	
7	OTHER	4,75 2,03				

Total Length: 176,44 m

BHA no. 13:	No. / Element / Body OD(in) / Length(m)		Depth In: 565 m MD		Out: 577 m MD	
1	TAPERMILL	6,0 1,02	8	CIRCULATING SUB	4,75 0,58	
2	X-OVER	4,75 0,50	9	DRILL COLLAR STEEL	4,75 73,61	
3	SHORT DRILL COLLAR	4,75 1,79	10	JAR	4,75 9,09	
4	X-OVER	4,69 0,70	11	X-OVER	6,5 1,10	
5	STEEL STAB	6,0 1,10	12	FLOAT SUB	6,75 0,95	
6	X-OVER	4,62 0,36	13	HWDP	5,0 83,61	
7	OTHER	4,75 2,03				

Total Length: 176,44 m

BHA no. 14:	No. / Element / Body OD(in) / Length(m)		Depth In: 447 m MD		Out: 447 m MD	
1	OTHER	8,813 3,95	7	DRILL PIPE	5,0 19,38	
2	PUP JOINT	5,0 4,54	8	MAGNET SUB	8,34 1,39	
3	DRILL PIPE	5,0 28,96	9	MAGNET SUB	8,34 1,39	
4	PUP JOINT	5,0 1,47	10	MAGNET SUB	8,34 1,39	
5	CIRCULATING SUB	6,5 0,60	11	PUP JOINT	5,0 2,38	
6	PUP JOINT	5,0 2,36				

Total Length: 67,81 m

BHA no. 15:	No. / Element / Body OD(in) / Length(m)		Depth In: 410 m MD		Out: 410 m MD	
1	BULL NOZE	7,5 0,88	6	MAGNET SUB	8,34 1,39	
2	OTHER	7,5 0,68	7	MAGNET SUB	8,34 1,39	
3	PUP JOINT	5,0 1,47	8	MAGNET SUB	8,34 1,39	
4	CIRCULATING SUB	6,5 0,60	9	PUP JOINT	5,0 2,38	
5	DRILL PIPE	5,0 31,32				

Total Length: 41,50 m

BOTTOM HOLE ASSEMBLIES**Well: 35/2-1 R****PO: 1**

BHA no. 16:	No. / Element / Body OD(in) / Length(m)		Depth In: 560 m MD		Out: 560 m MD	
1 OTHER	3,5	2,14	3	X-OVER	6,5	1,10
2 DRILL PIPE	3,5	87,51	4	FLOAT SUB	6,75	0,91

Total Length: 91,66 m

BHA no. 17:	No. / Element / Body OD(in) / Length(m)		Depth In: 412 m MD		Out: 412 m MD	
1 OTHER	8,0	3,95	6	MAGNET SUB	8,343	1,39
2 PUP JOINT	5,0	1,47	7	MAGNET SUB	8,343	1,39
3 DIVERTER SUB	6,5	0,60	8	MAGNET SUB	8,343	1,39
4 PUP JOINT	5,0	2,36	9	PUP JOINT	5,0	2,39
5 DRILL PIPE	5,0	9,53				

Total Length: 24,46 m

BHA no. 18:	No. / Element / Body OD(in) / Length(m)		Depth In: 557 m MD		Out: 557 m MD	
1 JUNKMILL	5,75	0,44	10	DRILL COLLAR STEEL	4,75	73,61
2 BIT SUB	4,69	1,10	11	JAR	4,75	9,09
3 DRILL COLLAR STEEL	4,75	9,18	12	X-OVER	6,5	1,01
4 STEEL STAB	6,0	1,34	13	FLOAT SUB	6,75	0,91
5 MAGNET SUB	5,843	1,32	14	MAGNET SUB	8,343	1,39
6 MAGNET SUB	5,843	1,31	15	MAGNET SUB	8,343	1,39
7 PUP JOINT	3,5	3,05	16	MAGNET SUB	8,343	1,39
8 CIRCULATING SUB	4,75	0,58	17	PUP JOINT	5,0	2,38
9 STEEL STAB	6,0	1,45				

Total Length: 110,94 m

BHA no. 19:	No. / Element / Body OD(in) / Length(m)		Depth In: 561 m MD		Out: 561 m MD	
1 JUNKMILL	5,75	0,44	13	X-OVER	6,5	1,01
2 BIT SUB	4,69	1,10	14	FLOAT SUB	6,75	0,91
3 DRILL COLLAR STEEL	4,75	9,75	15	MAGNET SUB	8,343	1,39
4 STEEL STAB	6,0	1,34	16	MAGNET SUB	8,343	1,39
5 DRILL COLLAR STEEL	4,75	9,15	17	MAGNET SUB	8,343	1,39
6 CIRCULATING SUB	4,75	0,58	18	PUP JOINT	5,0	2,38
7 STEEL STAB	6,0	1,45	19	MAGNET SUB	8,343	1,38
8 DRILL COLLAR STEEL	4,75	73,61	20	MAGNET SUB	8,343	1,37
9 JAR	4,75	9,09	21	MAGNET SUB	8,343	1,39
10 MAGNET SUB	5,843	1,32	22	MAGNET SUB	8,343	1,39
11 MAGNET SUB	5,843	1,31	23	PUP JOINT	5,0	1,80
12 PUP JOINT	3,5	3,05				

