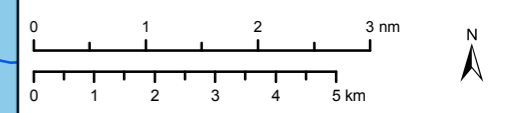


- KEY:
- Hywind Scotland Offshore Exclusivity Area
  - Proposed Cable Route (Statoil ASA)
  - Cable Route Corridor
  - ◆ Substation Location
  - Forties to Cruden Bay Pipelines
  - Bathymetric contours



TITLE:  
**Figure A1. Hywind Scotland Field Location and Bathymetry**

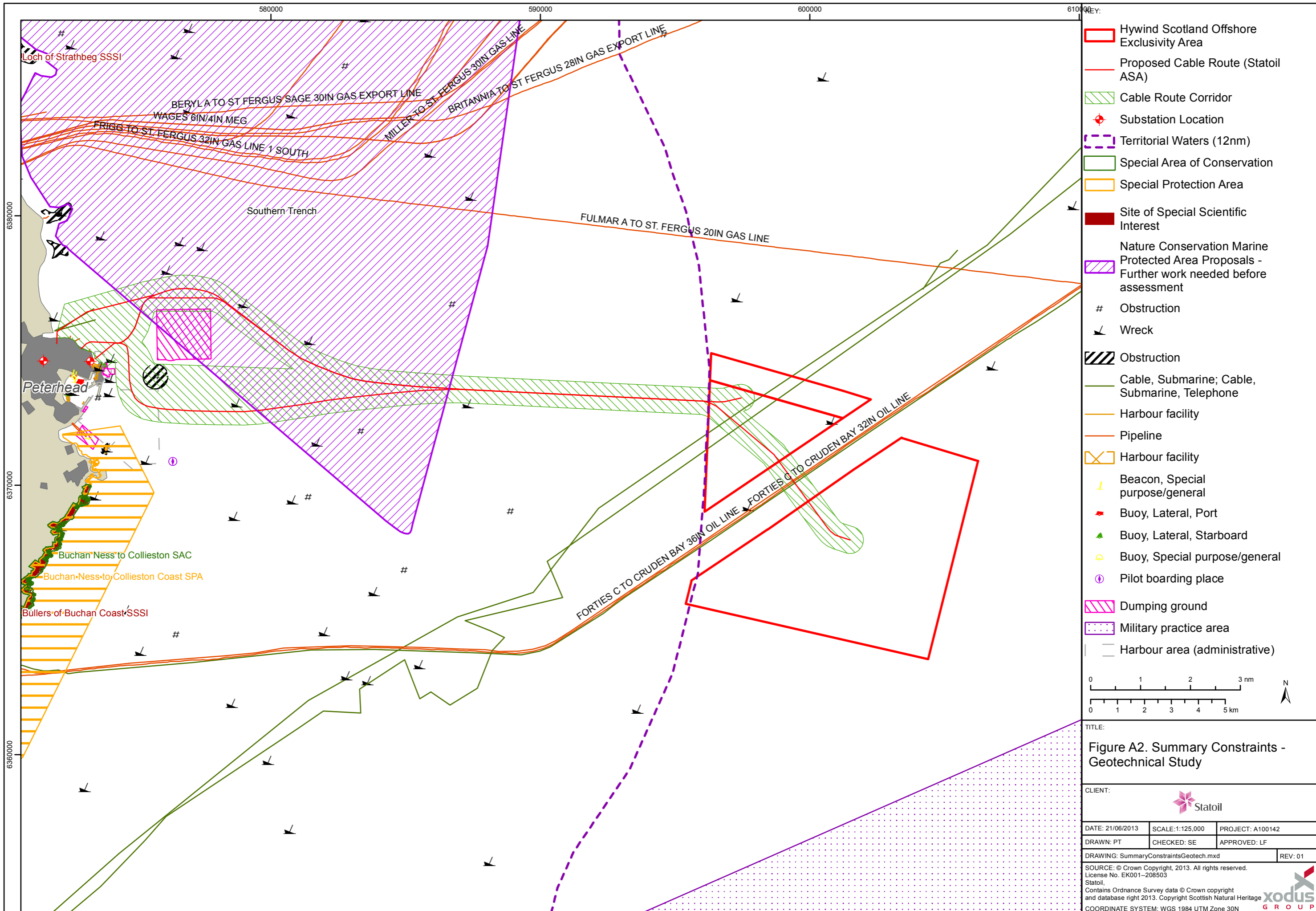
CLIENT: Statoil

DATE: 21/06/2013	SCALE: 1:125,000	PROJECT: A100142
DRAWN: PT	CHECKED: GC	APPROVED: LF

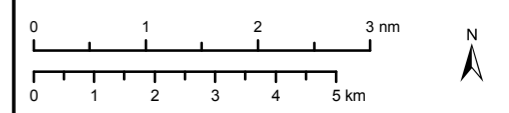
DRAWING: Bathy\_Location.mxd REV: 01

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COORDINATE SYSTEM: WGS 1984 UTM Zone 30N



- Hywind Scotland Offshore Exclusivity Area
- Proposed Cable Route (Staitoil ASA)
- Cable Route Corridor
- + Substation Location
- Territorial Waters (12nm)
- Special Area of Conservation
- Special Protection Area
- Site of Special Scientific Interest
- Nature Conservation Marine Protected Area Proposals - Further work needed before assessment
- # Obstruction
- ↙ Wreck
- Obstruction
- Cable, Submarine; Cable, Submarine, Telephone
- Harbour facility
- Pipeline
- Harbour facility
- ⚓ Beacon, Special purpose/general
- ⚓ Buoy, Lateral, Port
- ⚓ Buoy, Lateral, Starboard
- ⚓ Buoy, Special purpose/general
- ⓪ Pilot boarding place
- Dumping ground
- Military practice area
- Harbour area (administrative)



