Northern Gas Networks

Locally sourced green gas

DN Capacity Hotspots

Biomethane Gas to Grid
Network entry connections

DN Analysis to Identify Capacity in Network

1. Bradford Distribution Network

The Bradford distribution network is located in West Yorkshire. The network provides gas to the surrounding areas.

1.1 Bradford Intermediate Pressure Main

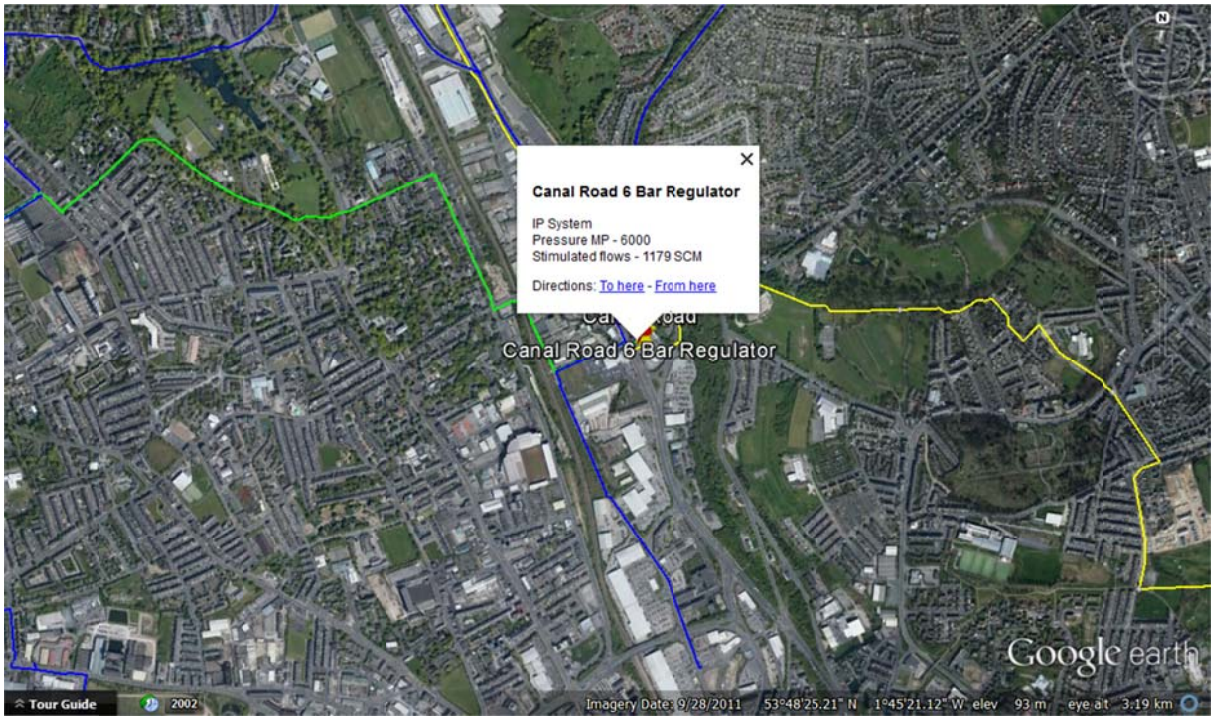
The Bradford Intermediate Pressure Main system operates up to 6.1 bar. The grid locations of the Intermediate pressure main considered is: **E: 414600, N: 434973**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Intermediate Network identified one location as detailed and depicted below.

Name Of Regulator	Pressure in Milli-Bar	Available Capacity
Canal Road 6 Bar Regulator	6000	1,179

The google map depicts the location of the regulator and the intermediate pressure main with the capacity identified above.



1.2 Bradford Medium Pressure Main

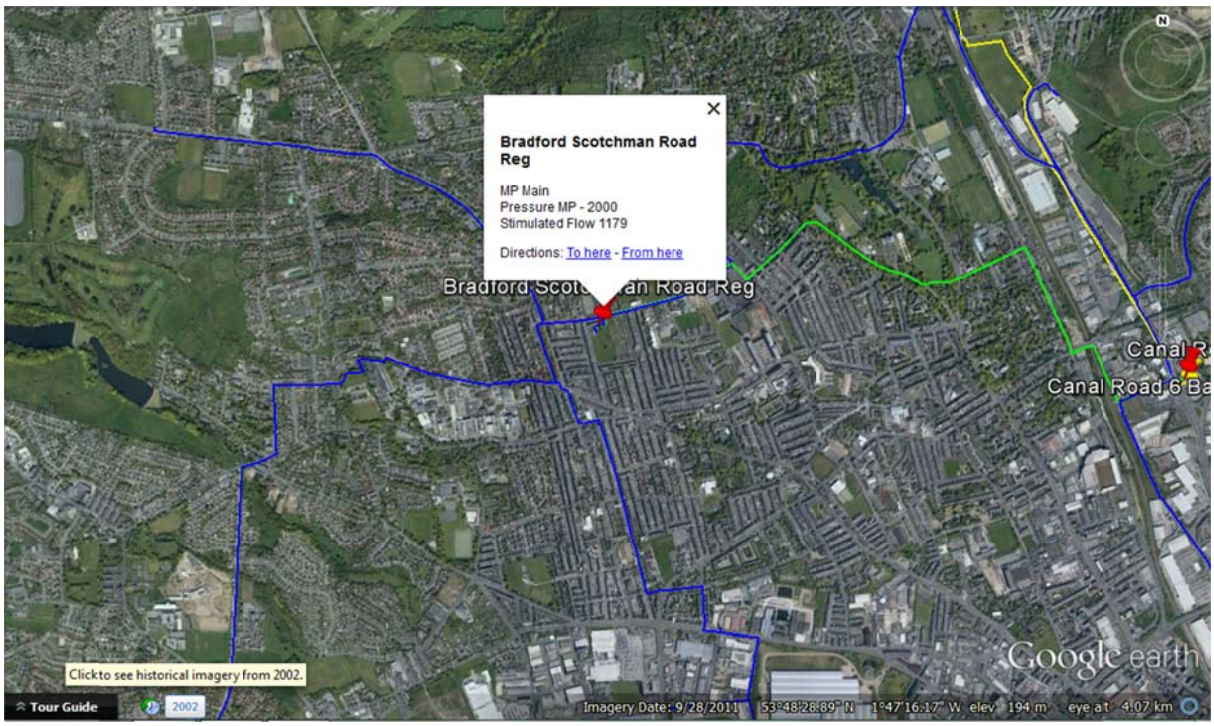
The Bradford Medium Pressure system operates up to 2 bar. The grid locations of the Medium pressure main considered is: 414600, N:434973

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Medium Network identified two locations as detailed and depicted below.

Name of Regulator	Pressure in Millibar	Available Capacity
Scotchmand Road 2Bar Regulator	2000	1179

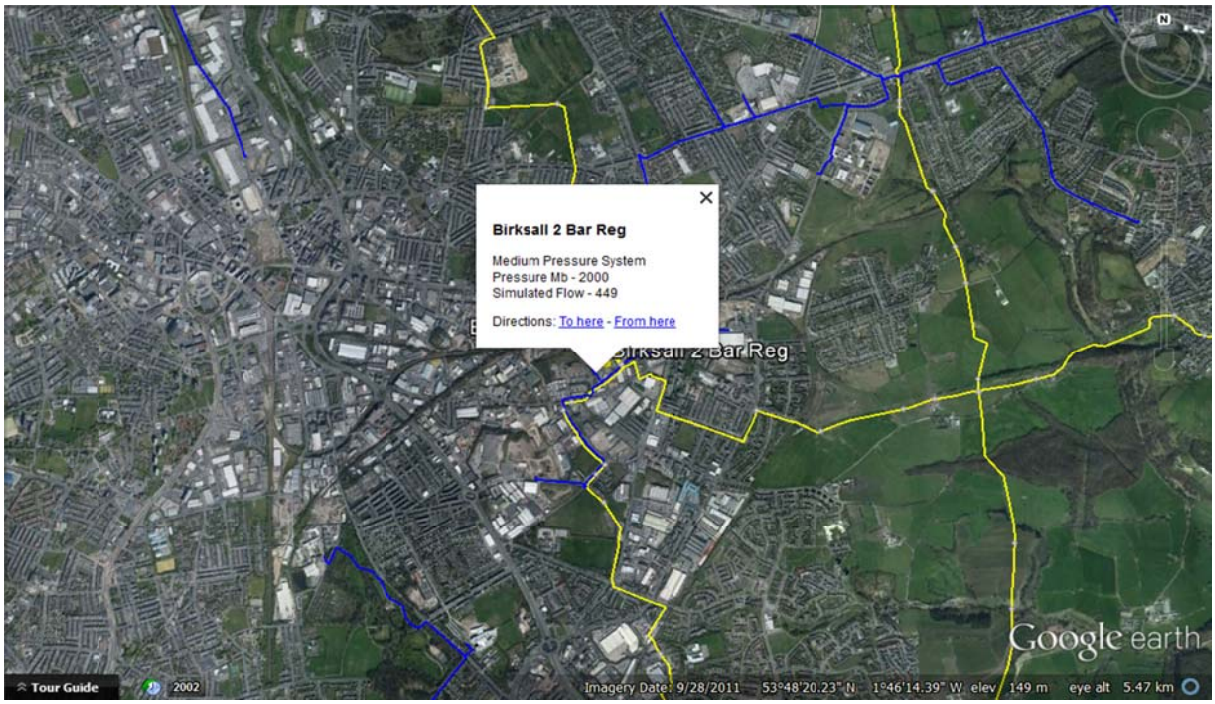
The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



As always Bio Source's must be prioritised to allow injection.