Total Length: 127,99 m

BHA no. 20:	No. / Element / Body OD(in) / Length(m)		Depth In: 614 m MD		Out: 614 m MD	
1 JUNKMILL	6,0	0,44	12	FLOAT SUB	6,75	0,91
2 X-OVER	4,69	1,10	15	MAGNET SUB	8,343	1,39
3 MAGNET SUB	4,844	1,32	16	MAGNET SUB	8,343	1,39
4 MAGNET SUB	4,844	1,31	17	MAGNET SUB	8,343	1,39
5 PUP JOINT	3,5	3,05	18	PUP JOINT	5,0	2,38
6 STEEL STAB	6,0	1,34	19	MAGNET SUB	8,34	1,38
7 CIRCULATING SUB	4,75	0,74	20	MAGNET SUB	8,34	1,37
8 DRILL COLLAR STEEL	4,75	64,41	21	MAGNET SUB	8,34	1,39
10 JAR	4,75	9,09	22	MAGNET SUB	8,34	1,39
11 X-OVER	6,5	1,01	23	PUP JOINT	5,0	1,80

Total Length: 98,60 m

BOTTOM HOLE ASSEMBLIES**Well: 35/2-1 R****PO: 1**

BHA no. 21:	No. / Element / Body OD(in) / Length(m)			Depth In: 614 m MD		Out: 614 m MD	
1	BULL NOZE	8,81	3,95	10	MAGNET SUB	8,34	1,39
2	PUP JOINT	5,0	1,47	11	PUP JOINT	5,0	2,38
3	REVERSE JET SUB	6,5	0,60	12	MAGNET SUB	8,34	1,38
4	PUP JOINT	5,0	2,36	13	MAGNET SUB	8,34	1,37
5	DRILL PIPE	5,0	9,59	14	MAGNET SUB	8,34	1,39
6	BRUSH TOOL	17,875	1,62	15	MAGNET SUB	8,34	1,39
7	PUP JOINT	5,0	2,96	16	PUP JOINT	5,0	1,80
8	MAGNET SUB	8,34	1,39	17	PUP JOINT	5,0	2,41
9	MAGNET SUB	8,34	1,39				

Total Length: 38,83 m

BHA no. 22:	No. / Element / Body OD(in) / Length(m)			Depth In: 504 m MD		Out: 504 m MD	
1	OTHER	3,5	1,54	3	PUP JOINT	5,0	2,20
2	JUNK SUB	8,313	3,12	4	FLOAT SUB	6,75	0,91

Total Length: 7,77 m

BHA no. 23:	No. / Element / Body OD(in) / Length(m)			Depth In: 570 m MD		Out: 577 m MD	
1	OTHER	5,75	5,49	4	CIRCULATING SUB	4,75	0,75
2	PUP JOINT	3,5	3,57	5	DRILL PIPE	3,5	87,55
3	DRILL PIPE	3,5	29,17	6	X-OVER	6,5	1,11

Total Length: 127,63 m

BHA no. 24:	No. / Element / Body OD(in) / Length(m)			Depth In: 570 m MD		Out: 570 m MD	
1	OTHER	5,75	5,42	4	CIRCULATING SUB	4,75	0,75
2	PUP JOINT	3,5	3,60	5	DRILL PIPE	3,5	87,55
3	DRILL PIPE	3,5	29,17	6	X-OVER	6,5	1,11

Total Length: 127,59 m

BHA no. 25:	No. / Element / Body OD(in) / Length(m)			Depth In: 566 m MD		Out: 566 m MD	
1	JUNK MILL	5,75	0,52	4	JAR	4,75	9,09
2	BIT SUB	4,87	1,10	5	X-OVER	6,5	1,11
3	DRILL COLLAR STEEL	4,75	73,61	6	FLOAT SUB	6,75	0,91

Total Length: 86,34 m

BHA no. 26:	No. / Element / Body OD(in) / Length(m)			Depth In: 566 m MD		Out: 566 m MD	
1	JUNK MILL	5,875	0,52	4	JAR	4,75	9,09
2	BIT SUB	4,87	1,10	5	X-OVER	6,5	1,11
3	DRILL COLLAR STEEL	4,75	73,61	6	FLOAT SUB	6,75	0,91

Total Length: 86,34 m

BHA no. 27:	No. / Element / Body OD(in) / Length(m)			Depth In: 416 m MD		Out: 416 m MD	
1	CASING CUTTER	5,75	2,00	4	X-OVER	6,5	0,63
2	X-OVER	4,75	1,13	5	STOP SUB	6,625	1,28
3	X-OVER	4,75	1,46				

Total Length: 6,50 m

BHA no. 28:	No. / Element / Body OD(in) / Length(m)			Depth In: 506 m MD		Out: 506 m MD	
1	CATCH ASSEMBLY	4,75	3,37	5	X-OVER	6,5	0,41
2	BUMPER SUB	6,5	1,40	6	JAR	6,5	4,45
3	X-OVER	6,5	0,88	7	DRILL COLLAR STEEL	6,5	55,93
4	CIRCULATING SUB	4,75	0,74				

Total Length: 67,18 m

BOTTOM HOLE ASSEMBLIES**Well: 35/2-1 R****PO: 1**

BHA no. 29:	No. / Element / Body OD(in) / Length(m)		Depth In: 506 m MD		Out: 506 m MD	
1	CATCH ASSEMBLY	6,5 3,37	4	JAR	6,5	4,45
2	BUMPER SUB	6,5 1,40	5	DRILL COLLAR STEEL	6,5	55,93
3	CIRCULATING SUB	4,75 0,77	6	ACCELERATOR	6,5	3,85

Total Length: 69,77 m

BHA no. 30:	No. / Element / Body OD(in) / Length(m)		Depth In: 566 m MD		Out: 566 m MD	
1	ATMGT18	8,5 0,24	6	MAGNET SUB	8,34	1,39
2	BIT SUB	6,5 1,00	7	MAGNET SUB	8,34	1,39
3	FLOAT SUB	6,5 0,90	8	MAGNET SUB	8,34	1,39
4	DRILL COLLAR STEEL	6,5 28,00	9	PUP JOINT	5,0	2,39
5	JAR	6,5 12,90	10	HWDP	5,0	28,03

