

Norsk Hydro a.s

Oslo - Norway



Well no. 16/3-2		Geological progress report				Sheet no. 1	
Interval 0 - 100 m			Area Norwegian North Sea		Date 10. 2. 1976		
Scale 1:500			Well R.K.B. (A.M.S.L.) 23,9m		Geologist BECKMAN, RYDBERG		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
10							
20							
			23,9m	SEA LEVEL			
30							
40							
50							
60							
70							
80							
90							
100							
Well 16/3-2		Geological progress report				Sheet no. 1	



Well no. 16/3-2		Geological progress report				Sheet no. 2	
Interval 100 - 200 m			Area Norwegian North Sea		Date 11.2.1976		
Scale 1:500			Well R.K.B. (A.H.S.L.) 23,9 m.		Geologist BECKMAN, RYDBERG		
Depth scale	Lithological column	Cores	Depths	Lithological description / markers	Casing	Shows	
110							
120							
130							
140			142 m	SEA FLOOR			
150							
160							
170							
180							
190				Bit sample @ 190,7 m: blk, dk silty gy, sl calc, v sl silty, sticky.			30" @ 190,5 m.
200							
Well 16/3-2		Geological progress report				Sheet no. 2	



Well no.		Geological progress report				Sheet no.	
16/3-2						3	
Interval			Area		Date		
200 - 300 m			Norwegian North Sea		12.2.76		
Scale			Well R.K.B. (A.H.S.L.)		Geologist		
1:500			23,9 m		BECKMAN, RYDBERG		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
						20" @ 207 m.	
210				Shell frags - mostly Pelecypods.			
220				Sd, crs - v crs, ang - s' ang, qtz, clear - yel.			
230				Tr lig.			
240							
250							
260				Sd, vf - f, ang - s' ang, w srid, qtz, clear loc yel.			
270							
280				blky, m dk gry, sl alty, v sl calc, sticky.			
290				Tr Annelida.			
300							
Well		Geological progress report				Sheet no.	
16/3-2						3	



Well no. 16/3-2		Geological progress report				Sheet no. 4	
Interval 300 - 400 m			Area Norwegian North Sea		Date 14.2.76		
Scale 1:500			Well R.K.B. (A.M.S.L.) 23,9 m		Geologist BECKMAN, RYDBERG		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
310				lly, m dk qy, slty.			
320							
330							
340							
350							
360							
370							
380							
382			382				
390				Stringers of sltst, yelsh qy, hd, w/ silic cnt. Tr bhest, blk - v dk qy.			
400				Tr silicified fossils.			
Well 16/3-2		Geological progress report				Sheet no. 4	

Norsk Hydro a.s

Oslo - Norway



Well no.		Geological progress report				Sheet no.	
16/3-2						5	
Interval 400 - 500 m.		Area Norwegian North Sea			Date 14.2.76		
Scale 1:500		Well R.K.B. (A.H.S.L.) 23, 9 m			Geologist BECKMAN, RYDBERG		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
410							
420			420	bly, m dk gy, sft, sticky, sl slty.			
430							
440						13 3/8" cgs @ 440, 1m.	
450				Tr pyrit. Sd, f-loc of, ang-subang, m w srt'd, qtz, clear-yel, loose			
460							
470				bly, olv gy, v sft, noncalc.			
480				bly loc grad into blyst, olv gy, sl slty, w/ spots of blk carb mat, micromic, noncalc.			
490				Ab pyrite			
500				Ab Forams.			
Well 16/3-2		Geological progress report				Sheet no. 5	

Norsk Hydro a.s

Oslo - Norway



Well no. 16/3-2		Geological progress report				Sheet no. 6		
Interval 500 - 600 m			Area Norwegian North Sea		Date 17.2.76			
Scale 1:500			Well R.K.B. (A.M.S.L.) 23,9 m		Geologist BECKMAN, RYDBERG			
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows		
510				bley, olv gy, plastic, non-calc.				
520								
530								
540								
550								
560				bley / blyst, olv gy, m sft, plastic, micronic, noncalc, sl slty.				
570								
580								
590				Ab Forams. Tr Sd, sf-f, md-subond, qtz, clear, loose.				
600								
Well 16/3-2			Geological progress report				Sheet no. 6	



