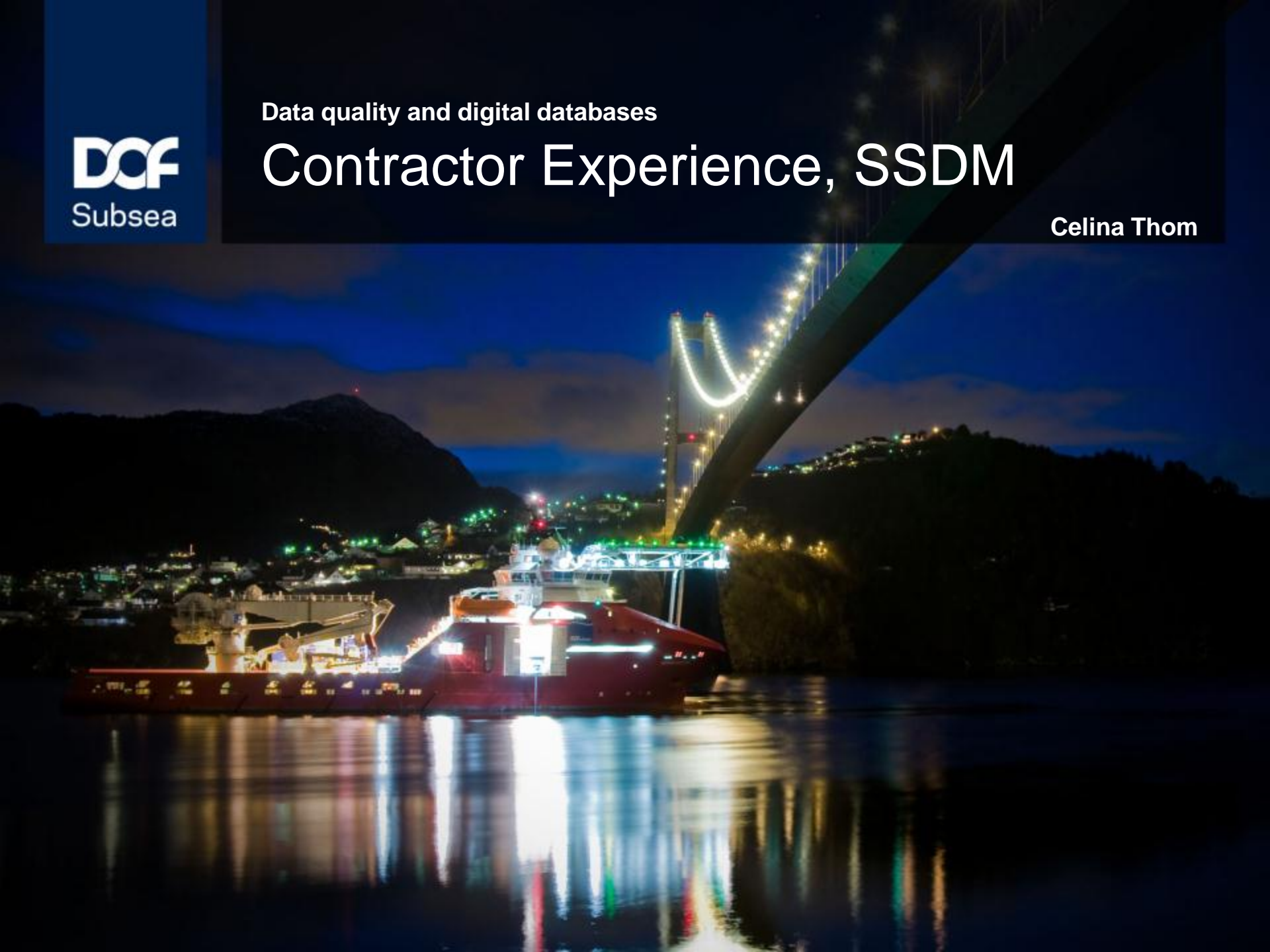


Data quality and digital databases

# Contractor Experience, SSDM

Celina Thom



# On the Agenda

- A short history of bad GIS
- The Seabed Survey Data Model
- Contractor Experiences
- Metadata
- Believe in GIS!