Total Length: 77,62 m

BHA no. 31:	No. / Element / Body OD(in) / Length(m)		Depth In: 565 m MD		Out: 565 m MD	
1	CEMENT STINGER	3,5 2,14	3	X-OVER	6,5	1,10
2	DRILL PIPE	3,5 462,23				

Total Length: 465,47 m

BHA no. 32:	No. / Element / Body OD(in) / Length(m)		Depth In: 491 m MD		Out: 561 m MD	
1	ATMGT18	8,5 0,24	4	DRILL COLLAR STEEL	6,5	55,93
2	BIT SUB	6,5 1,00	5	JAR	6,5	12,90
3	FLOAT SUB	6,5 0,90	10	HWDP	5,0	83,61

Total Length: 154,58 m

BHA no. 33:	No. / Element / Body OD(in) / Length(m)		Depth In: 506 m MD		Out: 506 m MD	
1	CATCH ASSEMBLY	8,125 2,43	4	DRILL COLLAR STEEL	8,0	28,12
2	BUMPER SUB	7,875 1,63	5	ACCELERATOR	7,938	5,49
3	FISHING JAR	7,938 3,56	6	X-OVER	8,0	0,77

Total Length: 42,00 m

BHA no. 34:	No. / Element / Body OD(in) / Length(m)		Depth In: 540 m MD		Out: 540 m MD	
1	ATMGT18	8,5 0,24	7	MAGNET SUB	8,34	1,39
2	BIT SUB	6,5 1,00	8	MAGNET SUB	8,34	1,39
3	FLOAT SUB	6,5 0,90	9	MAGNET SUB	8,34	1,39
4	DRILL COLLAR STEEL	6,5 28,00	10	PUP JOINT	5,0	1,80
5	JAR	6,5 12,90	11	HWDP	5,0	28,03
6	MAGNET SUB	8,34 1,39				

Total Length: 78,43 m

BHA no. 35:	No. / Element / Body OD(in) / Length(m)		Depth In: 486 m MD		Out: 486 m MD	
1	CASING CUTTER	8,25 1,84	4	STOP SUB	12,0	0,46
2	SHORT DRILL COLLAR	6,5 3,05	5	X-OVER	8,0	0,88
3	X-OVER	8,0 0,48	6	PUP JOINT	5,0	3,02

Total Length: 9,73 m

BHA no. 36:	No. / Element / Body OD(in) / Length(m)		Depth In: 486 m MD		Out: 486 m MD	
1	CATCH ASSEMBLY	8,91 3,39	5	ACCELERATOR	7,938	5,49
2	BUMPER SUB	7,875 1,63	6	X-OVER	8,0	0,88
3	FISHING JAR	7,938 3,56	7	CIRCULATING SUB	6,5	0,77
4	DRILL COLLAR STEEL	8,0 28,12				

Total Length: 43,84 m

BOTTOM HOLE ASSEMBLIES**Well: 35/2-1 R****PO: 1**

BHA no. 37:	No. / Element / Body OD(in) / Length(m)		Depth In: 494 m MD		Out: 494 m MD	
1	CATCH ASSEMBLY	8,917 3,39	5	ACCELERATOR	7,938 5,49	
2	BUMPER SUB	7,875 1,63	6	X-OVER	8,0 0,88	
3	FISHING JAR	7,938 3,56	7	CIRCULATING SUB	6,5 0,77	
4	DRILL COLLAR STEEL	8,0 28,12				

Total Length: 43,84 m

BHA no. 38:	No. / Element / Body OD(in) / Length(m)		Depth In: 527 m MD		Out: 527 m MD	
1	INTERNAL CUTTER	8,25 1,84	2	SHORT DRILL COLLAR	6,5 3,05	
5	X-OVER	8,0 0,48	3	DRILL PIPE	5,0 29,05	
9	X-OVER	8,0 0,88	4	PUP JOINT	5,0 2,12	
4	STOP SUB	12,0 0,96				

Total Length: 38,38 m

BHA no. 39:	No. / Element / Body OD(in) / Length(m)		Depth In: 494 m MD		Out: 494 m MD	
1	CATCH ASSEMBLY	8,917 3,39	5	ACCELERATOR	7,938 5,49	
2	BUMPER SUB	7,875 1,63	6	X-OVER	8,0 0,88	
3	FISHING JAR	7,938 3,56	7	CIRCULATING SUB	6,5 0,77	
4	DRILL COLLAR STEEL	8,0 28,12	8	PUP JOINT	5,0 6,03	

Total Length: 49,87 m

BHA no. 40:	No. / Element / Body OD(in) / Length(m)		Depth In: 494 m MD		Out: 494 m MD	
1	CATCH ASSEMBLY	8,92 3,19	5	ACCELERATOR	7,938 5,49	
2	BUMPER SUB	7,875 1,63	6	X-OVER	8,0 0,62	
3	FISHING JAR	7,938 3,56	7	HWDP	5,5 389,60	
4	DRILL COLLAR STEEL	8,0 28,12	8	X-OVER	7,25 0,57	

Total Length: 432,78 m

BHA no. 41:	No. / Element / Body OD(in) / Length(m)		Depth In: 560 m MD		Out: 560 m MD	
1	ATMGT18	8,5 0,24	5	JAR	6,5 9,95	
2	BIT SUB	6,5 1,00	6	PUP JOINT	5,0 2,97	
3	FLOAT SUB	6,5 0,90	7	HWDP	5,0 84,01	
4	DRILL COLLAR STEEL	6,5 28,00				