Well no.		Geological progress report				Sheet no.	
16/3-2						7	
Interval			Area		Date		
600 - 700			Norwegian North Sea		17.2.76		
Scale			Well R.K.B. (A.M.S.L.)		Geologist		
1:500			23,9 m		BECKMAN, RYDBERG		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
610				blg / blyst a/a.			
620							
630							
640			639 m	lst, hd, m dk gy, tite, arg, slty. balcite, brown, hd - prob. vein fillings.			
650							
660				Tr Sd, f, subang, loose.			
670							
680							
690				blg, olv gy, sft, plastic, v sl slty			
700				Sd, f, subond, loose, w silt.			
Well		Geological progress report				Sheet no.	
16/3-2						7	



Well no. 16/3-2		Geological progress report				Sheet no. 8	
Interval 700-800 m.			Area Norwegian North Sea		Date 17.2.76		
Scale 1:500			Well R.K.B. (A.M.S.L.) 23,9 m.		Geologist BECKMAN, RYDBERG		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
710				bl y a/a. Lt a/a. Sd a/a.			
720							
730				bl y olv gy, plastic, noncalc, sft. A b Forams			
740							
750							
760							
770							
780			-779m	Sd, f-uf, subang-subord, w srttd, gtz, clear, loose, glau			
790				Shell - Pelecypods, Spongie spiculae, Bryozoans etc.			
800							
Well 16/3-2		Geological progress report				Sheet no. 8	



Well no.		Geological progress report				Sheet no.	
16/3-2						9	
Interval			Area		Date		
800-900 m.			Norwegian North Sea		19-2-76		
Scale			Well R.K.B. (A.M.S.L.)		Geologist		
1:500			23,9 m.		Sæbøe/Thomassen		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
810				Sd, f-vf, md-subang, w srt d, cl rqtz Shell frag of Pelecypods, Bryozoas, Spongie etc. Tr. Glaucc.			
820				Cly, m-dk gy, sft-sticky			
830				Sd a/a.			
840				Cly/clyst md-dk gy, soft, sticky silty, slightly calcareous.			
850				Sd a/a Cly/clyst a/a			
860				Sd a/a increasing Glauconite			
870							
880				cly/clyst a/a.			
890							
900							
Well 16/3-2		Geological progress report				Sheet no. 9	



Well no.		Geological progress report				Sheet no.	
16/3-2						10	
Interval 900 - 1000 m			Area Norwegian North Sea		Date 19-2-76		
Scale 1:500			Well R.K.B. (A.M.S.L.) 23.9 m		Geologist Sæbøe/Thomassen		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
910				Cly sd f-vf subbrnd-subang, clr transl, sm crs sd g. Abn glau vf-crs sm shell frag			
920				a/a			
930				Cly a/a Clyst gy-brn/pinkish brn m-hd, slty abn glau tr sd a/a			
940				Cly a/a steky. Lst dk gy hd pyr, crs g clr qtz			
950				Cly sft steky gy w clyst a/a tr lst crs g hd gy hvy tr glau sm pyr			
960				a/a incr in calc mt			
970				a/a			
980				a/a			
990				a/a			
1000							
Well 16/3-2		Geological progress report				Sheet no. 10	



Well no.		Geological progress report				Sheet no.	
16/3-2						11	
Interval 1000 - 1100 m			Area Norwegian North Sea		Date 19-2-76		
Scale 1: 500			Well R.K.B. 23.9 m.		Geologist Sæbøe/Thomassen		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
1010				Cly/Clyst brn - brn gy sft stcky Tr lst dk gy hd w sec CaCO3 Tr sd and glau a/a Cly/Clyst a/a Tr sd and glau a/a			
1020				a/a			
1030				a/a			
1040				a/a w pyr Tr lst hd dk gy occ shell fragm			
1050				a/a			
1060				a/a			
1070				a/a inc Clyst less glau & lst			
1080				Cly/Clyst a/a tr sd a/a weak tr glau			
1090				a/a			
1100				a/a			
Well 16/3-2		Geological progress report				Sheet no. 11	



Well no.		Geological progress report				Sheet no.	
16/3-2						12	
Interval			Area		Date		
1100-1200 m			Norwegian NORTH SEA		19-2-76		
Scale			Well R.K.B.		Geologist		
1:500			23.9 m		Sæbøe/Thomassen		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
1110				Cly/clyst a/a Tr glau, sd lst a/a Tr lst beige sft (sec?)			
1120				a/a			
1130				a/a			
1140				a/a calc incr lst dk beige-lt brn, hd.			
1150				a/a			
1160				a/a			
1170				a/a			
1180				a/a			
1190				a/a Clyst getting sl slty			
1200				a/a			
Well 16/3-2		Geological progress report				Sheet no. 12	