TITLE:  
**Figure A2. Summary Constraints - Geotechnical Study**

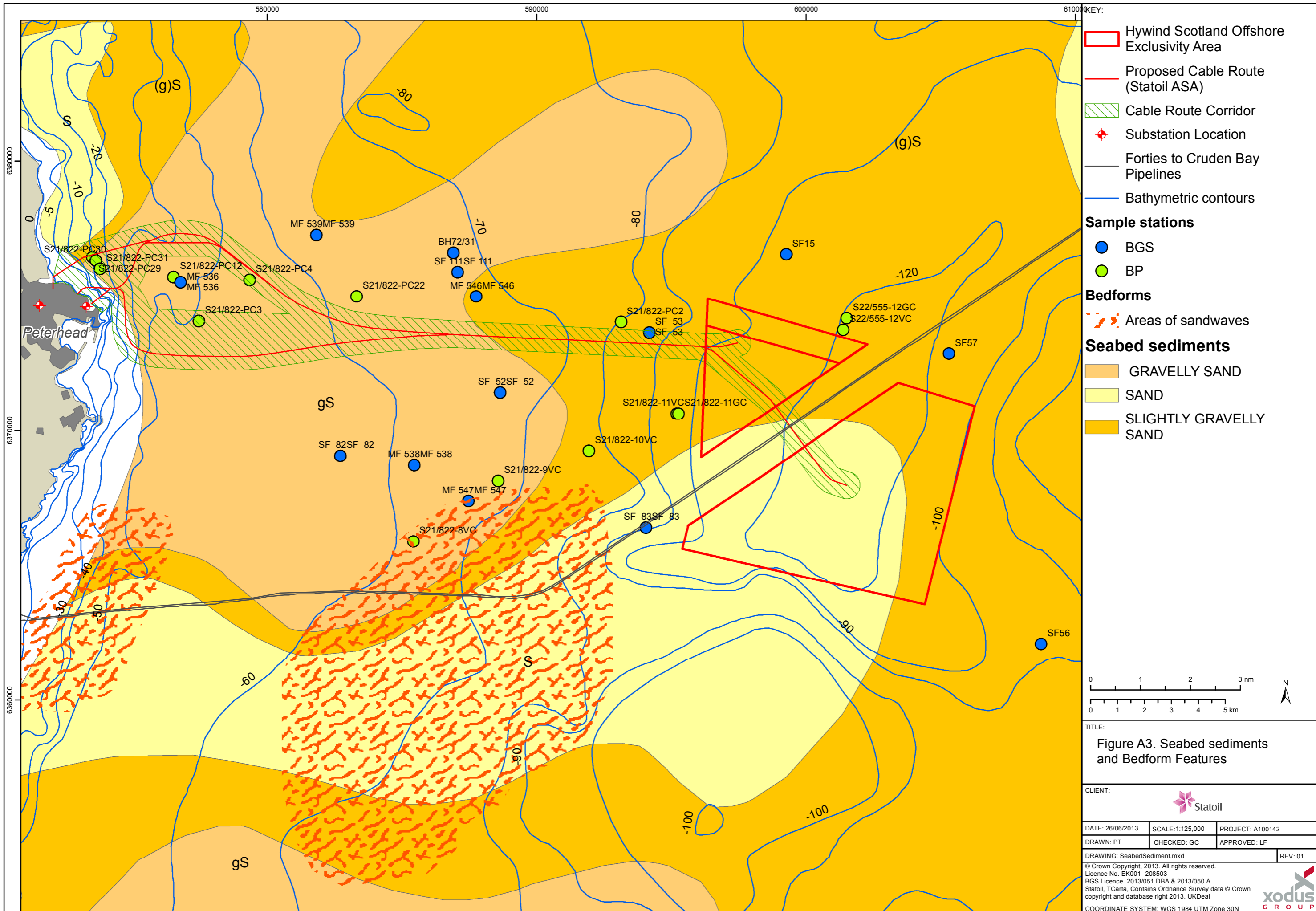
CLIENT:

DATE: 21/06/2013	SCALE: 1:125,000	PROJECT: A100142
DRAWN: PT	CHECKED: SE	APPROVED: LF

DRAWING: SummaryConstraintsGeotech.mxd REV: 01

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 COORDINATE SYSTEM: WGS 1984 UTM Zone 30N



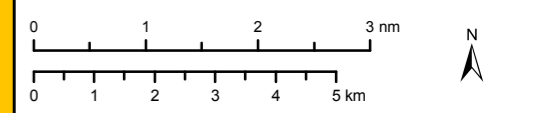


- KEY:**
- Hywind Scotland Offshore Exclusivity Area
  - Proposed Cable Route (Statoil ASA)
  - Cable Route Corridor
  - + Substation Location
  - Forties to Cruden Bay Pipelines
  - Bathymetric contours