Name of Regulator	Pressure in Millibar	Available Capacity
Birksall 2Bar Regulator	2000	449

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



2. Calder Valley Distribution Network

The Calder Valley distribution network is located in West Yorkshire. The network provides gas to the surrounding areas.

2.1 Calder Valley 2 Intermediate Pressure Main

The Calder Valley Intermediate Pressure system operates up to 6.1 bar. The grid locations of the Intermediate pressure main considered are: **E: 414886.13, N: 417220.25**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

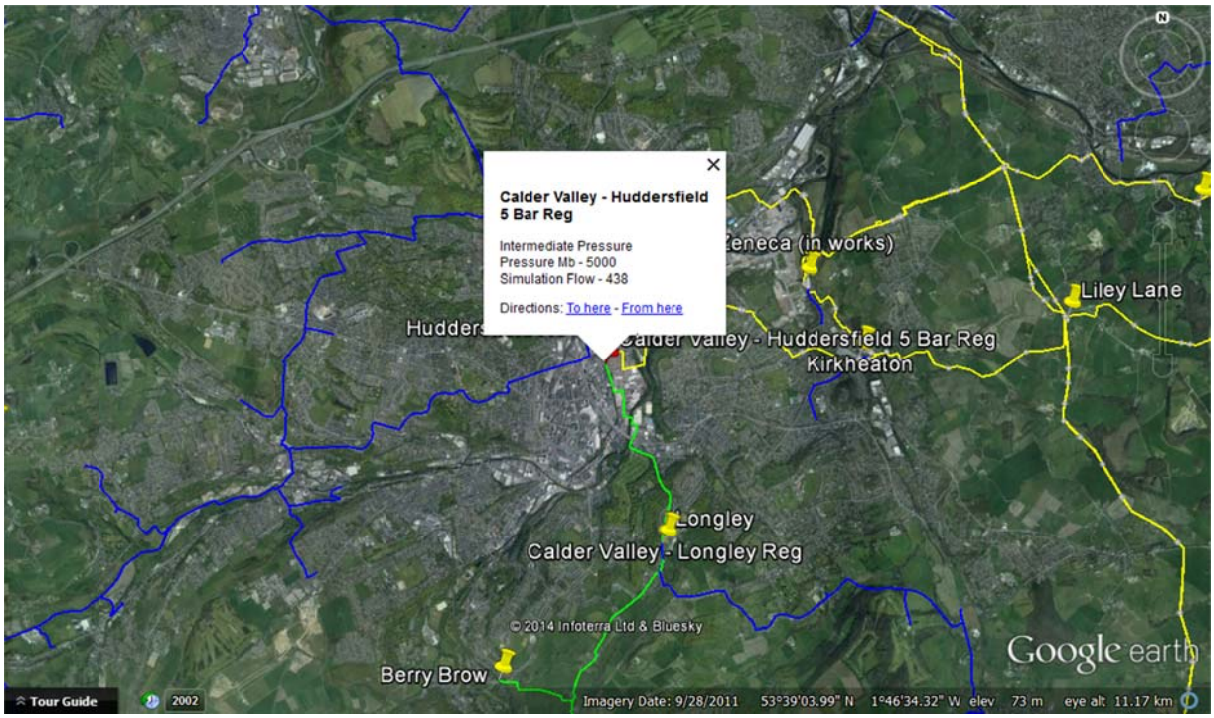
The analysis of the Intermediate Network identified two locations as detailed and depicted below.

Name of Regulator	Pressure in Millibar	Available Capacity
Tong 5 Bar PRU	5200	959

The google map depicts the location of the regulator and the intermediate pressure main with the capacity identified above.

Name of Regulator	Pressure in Millibar	Available Capacity
Huddersfield 5Bar PRU	5000	438

The google map depicts the location of the regulator and the intermediate pressure main with the capacity identified above.



2.2 Calder Valley Medium Pressure Main

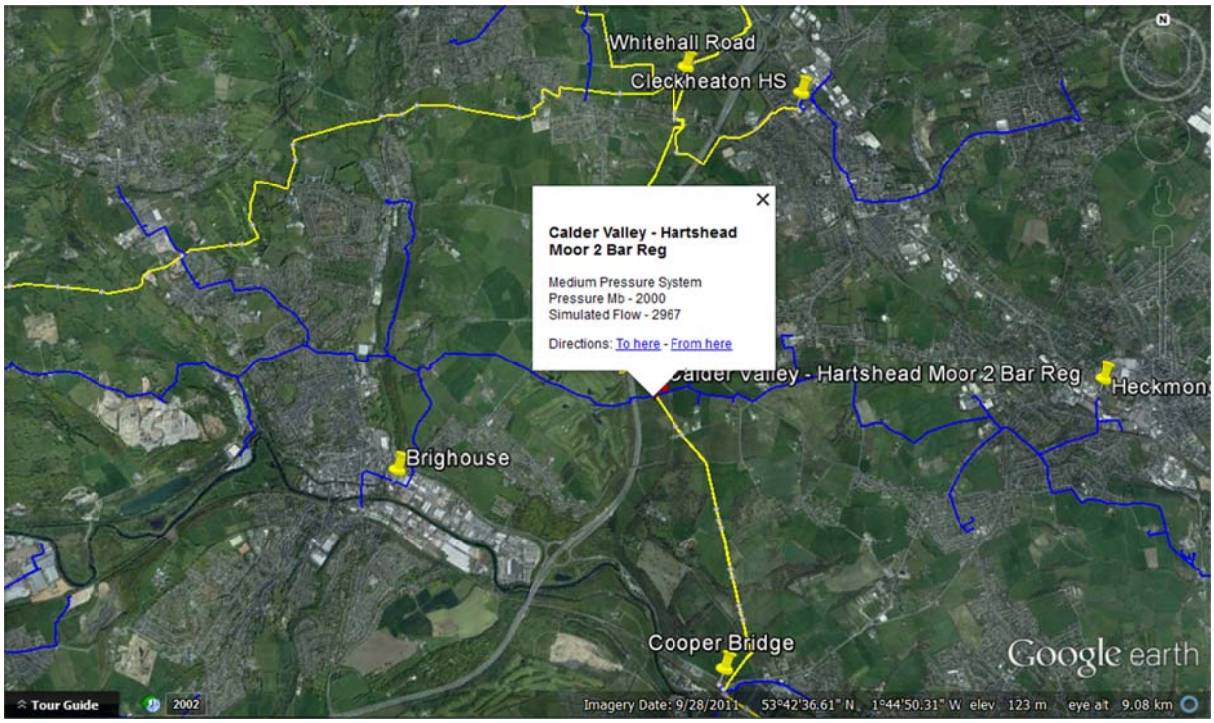
The Calder Valley Medium Pressure Main system operates up to 2 bar. The grid locations of the Medium pressure main considered is: 414600, N:434973

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Medium Network identified five locations as detailed and depicted below.

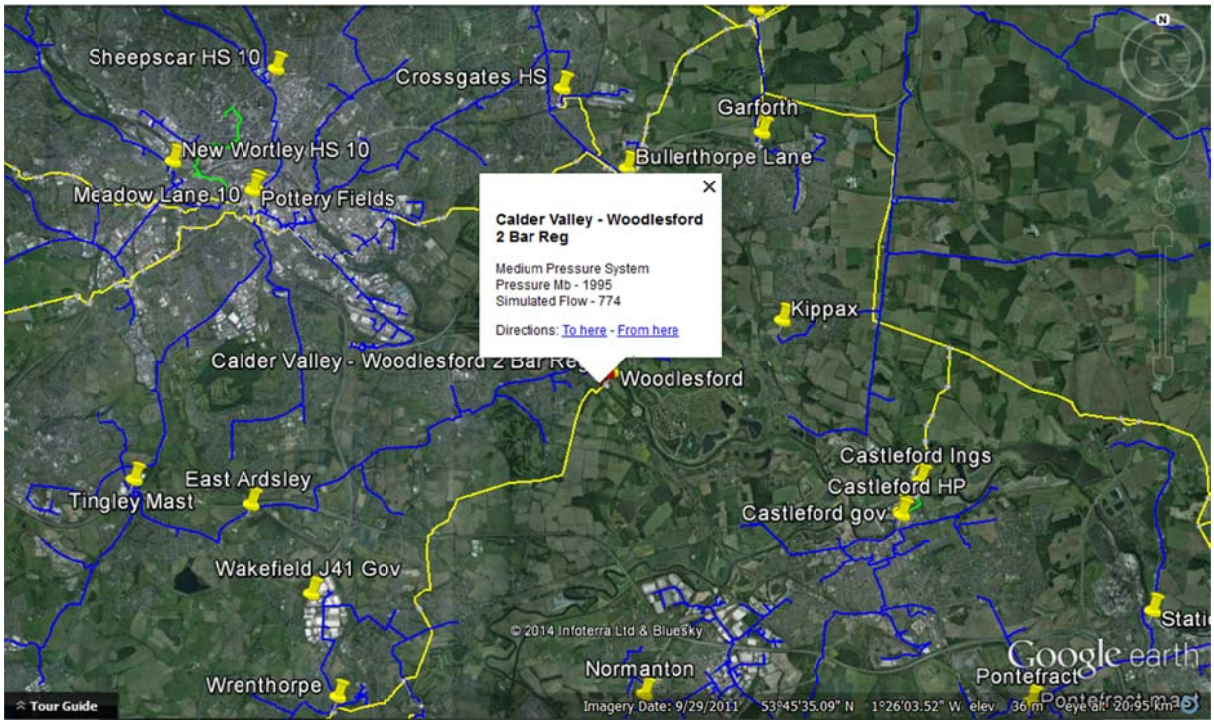
Name of Regulator	Pressure in Millibar	Available Capacity
Hartshead Moor 2Bar PRU	2000	2967scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Woodlesford 2Bar PRU	1995	774scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

