TOTAL, DEMINEX, SVENSKA PETROLEUM, NORSK HYDRO

PARTNERS

STATOIL

WELL **30/3-7A**

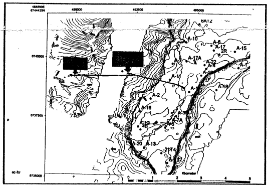
COMPOSITE LOG
1 : 500

Veslefrikk K-prospect

PROSPECT STRUCTURE

AREA:	Veslefrikk
LICENCE:	Pl 052
COORDINATES:	6 738 755.4 m N 494 432.5 m E
K.B.:	56 m
WATER DEPTH:	175 m
TOTAL DEPTH:	6678 m
FM. AT T.D.:	Drake Formation
SPUD DATE:	14th November 1997
RIG RELEASE:	29th January 1998
WELL STATUS:	Exploration
RIG:	VFA
CONTRACTOR:	Smedvig
GEOLOGIST:	Helle,Netland,Alstadsæter,Monsen,Furmyr,Elkefet,Bjerkenes,Aga,Sørensen,Graue,Ingdahl
PREPARED BY:	L.J. Skjold DATE: 28.02.97

LOCATION MAP



3000m

CASING DATA

Window in 9 5/8"
3336 mMD/2397 mTVD

7" 5705 m MD/3290.6 m TVD

LEAK OFF TESTS

1.80 g/cc(FIT)

VELOCITY SURVEY

Check shots from TD to 7" shoe.

LOGS RUN

CONTRACTOR: ATLAS WIRELINE SERVICES

8 1/2" SECTION BHI MPR	Runs 5 - 10	3336 - 5706 m MD	6" SECTION		
			TTRM/GR/CND/ZDL/ MAC/HDIL/VSP	1A	6670 - 5681 m MD
			TTRM/GR/CND/ZDL/ MAC/MRIL	1A	5690 - 6659 m md
			VSP/HDIL/DPIL/GR	1A	3114 - 2888 m MD
			RCI/GR/div.	1A	6353 - 6581 m MD
			RCI/GR	2B	6510 - 6592 m MD
			FMT/GR	1A	6536 - 6592 m MD
			BHI MPR	Runs 11 - 16	5733 - 6678 m MD

COMMENTS: Well side-tracked from 30/3-7S T2

LITHOLOGICAL SYMBOLS

CONGLOMERATE	SHALE	MARL	COAL LIGNITE	FORAMS	MICA
SAND SANDSTONE	LIMESTONE	TUFF	WOOD FRAGS	BURROWS	KAOLINITE
SILT SILTSTONE	CHALK	SALT GEN'L	FOSSILS GEN'L	PYRITE	CHERT

CLAY CLAYSTONE
DOLOMITE
ANHYDRITE
SHELL FRAGS
GLAUCONITE
SIDERITE

CUTTINGS/FLUORESCENCE ◇
OIL SHOW ●
OIL/GAS SHOW ✹
GAS SHOW ☼

AZIMUTH & INCLINATION

SIDEWALL CORES
1.5 ▶ SIDEWALL CORE
2.8 ▷ NO RECOVERY
R 1.2 ▶ ROTARY SIDEWALL CORE

CORES
CORE NO

DST

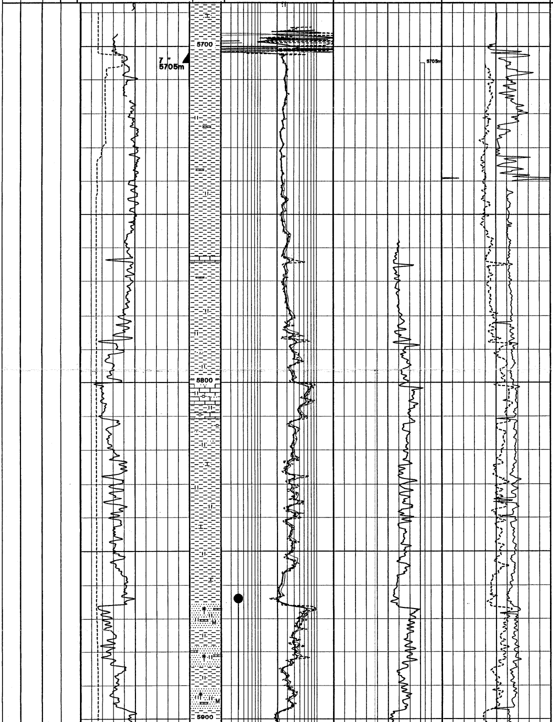
RFT/FMT
SAMPLE

CASING SHOE / LINER

CHRONO STRAT
UNCERTAINTY

Series	Depth	Litho Strat: Group	Litho Strat: Formation	RESERVOAR LOGG	Lithological Descriptions

Track	Curve	Left scale	Right scale
1	GRC-MWD(API)	0	150
1	CALI(in)	5.00	15
1	GR(API)	0	150
2	PSR-MWD()	0.20	20
2	ATR-MWD(ohm-m)	0.20	20
2	RT(ohm-m)	0.20	20
3	DT(msec/ft)	140	40
4	RHOB(gm/cc)	1.95	2.95
4	NPHI(API)	0.45	-0.15



CLST: med - dk gry, sft - frm, blky, var non - mod calc, non - sl slty.

LS: gry wh, sft, blky, arg streaks.

CLST: med - dk gry occ lt gry, bec mod slty + occ sdy vfn qtz, sft - frm, blky, sl - mod calc.

SLTST: lt gry bcm med gry - dk gry, frm, blky, sl carb in specs, calc l/p.

LS: gry wh with arg dark streaks, occ yel gry, frm, blky, occ sdy + slty, grdg sst.

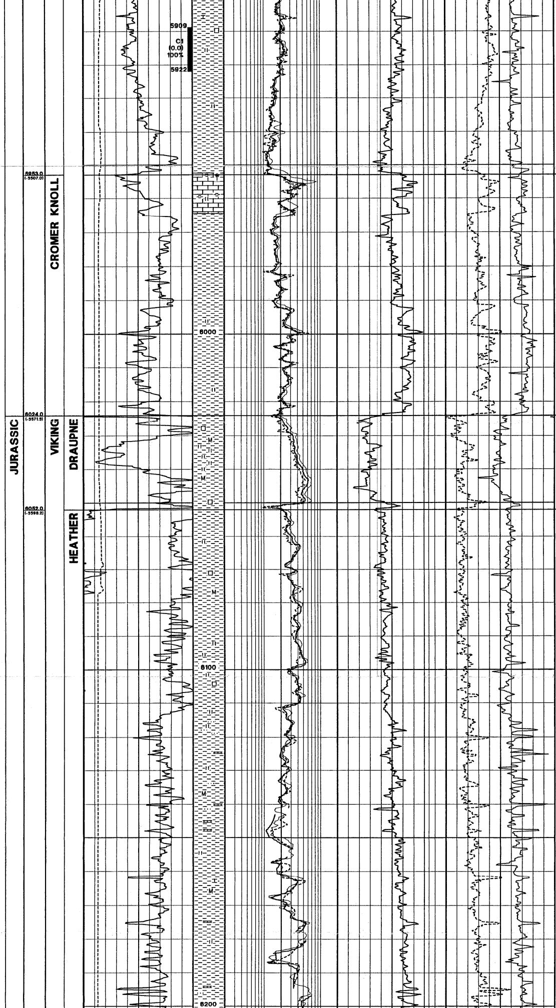
SST: lt med gry, vfn, w srtd, frm, blky, tr glau, tr mica, sl calc.