- Sample stations**
- BGS
  - BP

- Bedforms**
- + Areas of sandwaves

- Seabed sediments**
- GRAVELLY SAND
  - SAND
  - SLIGHTLY GRAVELLY SAND



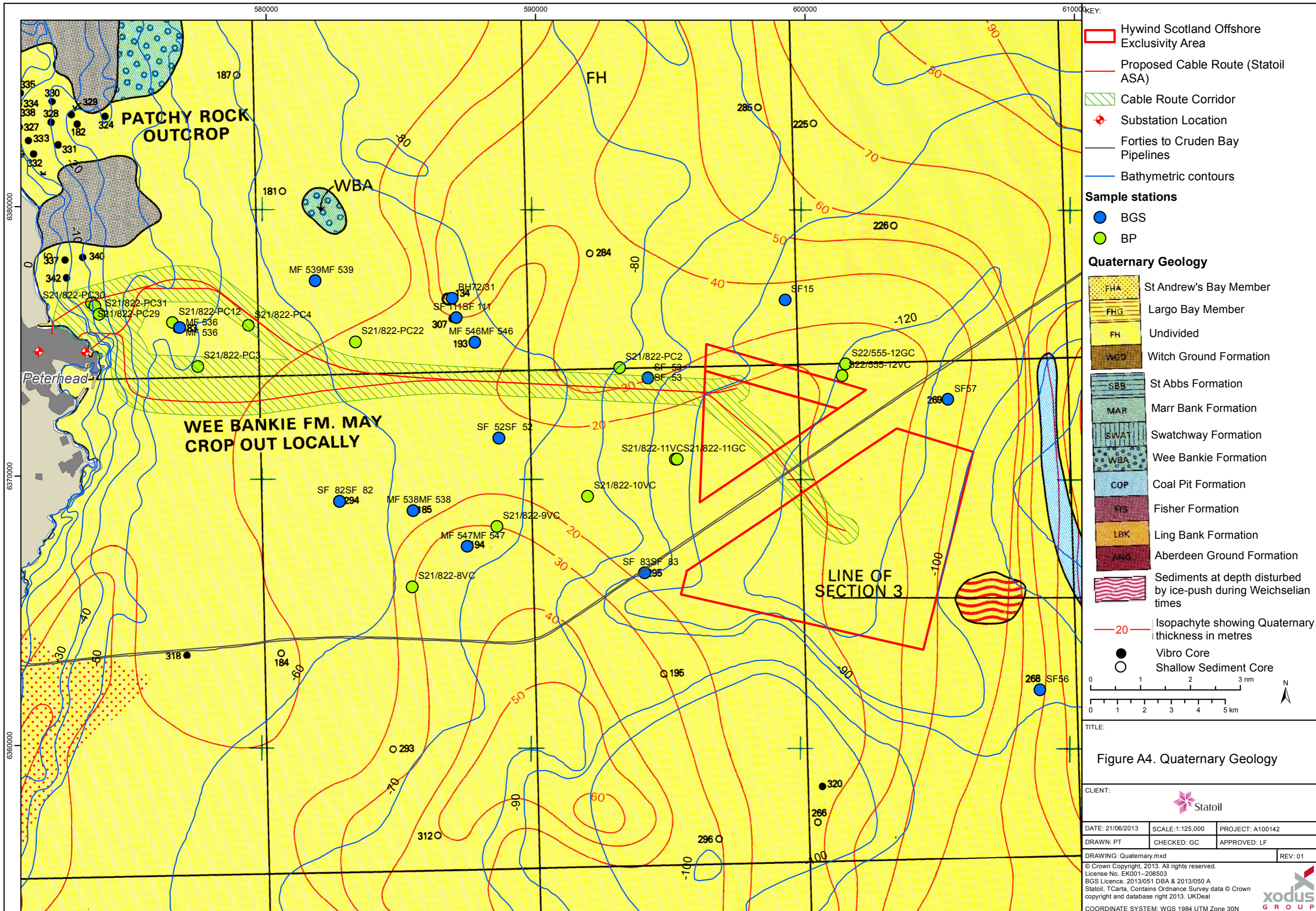
TITLE:  
**Figure A3. Seabed sediments and Bedform Features**

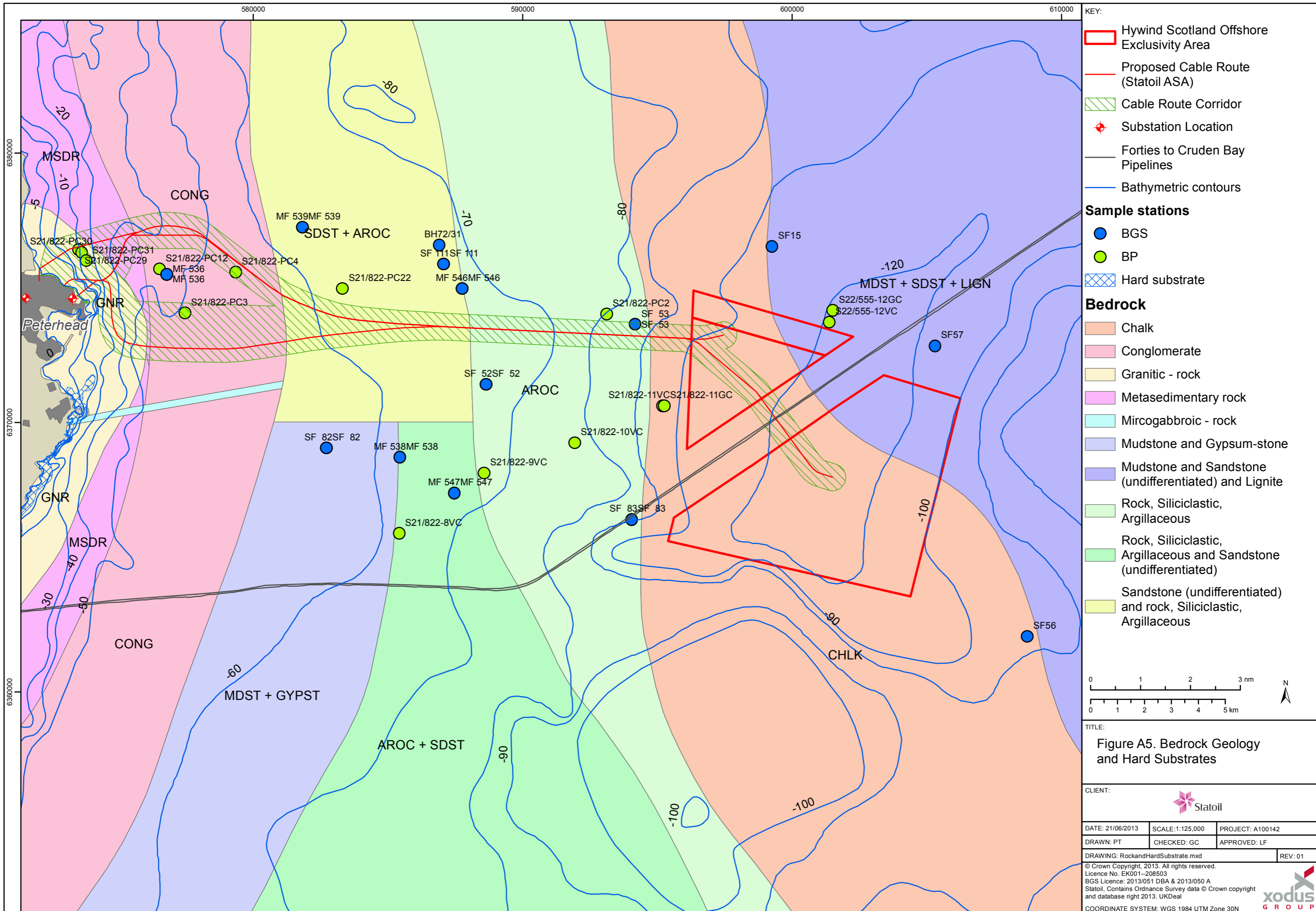
CLIENT:

DATE: 26/06/2013	SCALE: 1:125,000	PROJECT: A100142
DRAWN: PT	CHECKED: GC	APPROVED: LF

DRAWING: SeabedSediment.mxd REV: 01

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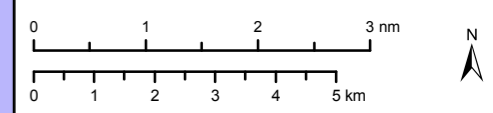




- KEY:**
- Hywind Scotland Offshore Exclusivity Area
  - Proposed Cable Route (Statoil ASA)
  - Cable Route Corridor
  - + Substation Location
  - Forties to Cruden Bay Pipelines
  - Bathymetric contours

- Sample stations**
- BGS
  - BP
  - Hard substrate

- Bedrock**
- Chalk
  - Conglomerate
  - Granitic - rock
  - Metasedimentary rock
  - Mircogabbroic - rock
  - Mudstone and Gypsum-stone
  - Mudstone and Sandstone (undifferentiated) and Lignite
  - Rock, Siliciclastic, Argillaceous
  - Rock, Siliciclastic, Argillaceous and Sandstone (undifferentiated)
  - Sandstone (undifferentiated) and rock, Siliciclastic, Argillaceous



TITLE:  
**Figure A5. Bedrock Geology and Hard Substrates**

CLIENT:

DATE: 21/06/2013	SCALE: 1:125,000	PROJECT: A100142
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DRAWN: PT	CHECKED: GC	APPROVED: LF
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DRAWING: RockandHardSubstrate.mxd	REV: 01
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COORDINATE SYSTEM: WGS 1984 UTM Zone 30N

## APPENDIX C GEOTECHNICAL LOGS

# Probe Data Sheet

Probe No. 6 VC

Location

Date 17.7.72 Time 20.30

Position

Decca Hi Fix Co-ordinates 1847.99 245.13

Geographical Co-ordinates 57 24 23.0N 01 39 47.3W

Depth of water 65 m by sounding  
 Sea and weather conditions Wind south-west 1-2, sea flat, sea mist. Visibility <2000 m

Probe penetration  
 Total core recovery 2.9 m  
 Percentage recovery

Depth below seabed (m)	Soil profile	Description of strata	Blows per 300mm	Penetrometer Test (kN/m <sup>2</sup> )	Water content (%)						Shear strength (kN/m <sup>2</sup> )										
					10	20	30	40	50	60	20	40	60	80	100	120					
0-5		Medium to coarse slightly silty brown SAND with numerous shell fragments (Possibly 30% of total)																			
1.0				27																	
1.5				54																	
2.0				76																	
2.5		Soft to firm grey clayey SILT with traces of gravel and shell fragments		54																	
3.0				76																	
3.5				214																	
4.0				128																	
4.5																					

Key

+ Vane Test

x Pocket Penetrometer

o Undisturbed Strength (Triaxial)

□ Remoulded Strength (Triaxial)

Remarks

Contract

North Sea - Forties Field Pipeline

Terresearch Limited

Report No. S22/555

Appendix 1 Sheet 11

# Probe Data Sheet

Probe No. 7 VC A

Location

Date 17.7.72 Time 1730

Position Decca Hi Fix Co-ordinates 1845.87 250.09  
 Geographical Co-ordinates 57 24 51.0N 01 38 02.5W

Depth of water 61.6 m by sounding  
 Sea and weather conditions Slight breeze, sea flat, Sunny  
 Probe penetration  
 Total core recovery 2.9 m  
 Percentage recovery

Depth below seabed (m)	Soil profile	Description of strata	Blows per 300 mm	Penetrometer Test (kN/m <sup>2</sup> )	Water content (%)						Shear strength (kN/m <sup>2</sup> )									
					10	20	30	40	50	60	10	20	30	40	50					
0-5	[Soil profile sketch]	Medium to coarse slightly silty SAND with fine gravel and numerous shell fragments (Possibly making up to 30% of total)		27																
1-0				54																
1-5				75																
2-0	[Soil profile sketch]	Soft to firm grey silty CLAY with some shell fragments		80																
2-5				75																
3-0					80															
3-5																				
4-0																				
4-5																				

Key + Vane Test      o Undisturbed Strength (Triaxial)  
 x Pocket Penetrometer      □ Remoulded Strength (Triaxial)

Remarks 20 minute vibration

Contract North Sea - Forties Field Pipeline

Terraresearch Limited      Report No. S22/555      Appendix 1 Sheet 13



Probe Data Sheet						Probe No. 14 PC												
						Location												
						Date 14.7.72 Time 2200												
Position		Decca Hi Fix Co-ordinates 1741.67 349.33																
		Geographical Co-ordinates 57 32 36.1N 01 06 31.3W																
Depth of water 95 m by sounding						Probe penetration 4.1 m												
Sea and weather conditions Heavy mist. Visibility less than 1000 m. Wind south west 1-2 sea slight						Total core recovery 3.2 m												
						Percentage recovery 78%												
Depth below seabed (m)	Soil profile	Description of strata	Blows per 300mm	Penetrometer Test (kN/m <sup>2</sup> )	Water content (%)			Shear strength (kN/m <sup>2</sup> )										
					0	4	8	12	16	20								
0.5																		
1.0		Loose silty fine to medium grey and brown SAND with shell fragments (numerous in places)	1															
1.5			4															
2.0			4															
2.5		Very soft grey silty CLAY with occasional shell fragments, sandy in places	3	22														
3.0			7	22														
3.5			5	27														
4.0		Shipek surface sample No. Top 14 (see surface description)																
4.5																		

**Key**

+	o
x	□

**Remarks** Outer core barrel not used. Penetration rate taken from 1st attempt (hydrophone damaged)

Contract	North Sea - Forties Field Pipeline
Terresearch Limited	Report No. S22/555
Appendix 1 Sheet	

23



SECTION OF I.G.S. Site No. 120 South Forties BH No. 72/31

East of Peterhead

Surface Level 82.5-86.2 M O.D.