Well no.		Geological progress report				Sheet no.	
16/3-2						13	
Interval		Area		Date			
1200 - 1300 m		NORWEGIAN NORTH SEA		19-2-76			
Scale		Well R.K.B. (A.M.S.L.)		Geologist			
1:500		23.9 m		Sæbøe/Thomassen			
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
1210				Cly/Clyst slty calc m gy - brnsh gy sft sm lst yel - yel brn fri tr glau & vf sd			
1220				a/a tr pyr			
1230				a/a			
1240				a/a			
1250				a/a			
1260				a/a			
1270				a/a			
1280				Clyst a/a Clyst applegm to wh/grn sft w occ tr blk spots [tuff?] Clyst rusty rd w occ blk spots [tuff]			
1290				Clyst a/a applegm Clyst a/a			
1300				a/a			
Well 16/3-2		Geological progress report				Sheet no. 13	



Well no.		Geological progress report				Sheet no.	
16/3-2		Norwegian North Sea				14	
Interval		Area		Date			
1300-1400 m		Norwegian North Sea		22/2-76			
Scale		Well R.K.B. (A.M.S.L.)		Geologist			
1:500		23.9 m		Sæbøe / Thomassen			
Depth scale	Lithological column	Cores	Depths	Lithological description / markers	Casing	Shows	
1305				as @ 1280			
1310				a/a v sft tr glau	95/8"		
1315				a/a			
1320				a/a incr in vf mt L gy - brn			
1325				Cmt, Clyst slty w sm sft sh dk gy			
1330				Tuff whsh gy slty tr glau			
1335				Clyst slty, ab cmt, tuff wh sft tr sd & glau			
1340				Cly clyst & sh m-dk gy, ab cmt, tuff tr sd & glau, tr pyr			
1345				a/a incr sd			
1350				Clyst slty shy, tuff, tr sd & glau			
1355				a/a tr lign			
1360				Clyst slty w sh m gy - grn gy, tuff mic tr sd & glau sm cmt			
1365				a/a tr lign, sec CaCO ₃ tr dol			
1370				Clyst slty shy sm tuff tr mic & cmt			
1375				Clyst shy slty a/a less tuff			
1380				Clyst dk grnsh gy, shy, slty w tuff sec CaCO ₃ tr dol			
1385				a/a			
1390				a/a			
1395				Clyst shy flky w sm tuff mat, sl calc tr sd & sec calc / dol			
1400				Gen app m gy w dk spt (lign?)			
Well 16/3-2		Geological progress report				Sheet no. 14	



Well no.		Geological progress report				Sheet no.	
16/3-2						15	
Interval			Area		Date		
1400-1500 m			Norwegian North Sea		22/2-76		
Scale			Well R.K.B. (A.M.S.L.)		Geologist		
1:500			25.9 m		Sæbøe/Thomassen		
Depth scale	Lithological column	Cores	Depths	Lithological description / markers	Casing	Shows	
1405				a/a Sh m dk gy m hd sby sm blk pigm, mic			
1410				Slt wh-dk, sm blk pigm, calc tr sh grn-gy grn m hd, tr pyr tr lst wh spltry m hd			
1415				Sh lt grn-wh-grn v sft tr sh rusty rd m hd			
1420							
1425				Sh of var comp wh-wh grn lt gy m gy & dk gy sm rd sh & tuff sft m sft tr sd & stl calc x tr lign			
1430							
1435							
1440							
1445				Sh a/a incr in lt gy lt grnsh gy sh sm rd sh frgm, tr lign & pyr			
1450							
1455							
1460							
1465							
1470				Chalk wh sft-m hd occ pinksh tr lt beige lst.			
1475							
1480							
1485							
1490							
1495							
1500							
Well		Geological progress report				Sheet no.	
16/3-2						15	