SLTST: lt gry bec med gry - dk gry, frm, blky, sl carb in specs, calc l/p.

CLST: med - dk gry occ lt gry, bec mod slty + occ sdy vfn qtz, sft - frm, blky, sl - mod calc.

LS: gry wh with arg dark streaks, occ yel gry, frm, blky, occ sdy + slty, grdg sst.

SST: lt med gry, vfn, w srtd, frm, blky, tr glau, tr mica, sl calc - calc.



MDST: dk gry, hd, blky, fiss, slty, micro mic, calc-v calc l/p pyr xls.

CROMER KNOLL GROUP: 5953 - 6024 m MD
LS: lt olv gry-olv gry, also wh-lt gry, sft-hd, blky, argil

CLST: gr blk-olv blk, frm, blky, occ slty, sli calc- v calc, glau, also: gry brn, sft-frm, fiss, earthy, sli calc-calc

VIKING GROUP: 6024 - 6349 m MD DRAUPNE FORMATION: 6024 - 6052 m MD CLST: brn blk, frm-mod hd, sub fiss, blky, slty, micro mic, tr pyr, occ grdg sltst.

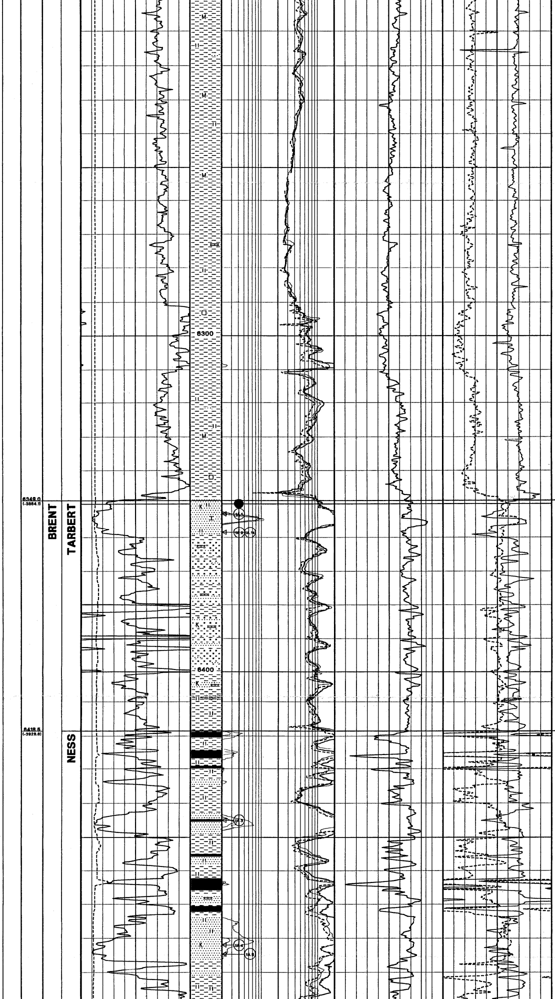
SLTST: dk gry - grn gry, frm-hd, blky, occ brn gry, mic, non-sl calc

HEATHER FORMATION: 6052 - 6349 m MD CLST: gry blk-olv blk, frm-mod hd, sub fiss, blky, slty, occ grdg sltst,micro mic, tr pyr, sl calc.

SLTST: dk gry - grn gry, dk gry brn, olv blk, frm-hd, blky, occ brn gry, micromic, non-sl calc

SST: brn blk-olv blk, vfn, clr qtz, sft-frm, mod srtd, subang-subrnd, v arg, mic, sl calc cmtd.

LS: wh-lt gry, olv gry, mod hd, blky, micromic



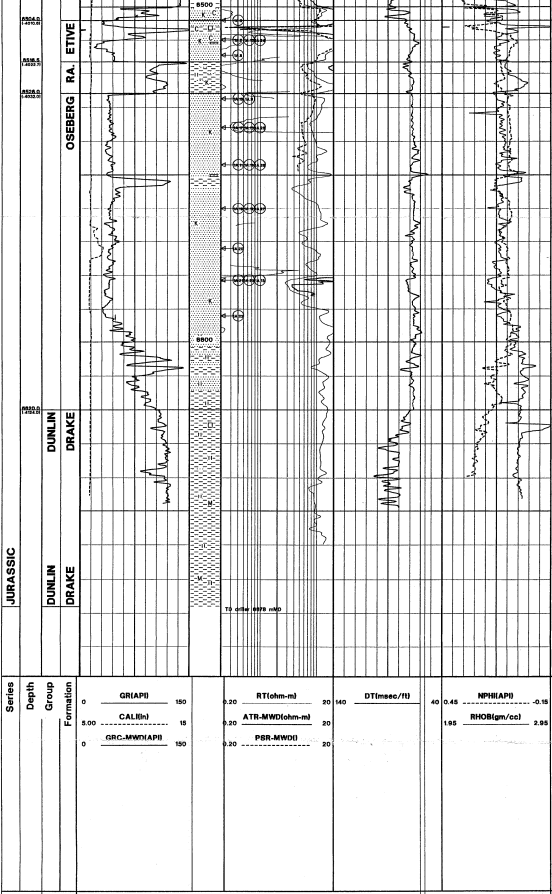
BRENT GROUP: 6349 - 6620 m MD
TARBERT FORMATION: 6349 - 6418.5 m MD
SST: clr-cldy qtz, dom fn, occ med, subang-subrnd, mod-gd srtd, calc-kaol mtrx, occ lse

SLTST: dk brn-dk gry, blky, mod hd-hd, grd vfn sst.

NESS FORMATION: 6418.5 - 6504 m MD

C: blk, blky , hd, brl, grad org sh.
SLTST: dk brn-dk gry, blky, mod hd-hd, grd vfn sst.

SST: clr-mlky qtz, vfn-med, dom fn, subang-subrnd, mod-gd srtd, calc-kaol matrx, occ lse
CLST: olv blk-olv gry, fst, blky, occ plty, non calc, grad sltst and org sh



ETIVE FORMATION: 6504 - 6516.5 m MD

SST: clr-mlky wh qtz gn, lse, vfn-med, pred fn, subang-subrnd, mod-gd srtd, pred kaol/calc mtrx

CLST: olv blk-olv gry, fst, blky, occ plty, non calc, grad sltst

Tr C: blk, blky, hd, brit, occ grad org sh

RANNOCH FORMATION: 6516.5 - 6526 m MD

SST: clr-mlky wh qtz gn, lse, vfn-med, pred fn, subang-subrnd, mod-gd srtd, pred kaol/calc mtrx

CLST: olv blk-olv gry, frm, blky, occ plty, non calc, grad sltst

OSEBERG FORMATION: 6526 - 6620 m MD SST: clr-mlky wh qtz gn, lse, vfn-med, pred fn-med, subang-subrnd, mod-gd srtd, pred kaol/calc mtrx

LS: wh, blky, frm-mod hd, microxln

CLST: olv blk-olv gry, med dk gry-med gry, frm, blky, occ plty, non calc, grad sltst

DUNLIN GROUP/DRAKE FORMATION: 6620-6678 m MD

CLST: olv blk-grysh blk, brnsh blk, occ med dk gry, frm, subblky-blky, occ plty, slty, micro mic, tr pyr, i/p sdy, occ grad sltst, non calc.