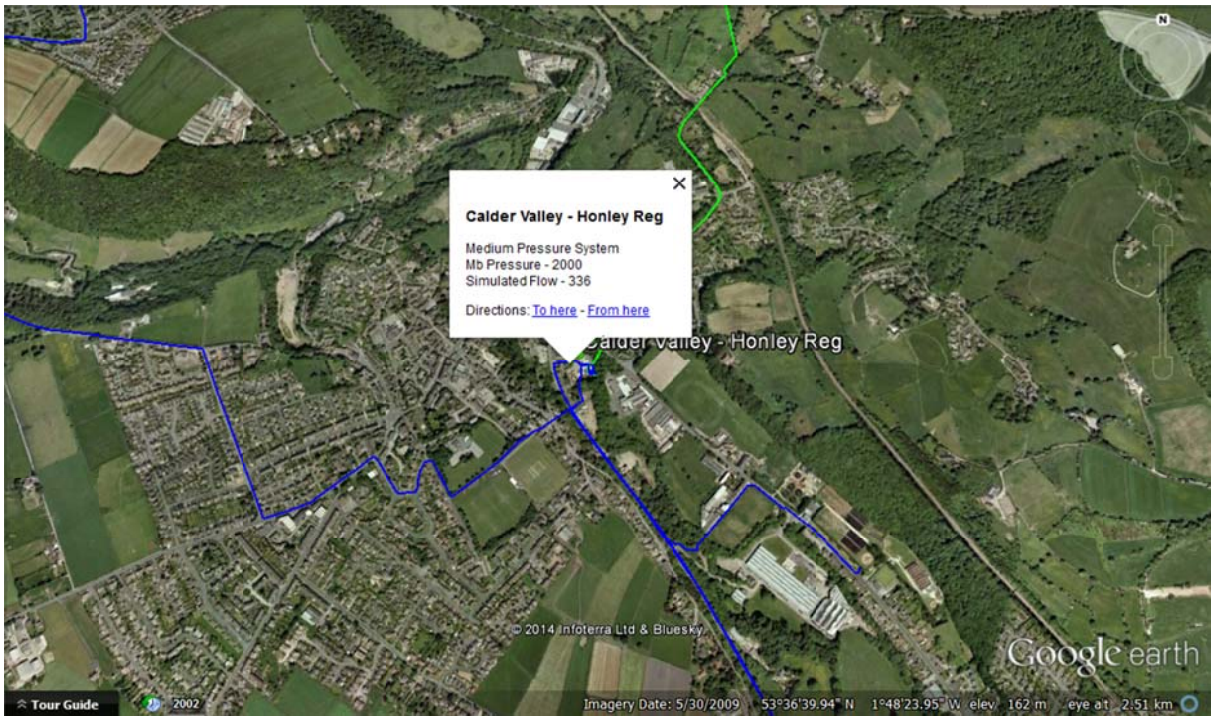


Name of Regulator	Pressure in Millibar	Available Capacity
Longley Reg	1600	80scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

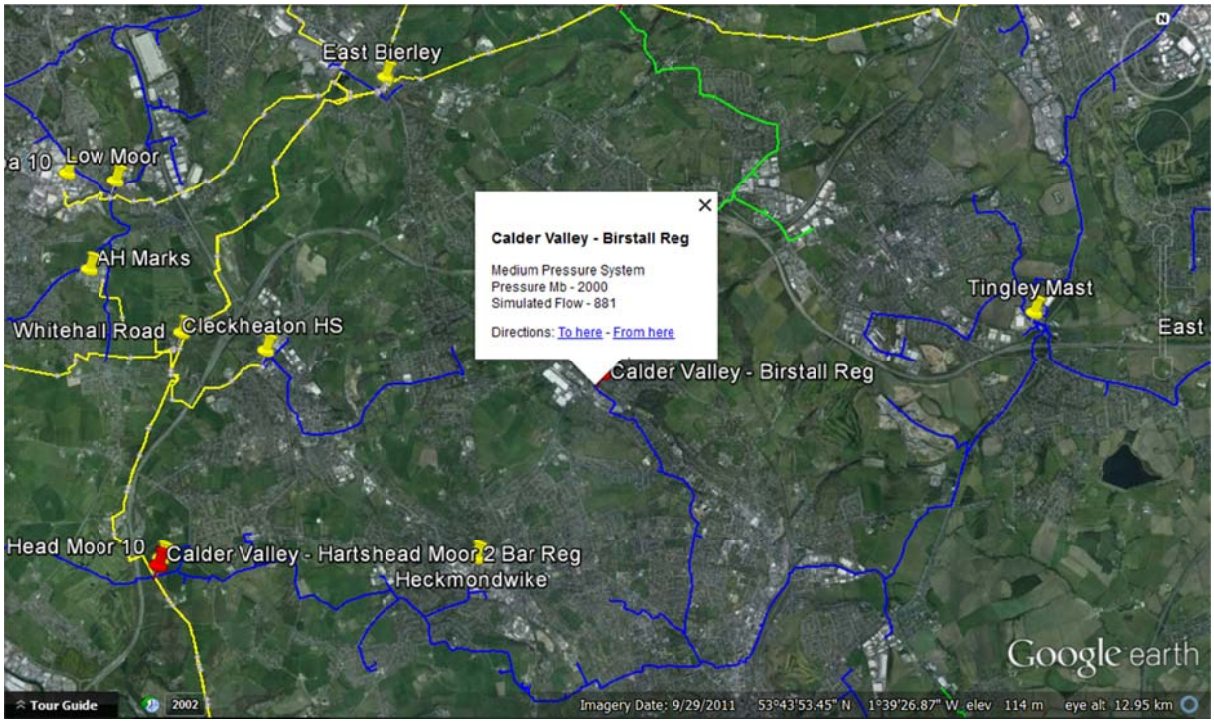
Name of Regulator	Pressure in Millibar	Available Capacity
Honley Reg	2000	336 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Birstall Reg	2000	881scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



As always the Bio Source's must be prioritised to allow injection.

3. Hull Distribution Network

The Hull distribution network is located in East Yorkshire. The network provides gas to the surrounding areas.

3.1 Hull Intermediate Pressure Main

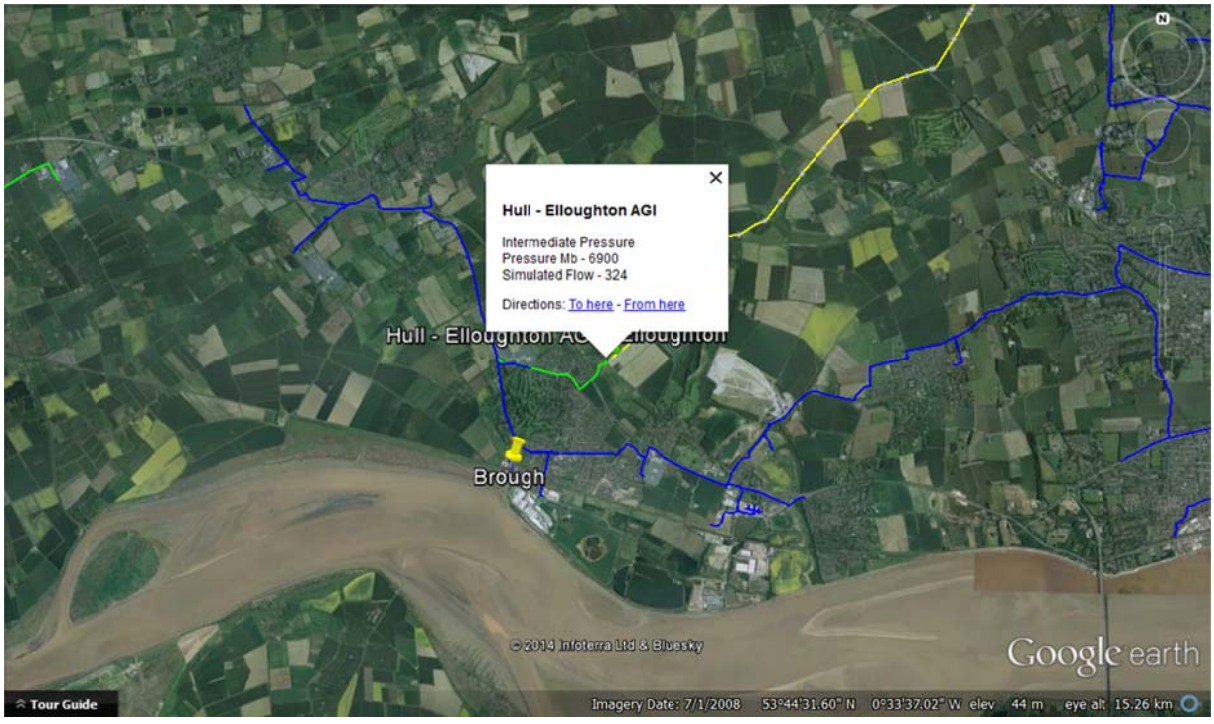
The Hull Intermediate Pressure Main system operates from 4 up to 6.9 bar. The grid locations of the Intermediate pressure main considered is: **E:509742, N:431261**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Intermediate Network identified three locations as detailed and depicted below.