Total Length: 127,07 m

BHA no. 42:	No. / Element / Body OD(in) / Length(m)		Depth In: 557 m MD		Out: 557 m MD	
1	CATCH ASSEMBLY	8,917 3,19	5	ACCELERATOR	7,938 5,49	
2	BUMPER SUB	7,875 1,63	6	X-OVER	7,625 0,62	
3	FISHING JAR	7,938 3,56	7	HWDP	5,5 389,60	
4	DRILL COLLAR STEEL	8,0 28,12	8	X-OVER	7,25 0,57	

Total Length: 432,78 m

BHA no. 43:	No. / Element / Body OD(in) / Length(m)		Depth In: 560 m MD		Out: 560 m MD	
1	MXBCR18CDX	12,25 0,33	9	PUP JOINT	5,5 2,80	
2	UNDER REAMER	9,5 2,72	10	X-OVER	7,12 0,56	
3	X-OVER	7,94 0,41	11	JAR	6,5 9,95	
4	FLOAT SUB	7,94 0,82	12	PUP JOINT	5,5 2,97	
5	CIRCULATING SUB	8,0 0,77	13	X-OVER	7,09 0,47	
6	DRILL COLLAR STEEL	8,0 18,70	14	HWDP	5,5 389,60	
7	X-OVER	7,62 0,62	15	X-OVER	7,25 0,26	
8	CASING SCRAPER	12,5 1,80				

Total Length: 432,78 m

BOTTOM HOLE ASSEMBLIES**Well: 35/2-1 R****PO: 1**

BHA no. 44:		No. / Element / Body OD(in) / Length(m)		Depth In: 476 m MD		Out: 496 m MD	
1	MXBCR18CDX	12,25	0,29	6	PUP JOINT	5,5	2,97
2	FLOAT SUB	7,94	0,84	7	X-OVER	7,12	0,47
3	DRILL COLLAR STEEL	6,5	28,12	8	HWDP	5,5	389,60
4	X-OVER	7,94	0,77	9	X-OVER	7,12	0,56
5	JAR	6,5	9,95				

Total Length: 433,57 m

BHA no. 45:		No. / Element / Body OD(in) / Length(m)		Depth In: 420 m MD		Out: 421 m MD	
1	MXBCR18CDX	12,25	0,29	4	X-OVER	7,94	0,62
2	FLOAT SUB	7,94	0,84	5	HWDP	5,5	362,09
3	DRILL COLLAR STEEL	6,5	28,12	6	X-OVER	7,12	0,56

Total Length: 392,52 m

CEMENT SLURRY REPORT

Well: 35/2-1 R		PO: 1									
Date	CsgSize	Jobtype	Slurry Type	Pumped Volume [m3]	Density [sg]	BHCT [DegC]	Yield [l/100 kg]	Additive	Unit	Additives [../100 kg Cement]	Additives [../m3 Slurry]
2006-07-19	13 3/8"	PLUG IN CASED TO OPEN HOLE	SPACER	3,00	1,03	9,00		BUFFER	kg		9,00
								GW-22	kg		3,00
			TAIL SLURRY	7,20	1,95	9,00	77,14	BA-58L	l	8,00	
								CD-34L	l	0,80	
								FL-67L	l	2,75	
								FP16LG	l	0,20	
			DISPLACEMENT	0,14	1,15	9,00					
			SPACER	5,00	1,00	9,00		BUFFER	kg		3,00
								GW-22	kg		3,00
								BA-58L	l	8,00	
								CD-34L	l	0,80	
								FL-67L	l	2,75	
								FP16LG	l	0,20	
2006-07-21	13 3/8"	PLUG IN CASED HOLE	DISPLACEMENT	0,10	1,00	9,00					
			DISPLACEMENT								

CEMENT CONSUMPTION PER JOB**Well:** 35/2-1 R**PO:** 1

Date	CsgSize	Job Type	Cement/ Additive	Description	Unit	Actual Amount Used
2006-07-19	13 3/8"	PLUG IN CASED TO OPEN HOLE	G	API CLASS G	MT	10
			FL-67L	FL-67LE	l	300
			CD-34L	DISPERSANT: CD-34L LIQUID	l	75
			BA-58L	BA-58L ANTI-GAS	l	800
			A.174	SPECIAL ADDITIVE: DEFOAMER	l	25
			GW-22	GW-22 VISCOSIFIER	kg	25
2006-07-21	13 3/8"	PLUG IN CASED HOLE	G	API CLASS G	MT	9
			FP16LG	SPECIAL ADDITIVE: DEFOAMER FP-16LG	l	20
			FL-67L	FL-67LE	l	270
			CD-34L	DISPERSANT: CD-34L LIQUID	l	80
			BUFFER	BUFFER 4	kg	25
			BA-58L	BA-58L ANTI-GAS	l	628
			GW-22	GW-22 VISCOSIFIER	kg	25

TOTAL CONSUMPTION OF CEMENT ADDITIVES**Well:** 35/2-1 R**PO:** 1

Section	Cement/Additive	Unit	Total Amount Used
14 1/2"	SPECIAL ADDITIVE: DEFOAMER	l	25,00
	BA-58L ANTI-GAS	l	800,00
	DISPERSANT: CD-34L LIQUID	l	75,00
	FL-67LE	l	300,00
	API CLASS G	MT	10,00
	GW-22 VISCOSIFIER	kg	25,00
Section	Cement/Additive	Unit	Total Amount Used
P&A	BA-58L ANTI-GAS	l	628,00
	BUFFER 4	kg	25,00
	DISPERSANT: CD-34L LIQUID	l	80,00
	FL-67LE	l	270,00
	SPECIAL ADDITIVE: DEFOAMER FP-16LG	l	20,00
	API CLASS G	MT	9,00
	GW-22 VISCOSIFIER	kg	25,00