Communicated by NGTF

Date of boring or sinking 9-12/7/72 Borer G Wimpey

One-inch Map Six-inch Map

248429 8M 6/73 J.F.&S. 275

Geologists Log	Thickness Recovered		Depth from Surface	
	M	Mm	M	Mm
See vibrocore sample SF 111			0.00-8.00	
Very dark grey-black sticky, quite soft boulder clay with relatively few pebbles.	1.45			
Site redrilled				
Rock roller - no core			0.00-21.00	
Very dark grey-black sticky and relatively soft boulder clay.	0.35		21.00-24.00	
Hard and very compact dark grey-black boulder clay	0.53			
Rock Roller - no core			24.00-33.00	
Loose sandy and gravelly material with large pebbles of igneous (basic) material and ?granite with large quartz crystals in a groundmass of pink feldspar.	0.10		33.00-34.50	
Very soft red and purple rotten or reconstituted pebbly mudstone with greenish reduction patches. This material may represent the weathered top of rockhead or a boulder clay of reconstituted red marl with pebbles.	0.25		34.50-35.50	

P.T.O.

BH 72/31 CD.

	Thickness		Depth from Surface	
	M	Mm	M	Mm
BX Core (Drilled through normal wireline rods) Broken fragments possibly pebbles from boulder clay of red sandstone and apparently metamorphosed red sandstone.	0.50		35.50-38.00	
Apparently flat bedded and massive marly or muddy brick red fine sandstone with rare subrounded pebbles of quartz or quartzite up to 2 cm across and thin flat lying laminae containing coarse sand grains. White and greenish reduction patches are common and the core has a tendency to break up into biscuits, perhaps due to thin layers of muddy sediment.	0.40			
END OF HOLE 38.00 metres				
Rockhead at approximately 35 metres				

SECTION OF SOUTH PORTES SITE No 120 EAST  
OF PETERHEAD

72/31

Surface Level 82.5 - 86.2 m O.D.

Communicated by NGTF

Date of boring or sinking 9/12 - 7 - 72 Borer G. WIMPEY

One-inch Map ~~Grid Map~~ 57° 30' N / 02° W

GEOLOGISTS LOG

SEE VIBROCORER

Very dark grey-black sticky, quite soft boulder clay with relatively few pebbles

Abundant small shell fragments which appear to be lying in a preferred orientation, i.e. flat. Pebbles generally fine + of variable size. Crumpled + coarse sand to cobbles. Some pebbles are encrusted. Pebble content does appear to vary - quite abundant at 80m.

SITE REDRILLED

Rock Roller - No Core.

Altho diff of traces know if clasts are not reworked by drilling; often congruent on margins of core

Very dark grey-black sticky and relatively soft boulder clay

21-24m. A/A but is laminated near base. Light bands are very fine - like flour - Rockflow? Occasional thin bands of coarse debris lie bedded above or below laminae. Trace bedding - very mg. shell/sand content. Dominant lithol. is sandy muddy fine (fine). Rockflow laminations die out up towards ~~core~~ top. Occur about 0.3m above point where rock roller used. Shell frags still present.

Hard and very compact dark grey-black boulder clay.

Rock Roller - No core.

Also got thin (thin) dark horizon when this sandy band comes in. Higher white mica content in this band.

Loose sandy and gravelly material with large pebbles of basic igneous material and ? granite with large quartz crystals in a groundmass of pink feldspar.

Very soft red and purple rotten or weathered + reconstituted pebbly

Thickness RECOVERED		Depth from Surface	
M	Mm	M	Mm
		0.00	08.00
1.45			
		0.00	21.00
0.35		21.00	24.00
0.53			
		24.00	33.00
< 0.10		33.00	34.50
≈ 0.25		34.50	35.50
			PTO

GEOLOGISTS LOG

BH72/31 CD

Thickness RECOVERED		Depth from Surface	
M	Mm	M	Mm

mudstone with greenish reduction patches. This material may represent the weathered top of rockhead or a boulder clay of reconstituted red sand with pebbles.

BX CORE (DRILLED THROUGH NORMAL WIRELINE RODS)  
Broken fragments, possibly pebbles from boulder clay of red sandstone and apparently metamorphosed red sandstone.

RODS)

0.05

35.50 - 38.00

Apparently flat bedded and massive mostly or muddy brick red fine sandstone with rare sub rounded pebbles of quartz or quartzite up to 2 cm across and thin flat lying laminae containing coarse sand grains. White and greenish reduction patches are common and the core has a tendency to break up into biscuits, perhaps due to thin layers of muddy sediment.

0.40

END OF HOLE 38.00 m  
ROCK HEAD ± 35 m

ROTARY DRILLING DAILY REPORT

BH 72/31

Site Location: NERC CONTRACT

Initial diameter of drilling: Wire line Depth of casing at end of shift or hole: 7 1/2 ft

Table with columns: DEPTH (FROM, TO), STRATA RECORD, CORE RUN (FROM, TO, TIME), CORE RE-COVERED, CASING DEPTH DURING CORING. Includes handwritten entries for coarse sand and boulder clay.

WATER LEVELS: (a) Morning, (b) After lunch, (c) On pulling casing. Includes boxes for level depth.

BITS USED table with columns: SIZE, CASING SHOE NO., CORE BIT NO. Includes handwritten entries for S(6"), P, H, N.

At what levels was water encountered? Did the level rise? If so, how much and how fast? At what depths was water cut off by casing? If standpipe/piezometer inserted, to what depth? Circulation fluid: water/air/mud: mud

When excessive bit wear is suffered and/or a bit is replaced then comment should be made in the remarks section.

TIME SPENT: CORING 1, OPEN HOLE, CASING, Moving (including pulling casing), STANDING TIME (i), (ii), (iii) hrs. TOTAL (THIS SHEET) 12

NOTE: If more than one water level or circulation loss is encountered give details of them all.

REMARKS (including explanation of all standing time and visits by non Central Laboratory staff) Very strong tide on stem of ship - pushed ship away from B.P. Had to pull out. Strong S.W. wind pull out, chill strong and waiting for better weather.