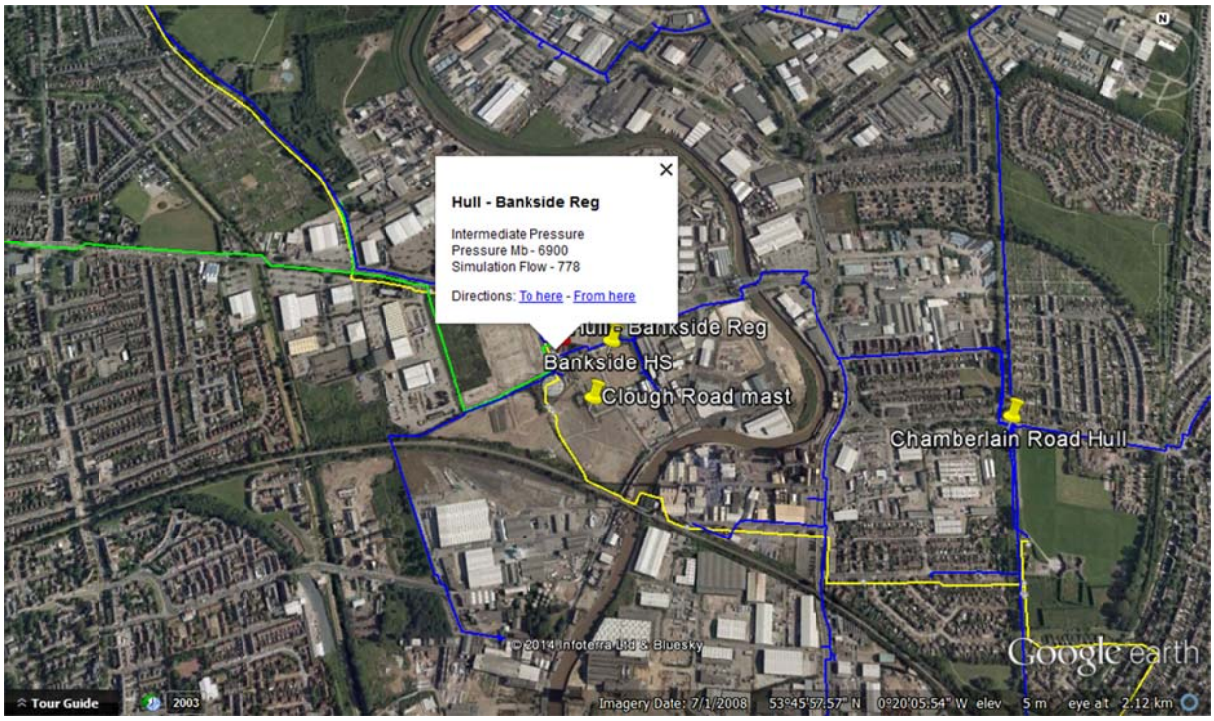
Name of Regulator	Pressure in Millibar	Available Capacity
Elloughton AGI	6900	324 scm/h

The google map depicts the location of the regulator and the intermediate pressure main with the capacity identified above.



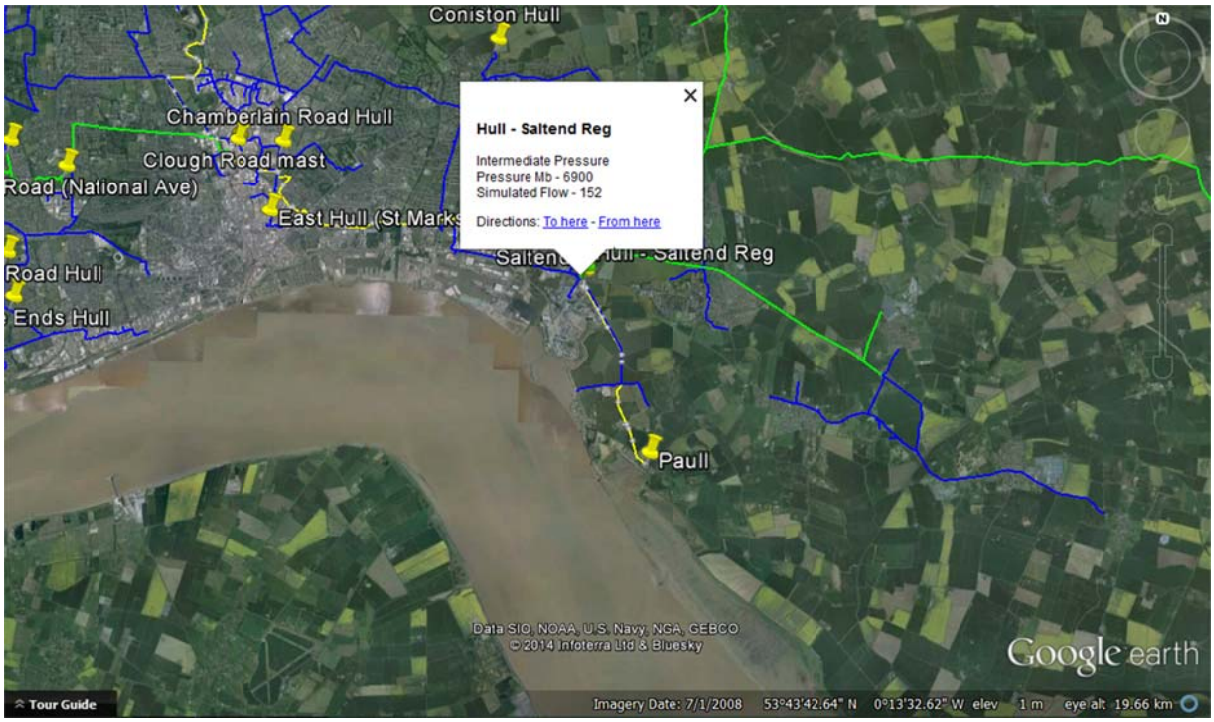
Name of Regulator	Pressure in Millibar	Available Capacity
Bankside Regulator	6900	778 scm/h

The google map depicts the location of the regulator and the intermediate pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Saltend Regulator	6900	152 scm/h

The google map depicts the location of the regulator and the intermediate pressure main with the capacity identified above.



3.2 Hull Medium Pressure Main

The Hull Medium Pressure Main system operates from 2 up to 4 bar. The grid locations of the Medium pressure main considered is: **E: 509742, N:431261**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Medium Network identified five locations as detailed and depicted below.

Name of Regulator	Pressure in Millibar	Available Capacity
Woodhall Street 2bar Reg	2000	565 scm/h

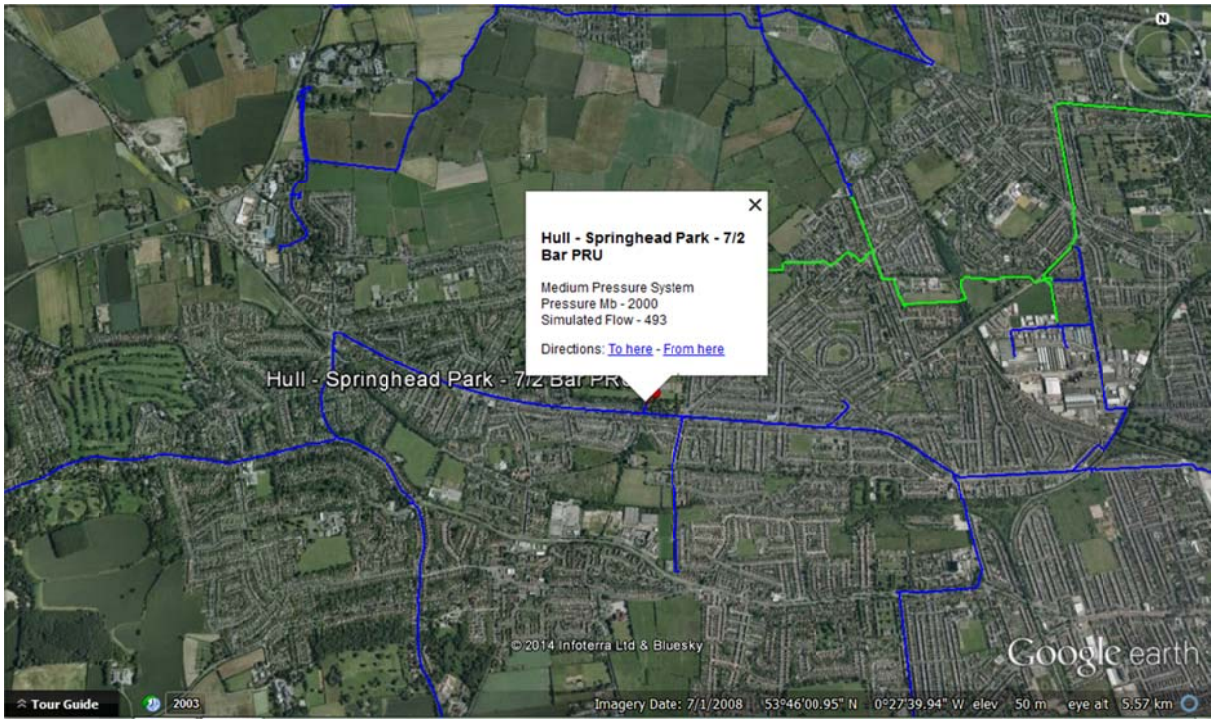
The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