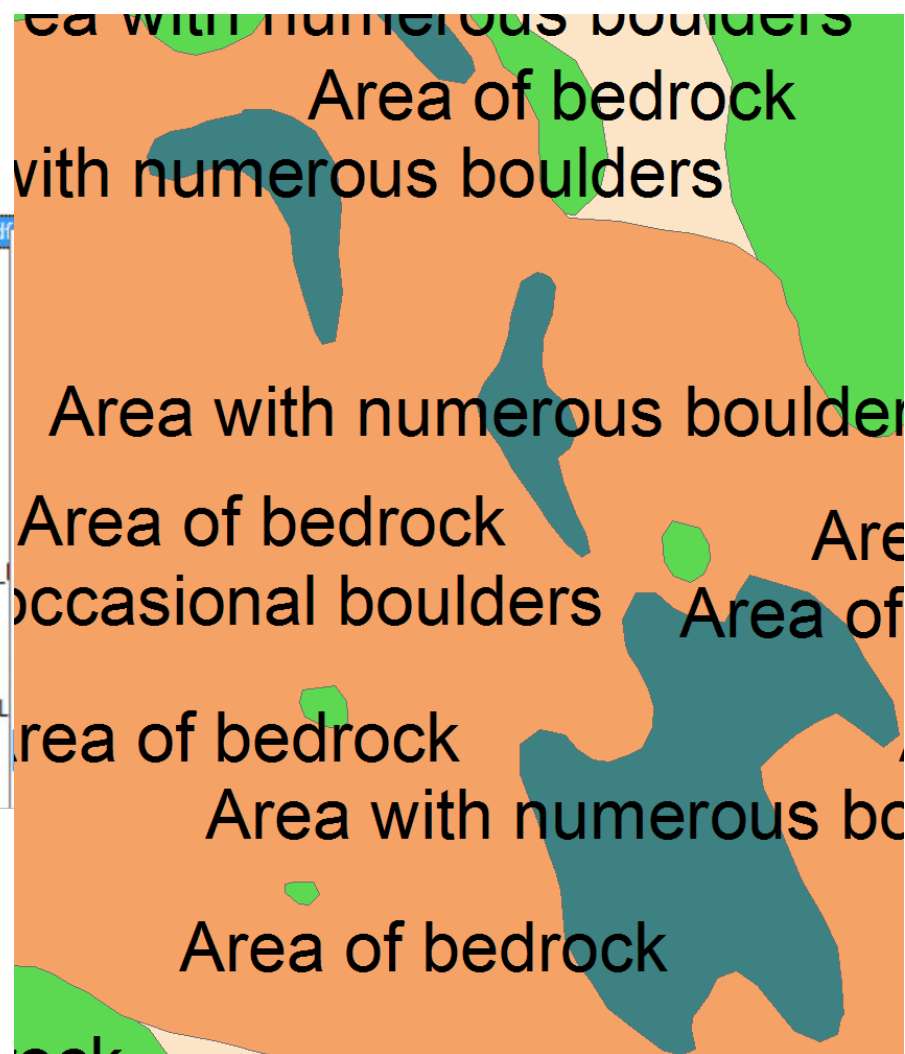
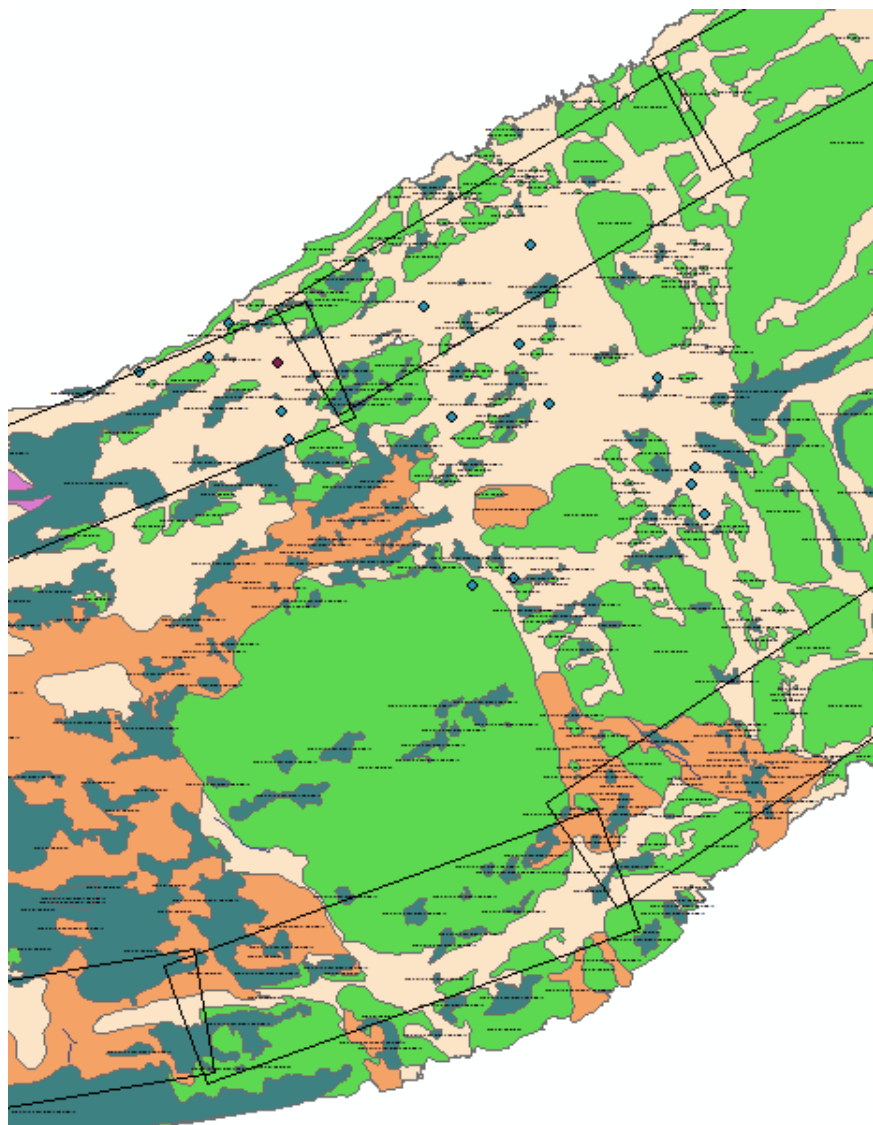


