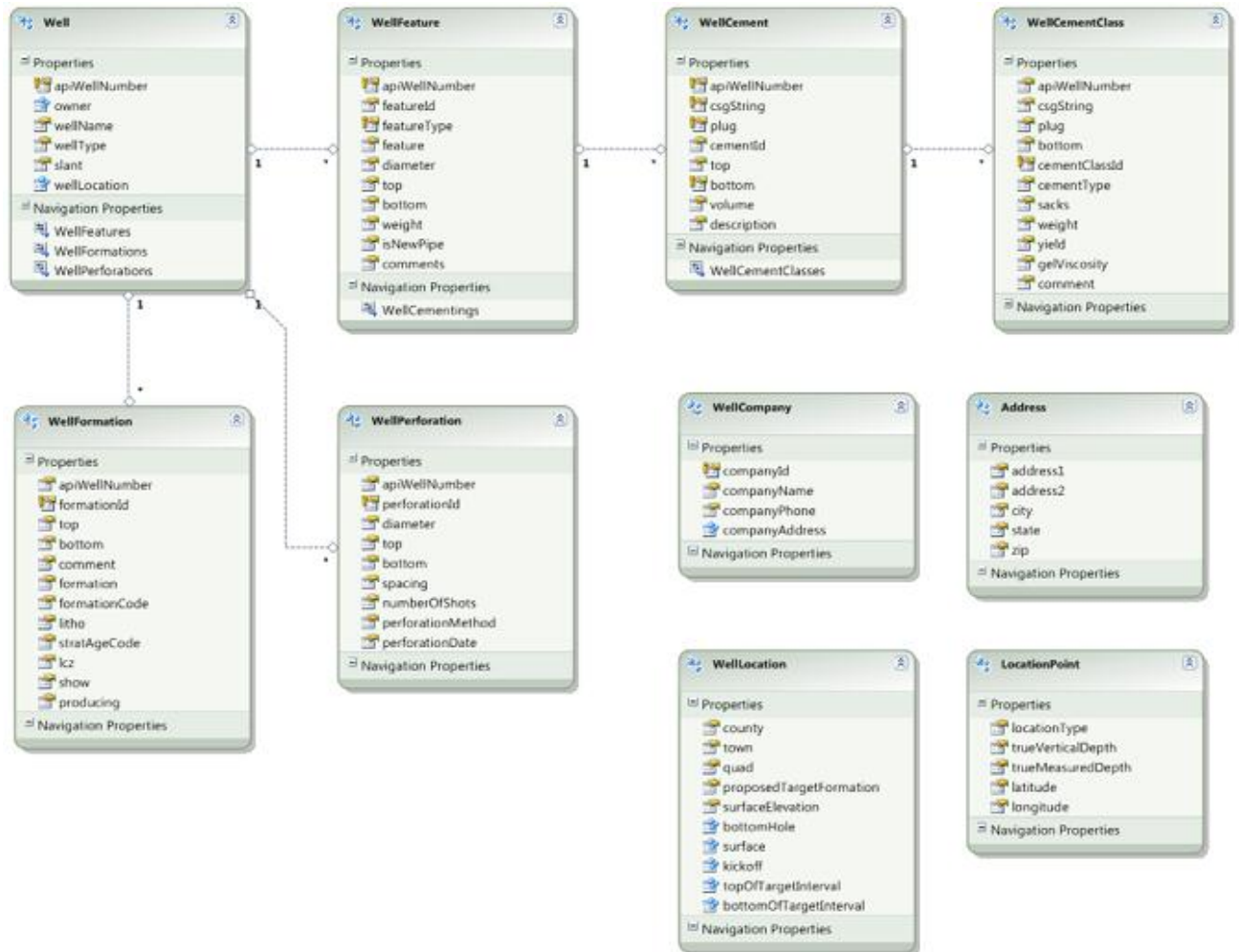


Wellbore Schema

02/03/2011 Chuck Borchert, NOGCC



Well

- apiWellNumber : string – SQL Server type varchar(14)
unique identifier
displayed in the info pane
- owner : complex property *WellCompany*
- wellName : string – SQL Server type varchar(70)

displayed in the info pane

- wellType : string – SQL Server type varchar(50)

displayed in the info pane

- slant : string – SQL Server type varchar(1)

not displayed

V, H, or D - V is drawn as a vertical, H and D as horizontal

- wellLocation : complex property **WellLocation**
- wellFeatures : array of **WellFeature**
- wellFormations : array of **WellFormation**
- wellPerforations : array of **WellPerforation**