Well no.		Geological progress report				Sheet no.	
16/3-2						16	
Interval		Area		Date			
1500 - 1600 m		Norwegian North sea.		22/2-76			
Scale		Well R.K.B. (A.M.S.L.)		Geologist			
1:500		23.9 m		Sæbøe / Thomassen			
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
-1505	[Lithological column symbols]			Chalk a/a tr sh m-lt gy.			
-1510	[Lithological column symbols]						
-1515	[Lithological column symbols]			Chalk a/a sh gy sft, sl calc, slty Tr sh m-lt gm, sl calc Tr sh brick red, tr pyr			
-1520	[Lithological column symbols]						
-1525	[Lithological column symbols]						
-1530	[Lithological column symbols]						
-1535	[Lithological column symbols]			a/a Chalky sly pinkish			
-1540	[Lithological column symbols]						
-1545	[Lithological column symbols]						
-1550	[Lithological column symbols]						
-1555	[Lithological column symbols]						
-1560	[Lithological column symbols]			Sh m-lt gm sft sl slty calc a/a Sh dk gy, sft, v slty, v sl calc Sh dk gy - gm sft sl slty non calc tr sh rd			
-1565	[Lithological column symbols]						
-1570	[Lithological column symbols]			a/a tr pyr			
-1575	[Lithological column symbols]						
-1580	[Lithological column symbols]						
-1585	[Lithological column symbols]						
-1590	[Lithological column symbols]						
-1595	[Lithological column symbols]						
-1600	[Lithological column symbols]						
Well		Geological progress report				Sheet no.	
16/3-2						16	



Well no.		Geological progress report				Sheet no.	
16/3-2						17	
Interval		Area		Date			
1600 - 1700 m		Norwegian North Sea		25.2.76			
Scale		Well R.K.B. (A.H.S.L.)		Geologists			
1:500		23,9 m		BECKMAN, RYDBERG.			
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
				Chalk s/a. Shale, dk gy, sft, v sl calc. Shale, m gy gr, sft, v sl calc. Shale, m dk gy brn, stly, v sl calc. Tr Shale, red.			
1610							
1620							
1630							
1640							
1650							
1660				Lst, l gy, m hd-hd, v glau, v sl mic w/ tr of sd. Tr pyr.			
1670				Chalk, wh, sft, earthy, loc w/ specks of gm glau, clean appearance.			
1680				Sh, dk grush gy - m gy, m w ind, micronic, fis, tr carb mat. Chalk loc pinkish.			
1690				Lst, l gy, v glau, sft, aren.			
1700							
Well 16/3-2		Geological progress report				Sheet no. 17	



Well no.		Geological progress report				Sheet no.	
16/3-2						18	
Interval		Area		Date			
1700 - 1800m.		Norwegian North Sea		26.2.1976			
Scale		Well R.K.B. (A.M.S.L.)		Geologist			
1:500		23,9 m		Beckman, Rydberg			
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
				<p>Helot, l gy, soft-firm, sl glau, loc grdng into Lst.</p> <p>Tr Sh, redbrn, fis, soft-firm, micromic.</p> <p>Sh, dk brnsh gy, subfis, soft.</p> <p>Tr Sd, f-uf, rnd, loose.</p> <p>Lst, beige-tan, hd, x-line.</p> <p>Abundant pyrite.</p>			
1710							
1720							
1730							
1740							
1750							
1760				<p>Sh, dk-lt gy, well ind, fis, sl calc, micromic.</p> <p>Tr Sd a/a.</p>			
1770				<p>Chalk, wh loc pinkish, soft, earthy, clean.</p>			
1780							
1790				<p>Tr Sh, redbrn, soft, fis, micro- mic.</p>			
1800				<p>Sh, m dk gy, fis, firm, w ind, micromic</p>			
Well 16/3-2		Geological progress report				Sheet no. 18	





Well no.		Geological progress report				Sheet no.	
16/3-2						19	
Interval			Area		Date		
1800 - 1900 M			Norwegian North Sea		26/2 - 1975		
Scale			Well R.K.B. (A.M. S.L.)		Geologist		
1:500			23,9 M		Beckman, Rydberg		
Depth scale	Lithological column	Cores	Depths	Lithological description / markers	Casing	Shows	
				Sh dk gy, calc, micro-mic -ll- red- brn, v calc			
1810				Lst w - brn Med m - lt gy			
1820				Sh m - dk gy, fis, v micro-mic v sl slty, non - v sl calc, tr blk carb mat, pyrp, tr glau			
1830							
1840							
1850							
1860							
1870							
1880							
1890				Medlt lt gy, m w ind, micro- mic, fis			
1900							
Well 16/3-2		Geological progress report				Sheet no. 19	