# A history of (bad) GIS in the industry

- Annotation
- Hyperlinks
- Metadata
- Conversion from CAD
- Outside the production line
- Lengthy discussions with clients

[illegible]

# Annotation



# Seabed Survey Data Model

**« [The] Vision is for the industry to have a template/standard for how seabed survey data is delivered to and managed by oil and gas companies»**



## The main areas of SSDM application are:

- Platform and drilling hazard site surveys – shallow geophysical and high-resolution 2D/3D seismic.
- Sweep and bathymetric surveys – side scan sonar and singlebeam/multibeam echosounder.
- Pipeline route surveys, pipeline span/surveillance/inspection surveys using side scan sonar, but *excluding ROV based pipeline inspection survey*.

# Seabed Survey Data Model

Create Features

< Search >

SurveyID\_SBFIn\_ProjectName\_yyyymmdd

- Anchor Scar/Plough Mark
- Boundary - Sediment
- Deposition - Creep
- Deposition - Rockfall
- Deposition - Slump/Slope Failure
- Fault Scarp
- Inferred Boundary - Sediment
- Mound
- Ridge
- Seabed Scar (DSN)

SurveyID\_SBFpt\_ProjectName\_yyyymmdd

- MBE, Anchor
- MBE, Bedrock
- MBE, Concrete
- MBE, Drum
- MBE, Metal
- MBE, Others (See Remarks)
- MBE, Podmark - Isolated (not actual size)
- MBE, Scaffolding
- MBE, Soft rope
- MBE, Tarpaulin
- MBE, Unidentified
- MBE, Wreck
- SSS, Anchor plowmark
- SSS, Cable / wire
- SSS, Depression (DSN)
- SSS, Fishing net
- SSS, Mound
- SSS, Podmark - Isolated (not actual size)
- SSS, Scaffolding
- SSS, Soft rope
- SSS, Tarpaulin
- SSS, Unidentified
- SSS, Wreck
- Video, Anchor plowmark
- Video, Cable / wire
- Video, Depression (DSN)
- Video, Fishing net
- Video, Mound
- Video, Plastic / met. Cont.
- Video, Possible mine
- Video, Sinker only
- Video, Sonar Contact - Water Column
- Video, Trawl Scar
- Video, Unidentified
- Video, Wreck