DAILY MUD PROPERTIES:RHEOLOGY PARAMETERS

Well: 35/2-1 R

PO: 1

Hole section : P&A

WATER BASED SYSTEM

Date	Depth [m]		Mud Type	Funnel Visc [sec]	Dens [sg]	Mudtmp Out [DegC]	Fann Readings								Rheo Test [DegC]	PV [mPas]	YP [Pa]	Gel0 [Pa]	Gel10 [Pa]
	MD	TVD					600	300	200	100	60	30	6	3					
2006-06-12	0	0	CACO3/NACL/POLY	0,0	1,15	0,0	49	34	28	20	0	0	7	5	50,0	15,0	9,0	3,0	4,0
2006-06-13	0	0	CACO3/NACL/POLY	0,0	1,15	0,0	49	34	28	20	0	0	7	5	50,0	15,0	9,0	3,0	4,0
2006-06-14	425	425	CACO3/NACL/POLY	0,0	1,15	0,0	51	37	29	21	0	0	7	5	50,0	14,0	11,0	3,0	4,0
2006-06-15	443	443	CACO3/NACL/POLY	0,0	1,15	0,0	44	33	27	20	0	0	7	6	50,0	11,0	11,0	4,0	5,0
2006-06-16	505	505	CACO3/NACL/POLY	0,0	1,15	0,0	47	35	30	23	0	0	8	7	50,0	12,0	11,0	4,0	6,0
2006-06-17	511	511	CACO3/NACL/POLY	0,0	1,15	16,0	45	34	29	21	0	0	8	6	50,0	11,0	11,0	4,0	6,0
2006-06-18	511	511	CACO3/NACL/POLY	0,0	1,15	16,0	47	35	29	22	0	0	8	6	50,0	12,0	11,0	5,0	6,0
2006-06-19	511	511	CACO3/NACL/POLY	0,0	1,15	16,0	47	35	29	21	0	0	7	6	50,0	12,0	11,0	4,0	5,0
2006-06-20	640	640	CACO3/NACL/POLY	0,0	1,15	0,0	51	40	33	26	0	0	9	7	50,0	11,0	14,0	5,0	6,0
2006-06-21	640	640	CACO3/NACL/POLY	0,0	1,15	0,0	50	38	31	24	0	0	9	7	50,0	12,0	12,0	4,0	6,0
2006-06-22	640	640	CACO3/NACL/POLY	0,0	1,15	0,0	51	38	30	23	0	0	9	7	50,0	13,0	12,0	4,0	6,0
2006-06-23	640	640	CACO3/NACL/POLY	0,0	1,15	0,0	46	34	29	22	0	0	8	6	50,0	12,0	11,0	4,0	5,0
2006-06-24	640	640	CACO3/NACL/POLY	0,0	1,15	16,0	49	37	32	25	0	0	9	7	50,0	12,0	12,0	4,0	6,0
2006-06-25	617	617	CACO3/NACL/POLY	0,0	1,15	14,0	56	44	38	30	0	0	12	10	50,0	12,0	15,0	6,0	8,0
2006-06-26	617	617	CACO3/NACL/POLY	0,0	1,15	0,0	55	43	36	28	0	0	11	9	50,0	12,0	15,0	5,0	7,0
2006-06-27	617	617	CACO3/NACL/POLY	0,0	1,15	11,0	67	56	44	34	0	0	14	11	50,0	11,0	22,0	13,0	18,0
2006-06-28	617	617	CACO3/NACL/POLY	0,0	1,15	10,6	61	46	40	31	0	0	13	10	50,0	15,0	15,0	6,0	8,0
2006-06-30	617	617	CACO3/NACL/POLY	0,0	1,15	11,0	78	59	49	38	0	0	15	13	15,0	19,0	19,0	7,0	11,0
2006-07-01	617	617	CACO3/NACL/POLY	0,0	1,15	11,0	80	60	49	38	0	0	15	13	15,0	20,0	19,0	7,0	11,0
2006-07-02	617	617	CACO3/NACL/POLY	0,0	1,15	12,0	72	53	44	35	0	0	15	12	15,0	19,0	16,0	6,0	8,0
2006-07-03	617	617	CACO3/NACL/POLY	0,0	1,15	0,0	74	55	48	36	0	0	15	12	50,0	19,0	17,0	6,0	7,0
2006-07-04	617	617	CACO3/NACL/POLY	0,0	1,15	0,0	78	58	51	40	0	0	17	14	12,5	20,0	18,0	7,0	10,0
2006-07-05	617	617	CACO3/NACL/POLY	0,0	1,15	0,0	78	58	51	40	0	0	17	14	12,5	20,0	18,0	7,0	10,0
2006-07-06	617	617	CACO3/NACL/POLY	0,0	1,15	0,0	78	58	51	40	0	0	17	14	12,5	20,0	18,0	7,0	10,0
2006-07-07	617	617	CACO3/NACL/POLY	0,0	1,15	0,0	78	58	50	40	0	0	17	14	12,5	20,0	18,0	7,0	10,0
2006-07-08	617	617	CACO3/NACL/POLY	0,0	1,15	0,0	80	60	52	40	0	0	17	14	12,5	20,0	19,0	8,0	10,0
2006-07-09	617	617	CACO3/NACL/POLY	0,0	1,15	0,0	78	58	51	40	0	0	17	14	12,5	20,0	18,0	7,0	10,0
2006-07-10	566	566	CACO3/NACL/POLY	0,0	1,15	0,0	80	60	52	40	0	0	17	14	12,5	20,0	19,0	8,0	10,0
2006-07-11	561	561	CACO3/NACL/POLY	0,0	1,15	0,0	49	38	33	26	0	0	12	10	50,0	11,0	13,0	7,0	8,0
2006-07-13	561	561	CACO3/NACL/POLY	0,0	1,15	0,0	45	36	30	24	0	0	10	7	45,0	9,0	13,0	4,0	6,0
2006-07-14	561	561	CACO3/NACL/POLY	0,0	1,15	0,0	45	36	30	24	0	0	10	8	50,0	9,0	13,0	4,0	6,0
2006-07-15	561	561	CACO3/NACL/POLY	0,0	1,15	0,0	45	36	30	24	0	0	10	8	50,0	9,0	13,0	4,0	6,0
2006-07-16	561	561	CACO3/NACL/POLY	0,0	1,15	0,0	45	36	30	24	0	0	10	8	50,0	9,0	13,0	4,0	6,0
2006-07-17	561	561	CACO3/NACL/POLY	0,0	1,15	0,0	44	35	29	24	0	0	10	8	50,0	9,0	12,0	4,0	6,0
2006-07-18	561	561	CACO3/NACL/POLY	0,0	1,15	0,0	40	32	28	22	0	0	9	7	50,0	8,0	11,0	4,0	6,0