WellCompany

- companyId : double – SQL Server type float

unique identifier

not displayed

- companyName : string – SQL Server type varchar(50)

displayed in the info pane

- companyPhone : string – SQL Server type varchar(12)

displayed in the info pane

- companyAddress : complex property **Address**

Address

- address1 : string – SQL Server type varchar(30)

displayed in the info pane

- address2 : string – SQL Server type varchar(30)

not displayed

- city : string – SQL Server type varchar(30)

displayed in the info pane

- state : string – SQL Server type varchar(2)

displayed in the info pane

- zip : string – SQL Server type varchar(5)

displayed in the info pane

WellLocation

- county : string – SQL Server type varchar(20)

displayed in the info pane

- town : string – SQL Server type varchar(23)

displayed in the info pane

- quad : string – SQL Server type varchar(4)

not displayed

- proposedTargetFormation : string – SQL Server type varchar(40)

not displayed

- surfaceElevation : int32 – SQL Server type int

displayed in the info pane

- bottomHole : complex property ***LocationPoint***

- surface : complex property ***LocationPoint***

- kickoff : complex property ***LocationPoint***

- topOfTargetInterval : complex property ***LocationPoint***

- bottomOfTargetInterval : complex property ***LocationPoint***

LocationPoint

- locationType : string – SQL Server type varchar(4)

not displayed

valid values “BH” = bottom of hole, “KICK” = kickoff, “SURF” = surface, “PB” = bottom of target interval, “PZ” = top of target interval

- trueVerticalDepth : int32 – **SQL Server type int**
 drawn on plot
 required for bottom of hole, and for kickoff for non vertical wells
- trueMeasuredDepth : int32 – **SQL Server type int**
 drawn on plot
 required for bottom of hole for non vertical wells, if not present in top of target will be calculated based on kickoff TVD and bottom of hole TVD
- latitude : double – **SQL Server type float**
 drawn on map
 NAD83 values
- longitude : double – **SQL Server type float**
 drawn on map
 NAD83 values - must be NEGATIVE for US locations

WellFeature

- featureId : int64 – **SQL Server type bigint**
 unique identifier
 not displayed
- featureType : string – **SQL Server type varchar(4)**
 not displayed
- feature : string – **SQL Server type varchar(150)**
 drawn on plot
 valid values:
 - "SURF" = **Surface Casing,**
 - "COND" = **Surface Conductor,**
 - "INTER" = **Intermediate Casing,**
 - "LINER" = **Liner,**
 - "PROD" = **Production Casing,**
 - "HOLE" = **Hole,**
 - "BASK" = **Basket,**
 - "PLUG" = **Plug,**
 - "PACK" = **Packer,**
 - "TUBING" = **Tubing,**

```
"BRIDGE" = Bridge Plug,  
"CIBP" = Cast Iron Bridge Plug,  
"CR" = Cement Retainer,  
"UNK" = Unknown,  
"CEN" = Centralizer
```

- diameter : double – SQL Server type float
drawn on plot
- top : int32 – SQL Server type int
drawn on plot
- bottom : int32 – SQL Server type int
drawn on plot
- weight : double – SQL Server type float
displayed in mouse over popup
- isNewPipe : bool – SQL Server type bit
displayed in mouse over popup
- comments : string – SQL Server type text
displayed in mouse over popup
- wellCementings : array of **WellCement**

WellCement

- cementId : int64 - SQL Server type bigint
unique identifier
not displayed
- top : int32 - SQL Server type int
drawn on plot
- bottom : int32 - SQL Server type int
drawn on plot
- volume : double – SQL Server type float

displayed in mouse over popup

- description : string – SQL Server type text

displayed in mouse over popup

- wellCementClasses : array of **WellCementClass**

WellCementClass

- cementClassId : int64 – SQL Server type bigint

unique identifier

not displayed

- cementType : string – SQL Server type varchar(50)

not displayed

- sacks : int32 - SQL Server type int

not displayed

- weight : single - SQL Server type real

not displayed

- yield : single - SQL Server type real

not displayed

- gelViscosity : single - SQL Server type real

not displayed

- comment : string - SQL Server type text

not displayed

WellFormation

- formationId : int64 – SQL Server type bigint

unique identifier

not displayed

- top : int32 – SQL Server type int

displayed in mouse over popup

- bottom : int32 – [SQL Server type int](#)

displayed in mouse over popup

- comment : string – [SQL Server type text](#)

displayed in mouse over popup

- formation : string – [SQL Server type varchar\(40\)](#)

displayed in mouse over popup

- formationCode : string – [SQL Server type varchar\(8\)](#)

not displayed

- litho : string – [SQL Server type varchar\(11\)](#)

drawn on plot

the codes and symbols are defined in the Federal Geographic Data Committee document
FGDC-STD-013-2006 Appendix A

- stratAgeCode : string – [SQL Server type varchar\(11\)](#)

drawn on plot

the codes and symbols are defined in the Federal Geographic Data Committee document
FGDC-STD-013-2006 Appendix A

- lcz : bool – [SQL Server type bit](#)

not displayed

- show : bool - [SQL Server type bit](#)

not displayed

- producing : bool – [SQL Server type bit](#)

drawn on plot

if true, the formation is shaded blue

WellPerforation

- perforationId : int64 – [SQL Server type bigint](#)

unique identifier

not displayed

- diameter : single - SQL Server type real
drawn on plot
- top : int32 – SQL Server type int
drawn on plot
- bottom : int32 – SQL Server type int
drawn on plot
- spacing : single - SQL Server type real
not displayed
- numberOfShots : int32 - SQL Server type int
displayed in mouse over popup
- perforationMethod : string – SQL Server type varchar(10)
not displayed
- perforationDate : DateTime - SQL Server type datetime
not displayed