SurveyID\_SBFpy\_ProjectName\_yymmdd

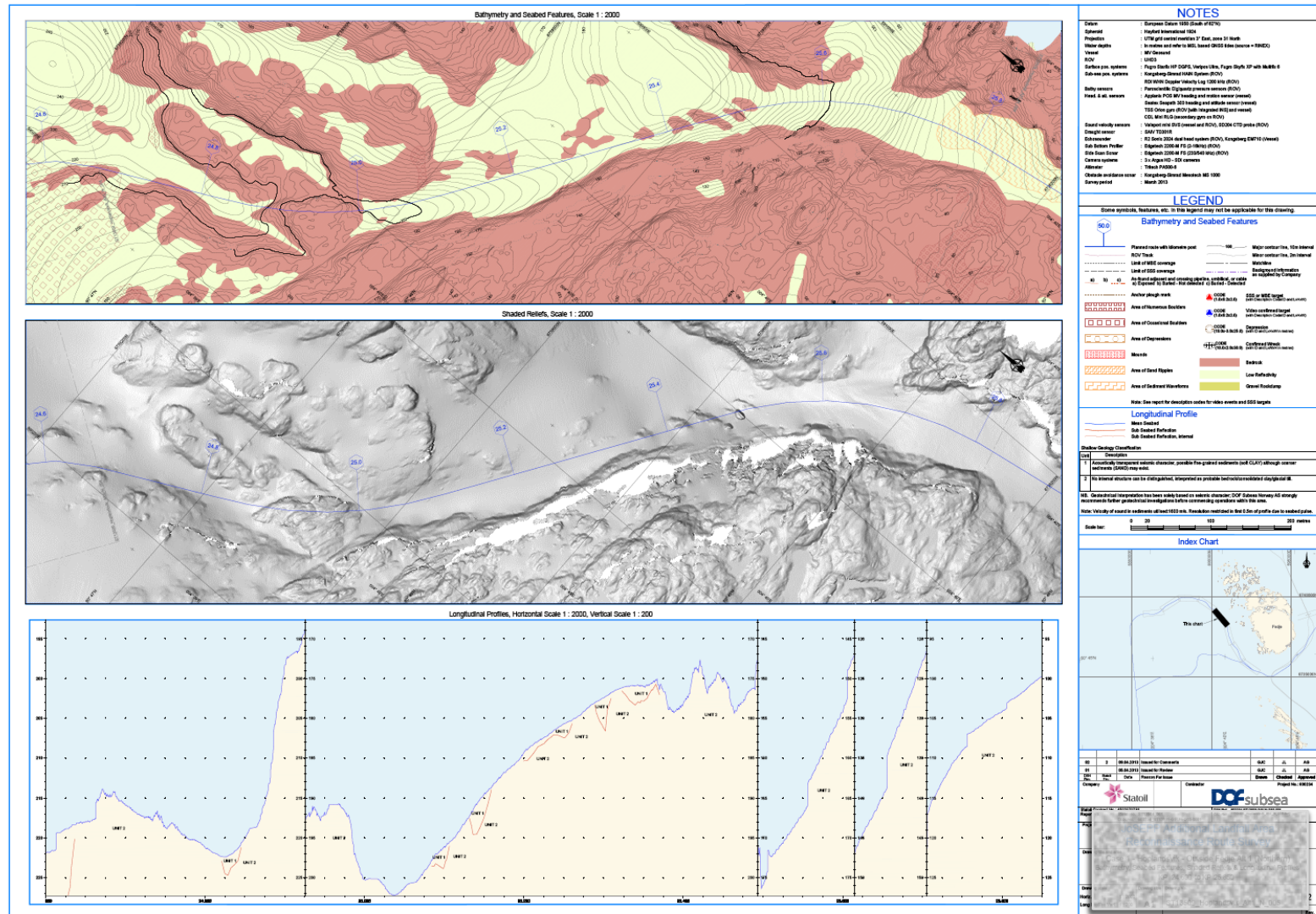
- Area of anchor / wire scars
- Area of Seabed Scars
- Area with occasional boulders
- Boundary - Others
- Channel Floor/Area
- Deposition - Creep
- Deposition - Rockfall
- Deposition - Slump/Slope Failure
- Diapiric Structure
- Dredge Area - Trench
- Expulsion Feature
- Hilly/Mudmucky Seafloor
- Mass-Transport Deposit Area
- Mound - Mud/Mud Lumps
- Others(See Remarks)
- Podmark - Cluster
- Rock-dump
- Sand Ripples
- Shallow Gas Vents
- Sonar/Hard Contact

SurveyID\_SBFpy\_ProjectName\_yymmdd

- Area of Bedrock
- Area with corals
- Area with trawl scars
- Boundary - Outcrop
- Collapse Features
- Deposition - Debris Flow
- Deposition - Rotated Slide
- Deposition - Turbidite
- Disturbed Sediment Area
- Drills Cutting Area
- Fish Traps
- Inferred Boundary - Sediment
- Mega Ripples
- Mound Cluster Area
- Pitted Area
- Podmark - Coalesced
- Sand Bar
- Sediment Waveform
- Soil -dump