Litho Strat

RESERVOAR LOGG

Lithological Descriptions

FORMASJONSTRYKK -RCI BRØNN: 30/3-7A					KJØRING: 1A			DATO: 14.01.98			
TST #	SONE NAMN	DJUP mMD BD	DJUP mSVD MHN	INIT. RES. TRYKK (BAR)	MÅLT RES. TRYKK (BAR)	TRYKK AVL. (BAR)	PORE TRYKK ref. BD	BRØNN TRYKK (BAR) HP	TRYKK - MÅLER	KRFT md-CP	KOMMENTARER
1	Tarbert	6353.0	3811.8	-	472,2	-	1,24	600,6	QD	3,5	Forts. tr.oppb. 143,9 C
2	Tarbert	6358.5	3817.0	-	471,5	-	1,24	601,5	QD	4,3	ok. 146,5 C
3	Ness	6445.0	3898.0	-	484,6	-	1,25	610,6	QD	1,5	ok. 148,9 C
4	Ness	6482.0	3933.5	-	492.0	-	1,26	617,8	QD		Stoppet etter 10 min. Delvis tett. 149,7 C
5	Ness	6484.5	3935.7	-	-	-	-		QD		Tett 151,2 C
6	Etive	6504.0	3954.6	-	493,8	-	1,25	616,8	QD		ok . 152,0 C
7	Etive	6510.0	3960.5	-	491,7	-	1,25	625,1	QD	1,15	Tok dobbel drawdown. Forts. tr. oppb. 152,7 C
8	Etive	6514.5	3964.8	-	-	-	-	615,1	QD		Tett 153,3 C
9	Oseberg	6527.5	3977.5	-	-	-	-	625,6	QD		No seal 153,5 C
10	Oseberg	6536.0	3985.8	-	-	-	-	629,3	QD		No seal 153,8 C
11	Oseberg	6547.0	3996.5	-	-	-	-	627,3	QD		No seal 153,9 C
12	Oseberg	6560.0	4009.5	-	-	-	-	630	QD		No seal 154,1 C
13	Oseberg	6581.5	4030.2	-	-	-	-	628,8	QD		No seal. 154,3 C
14	Tarbert	6358.5	3817.0	-	-	-	-	575	QD		No seal. 150,5 C

FORMASJONSTRYKK -RCI **BRØNN: 30/3-7A**					**KJØRING: 1B**			**DATO: 16.01.98**			
TST #	**SONE NAVN**	**DYBDE mMD BD**	**DYBDE mSVD MSL**	**INIT. RES. TRYKK (BAR)**	**MÅLT RES. TRYKK (BAR)**	**TRYKK AVL. (BAR)**	**PORE TRYKK ref. BD**	**BRØNN TRYKK (BAR) HP**	**TRYKK - MÅLER**	**KRFT md-CP**	**KOMMENTARER**
15	Etive	6510.0	3960.3	-	493.3	-	1.25	629.1	QD	1.56	ok. 148.8 C
16	Oseberg	6527.5	3977.5	-	495.3	-	1.25	634.0	QD	0.57	Begynnende lekkasje i pakning. Stoppet tr.oppb. med rate 0.3bar/min.
17	Oseberg	6536.0	3985.8	-	501.4	-		637.2	QD		Stoppet trykk oppbygging med rate 0.8 bar/min.
18	Oseberg	6547.0	3996.5					638.8	QD		Ingen forsegling. 153.2 C
19	Oseberg	6560.0	4009.5					645.0	QD		Ingen forsegling. 153.7 C
20	Oseberg	6572.0	4021.0					644.1	QD		Ingen forsegling. 154.0 C
21	Oseberg	6581.5	4030.2					645.3	QD		Ingen forsegling. 154.3 C
22	Oseberg	6592.0	4040.6					646.0	QD		Ingen forsegling. 155.0 C
23	Oseberg	6581.5	4030.2						QD		Ingen forsegling. 155.6 C
24	Etive	6510.0	3960.3						QD		Ingen forsegling

FORMASJONSTRYKK -FMT **BRØNN: 30/3-7A**					**KJØRING: 1A**			**DATO: 19.01.98**			
TST #	**SONE NAVN**	**DYBDE mMD BD**	**DYBDE mSVD MSL**	**INIT. RES. TRYKK (BAR)**	**MÅLT RES. TRYKK (BAR)**	**TRYKK AVL. (BAR)**	**PORE TRYKK ref. BD**	**BRØNN TRYKK (BAR) HP**	**TRYKK - MÅLER**	**KRFT md-CP**	**KOMMENTARER**
25	Oseberg	6536.0	3985.8	-	-	-	-	581.9	S.G.	-	Tett. 148.4 C
26	Oseberg	6547.0	3996.5	-	-	-	-	584.1	S.G.	-	Tett. 149.1 C
27	Oseberg	6560.0	4009.5	-	-	-	-	586.0	S.G.	-	Tett. 149.7 C

Antall tester: 27 nivå | Vellykkede tester: 5 | Antall væskeprøver: 0

Hydrostatisk gradient til overflaten: 1.62 - 1.58 g/cm³ (1.47 g/cm3 i kjøring nr. 3 etter sirkulering)

Hydrostatisk gradient i loggeintervallet: -

Maks. poretrykkgradient i intervallet ref . BD: 1.26g/cm³

Min. poretrykkgradient i intervallet ref. BD: 1.24 g/cm³

KOMMENTARER TIL RCI TRYKK: Pakningen som brukes tåler enten ikke den høye temperaturen og/eller det høye differensialtrykket mellom hydrostatisk- og reservoartrykk. Dårlig forsegling/sprekker i pakningen antas å være årsak til at trykkoppbyggingen ikke ville stabilisere og derfor ble avbrutt i flere av testene.