DAILY MUD PROPERTIES:RHEOLOGY PARAMETERS

Well: 35/2-1 R

PO: 1

Hole section : P&A

WATER BASED SYSTEM

Date	Depth [m]		Mud Type	Funnel Visc [sec]	Dens [sg]	Mudtmp Out [DegC]	Fann Readings								Rheo Test [DegC]	PV [mPas]	YP [Pa]	Gel0 [Pa]	Gel10 [Pa]
	MD	TVD					600	300	200	100	60	30	6	3					
2006-07-19	476	476	CACO3/NACL/POLY	0,0	1,15	0,0	39	31	27	21	0	0	8	7	50,0	8,0	11,0	4,0	6,0
2006-07-20	494	494	CACO3/NACL/POLY	0,0	1,15	0,0	40	31	27	21	0	0	9	7	50,0	9,0	11,0	4,0	6,0
2006-07-21	421	421	CACO3/NACL/POLY	0,0	1,15	0,0	41	32	27	22	0	0	9	7	50,0	9,0	11,0	4,0	6,0
2006-07-22	420	420	CACO3/NACL/POLY	0,0	0,00	0,0	0	0	0	0	0	0	0	0	0,0	0,0	0,0	0,0	0,0

DAILY MUD PROPERTIES : OTHER PARAMETERS

Well: 35/2-1 R		PO: 1																							
Hole section : P&A		WATER BASED SYSTEM																							
Date	Depth [m]	Mud Type	Dens [sg]	Filtrate API	HPHT [ml]	Filtcake API	HPHT [mm]	HPHT Press/Temp [bar/DegC]	pH	Alcalinity Pm	Pf	Mf	Inhib Chem	K+	CL-	Ca++	Mg++	Tot hard	Percentage Solid	Oil	Sand	CEC	ASG	LGS	Glycol
	MD	TVD		[ml]	[ml]	[mm]	[mm]			[ml]	[ml]	[ml]	[Kg/m3]	[mg/l]	[mg/l]	[mg/l]	[mg/l]	[mg/l]	[%]	[%]	[%]	[Kg/m3]	[sg]	[Kg/m3]	[%]
2006-06-12	0	0	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	9,0	0,0	0,0	0,0	0	0	75000	0	0	160	0,0	0,0	0,0	0	0,0	0
2006-06-13	0	0	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	9,0	0,0	0,0	0,0	0	0	75000	0	0	160	0,0	0,0	0,0	0	0,0	0
2006-06-14	425	425	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	9,0	0,0	0,0	0,0	0	0	75000	0	0	160	0,0	0,0	0,0	0	0,0	0
2006-06-15	443	443	CACO3/NACL/POL	1,15	3,2	0,0	1	0	0 / 0	10,0	0,0	0,1	1,4	0	0	75000	0	0	180	0,0	0,0	0,0	0	0,0	0
2006-06-16	505	505	CACO3/NACL/POL	1,15	3,4	0,0	1	0	0 / 0	11,2	3,4	0,2	1,5	0	0	70000	0	0	600	0,0	0,0	0,0	0	0,0	0
2006-06-17	511	511	CACO3/NACL/POL	1,15	3,4	0,0	1	0	0 / 0	10,9	2,3	0,1	1,7	0	0	71000	0	0	380	0,0	0,0	0,0	0	0,0	0
2006-06-18	511	511	CACO3/NACL/POL	1,15	3,4	0,0	1	0	0 / 0	10,6	1,8	0,0	1,7	0	0	69000	0	0	360	0,0	0,0	0,0	0	0,0	0
2006-06-19	511	511	CACO3/NACL/POL	1,15	3,4	0,0	1	0	0 / 0	10,4	1,9	0,0	1,5	0	0	71000	0	0	400	0,0	0,0	0,0	0	0,0	0
2006-06-20	640	640	CACO3/NACL/POL	1,15	3,4	0,0	1	0	0 / 0	10,0	2,5	0,1	1,5	0	0	70000	0	0	460	4,5	0,0	0,0	0	2,7	1
2006-06-21	640	640	CACO3/NACL/POL	1,15	3,6	0,0	1	0	0 / 0	9,3	1,5	0,1	1,5	0	0	70000	0	0	400	4,4	0,0	0,0	0	2,7	1
2006-06-22	640	640	CACO3/NACL/POL	1,15	3,4	0,0	1	0	0 / 0	9,2	1,7	0,1	1,4	0	0	67000	0	0	400	4,7	0,0	0,0	0	2,7	1
2006-06-23	640	640	CACO3/NACL/POL	1,15	3,6	0,0	1	0	0 / 0	9,1	1,7	0,1	1,5	0	0	70000	0	0	400	4,5	0,0	0,0	0	2,7	1
2006-06-24	640	640	CACO3/NACL/POL	1,15	3,6	0,0	1	0	0 / 0	9,0	1,8	0,0	1,6	0	0	71000	0	0	400	4,4	0,0	0,0	0	2,7	2
2006-06-25	617	617	CACO3/NACL/POL	1,15	3,2	0,0	1	0	0 / 0	8,7	2,0	0,5	1,3	0	0	65000	0	0	480	4,8	0,0	0,0	0	2,7	1
2006-06-26	617	617	CACO3/NACL/POL	1,15	3,4	0,0	1	0	0 / 0	8,9	1,8	0,0	1,4	0	0	65000	0	0	400	4,8	0,0	0,0	0	2,7	1
2006-06-27	617	617	CACO3/NACL/POL	1,15	3,2	0,0	1	0	0 / 0	8,7	1,5	0,1	1,0	0	0	61000	0	0	410	5,0	0,0	0,0	0	2,7	1
2006-06-28	617	617	CACO3/NACL/POL	1,15	2,0	0,0	1	0	0 / 0	8,5	1,6	0,2	1,1	0	0	61000	0	0	410	5,0	0,0	0,0	0	2,7	1