GANGER: G. Anstey, B. Swell; CREW: D. Roberts; J. Gallaher; RIG TYPE/ G.W. No.: /G.W.; VEHICLE NO.; DAY: Mon; DATE: 10/7/72; BH NO.: 012/31

ROTARY DRILLING DAILY REPORT

LAB. 82

Site Location: NERC CONTRACT (IBS BH 120)

Initial diameter of drilling: WIRE LINE Depth of casing at end of shift or hole: 6in to... PX to... HX to... NX to...

Table with columns: DEPTH (FROM, TO), STRATA RECORD, CORE RUN (FROM, TO, TIME), CORE RE-COVERED, CASING DEPTH DURING CORING. Handwritten entries include 'Open Hole' and 'Boulder clay with layers of Boulders & possibly Gravel'.

WATER LEVELS: (a) Morning, (b) After lunch, (c) On pulling casing. Includes boxes for 'Water Casing level depth'.

BITS USED table with columns: SIZE, CASING SHOE NO., CORE BIT NO. Rows include S(6"), P, H, N.

At what levels was water encountered? Did the level rise? If so, how much and how fast? At what depths was water cut off by casing? If standpipe/piezometer inserted, to what depth? Circulation fluid: water/air/mud: Mud

When excessive bit wear is suffered and/or a bit is replaced then comment should be made in the remarks section.

TIME SPENT TOTAL (THIS SHEET) 12 Hrs. Includes boxes for CORING, OPEN HOLE, CASING, Moving (including pulling casing), and STANDING TIME.

NOTE: If more than one water level or circulation loss is encountered give details of them all.

REMARKS (including explanation of all standing time and visits by non Central Laboratory staff) Standing by due to very fast Tides. 5 1/2 Hrs. MUD MIXED 30 X 50 LB SALT GEL + 8 Bags MAG.

GANGER: M Mannion, W Wheatley; CREW: E Buren, T Lusack; RIG TYPE: 1/G.W.; DAY: Mon TUES; DATE: 10/11-7-72; BH NO.: 72/31



ROTARY DRILLING DAILY REPORT

LAB. 82

Site Location: NERC Contract

Initial diameter of drilling: Wire line Depth of casing at end of shift or hole: 6in to 7 1/2" Rock Roller HX to: NX to:

DEPTH		STRATA RECORD	CORE RUN			CORE RE-COVERED	CASING DEPTH DURING CORING
FROM	TO		FROM	TO	TIME		
1850	33	<i>grey stiff boulders clay with cobbles and boulders</i>					
			m	m		m	
			21	24		1	
			m	m		nil	
			32	33			

**WATER LEVELS:**

(a) Morning Water Casing level depth: 86'

(b) After lunch Water Casing level depth:     

(c) On pulling casing Water Casing level depth:     

At what levels was water encountered?.....

Did the level rise?.....

If so, how much and how fast?.....

At what depths was water cut off by casing?.....

If standpipe/piezometer inserted, to what depth?.....

Circulation fluid: water/air/mud:.....

At what depths was full circulation not maintained and state percentage return at these depths:.....

**NOTE:** If more than one water level or circulation loss is encountered give details of them all.

**REMARKS** (including explanation of all standing time and visits by non Central Laboratory staff)

*Standing over to strong line 7:30 AM TO 9 AM 15:15 PM TO 15:30 PM*

**BITS USED**

SIZE	CASING SHOE NO.	CORE BIT NO.
S(6")		
P		
H		
N		

When excessive bit wear is suffered and/or a bit is replaced then comment should be made in the remarks section.

**TIME SPENT** TOTAL (THIS SHEET) 12

CORING 3 1/4 OPEN HOLE 5 CASING     

Moving (including pulling casing) From BH      To BH      hrs

STANDING TIME (i) 1 1/2 hrs (ii) 2 1/4 hrs (iii)      hrs

GANGER G. Amst CREW D. Roberts

CREW J. Galahar COMPRESSOR      cfm

RIG TYPE/ G.W. No.      /G.W. VEHICLE NO.     

DAY Tues DATE 11/7/72 BH NO. 32/31

ROTARY DRILLING  
DAILY REPORT

Site Location: NERC CONTRACT

Initial diameter of drilling: WIRELINE Depth of casing at end of shift or hole: 6in to..... PX to.....  
HX to..... NX to.....

DEPTH		STRATA RECORD	CORE RUN			CORE RE-COVERED	CASING DEPTH DURING CORING
FROM	TO		FROM	TO	TIME		
<u>33.00</u>		<u>Very Hard Red Sandstone with soft Bands</u>	<u>33.00</u>	<u>34.50</u>		<u>0.20</u>	
			<u>34.50</u>	<u>35.50</u>		<u>0.30</u>	
	<u>35.50</u>						

**WATER LEVELS:**

(a) Morning  
 Water Casing level depth [ ] [ ] [ ] [ ]  
 (b) After lunch  
 Water Casing level depth [ ] [ ] [ ] [ ]  
 (c) On pulling casing  
 Water Casing level depth [ ] [ ] [ ] [ ]

At what levels was water encountered?.....  
 Did the level rise?.....  
 If so, how much and how fast?.....  
 At what depths was water cut off by casing?.....  
 If standpipe/piezometer inserted, to what depth?.....  
 Circulation fluid: water/air/mud: MUD  
 At what depths was full circulation not maintained and state percentage return at these depths:.....

**BITS USED**

SIZE	CASING SHOE NO.	CORE BIT NO.
S(6")		
P		
H		
N		

When excessive bit wear is suffered and/or a bit is replaced then comment should be made in the remarks section.