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                      DEVIATION REPORT        Well : 30/03-7-A

Magnetic Declination: -3.99 Degrees              Wellhead Coordinates
    Grid Correction: -0.09 Degrees                      3.25 n M.
          Drill Floor Veslefrikk A:  56.00 M. m         4.86 w M.
                                               Target Direction: 286.05 Deg  (grid)

  Depth     Inclin Azimuth  True Vert  Vert.    Projected Horizontal   Dogleg   Tool
Along Hole  -ation  True     Depth    Section      Displacement         Sev.    Type
   M.       (Deg)   (Deg)     M.        M.      North M.     East M.  Deg/30m

  2950.00   52.75  284.52   2169.09  1681.04   435.89 N  1629.62 W    0.73   GYRODATA 60N,ror
  2980.00   53.38  284.88   2187.12  1705.02   441.97 N  1652.81 W    0.69   GYRODATA 60N,ror
  3010.00   53.85  284.14   2204.92  1729.16   448.03 N  1676.19 W    0.76   GYRODATA 60N,ror
  3040.00   53.68  283.39   2222.65  1753.34   453.78 N  1699.69 W    0.63   GYRODATA 60N,ror
  3070.00   53.67  283.98   2240.42  1777.49   459.50 N  1723.18 W    0.48   GYRODATA 60N,ror

  3100.00   54.04  284.60   2258.12  1801.70   465.48 N  1746.65 W    0.62   GYRODATA 60N,ror
  3130.00   54.07  283.59   2275.73  1825.97   471.40 N  1770.21 W    0.82   GYRODATA 60N,ror
  3160.00   54.15  283.99   2293.31  1850.26   477.19 N  1793.81 W    0.33   GYRODATA 60N,ror
  3190.00   53.79  283.29   2310.96  1874.50   482.91 N  1817.39 W    0.67   GYRODATA 60N,ror
  3220.00   53.52  283.74   2328.74  1898.64   488.56 N  1840.88 W    0.45   GYRODATA 60N,ror

  3250.00   53.73  284.20   2346.53  1922.78   494.39 N  1864.32 W    0.43   GYRODATA 60N,ror
  3280.00   53.93  284.71   2364.34  1946.98   500.43 N  1887.77 W    0.45   GYRODATA 60N,ror
  3310.00   54.10  285.47   2381.87  1971.25   506.75 N  1911.21 W    0.64   GYRODATA 60N,ror
  3340.00   54.10  284.76   2399.46  1995.55   513.09 N  1934.67 W    0.58   GD_Cont 60N ror ccl
  3352.00   56.08  280.47   2406.33  2005.37   515.23 N  1944.27 W   10.09   GD_Cont 60N ror ccl

  3362.00   56.91  279.37   2411.85  2013.66   516.67 N  1952.48 W    3.71   GD_Cont 60N ror ccl
  3372.00   57.62  278.62   2417.26  2022.01   517.98 N  1960.79 W    2.85   GD_Cont 60N ror ccl
  3382.00   58.23  277.68   2422.57  2030.40   519.19 N  1969.10 W    1.01   GD_Cont 60N ror ccl
  3392.00   58.86  277.15   2427.79  2038.83   520.39 N  1977.64 W    2.11   GD_Cont 60N ror ccl
  3402.10   59.78  276.49   2432.94  2047.41   521.32 N  1986.26 W    1.21   GD_Cont 60N ror ccl

  3412.10   60.15  275.57   2437.91  2055.94   522.21 N  1994.88 W    2.94   GD_Cont 60N ror ccl
  3422.10   61.11  274.40   2442.80  2064.51   522.99 N  2003.58 W    4.21   GD_Cont 60N ror ccl
  [illegible]
  [illegible]
  3452.10   63.51  271.47   2456.73  2090.37   524.26 N  2030.12 W    3.17   GD_Cont 60N ror ccl

  3462.10   64.27  270.76   2461.13  2099.04   524.43 N  2039.10 W    2.98   GD_Cont 60N ror ccl
  3472.10   65.00  270.02   2465.31  2107.75   524.50 N  2048.13 W    2.97   GD_Cont 60N ror ccl
  3482.20   65.60  269.12   2469.63  2116.54   524.43 N  2057.31 W    3.01   GD_Cont 60N ror ccl
  3492.20   66.62  267.47   2473.66  2125.25   524.15 N  2066.45 W    5.46   GD_Cont 60N ror ccl
  3502.20   67.10  266.79   2477.61  2133.95   523.69 N  2075.63 W    2.36   GD_Cont 60N ror ccl

  3512.20   66.49  266.70   2481.55  2142.62   523.17 N  2084.81 W    1.85   GD_Cont 60N ror ccl
  3522.20   67.65  266.94   2485.45  2151.32   522.66 N  2094.00 W    3.54   GD_Cont 60N ror ccl
  3532.20   68.55  267.01   2489.18  2160.09   522.17 N  2103.27 W    2.71   GD_Cont 60N ror ccl
  3542.20   69.46  266.70   2492.76  2168.91   521.66 N  2112.59 W    2.86   GD_Cont 60N ror ccl
  3552.20   70.32  266.24   2496.20  2177.75   521.08 N  2121.96 W    2.89   GD_Cont 60N ror ccl

  3562.20   70.58  266.07   2499.54  2186.62   520.45 N  2131.36 W    0.92   GD_Cont 60N ror ccl
  3572.30   70.59  266.14   2502.90  2195.57   519.80 N  2140.87 W    0.20   GD_Cont 60N ror ccl
  3582.30   70.66  266.28   2506.22  2204.44   519.18 N  2150.28 W    0.45   GD_Cont 60N ror ccl
  3592.30   70.71  266.49   2509.53  2213.33   518.58 N  2159.70 W    0.61   GD_Cont 60N ror ccl
  3602.30   70.86  266.51   [illegible]        518.01 N  2169.13 W    0.16   GD_Cont 60N ror ccl

  3612.30   71.08  266.60   2516.08  2231.14   517.44 N  2178.56 W    0.69   GD_Cont 60N ror ccl
  3622.30   71.08  266.95   2519.32  2240.07   516.91 N  2188.01 W    0.99   GD_Cont 60N ror ccl
  3632.30   70.94  267.89   2522.57  2249.03   516.48 N  2197.45 W    2.70   GD_Cont 60N ror ccl
  3642.30   71.25  268.38   2525.81  2258.03   516.18 N  2206.91 W    1.67   GD_Cont 60N ror ccl
  3652.40   71.46  268.50   2529.04  2267.16   515.92 N  2216.47 W    0.71   GD_Cont 60N ror ccl

  3662.40   71.61  268.50   2532.21  2276.20   515.67 N  2225.96 W    0.45   GD_Cont 60N ror ccl
  3672.40   71.74  268.45   2535.35  2285.25   515.42 N  2235.44 W    0.42   GD_Cont 60N ror ccl
  3682.40   71.91  268.33   2538.47  2294.30   515.15 N  2244.94 W    0.61   GD_Cont 60N ror ccl
  3692.40   72.09  268.54   2541.56  2303.37   514.89 N  2254.45 W    0.81   GD_Cont 60N ror ccl
  3702.40   72.38  268.59   2544.62  2312.45   514.65 N  2263.97 W    0.88   GD_Cont 60N ror ccl

  3712.40   72.56  268.60   2547.63  2321.55   514.42 N  2273.50 W    0.60   GD_Cont 60N ror ccl
  3722.40   72.92  268.70   2550.59  2330.67   514.20 N  2283.05 W    1.08   GD_Cont 60N ror ccl
  3732.40   73.11  268.79   2553.52  2339.80   514.00 N  2292.61 W    0.63   GD_Cont 60N ror ccl

                  Coordinates are from structure centre.
      TVDs are from Drill Floor Veslefrikk A  (56.00 M. above mean sea level)
                               Page 6
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                      DEVIATION REPORT        Well : 30/03-7-A

Magnetic Declination: -3.99 Degrees              Wellhead Coordinates
    Grid Correction: -0.09 Degrees                      3.25 n M.
          Drill Floor Veslefrikk A: -56.00 M. m         4.86 w M.
                                               Target Direction: 286.05 Deg  (grid)