Well no.		Geological progress report				Sheet no.	
16/3-2						20	
Interval		Area		Date			
1900 - 2000		Norwegian North Sea		27.2.76			
Scale		Well R.K.B. (A.M. 3. L.)		Geologist			
1:500		23,9 m.		Beckman, Rysberg.			
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
			1903	At 1903 m - 1957 m: Frequent intercalations of Sh, redbrn-orange brn, well indurated, micromicaceous, sl calc.			
1910							
			1920	Sh, m dk gry, fis, micromic, sl calc - calc, loc to blk carb material, sl pyritic, v sl glau.			
			1930	lst, sft, wh-tan, earthy, shaly.			
			1940				
			1950	Mst, l gry, sft, subindur.			
			1957	Sh, dk gry, splintery, fis, moncalc, pyritic. Tr of frags of chitinous mat.			
			1970				
			1972	Sd, qtz, transl, m-v cis, w artd, ang-subang, loose.			
			1980				
			1985,5				
			Core #1				
			0% Rec.				
			1990				
			1998,8				
2000							
Well 16/3-2		Geological progress report				Sheet no. 20	



Well no.		Geological progress report				Sheet no.	
16/3-2						21	
Interval 2000 - 2018,5 m		Area Norwegian North Sea			Date 1.3.76		
Scale 1:500		Well R.K.B. (A.M.S.L.) 23,9 m			Geologist Beckman, Rydberg		
Depth scale	Lithological column	cores	Depths	Lithological description / markers	Casing	Shows	
2010 2018,5			Core #2 23,7% Rec. 2006,4 2017,5 2018,5 Core #3 100% Rec.	Granite, greyish pink, v hd, homo- genous, medium - coarse grained T.D. @ 2018,5 m.			
Well 16/3-2		Geological progress report				Sheet no. 21	

PRELIMINARY PROGRESS REPORT

DEPTHS	LITHO SECTION	FORMATIONS	STAGES	SHOWS	DESCRIPTIONS, OBS	LOCATED ON LINE: 725847	WELL: 16/3-2
						SP : 40	
						RKB AMSL : 23.9m	
						WATER DEPTH : 118 m	
50						1275	Clyst apple green - wh grn sft
100		142			Sea floor	1300	w occ tr blk spots, Clyst
150		(190.5)			No return	1320	rusty rd w occ blk spots
200		30"				1350	Tuff and mat a/a
250		(207)			212 Cly m dk gy slty sl calc	1355	Clyst slty w sh m gy
300		275			w intbd sd, vf - v crs,	1400	grn gy, tuff, mic, tr sd
350					poorly srtd, subr-ang,	1450	& glau, tr lign & sec calc.
400		382			shell frgm, tr lign.	1465	Sh m dk gy md hd slty sm
450		420			Cly m dk gy sl slty v sl calc	1500	blk pigm, mic.
500		13 3/4"			sticky	1550	Chalk wh - pinkish sft -
550		(440.1)			A/a w thin strks sltst,	1600	m hd w occasional strks
600					Ab forams	1650	of lt br - beige limestone
650					Cly m dk gy, slty, sl calc,	1660	(stylolites filled w pyrite)
700					w intrb sd a/a.	1680	Chalk v lt gy, glau, frm
750					Ab forams	1700	Chalk a/a
800					Tr sd, vf-f, rnd - subrnd, qtz	1750	Lst lt gy - m gy, m hd, v glau, tr vf sd.
850					clr loose	1800	Chalk intd w lst, lt gy
900					Lst, hd, m dk gy, tite, arg, slty	1850	v glau sm sh dk gr-gy - m gy
950					Calcite, brwn hd, - prob	1900	Marl/Mrlst lt gy, sft, frm,
1000					veinfillings	1901	sl glau intbd w chalk and lst.
1050					Sd, f, sub rnd, loose	1950	Marlst intbd w sh, dk-lt gy
1100					Cly olv gy, sft, plstic, v sl slty	1957	Sh gy frm - hd sl slty micromic
1150					Ab forams	1972	calcareous.
1200					Cly & sd a/a	2000	Sh m dk gy frm v sl slty
1250					Sd vf-f, subang - subrnd,	2006	micromic calc.
					w srtd, qtz, clr, loose, glauc.	2018.5	Mrlst, m frm, rdbrn, micromic
					Ab shell fragm.		Mrlst, lt*gy sft, slty, diss pyr
					Cly a/a		Sh dk gy - dk brnsh gy w incl,
					Sd a/a w incr glau.		frm, fis, loc micropyr, non calc.
					Cly/Clyst		1 1985.5 - 1998.8
					Lst strks, dk gy hd, pyr,		2 1998.8 - 2006.4
					hvy tr glauc incr in calc mat		3 2017.5 - 2018.5
					Cly & Clyst brn - brngy sft		
					Stcky, tr lst dk gy m hd		
					w sec CaCO ₃ , tr sd & glau		
					Cly/Clyst w sm lst dk beige		
					lt brn, hd prtly shy		
					Cly/Clyst a/a		