Name of Regulator	Pressure in Millibar	Available Capacity
Brantingham – Brough 7/2 Bar PRU	2000	324 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

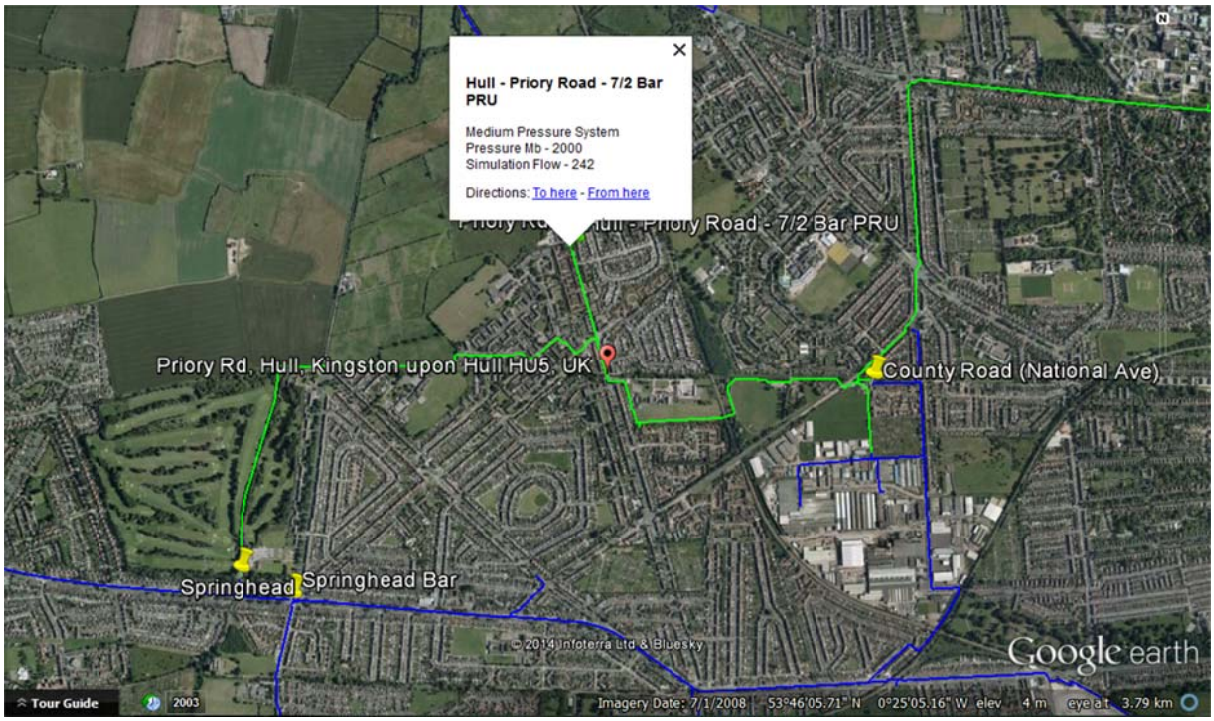
Name of Regulator	Pressure in Millibar	Available Capacity
Springhead Park 7/2bar PRU	2000	493 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



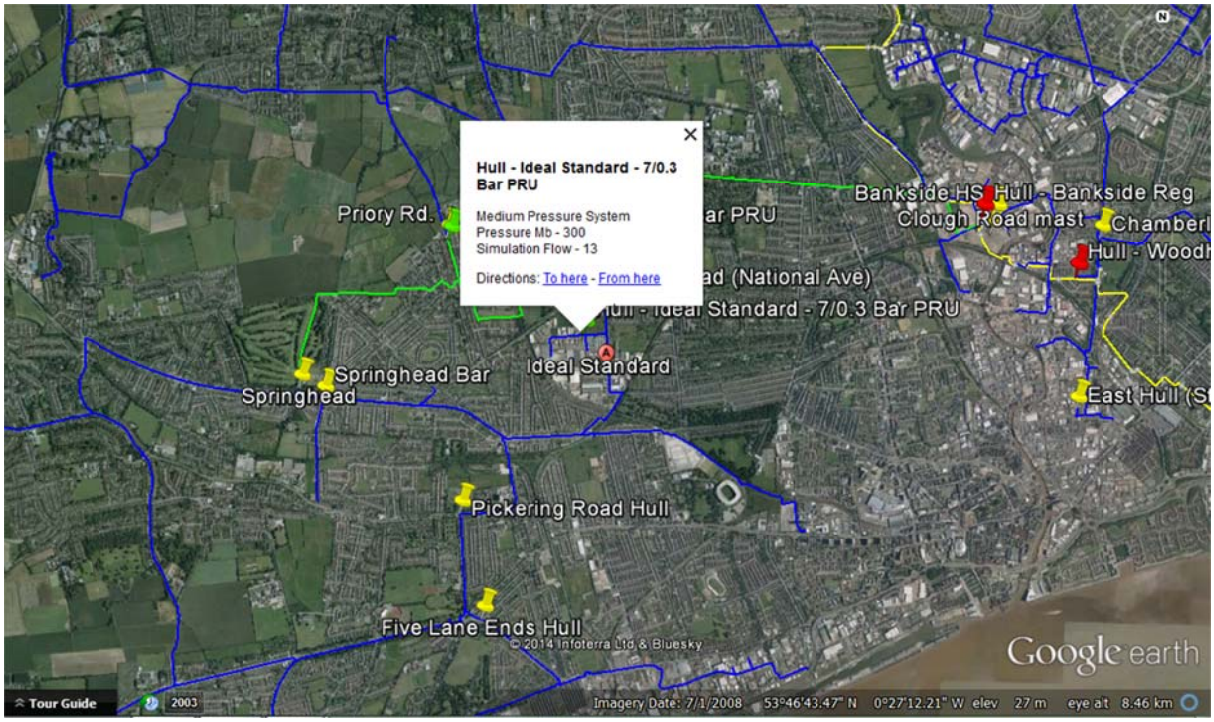
Name of Regulator	Pressure in Millibar	Available Capacity
Priory Road 7/2bar PRU	2000	242 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Ideal Standard 7/03bar PRU	300	13

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



As always the Bio Source's must be prioritised to allow injection.

4. Leeds Distribution Network

The Leeds distribution network is located in West Yorkshire. The network provides gas to the surrounding areas.

4.1 Leeds Intermediate Pressure Main

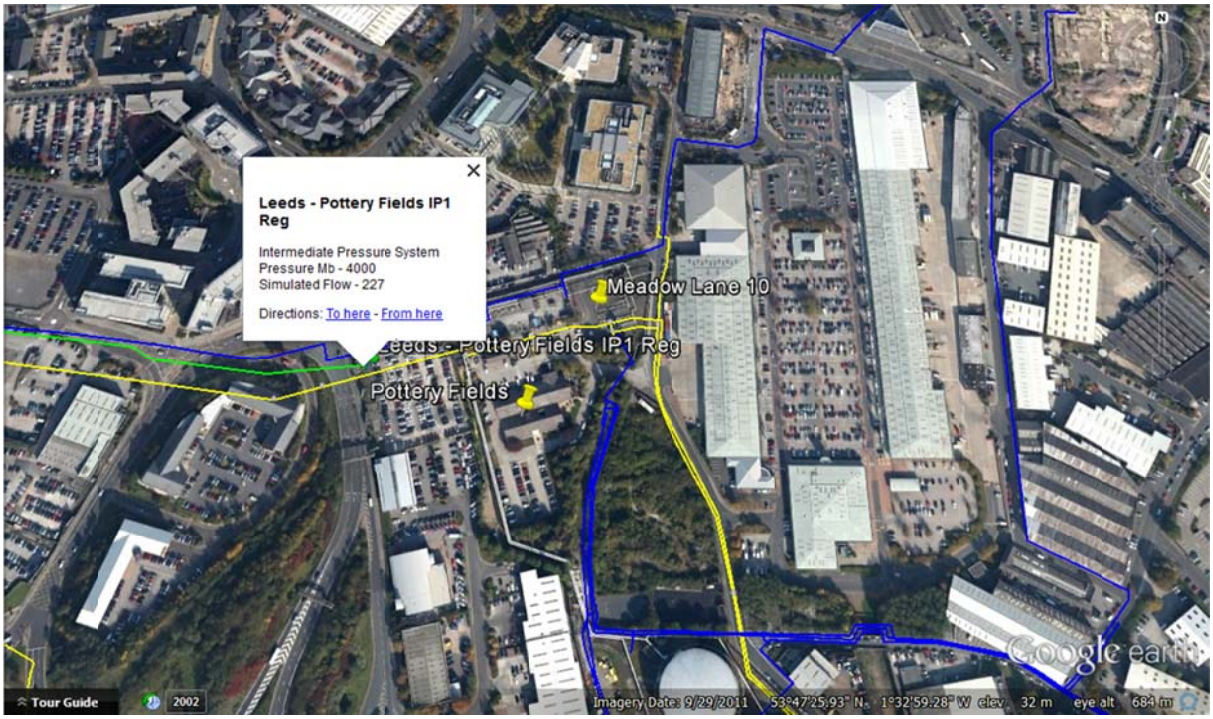
The Leeds Intermediate Pressure Main system operates from 2 up to 4 bar. The grid locations of the Intermediate pressure main considered is: **E**: **435900.15, N: 436385.54**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Intermediate Network identified one location as detailed and depicted below.