  Depth     Inclin Azimuth  True Vert  Vert.    Projected Horizontal   Dogleg   Tool
Along Hole  -ation  True     Depth    Section      Displacement         Sev.    Type
   M.       (Deg)   (Deg)     M.        M.      North M.     East M.  Deg/30m

  3742.50   73.46  268.86   2556.42  2349.04   513.80 N  2302.28 W    1.06   GD_Cont 60N ror ccl
  3752.50   73.42  268.87   2559.27  2358.19   513.61 N  2311.87 W    0.12   GD_Cont 60N ror ccl
  3762.50   73.20  269.10   2562.14  2367.35   513.44 N  2321.44 W    0.93   GD_Cont 60N ror ccl
  3772.50   73.39  269.16   2565.02  2376.51   513.29 N  2331.02 W    0.60   GD_Cont 60N ror ccl
  3782.50   73.85  269.38   2567.84  2385.70   513.17 N  2340.61 W    1.52   GD_Cont 60N ror ccl

  3792.50   73.82  269.38   2570.62  2394.90   513.07 N  2350.22 W    0.09   GD_Cont 60N ror ccl
  3802.50   73.57  269.46   2573.43  2404.10   512.97 N  2359.81 W    0.78   GD_Cont 60N ror ccl
  3812.50   72.87  269.46   2576.32  2413.27   512.88 N  2369.39 W    2.10   GD_Cont 60N ror ccl
  3822.50   72.78  269.42   2579.27  2422.43   512.78 N  2378.94 W    0.29   GD_Cont 60N ror ccl
  3832.60   72.83  269.33   2582.25  2431.67   512.68 N  2388.59 W    0.30   GD_Cont 60N ror ccl

  3842.60   72.43  269.07   2585.24  2440.81   512.55 N  2398.13 W    1.44   GD_Cont 60N ror ccl
  3852.60   71.95  268.88   2588.30  2449.91   512.38 N  2407.65 W    1.51   GD_Cont 60N ror ccl
  3862.60   72.08  268.75   2591.39  2458.99   512.18 N  2417.16 W    0.54   GD_Cont 60N ror ccl
  3872.60   71.62  268.30   2594.50  2468.05   511.93 N  2426.66 W    1.88   GD_Cont 60N ror ccl
  3882.60   71.51  267.99   2597.67  2477.08   511.63 N  2436.14 W    0.94   GD_Cont 60N ror ccl

  3892.60   71.47  268.06   2600.84  2486.10   511.30 N  2445.62 W    0.23   GD_Cont 60N ror ccl
  3902.60   70.71  268.12   2604.08  2495.10   510.99 N  2455.07 W    2.29   GD_Cont 60N ror ccl
  3912.70   70.48  268.27   2607.44  2504.17   510.69 N  2464.60 W    0.80   GD_Cont 60N ror ccl
  3922.70   70.62  268.29   2610.77  2513.15   510.40 N  2474.02 W    0.42   GD_Cont 60N ror ccl
  3932.70   70.94  268.49   2614.06  2522.14   510.14 N  2483.46 W    1.11   GD_Cont 60N ror ccl

  3942.70   71.17  268.54   2617.30  2531.16   509.89 N  2492.91 W    0.70   GD_Cont 60N ror ccl
  [illegible]
  [illegible]
  3972.70   70.67  268.31   2627.12  2558.17   509.08 N  2521.25 W    0.33   GD_Cont 60N ror ccl
  3982.70   70.91  268.22   2630.41  2567.16   508.80 N  2530.69 W    0.76   GD_Cont 60N ror ccl

  3992.70   70.60  268.04   2633.71  2576.15   508.49 N  2540.13 W    1.06   GD_Cont 60N ror ccl
  4002.80   70.77  268.14   2637.05  2585.21   508.17 N  2549.65 W    0.58   GD_Cont 60N ror ccl
  4012.80   70.35  268.07   2640.38  2594.19   507.86 N  2559.08 W    1.28   GD_Cont 60N ror ccl
  4022.80   69.83  267.88   2643.78  2603.12   507.53 N  2568.47 W    1.65   GD_Cont 60N ror ccl
  4032.80   69.28  267.60   2647.27  2612.02   507.16 N  2577.84 W    1.83   GD_Cont 60N ror ccl

  4042.80   68.08  267.40   2650.91  2620.85   506.75 N  2587.14 W    3.64   GD_Cont 60N ror ccl
  4052.80   67.52  267.17   2654.69  2629.62   506.31 N  2596.39 W    1.80   GD_Cont 60N ror ccl
  4062.80   67.57  267.25   2658.51  2638.37   505.86 N  2605.62 W    0.27   GD_Cont 60N ror ccl
  4072.80   67.98  267.36   2662.29  2647.13   505.43 N  2614.87 W    1.27   GD_Cont 60N ror ccl
  4082.90   68.45  267.31   2666.04  2656.01   504.99 N  2624.24 W    1.40   GD_Cont 60N ror ccl

  4092.90   68.24  267.55   2669.73  2664.82   504.58 N  2633.52 W    0.88   GD_Cont 60N ror ccl
  4102.90   68.45  267.71   2673.42  2673.64   504.19 N  2642.81 W    0.77   GD_Cont 60N ror ccl
  4112.90   68.60  267.73   2677.08  2682.48   503.82 N  2652.11 W    0.45   GD_Cont 60N ror ccl
  4122.90   68.81  267.88   2680.71  2691.32   503.47 N  2661.42 W    0.76   GD_Cont 60N ror ccl
  4132.90   68.80  268.01   2684.33  2700.19   503.13 N  2670.73 W    0.36   GD_Cont 60N ror ccl

  4142.90   69.04  268.11   2687.92  2709.06   502.82 N  2680.06 W    0.77   GD_Cont 60N ror ccl
  4152.90   69.44  268.13   2691.47  2717.96   502.51 N  2689.41 W    1.20   GD_Cont 60N ror ccl
  4162.90   69.43  267.83   2694.98  2726.86   502.18 N  2698.76 W    0.84   GD_Cont 60N ror ccl
  4173.00   69.01  267.60   2698.56  2735.82   501.80 N  2708.20 W    1.40   GD_Cont 60N ror ccl
  4183.00   69.35  267.58   2702.12  2744.69   501.41 N  2717.54 W    1.02   GD_Cont 60N ror ccl

  4193.00   69.50  267.75   2705.63  2753.57   501.03 N  2726.89 W    0.66   GD_Cont 60N ror ccl
  4203.00   69.58  267.81   2709.13  2762.47   500.66 N  2736.25 W    0.29   GD_Cont 60N ror ccl
  4213.00   69.45  267.65   2712.63  2771.36   500.29 N  2745.61 W    0.60   GD_Cont 60N ror ccl
  4223.00   68.70  267.67   2716.20  2780.23   499.91 N  2754.95 W    0.95   GD_Cont 60N ror ccl
  4233.00   68.33  267.78   2719.86  2789.06   499.54 N  2764.24 W    1.18   GD_Cont 60N ror ccl