**TIME SPENT**

TOTAL (THIS SHEET) 12 A/c

CORING [ ] OPEN HOLE [ ] CASING [ ]

Moving (including pulling casing) From BH [ ] To BH [ ] hrs

STANDING TIME (i) [ ] hrs (ii) [ ] hrs (iii) [ ] hrs

**NOTE:** If more than one water level or circulation loss is encountered give details of them all.

**REMARKS** (including explanation of all standing time and visits by non Central Laboratory staff)  
MUD MIXED 15X50LB SALT CEL  
+ 8 MACROGEL  
Standing 2y Due to TIDE 5 1/2 Hrs  
Progress slow probably due to R/Roller being worn  
Preparing Bx. Equipment for Drilling 2 HAS

**GANGER** M. Manner **CREW** T. Cusack  
E. Burn

**CREW** W. Wheatley **COMPRESSOR** [ ] cfm

**RIG TYPE/ G.W. No.** [ ] /G.W. **VEHICLE NO.** [ ]

**DAY** N shift **DATE** 11-7-72 **SH NO.** 72/31

ROTARY DRILLING DAILY REPORT

Site Location: NERC CONTRACT

Initial diameter of drilling: Wire line Depth of casing at end of shift or hole: BX to 38 PX to: HX to: NX to:

DEPTH		STRATA RECORD	CORE RUN			CORE RE-COVERED	CASING DEPTH DURING CORING
FROM	TO		FROM	TO	TIME		
355	38	(BX core barrel) Reel Sancho Toro	m 3550	m 38		150	
		B.O. Complete.					
		mud mixed on the 11/7/72					
		27 m salt gel. 10 magge gel.					

**WATER LEVELS:**

(a) Morning Water Casing level depth:  "  "

(b) After lunch Water Casing level depth:  "  "

(c) On pulling casing: 86 m

At what levels was water encountered?.....

Did the level rise?.....

If so, how much and how fast?.....

At what depths was water cut off by casing?.....

If standpipe/piezometer inserted, to what depth?.....

Circulation fluid: water/air/mud:.....

At what depths was full circulation not maintained and state percentage return at these depths:.....

**BITS USED**

SIZE	CASING SHOE NO.	CORE BIT NO.
S(6")		
P		
H		
N		

When excessive bit wear is suffered and/or a bit is replaced then comment should be made in the remarks section.

**TIME SPENT** TOTAL (THIS SHEET)

CORING  OPEN HOLE  CASING

Moving (including pulling casing) From BH  To BH  hrs

STANDING TIME (i)  hrs (ii)  hrs (iii)  hrs

NOTE: If more than one water level or circulation loss is encountered give details of them all.

**REMARKS** (including explanation of all standing time and visits by non Central Laboratory staff)

awaiting tide. 2 slabs off. 3 hrs. Pulling out 1 hr. Delay during to strong tide. Lifting anchors. 3 hrs

GANGER J. Anst CREW J. Golder

CREW D. Roberts COMPRESSOR  cfm

RIG TYPE/ G.W. No.  /G.W. VEHICLE NO.

DAY Wed DATE 12/7/72 PH. NO. 72/31



INSTITUTE OF GEOLOGICAL SCIENCES  
SCOTTISH CONTINENTAL SHELF UNIT

SAMPLE DATA SHEET

GEOLOGIST: JAC.

COMP. 0-10	SIZE DISTRIB. 0-10	STRATIGRAPHY	SED DEPTH (m)	DESIGNATION	CORES	BAGS (LARGE) BAGS (SMALL) BOTTLES
QUARTZ	GRAVEL, S/ND SILT CLAY					

6/ med yellow shelly sand. Grains well rounded mod φ

--	--	--	--	--	--	--

.

--	--	--	--	--	--	--

5/ Gravelly shelly slightly muddy sand.

344	5441					
-----	------	--	--	--	--	--

SITING		BEARING (°T)	DISTANCE (Km)
DECCA CHAIN:	RED	GREEN	PURPLE
6CMP	E0439	D3622	H7650

SAMPLE TOTALS	
VESSEL	MV Whitehorn <sup>2</sup>
CORRECTED WATER DEPTH (m)	71m
TIME	2025 21.5.71
DATE	
SAMPLE MODE	Gr SL
STATION NO.	ME 538

57-02 186

MICROFILMED

INSTITUTE OF GEOLOGICAL SCIENCES  
SCOTTISH CONTINENTAL SHELF UNIT

SAMPLE DATA SHEET

GEOLOGIST: JAC

COMP. 0-10	SIZE DISTRIB. 0-10	CLAY	SILT	SAND	GRAVEL	OTHER	HEAVY MIN G. SPONATE	QUARTZ	STRATIGRAPHY	SED DEPTH (m)	DESIGNATION	CORES	BOTTLES	BAGS (SMALL)	BAGS (LARGE)
53	2	28								0			1		

d/ Gravelly slightly muddy shaly sand

										0					
--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--

										0					
--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--

sc/ ? No recovery

										0					
										1					
										2					
										3					

SITING		BEARING (°T)	DISTANCE (Km)
DECCA CHAIN:	RED	GREEN	PURPLE
6CMF	E01.67	D35.45	H69.78

SAMPLE TOTALS	
VESSEL	PW Whitehorn
CORRECTED WATER DEPTH (m)	70.5m
TIME	2145
DATE	21.5.71
SAMPLE MODE	
STATION NO.	ME539 G+Sc







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SCOTTISH CONTINENTAL SHELF UNIT  
SAMPLE DATA SHEET

EQUIPMENT	ATTEMPTS		COMP.			SIZE DISTRIB				CORES	BOTTLES	BAGS (small)	BAGS (large)	
			0-10 QUARTZ	0-10 CARBONATE	0-10 HEAVY MIN.	OTHER	0-10 GRAVEL	0-10 SAND	0-10 SILT					0-10 CLAY
		6 SC 2				7	1	2		10			1	
		Fine yellow sand. No recovery												

SITING			BEARING °T	DISTANCE km	SAMPLE TOTALS	1	
					GEOLOGIST	JDC	
					VESSEL	WHITE THORN	
					TIME	0235	
CHAIN	RED	GREEN	PURPLE	DATE			12-5-72
	6C	018.4	no sample	H 59.4	CORRECTED DEPTH (m)		99.
		18.5		59.1	SAMPLE MODE		G/SC
					STATION NO.		SP 15



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MICROFILMED

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SCOTTISH CONTINENTAL SHELF UNIT  
SAMPLE DATA SHEET

EQUIPMENT	ATTEMPTS		COMP.		SIZE DISTRIB					CORES	BAGS (large)	BAGS (small)	BOTTLES	
			0-10	OTHER	0-10	SAND	SILT	CLAY	GRAVEL					
G	1	Fine grey sand.	7	2	10								1	7
6c	2	No recovery												

SITING			BEARING °T	DISTANCE km	SAMPLE TOTALS	1
					GEOLOGIST	JAC Whitethorn
					VESSEL	
					TIME	2350
CHAIN	RED	GREEN	PURPLE	DATE	28.5.72	
6c	E02.05	D38.00	H72.85	CORRECTED DEPTH (m)	82m	
				SAMPLE MODE	65+SK	
				STATION NO.	SF52	



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SCOTTISH CONTINENTAL SHELF UNIT

SAMPLE DATA SHEET

EQUIPMENT  
ATTEMPTS

G  
SC 2

Medium - coarse clean yellow sand, with few shell fragments  
No recovery.