2006-06-30	617	617	CACO3/NACL/POL	1,15	0,0	0,0	0	0	0 / 0	8,7	1,4	0,1	1,0	0	0	61000	0	0	320	5,0	0,0	0,0	0	2,7	1
2006-07-01	617	617	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	8,7	1,4	0,1	1,0	0	0	60000	0	0	320	5,1	0,0	0,0	0	2,7	1
2006-07-02	617	617	CACO3/NACL/POL	1,15	3,4	0,0	1	0	0 / 0	8,6	1,1	0,2	1,4	0	0	61000	0	0	320	5,0	0,0	0,0	0	2,7	1
2006-07-03	617	617	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	9,3	2,0	0,3	2,4	0	0	69000	0	0	160	4,6	0,0	0,0	0	2,7	1
2006-07-04	617	617	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	8,6	1,2	0,2	1,7	0	0	59000	0	0	320	5,1	0,0	0,0	0	2,7	1
2006-07-05	617	617	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	8,6	1,2	0,2	1,7	0	0	59000	0	0	320	5,1	0,0	0,0	0	2,7	1
2006-07-06	617	617	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	8,6	1,2	0,2	1,7	0	0	59000	0	0	320	5,1	0,0	0,0	0	2,7	1
2006-07-07	617	617	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	8,6	1,2	0,2	1,7	0	0	58000	0	0	320	5,2	0,0	0,0	0	2,7	1
2006-07-08	617	617	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	8,6	1,2	0,2	1,7	0	0	59000	0	0	320	5,1	0,0	0,0	0	2,7	1
2006-07-09	617	617	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	8,6	1,2	0,2	1,7	0	0	59000	0	0	320	5,1	0,0	0,0	0	2,7	1
2006-07-10	566	566	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	8,6	1,2	0,2	1,7	0	0	59000	0	0	320	5,1	0,0	0,0	0	2,7	1
2006-07-11	561	561	CACO3/NACL/POL	1,15	3,0	0,0	1	0	0 / 0	9,4	0,0	0,3	1,5	0	0	72000	0	0	320	4,4	0,0	0,0	0	2,7	2
2006-07-13	561	561	CACO3/NACL/POL	1,15	3,7	0,0	1	0	0 / 0	10,0	1,4	0,3	1,2	0	0	68000	0	0	400	4,6	0,0	0,0	0	2,7	1
2006-07-14	561	561	CACO3/NACL/POL	1,15	3,7	0,0	1	0	0 / 0	10,0	1,4	0,3	1,2	0	0	68000	0	0	400	4,6	0,0	0,0	0	2,7	1
2006-07-15	561	561	CACO3/NACL/POL	1,15	3,7	0,0	1	0	0 / 0	10,0	1,4	0,3	1,2	0	0	68000	0	0	400	4,6	0,0	0,0	0	2,7	1
2006-07-16	561	561	CACO3/NACL/POL	1,15	3,7	0,0	1	0	0 / 0	10,0	1,4	0,3	1,2	0	0	68000	0	0	400	4,6	0,0	0,0	0	2,7	1

PO: 1

Hole section : P&A

WATER BASED SYSTEM

Date	Depth		Mud Type	Dens [sg]	Filtrate		Filtcake		HPHT pH	Alcalinity	Inhib	K+	CL-	Ca++	Mg++	Tot	Percentage			CEC	ASG	LGS	Glycol		
	API	HPHT			API	HPHT	Press/Temp	Pm									Pf	Mf	Chem					Solid	Oil
	MD	TVD			[ml]	[ml]	[mm]	[mm]	[bar/DegC]	[ml]	[ml]	[ml]	[Kg/m3]	[mg/l]	[mg/l]	[mg/l]	[mg/l]	[mg/l]	[mg/l]	[%]	[%]	[%]	[Kg/m3]	[sg]	[Kg/m3]
2006-07-17	561	561	CACO3/NACL/POL	1,15	3,6	0,0	1	0	0 / 0	9,9	1,5	0,3	1,3	0	0	68000	0	0	380	4,6	0,0	0,0	0	2,7	1
2006-07-18	561	561	CACO3/NACL/POL	1,15	3,9	0,0	1	0	0 / 0	10,0	3,5	0,1	1,7	0	0	68000	0	0	360	4,7	0,0	0,0	0	2,6	2
2006-07-19	476	476	CACO3/NACL/POL	1,15	3,8	0,0	1	0	0 / 0	10,2	3,6	0,1	1,9	0	0	68000	0	0	400	4,7	0,0	0,0	0	2,6	2
2006-07-20	494	494	CACO3/NACL/POL	1,15	4,0	0,0	1	0	0 / 0	10,5	3,6	0,2	2,0	0	0	67000	0	0	400	4,8	0,0	0,0	0	2,6	2
2006-07-21	421	421	CACO3/NACL/POL	1,15	4,0	0,0	1	0	0 / 0	10,5	3,4	0,1	1,9	0	0	67000	0	0	360	4,8	0,0	0,0	0	2,6	2
2006-07-22	420	420	CACO3/NACL/POL	0,00	0,0	0,0	0	0	0 / 0	0,0	0,0	0,0	0,0	0	0	0	0	0	0	0,0	0,0	0,0	0	0,0	0