  4243.00   68.18  267.92   2723.57  2797.88   499.19 N  2773.53 W    0.57   GD_Cont 60N ror ccl
  4253.10   68.13  268.00   2727.33  2806.80   498.86 N  2782.89 W    0.27   GD_Cont 60N ror ccl
  4263.10   68.04  268.05   2731.06  2815.62   498.54 N  2792.17 W    0.30   GD_Cont 60N ror ccl

                  Coordinates are from structure centre.
      TVDs are from Drill Floor Veslefrikk A  (56.00 M. above mean sea level)
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                      DEVIATION REPORT        Well : 30/03-7-A

Magnetic Declination: -3.99 Degrees              Wellhead Coordinates
    Grid Correction: -0.09 Degrees                      3.25 n M.
          Drill Floor Veslefrikk A: -56.00 M. m         4.86 w M.
                                               Target Direction: 286.05 Deg  (grid)

  Depth     Inclin Azimuth  True Vert  Vert.    Projected Horizontal   Dogleg   Tool
Along Hole  -ation  True     Depth    Section      Displacement         Sev.    Type
   M.       (Deg)   (Deg)     M.        M.      North M.     East M.  Deg/30m

  4273.10   68.26  268.19   2734.78  2824.45   498.24 N  2801.44 W    0.77   GD_Cont 60N ror ccl
  4283.10   68.36  268.35   2738.48  2833.30   497.96 N  2810.73 W    0.54   GD_Cont 60N ror ccl
  4293.10   68.68  268.45   2742.14  2842.17   497.70 N  2820.03 W    1.00   GD_Cont 60N ror ccl
  4303.10   68.97  268.55   2745.75  2851.06   497.45 N  2829.35 W    0.91   GD_Cont 60N ror ccl
  4313.10   69.09  268.66   2749.33  2859.96   497.23 N  2838.69 W    0.47   GD_Cont 60N ror ccl

  4323.10   69.24  268.75   2752.89  2868.89   497.01 N  2848.03 W    0.52   GD_Cont 60N ror ccl
  4333.10   69.50  268.82   2756.41  2877.82   496.82 N  2857.39 W    0.80   GD_Cont 60N ror ccl
  4343.20   69.66  269.03   2759.93  2886.87   496.64 N  2866.85 W    0.75   GD_Cont 60N ror ccl
  4353.20   69.99  269.10   2763.38  2895.85   496.48 N  2876.24 W    1.01   GD_Cont 60N ror ccl
  4363.20   70.01  269.23   2766.80  2904.84   496.35 N  2885.63 W    0.37   GD_Cont 60N ror ccl

  4373.20   70.21  269.29   2770.21  2913.84   496.23 N  2895.04 W    0.62   GD_Cont 60N ror ccl
  4383.20   69.89  269.14   2773.62  2922.84   496.10 N  2904.44 W    1.05   GD_Cont 60N ror ccl
  4393.20   69.31  269.19   2777.10  2931.81   495.96 N  2913.81 W    1.75   GD_Cont 60N ror ccl
  4403.20   69.53  269.18   2780.62  2940.77   495.83 N  2923.17 W    0.66   GD_Cont 60N ror ccl
  4413.20   69.70  269.19   2784.10  2949.74   495.69 N  2932.54 W    0.51   GD_Cont 60N ror ccl

  4423.30   69.83  269.34   2787.59  2958.81   495.57 N  2942.02 W    0.57   GD_Cont 60N ror ccl
  4433.30   69.94  269.34   2791.03  2967.80   495.46 N  2951.41 W    0.33   GD_Cont 60N ror ccl
  4443.30   69.32  269.14   2794.51  2976.78   495.34 N  2960.78 W    1.94   GD_Cont 60N ror ccl
  4453.30   68.63  268.92   2798.10  2985.70   495.18 N  2970.11 W    2.16   GD_Cont 60N ror ccl
  4463.30   68.70  269.03   2801.74  2994.61   495.02 N  2979.43 W    0.17   GD_Cont 60N ror ccl

  4473.30   68.86  269.04   2805.36  3003.52   494.86 N  2988.75 W    0.48   GD_Cont 60N ror ccl
  4483.30   69.03  268.83   2808.95  3012.44   494.69 N  2998.08 W    0.78   GD_Cont 60N ror ccl
  4493.30   69.07  368.98   2812.53  3021.37   494.51 N  3007.41 W    0.44   GD_Cont 60N ror ccl
  4503.30   69.08  269.05   2816.10  3030.30   494.35 N  3016.75 W    0.20   GD_Cont 60N ror ccl
  4513.40   68.97  268.85   2819.71  3039.31   494.17 N  3026.18 W    0.64   GD_Cont 60N ror ccl

  4523.40   69.36  268.84   2823.27  3048.24   493.99 N  3035.53 W    1.17   GD_Cont 60N ror ccl
  4533.40   69.34  269.00   2826.80  3057.18   493.81 N  3044.88 W    0.45   GD_Cont 60N ror ccl
  4543.40   69.57  269.04   2830.31  3066.14   493.65 N  3054.25 W    0.70   GD_Cont 60N ror ccl
  4553.40   69.79  269.17   2833.78  3075.11   493.50 N  3063.62 W    0.75   GD_Cont 60N ror ccl
  4563.40   70.00  269.16   2837.22  3084.09   493.37 N  3073.01 W    0.63   GD_Cont 60N ror ccl

  4573.40   70.21  269.13   2840.62  3093.09   493.22 N  3082.41 W    0.64   GD_Cont 60N ror ccl
  4583.40   70.36  269.11   2843.99  3102.10   493.08 N  3091.83 W    0.45   GD_Cont 60N ror ccl
  4593.50   70.45  269.12   2847.38  3111.20   492.93 N  3101.34 W    0.27   GD_Cont 60N ror ccl
  4603.50   70.66  269.14   2850.71  3120.22   492.79 N  3110.77 W    0.63   GD_Cont 60N ror ccl
  4613.50   70.79  269.15   2854.01  3129.25   492.65 N  3120.21 W    0.39   GD_Cont 60N ror ccl

  4623.50   70.96  269.12   2857.29  3138.29   492.51 N  3129.65 W    0.52   GD_Cont 60N ror ccl
  4633.50   71.11  269.20   2860.54  3147.34   492.37 N  3139.11 W    0.50   GD_Cont 60N ror ccl
  4643.50   70.68  269.24   2863.81  3156.39   492.24 N  3148.56 W    1.29   GD_Cont 60N ror ccl
  4653.50   70.76  269.16   2867.11  3165.42   492.11 N  3158.00 W    0.11   GD_Cont 60N ror ccl
  4663.50   70.76  269.19   2870.41  3174.45   491.97 N  3167.44 W    0.08   GD_Cont 60N ror ccl

  4673.50   70.34  269.23   2873.74  3183.48   491.84 N  3176.87 W    1.27   GD_Cont 60N ror ccl
  4683.60   70.55  269.24   2877.12  3192.59   491.71 N  3186.38 W    0.62   GD_Cont 60N ror ccl
  4693.60   70.78  269.26   2880.43  3201.62   491.59 N  3195.82 W    0.69   GD_Cont 60N ror ccl
  4703.60   70.93  269.27   2883.71  3210.67   491.47 N  3205.26 W    0.45   GD_Cont 60N ror ccl
  4713.60   70.78  269.29   2886.99  3219.71   491.35 N  3214.71 W    0.45   GD_Cont 60N ror ccl