COMP.	SIZE DISTRIB					CORES	BAGS (large)	BAGS (small)	BOTTLES
	0-10	OTHER	GRAVEL	SAND	SILT				
QUARTZ									
CARBONATE									
HEAVY MIN.									
CLAY									
	2	2		10					1

SITING			BEARING °T	DISTANCE km	SAMPLE TOTALS
					1
					GEOLOGIST JAG
					VESSEL Whitebeam
					TIME 0040
CHAIN	RED	GREEN	PURPLE	DATE	29.5.72
60	D22.29	D40.87	H67.05	CORRECTED DEPTH (m)	91m
				SAMPLE MODE	GS+SK
				STATION NO.	SF53

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SCOTTISH CONTINENTAL SHELF UNIT

SAMPLE DATA SHEET

EQUIPMENT	ATTEMPTS	DESCRIPTION	DEPTH (cm)	MICROFILMED																	
				QUARTZ	CARBONATE	HEAVY MIN.	OTHER	GRAVEL	SAND	SILT	CLAY	CORES	BAGS (small)	BAGS (large)							
6	1	Medium yellow grey sand		6	2	2				10											
2	1	Grey sand Grey clayey	71cm 43cm																		

SITING				BEARING °T	DISTANCE km	SAMPLE TOTALS		1
						GEOLOGIST		JAC
						VESSEL		WHITETHORN
						TIME		0435
CHAIN	RED	GREEN	PURPLE			DATE		29.5.72
6c	D 22.0	D 46.0	K 68.4			CORRECTED DEPTH (m)		98.4
						SAMPLE MODE		
						STATION NO.		SF 56

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MICROFILMED

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SCOTTISH CONTINENTAL SHELF UNIT  
SAMPLE DATA SHEET

EQUIPMENT  
ATTEMPTS

6 1  
SC 1

Medium greyish sand.  
medium grey sand - 27 cm

COMP.			SIZE DISTRIB				CORES	BOTTLES	BAGS (large)	BAGS (small)
0-10	HEAVY MIN.	OTHER	0-10	SAND	SILT	CLAY				
QUARTZ	CARBONATE									
6	2	2		10						1
							1			

SITING			BEARING °T	DISTANCE km	SAMPLE TOTALS	11
					GEOLOGIST	JAL
					VESSEL	Whitethorn
					TIME	0100
CHAIN	RED	GREEN	PURPLE	DATE	1.6.72.	
6c.	E 2.2	D 39.9	H. 740	CORRECTED DEPTH (m)	102.	
				SAMPLE MODE	sc 16	
				STATION NO.	SF 83	



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SCOTTISH CONTINENTAL SHELF UNIT  
SAMPLE DATA SHEET

EQUIPMENT  
ATTEMPTS

6 1  
5c 1

Medium clean yellow sand.  
Medium yellow grey sand 34  
Soft grey clay 10

COMP.		SIZE DISTRIB			CORES	BAGS (large)	BAGS (small)	BOTTLES
0-10 QUARTZ	HEAVY MIN. CARBONATE	OTHER	0-10 SAND	CLAY SILT				
7	2	1	10					1

SITING		BEARING °T	DISTANCE km	SAMPLE TOTALS	11
				GEOLOGIST	JAL
				VESSEL	Whitethorn
				TIME	2310
CHAIN	RED	GREEN	PURPLE	DATE	31.5.72.
6c	F 6.2	D 35.0	1 79.2	CORRECTED DEPTH (m)	69
				SAMPLE MODE	SC/G
				STATION NO.	SF 82



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SCOTTISH CONTINENTAL SHELF UNIT  
SAMPLE DATA SHEET

EQUIPMENT  
ATTEMPTS

6	1	Grey medium sand (poor recovery)
5c	1	Grey medium sand 30cm Soft grey clay 30cm

COMP.		SIZE DISTRIB				CLAY	CORES	BAGS (large)	BAGS (small)	BOTTLES
0-10	OTHER	0-10	SAND	SILT	GRAVEL					
71	2	10								1

SITING				BEARING °T	DISTANCE km	SAMPLE TOTALS		1	1
						GEOLOGIST		Jul	
						VESSEL		WHITETHORN	
						TIME		0530	
CHAIN				RED	GREEN	PURPLE		DATE	
6c				▷ 17.9	▷ 46.0	H 60.8		29.5.72	
						CORRECTED DEPTH (m)		122(m)	
						SAMPLE MODE			
						STATION NO.		S= 57	



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MICROFILMED

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SCOTTISH CONTINENTAL SHELF UNIT  
SAMPLE DATA SHEET

EQUIPMENT  
ATTEMPTS

COMP.	0-10	OTHER	GRAVEL	SAND	SILT	CLAY	CORES	BAGS (large)	BAGS (small)	BOTTLES
QUARTZ	CARBONATE	HEAVY MIN.								
	62	2	2	8	-					4

G 1 Poorly sorted shelly + pebbly fine - coarse sand with fragments of gastropods, bivalves, edinooids, also forams & living small starfish & sponge (dead man's fingers).

V 1 1.38m Top 15cm is medium shelly + pebbly sand which rests on very dark grey boulder clay  
SITE Very dark grey - black boulder clay with relatively rare sub-rounded - rounded pebbles.

A  
B  
C

SITING			BEARING °T	DISTANCE km	SAMPLE TOTALS	3 2
					GEOLOGIST	NGTF
					VESSEL	WHITEHORN
					TIME	16-00
					DATE	10.7.72
CHAIN	RED	GREEN	PURPLE	CORRECTED DEPTH (m)		
6c	D23-89	D37-78	H68-03	SAMPLE MODE G V		
				STATION NO. SF 111		

(B4 72/31 SITE)