Name of Regulator	Pressure in Millibar	Available Capacity
Pottery Fields IP1 Reg	4000	227

The google map depicts the location of the regulator and the intermediate pressure main with the capacity identified above.



4.2 Leeds Medium Pressure Main

The Leeds Medium Pressure Main system operates up to 2 bar. The grid locations of the Medium Pressure main considered is: **E**: **435900.15, N: 436385.54**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

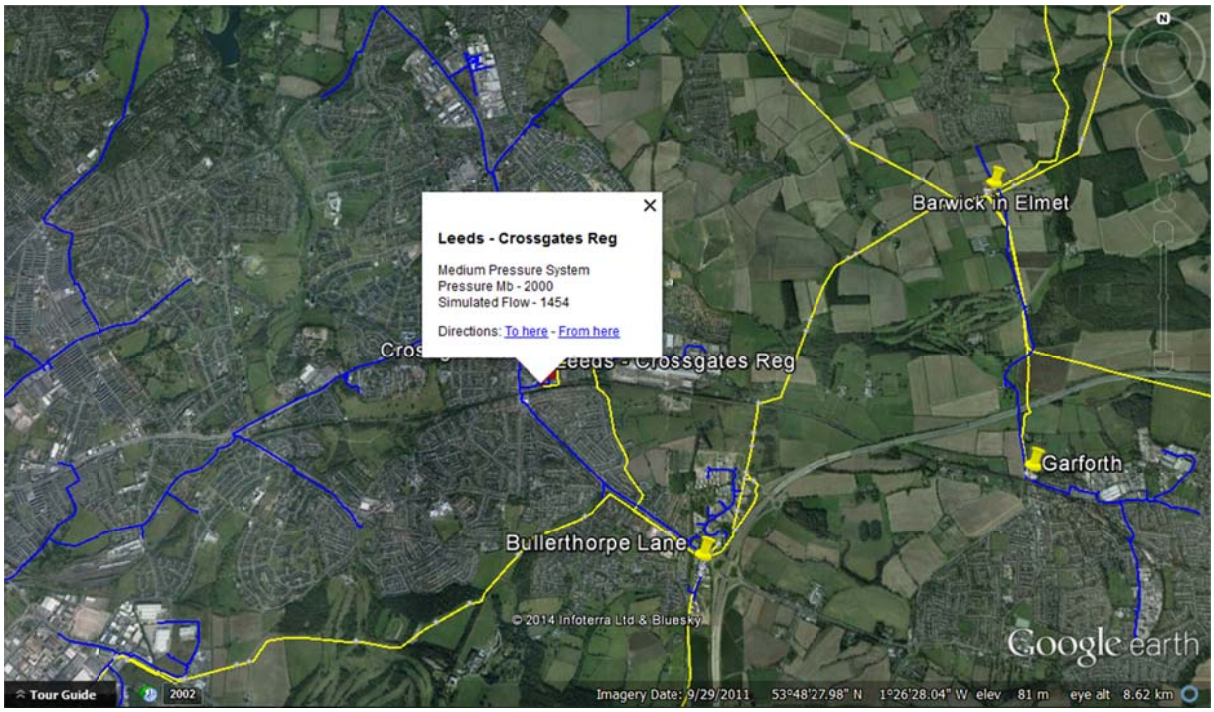
The analysis of the Medium Network identified six locations as detailed and depicted below.

Name of Regulator	Pressure in Millibar	Available Capacity
Aberford Regulator	2000	474

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

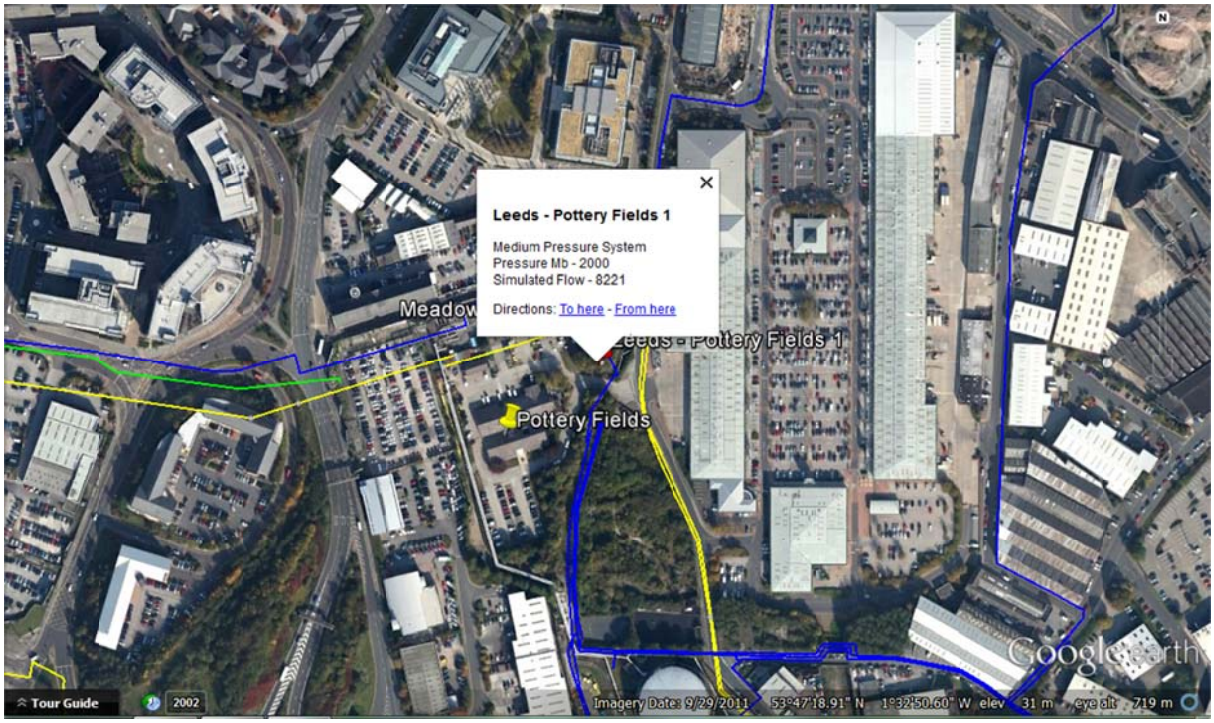
Name of Regulator	Pressure in Millibar	Available Capacity
Crossgates Regulator	2000	1454 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



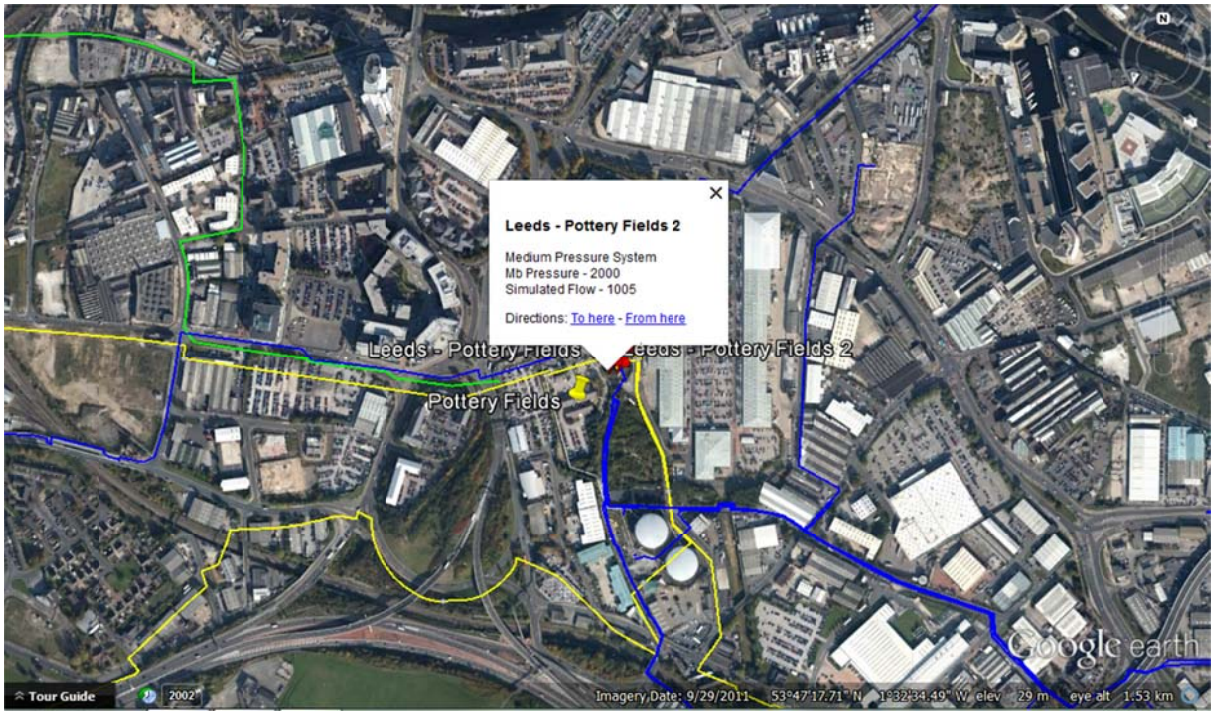
Name of Regulator	Pressure in Millibar	Available Capacity
Pottery Fields	2000	8221