  4723.60   70.77  269.30   2890.28  3228.76   491.24 N  3224.15 W    0.04   GD_Cont 60N ror ccl
  [illegible]                                  491.13 N  3233.59 W    0.11   GD_Cont 60N ror ccl
  4743.60   70.87  269.31   2896.86  3246.84   491.01 N  3243.04 W    0.39   GD_Cont 60N ror ccl
  4753.60   71.10  269.38   2900.12  3255.90   490.91 N  3252.49 W    0.70   GD_Cont 60N ror ccl
  4763.60   71.32  269.36   2903.34  3264.97   490.80 N  3261.96 W    0.66   GD_Cont 60N ror ccl

  4773.70   71.41  269.42   2906.57  3274.14
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                      DEVIATION REPORT        Well : 30/03-7-A

Magnetic Declination: -3.99 Degrees              Wellhead Coordinates
    Grid Correction: -0.09 Degrees                      3.25 n M.
          Drill Floor Veslefrikk A: -56.00 M. m         4.86 w M.
                                               Target Direction: 286.05 Deg  (grid)

  Depth     Inclin Azimuth  True Vert  Vert.    Projected Horizontal   Dogleg   Tool
Along Hole  -ation  True     Depth    Section      Displacement         Sev.    Type
   M.       (Deg)   (Deg)     M.        M.      North M.     East M.  Deg/30m

  4803.70   71.81  269.61   2916.02  3301.42   490.43 N  3300.00 W    0.48   GD_Cont 60N ror ccl
  4813.70   71.10  269.48   2919.20  3310.51   490.35 N  3309.48 W    2.16   GD_Cont 60N ror ccl
  4823.70   70.24  269.27   2922.51  3319.55   490.25 N  3318.91 W    2.65   GD_Cont 60N ror ccl
  4833.70   70.25  269.51   2925.89  3328.57   490.15 N  3328.33 W    0.68   GD_Cont 60N ror ccl
  4843.70   69.80  269.50   2929.30  3337.58   490.07 N  3337.72 W    1.35   GD_Cont 60N ror ccl

  4853.80   69.83  269.43   2932.79  3346.67   489.98 N  3347.20 W    0.21   GD_Cont 60N ror ccl
  4863.80   70.11  269.43   2936.21  3355.67   489.88 N  3356.60 W    0.84   GD_Cont 60N ror ccl
  4873.80   70.27  269.59   2939.60  3364.69   489.80 N  3366.01 W    0.66   GD_Cont 60N ror ccl
  4883.80   70.33  269.59   2942.97  3373.72   489.74 N  3375.42 W    0.18   GD_Cont 60N ror ccl
  4893.80   70.23  269.76   2946.35  3382.75   489.68 N  3384.83 W    0.57   GD_Cont 60N ror ccl

  4903.80   70.34  269.62   2949.72  3391.78   489.63 N  3394.25 W    0.52   GD_Cont 60N ror ccl
  4913.80   70.48  269.75   2953.07  3400.82   489.58 N  3403.67 W    0.56   GD_Cont 60N ror ccl
  4923.80   70.52  269.78   2956.41  3409.87   489.54 N  3413.09 W    0.15   GD_Cont 60N ror ccl
  4933.80   70.68  269.94   2959.73  3418.93   489.52 N  3422.53 W    0.66   GD_Cont 60N ror ccl
  4943.90   70.85  269.97   2963.06  3428.09   489.51 N  3432.06 W    0.51   GD_Cont 60N ror ccl

  4953.90   70.99  269.96   2966.33  3437.17   489.50 N  3441.51 W    0.42   GD_Cont 60N ror ccl
  4963.90   70.99  269.99   2969.59  3446.26   489.50 N  3450.97 W    0.09   GD_Cont 60N ror ccl
  4973.90   71.06  270.00   2972.84  3455.34   489.50 N  3460.42 W    0.21   GD_Cont 60N ror ccl
  4983.90   71.19  269.92   2976.07  3464.44   489.49 N  3469.89 W    0.45   GD_Cont 60N ror ccl
  4993.90   71.25  270.09   2979.29  3473.53   489.49 N  3479.35 W    0.52   GD_Cont 60N ror ccl

  5003.90   71.26  270.09   2982.51  3482.64   489.51 N  3488.82 W    0.03   GD_Cont 60N ror ccl
  5013.90   71.31  270.16   2985.71  3491.75   489.53 N  3498.29 W    0.25   GD_Cont 60N ror ccl
  5024.00   71.36  270.25   2988.95  3500.95   489.56 N  3507.86 W    0.29   GD_Cont 60N ror ccl
  5034.00   71.40  270.24   2992.14  3510.07   489.60 N  3517.34 W    0.12   GD_Cont 60N ror ccl
  5044.00   71.46  270.16   2995.32  3519.19   489.64 N  3526.82 W    0.29   GD_Cont 60N ror ccl

  5054.00   71.32  270.27   2998.52  3528.31   489.67 N  3536.30 W    0.52   GD_Cont 60N ror ccl
  5064.00   71.37  270.34   3001.71  3537.43   489.72 N  3545.77 W    0.25   MWD-std.
  5092.00   70.80  268.70   3010.79  3562.82   489.50 N  3572.26 W    1.77   MWD-std.
  5121.00   70.90  269.30   3020.30  3589.01   489.02 N  3599.65 W    0.60   MWD-std.
  5150.00   70.80  268.70   3029.82  3615.20   488.55 N  3627.04 W    0.60   MWD-std.

  5178.00   70.80  268.60   3039.03  3640.44   487.92 N  3653.47 W    0.10   MWD-std.
  5208.00   70.90  269.10   3048.87  3667.51   487.35 N  3681.81 W    0.48   MWD-std.
  5237.00   71.00  269.90   3058.33  3693.79   487.12 N  3709.22 W    0.79   MWD-std.
  5261.00   70.90  270.00   3066.17  3715.58   487.10 N  3731.90 W    0.17   MWD-std.
  5294.00   70.80  270.30   3076.99  3745.56   487.18 N  3763.08 W    0.27   MWD-std.

  5324.00   71.00  272.30   3086.81  3772.98   487.82 N  3791.42 W    1.90   MWD-std.
  5353.00   69.30  271.30   3096.66  3799.41   488.68 N  3818.68 W    2.01   MWD-std.
  5381.00   67.50  271.10   3106.96  3824.59   489.27 N  3844.71 W    1.93   MWD-std.
  5410.00   65.70  270.70   3118.48  3850.29   489.73 N  3871.31 W    1.95   MWD-std.
  5439.00   63.70  270.90   3130.87  3875.59   490.10 N  3897.53 W    2.08   MWD-std.

  5468.00   61.60  270.30   3144.20  3900.41   490.37 N  3923.28 W    2.24   MWD-std.
  5496.00   59.50  269.60   3157.96  3923.84   490.35 N  3947.66 W    2.34   MWD-std.
  5525.00   57.40  268.90   3173.14  3947.50   490.03 N  3972.37 W    2.26   MWD-std.
  5554.00   54.60  268.60   3189.35  3970.45   489.51 N  3996.41 W    2.91   MWD-std.
  5583.00   52.10  267.50   3206.66  3992.58   488.72 N  4019.66 W    2.74   MWD-std.