TOTAL CONSUMPTION OF MUD ADDITIVES

Well: 35/2-1 R

PO: 1

Section	Product/ Additive	Unit	Total Amount Used
8 1/2"	BARITE	kg	3000,00
	CACO3 C	kg	550,00
	CACO3 F	kg	275,00
	CACO3 M	kg	38000,00
	CITRIC ACID	kg	1675,00
	LIME	kg	50,00
	MICA FINE	kg	875,00
	NACL BRINE	l	103000,00
	NUTPLUG F	kg	250,00
	NUTPLUG M	kg	150,00
	PERMALOSE HT	kg	5750,00
	SODA ASH	kg	625,00
	SODIUM BICARBONATE	kg	1150,00
	SPERSENE CF	kg	25,00
	UNDEFINED	xx	29000,00
	XANTHAN GUM	kg	3325,00

DOWNTIME REPORT All installations

Installation: DST			Well: 35/2-1 R			PO: 1						
Startdate	#	Sum hrs	Downtime Type	Responsible Contractor	Manufacturer	Short description	Equipment Type	Activity	Service Type	NSFI Code	NSFI Type	Serial Number
2006-06-11	1	32,0	Equipment failure	ODFJELL DRILLING BERGEN A/S	CAMERON NORGE	Repaired the shear ram booster system.	WELLCONTROL EQUIPMENT/SYS	BOP INSTALLATION AND TESTING	SUB-SEA EQUIPMENT	332.00	Bop Control System	
2006-06-13	2	4,0	Waiting on weather					BOP INSTALLATION AND TESTING				
2006-06-15	3	6,0	Equipment failure	PEAK WELL SOLUTIONS	PEAK WELL SOLUTIONS	Unable to retrieve the 13 3/8" PEAK WMB plug	SERVICE EQUIPMENT/SYS	OTHER ACTIVITY	OTHER	372.08	Retrievable packer	PVMB 005
2006-06-16	4	0,5	Equipment failure	ODFJELL DRILLING BERGEN A/S	HYDRALIFT	Changed the shear pin on the upper racking arm.	PIPE HANDLING EQUIPMENT/SYS	OTHER ACTIVITY	DRILLING CONTRACTOR	341.00	Vertical Pipe Handling	
2006-06-20	5	0,5	Equipment failure	BAKER HUGHES INTEQ	BAKER HUGHES INTEQ	Failure in BHI gas detector data aquisition	SERVICE EQUIPMENT/SYS	DRILL STEM TEST	MUD LOGGING	372.18	Surface data aquisition	
2006-06-20	6	0,5	Equipment failure	NORSK HYDRO A/S	SPECIALIZED PETROLEUM SERVICES	6" Mill for scraper assembly was cracked. Changed to 6" bit.	DRILLSTRING/DO EQUIPMENT	DRILL STEM TEST	OTHER	357.07	Other Drilling/Downt Equipment	
2006-06-21	7	2,5	Equipment failure	SCHLUMBERG OFFSHORE SERVICES LTD	SCHLUMBERG OFFSHORE SERVICES LTD	Failure in USIT / CBL logging tool. Several stops in logging due to system error.	SERVICE EQUIPMENT/SYS	LOGGING	ELECTRIC LOGGING	374.15	Other logging equipment	
2006-06-22	8	1,5	Equipment failure	BJ SERVICES	BJ SERVICES	Could not make up Cement Retainer to setting tool. Damage in thread connection had to be removed by use of lathe.	DRILLSTRING/DO EQUIPMENT	PLUG AND ABANDONMENT	DOWNHOLE CASING/COM EQUIPMENT	357.07	Other Drilling/Downt Equipment	3BB
2006-06-30	9	0,5	Equipment failure	ODFJELL DRILLING BERGEN A/S	NATIONAL OILWELL	Hydraulic hose broke on the iron rough neck. Changed hydraulic hose.	PIPE HANDLING EQUIPMENT/SYS	PLUG AND ABANDONMENT	DRILLING CONTRACTOR	342.40	Iron Roughneck	
2006-07-11	10	6,0	Equipment failure	DRIL-QUIP	DRIL-QUIP	Unable to retrieve the Wear Bushing.	SERVICE EQUIPMENT/SYS	PLUG AND ABANDONMENT	WELLHEAD	376.01	Wellhead	
2006-07-12	11	0,5	Equipment failure	ODFJELL DRILLING BERGEN A/S	NATIONAL OILWELL	The Trolley Chain on the Cat Walk broke.	PIPE HANDLING EQUIPMENT/SYS	PLUG AND ABANDONMENT	DRILLING CONTRACTOR	347.00	Other Pipe Handling Equipment	
2006-07-13	12	3,0	Equipment failure	SCHLUMBERG OFFSHORE SERVICES LTD	SCHLUMBERG OFFSHORE SERVICES LTD	Failure of the USIT log.	SERVICE EQUIPMENT/SYS	LOGGING	ELECTRIC LOGGING	374.01	Electric Logging Eq. in General	

PO: 1

[illegible]