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



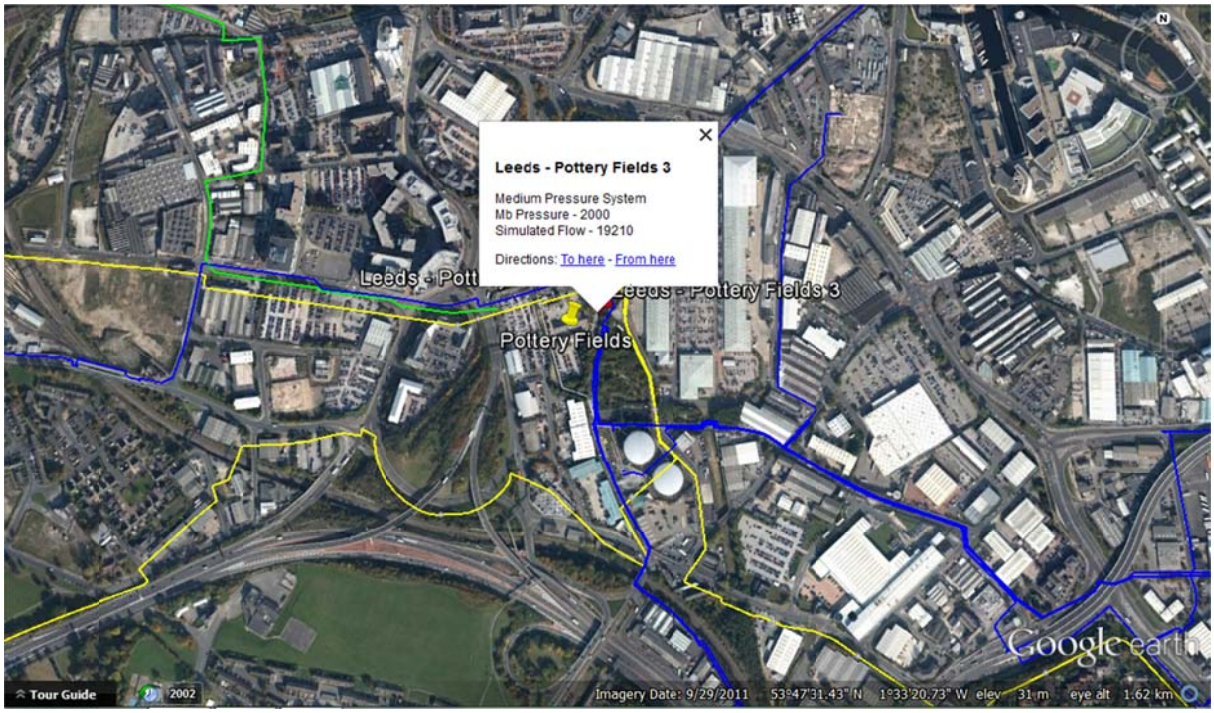
Name of Regulator	Pressure in Millibar	Available Capacity
Pottery Fields 2	2000	1005

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Pottery Fields 3	2000	19210

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Wellington Street 4/2bar PRU	2000	72

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

As always the Bio Source's must be prioritised to allow injection.

5. Northumbria Distribution Network

The Northumbrian distribution network is located in North East of England. The network provides gas to the surrounding areas.

5.1 Northumbrian Medium Pressure Main

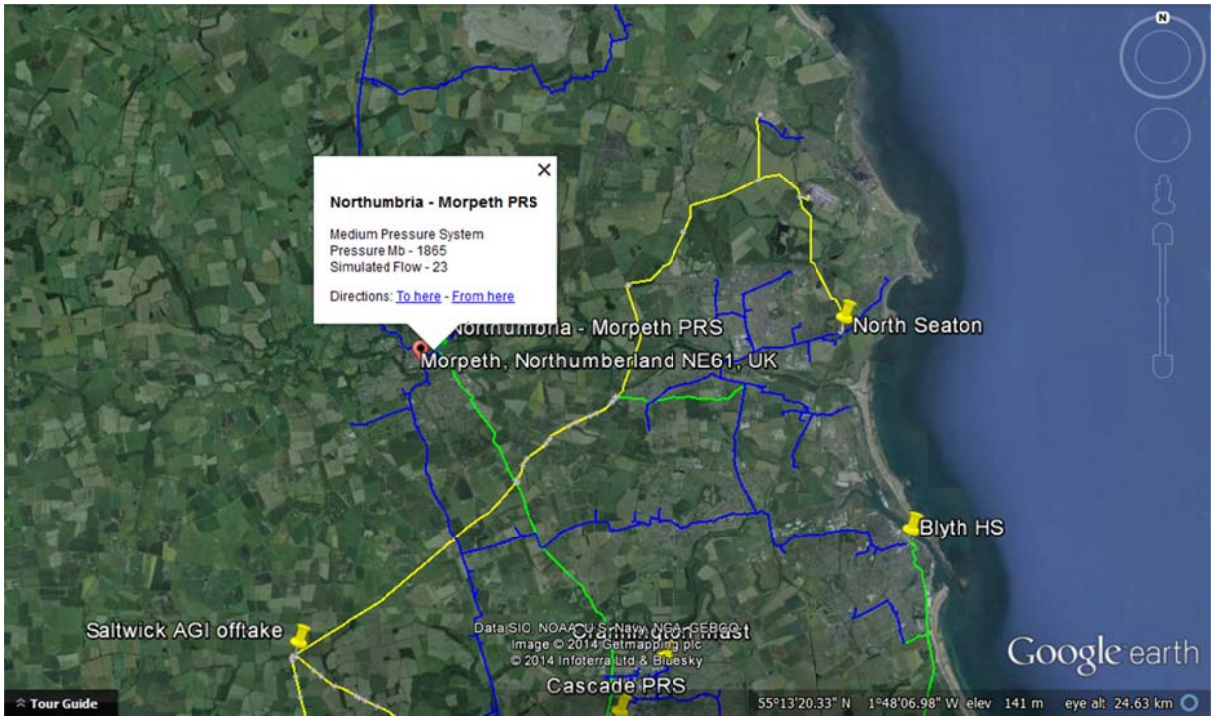
The Northumbrian Medium Pressure Main system operates up to 2 bar. The grid locations of the medium pressure main considered is: **E:424012, N:573012**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Medium Pressure Network identified eleven locations as detailed and depicted below.

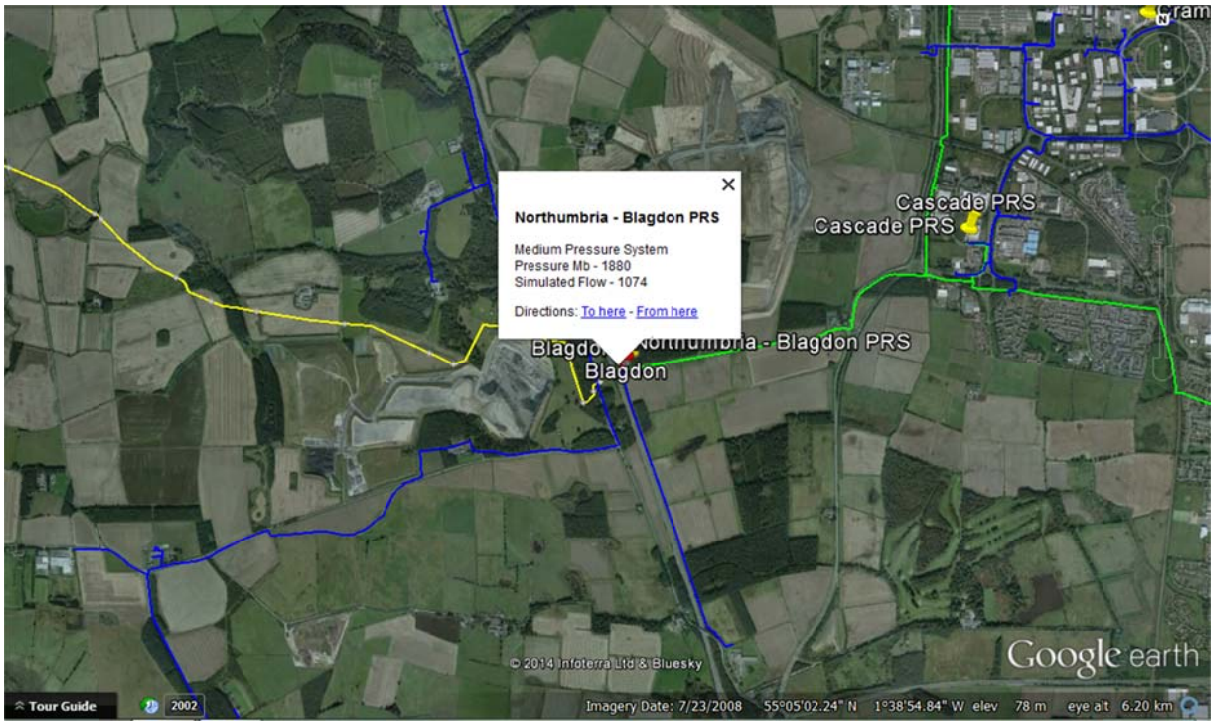
Name of Regulator	Pressure in Millibar	Available Capacity
Morpeth PRS	1865	23 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