  5611.00   49.50  265.20   3224.36  4013.00   487.35 N  4041.31 W    3.38   MWD-std.
  5641.00   47.20  265.40   3244.29  4033.97   485.51 N  4063.65 W    2.30   MWD-std.
  5669.00   44.40  265.00   3263.81  4052.72   483.83 N  4083.65 W    3.02   MWD-std.
  5680.00   43.40  265.30   3271.74  4059.85   483.18 N  4091.25 W    2.79   MWD-std.
  5729.00   34.50  262.40   3309.81  4088.36   479.96 N  4121.85 W    5.56   MWD-std.
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					490.70 N	3271.51 W	0.12	GD_Cont 60N ror ccl
	71.60	269.17	2909.74	3281.22	490.60 N	3281.01 W	0.59	GD_Cont 60N ror ccl
4793.70	71.74	269.46	2912.89	3292.32	490.50 N	3290.50 W	0.49	GD_Cont 60N ror ccl

DEVIATION REPORT Well : 30/03-7-A

Magnetic Declination: 3.99 Degrees
Grid Correction: -0.09 Degrees
Drill Floor Veslefrikk A: -56.00 M. m

Wellhead Coordinates
3.25 n M.
4.86 w M.
Target Direction: 286.05 Deg (grid)

Depth Along Hole M.	Inclin -ation (Deg)	Azimuth True (Deg)	True Vert Depth M.	Vert. Section M.	Projected Horizontal Displacement North M.	East M.	Dogleg Sev. Deg/30m	Tool Type
5845.00	27.50	262.60	3408.86	4143.49	471.90 N	4181.53 W	2.11	MWD-std.
5874.00	25.20	262.10	3434.85	4155.28	470.19 N	4194.29 W	2.39	MWD-std.
5913.00	23.30	262.50	3470.41	4169.94	468.04 N	4210.16 W	1.47	MWD-std.
5942.00	23.80	261.70	3496.99	4180.53	466.44 N	4221.63 W	0.61	MWD-std.
5971.00	24.40	261.30	3523.46	4191.30	464.69 N	4233.35 W	0.64	MWD-std.
5999.00	25.30	266.70	3548.87	4202.20	463.47 N	4245.04 W	2.61	MWD-std.
6028.00	26.80	266.70	3574.93	4214.21	462.74 N	4257.75 W	1.55	MWD-std.
6070.00	28.70	271.00	3612.10	4232.89	462.37 N	4277.29 W	1.97	MWD-std.
6102.00	28.10	272.00	3640.25	4247.62	462.77 N	4292.51 W	0.72	MWD-std.
6131.00	27.40	274.30	3665.91	4260.78	463.51 N	4305.99 W	1.32	MWD-std.
6160.00	26.30	274.30	3691.79	4273.60	464.49 N	4319.05 W	1.14	MWD-std.
6189.00	25.40	275.00	3717.88	4286.00	465.51 N	4331.65 W	0.98	MWD-std.
6218.00	24.80	274.90	3744.14	4298.07	466.57 N	4343.90 W	0.62	MWD-std.
6247.00	24.40	275.90	3770.51	4309.93	467.71 N	4355.92 W	0.60	MWD-std.
6276.00	23.90	276.60	3796.97	4321.62	469.00 N	4367.72 W	0.60	MWD-std.
6304.00	23.50	277.90	3822.61	4332.75	470.42 N	4378.88 W	0.71	MWD-std.
6334.00	22.50	279.10	3850.23	4344.37	472.15 N	4390.47 W	1.10	MWD-std.
6363.00	21.80	280.20	3877.09	4355.23	473.98 N	4401.23 W	0.84	MWD-std.
6391.00	21.20	279.40	3903.14	4365.43	475.73 N	4411.36 W	0.72	MWD-std.
6420.00	19.90	281.70	3930.29	4375.56	477.59 N	4421.37 W	1.58	MWD-std.
6449.00	18.00	282.60	3957.72	4384.96	479.56 N	4430.58 W	1.99	MWD-std.
6547.00	11.60	293.40	4052.44	4409.87	486.79 N	4454.43 W	2.13	MWD-std.
6577.00	11.30	294.40	4081.84	4415.77	489.20 N	4459.87 W	0.16	MWD-std.
6678.00	11.30	294.40	4180.88	[illegible]	497.38 N	4477.89 W	0.00	MWD-std.

								MWD-std.
5758.00	31.10	262.10	3333.91	4103.12	477.79 N	4137.83 W	1.46	MWD-std.
5787.00	31.60	262.80	3358.41	4117.34	475.75 N	4153.21 W	1.60	MWD-std.
5816.00	29.50	261.80	3383.38	4130.84	473.78 N	4167.82 W	2.24	MWD-std.

DEVIATION REPORT Well : 30/03-7-A

Magnetic Declination: -3.99 Degrees
Grid Correction: -0.09 Degrees
Drill Floor Veslefrikk A: -56.00 M. m

Wellhead Coordinates
3.25 n M.
4.86 w M.
Target Direction: 286.05 Deg (grid)

Comments in wellpath

MD	TVD	Rectangular Coords.		Comment
6678.00	4180.88	497.38 N	4477.89 W	Extrapolated from 6577 m

Casing positions in string 'ABC'

Top MD	Top TVD	Rectangular Coords.		Shoe MD	Shoe TVD	Rectangular Coords.		Casing
31.00	n/a	n/a	n/a	467.00	466.26	17.88N	5.56W	26" conductor
0.00	n/a	n/a	n/a	1467.50	1281.13	205.37N	465.95W	20" casing
31.00	n/a	n/a	n/a	2865.00	2117.49	420.38N	1563.89W	13 3/8" casing
0.00	n/a	n/a	n/a	3336.00	2397.11	512.26N	1931.54W	9 5/8" WINDOW
0.00	n/a	n/a	n/a	5705.00	3290.56	481.66N	4107.62W	7" Liner

Targets associated with this wellpath

Target name	Position	T.V.D.	Local rectangular coords.		Date revised
T3 Tolerances	490968.51,6739606.49	3916.00	854.71N	3470.19W	27-Jan-98
T2 Drillers Target	491014.00,6739604.49	3781.00	852.71N	3424.68W	27-Jan-98
T1 Drillers Target	491826.00,6739505.00	3216.00	753.18N	2612.35W	27-Jan-98
T2 Tolerances	491019.51,6739604.49	3781.00	852.71N	3419.17W	27-Jan-98
T2 Brent B-Prosp.	491032.00,6739592.00	3781.00	840.22N	3406.67W	23-Jan-98
T1 C-segment V35	491826.00,6739505.00	3216.00	753.18N	2612.35W	9-Dec-96
T3 Etive B-Prosp	490981.00,6739594.00	3916.00	842.22N	3457.69W	23-Jan-98
H1	491191.00,6739585.79	3536.00	834.00N	3247.61W	9-Dec-96
T1 Drillers Target	490963.00,6739606.49	3916.00	854.71N	3475.70W	27-Jan-98