# Multiple End Users



# Metadata Alternative

FID	Shape *	OBJECTID	FEATURE ID	SURVEY ID	SURVEYIDR	SYMBOL ID	SSL CODE	FEAT NAME	FEAT DESC	SURVEYDATE	GRADIENT	BEARING	LENGTH M	HEIGHT M	WIDTH M	DEPTH M
108	Point	322		509	ST13509	826		Possible boulder		09.03.2013	0	0	4.7	0.4	1.8	225.32
95	Point	309		509	ST13509	826		Possible boulder		18.03.2013	0	0	4.8	1.2	2.6	233.4
41	Point	250		509	ST13509	825		Unidentified		18.03.2013	0	0	5.2	0.1	2.1	551.65
125	Point	339		509	ST13509	826		Possible boulder		19.03.2013	0	272.82	5.2	1.9	3.6	126.71
119	Point	333		509	ST13509	826		Possible boulder		19.03.2013	0	106.56	5.3	4.5	4.7	120.43
0	Point	38		509	ST13509	841	OGP1005	Depression (DSN)		14.03.2013	0	0	6	0.1	6	349.8
105	Point	319		509	ST13509	826		Possible boulder		09.03.2013	0	0	6.9	0.4	2	451.98
1	Point	39		509	ST13509	841	OGP1005	Depression (DSN)		14.03.2013	0	0	7	0.1	6	348.57
4	Point	42		509	ST13509	841	OGP1005	Depression (DSN)		14.03.2013	0	0	7	0.1	7	356.44
10	Point	53		509	ST13509	841	OGP1005	Depression (DSN)		14.03.2013	0	0	7	0.1	7	355.54
69	Point	279		509	ST13509	826		Possible boulder		18.03.2013	0	0	7.6	4.1	8.3	453.47
111	Point	325		509	ST13509	826		Possible boulder		19.03.2013	0	283.32	7.9	5.9	4.5	127.36
11	Point	54		509	ST13509	841	OGP1005	Depression (DSN)		14.03.2013	0	0	8	0.1	8	348.7
14	Point	58		509	ST13509	841	OGP1005	Depression (DSN)		14.03.2013	0	0	8	0.1	5	326.22

DEPTH M	WAVELENGTH	WAVEHEIGHT	HEIGHTDESC	DIMENSION	DATASOURCE	LAYER	LASTUPDATE	LASTUPDBY	REMARKS
225.32				(4.7x0.4x1.8)	SSS	Targets_MBESSS	09.04.2013	AF_OAJ_JLP	
233.4				(4.8x1.2x2.6)	SSS	Targets_MBESSS	09.04.2013	AF_OAJ_JLP	
551.65				(5.2x0.1x2.1)	SSS	Targets_MBESSS	09.04.2013	AF_OAJ_JLP	
126.71				(5.2x1.9x3.6)	SSS	Targets_MBESSS	09.04.2013	AF_OAJ_JLP	
120.43				(5.3x4.5x4.7)	SSS	Targets_MBESSS	09.04.2013	AF_OAJ_JLP	
349.8				(6.0x0.1x6.0)	MBE	Targets_Depression	09.04.2013	AF_OAJ_JLP	
451.98				(6.9x0.4x2.0)	SSS	Targets_MBESSS	09.04.2013	AF_OAJ_JLP	
348.57				(7.0x0.1x6.0)	MBE	Targets_Depression	09.04.2013	AF_OAJ_JLP	
356.44				(7.0x0.1x7.0)	MBE	Targets_Depression	09.04.2013	AF_OAJ_JLP	
355.54				(7.0x0.1x7.0)	MBE	Targets_Depression	09.04.2013	AF_OAJ_JLP	
453.47				(7.6x4.1x8.3)	MBE	Targets_MBESSS	09.04.2013	AF_OAJ_JLP	
127.36				(7.9x5.9x4.5)	SSS	Targets_MBESSS	09.04.2013	AF_OAJ_JLP	
348.7				(8.0x0.1x8.0)	MBE	Targets_Depression	09.04.2013	AF_OAJ_JLP	
326.22				(8.0x0.1x5.0)	MBE	Targets_Depression	09.04.2013	AF_OAJ_JLP	



Thank you!