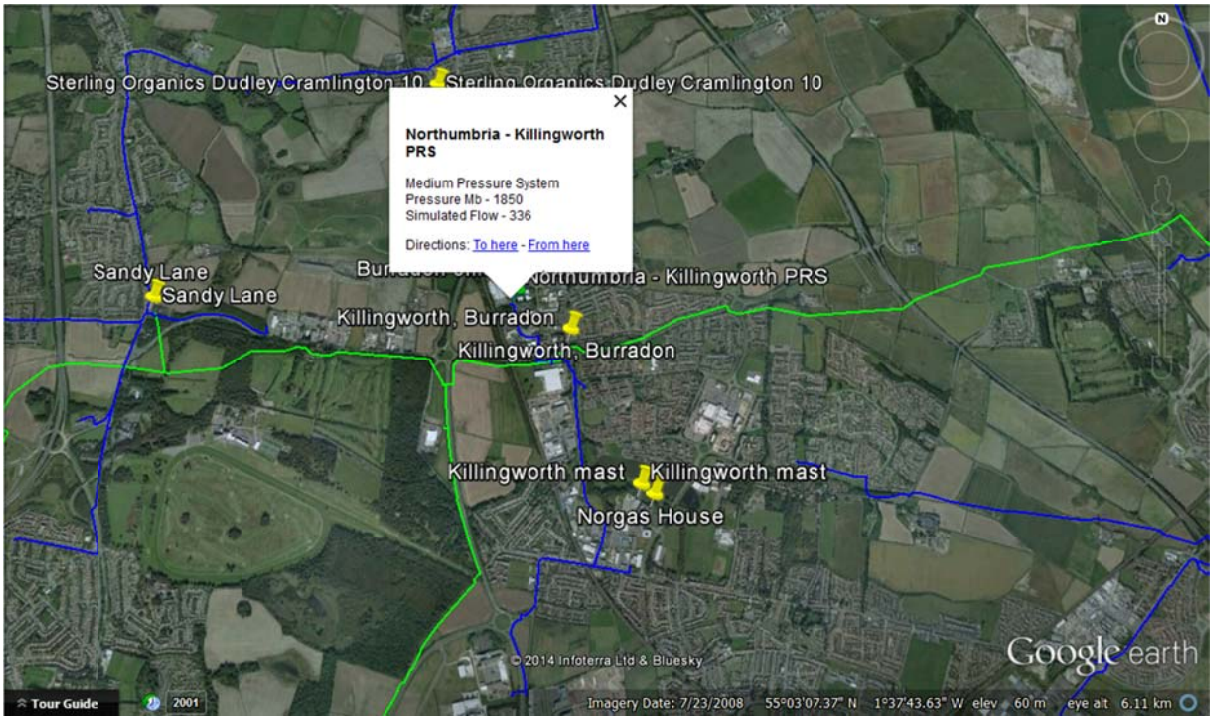
Name of Regulator	Pressure in Millibar	Available Capacity
Blagdon PRS	1880	1074

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



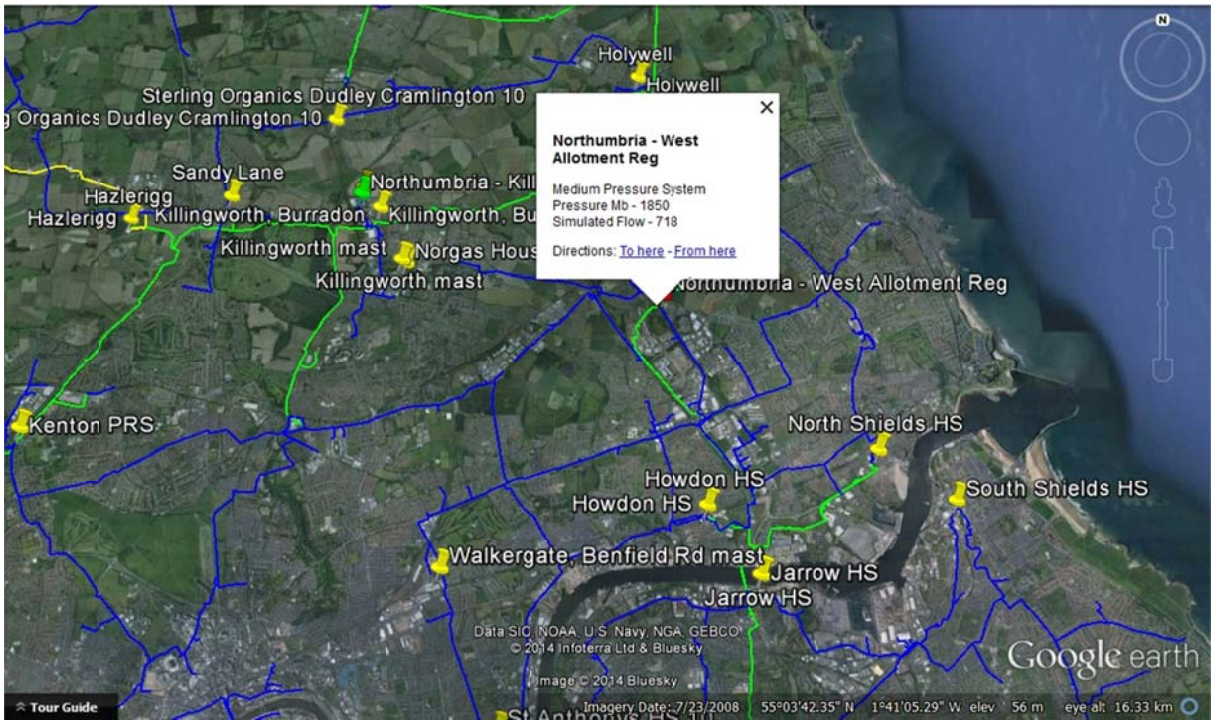
Name of Regulator	Pressure in Millibar	Available Capacity
Killingworth PRS	1850	336

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



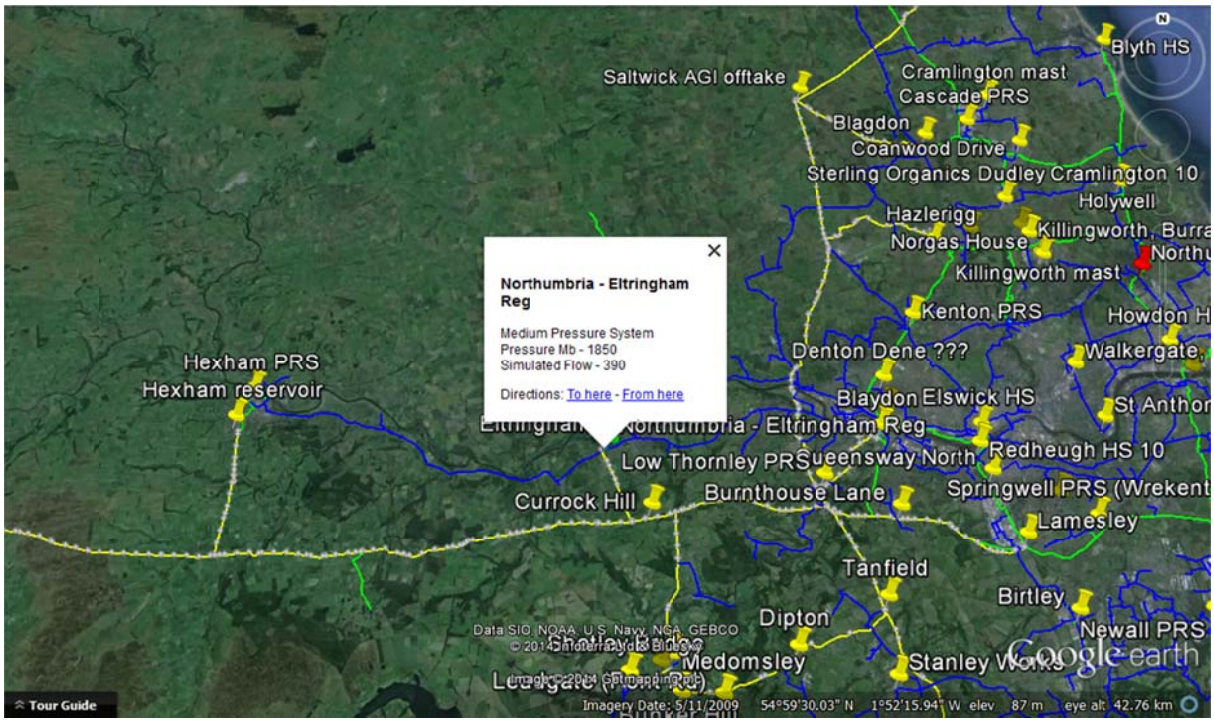
Name of Regulator	Pressure in Millibar	Available Capacity
West Allotment Reg	1850	718

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Eltringham Regulator	1850	390

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

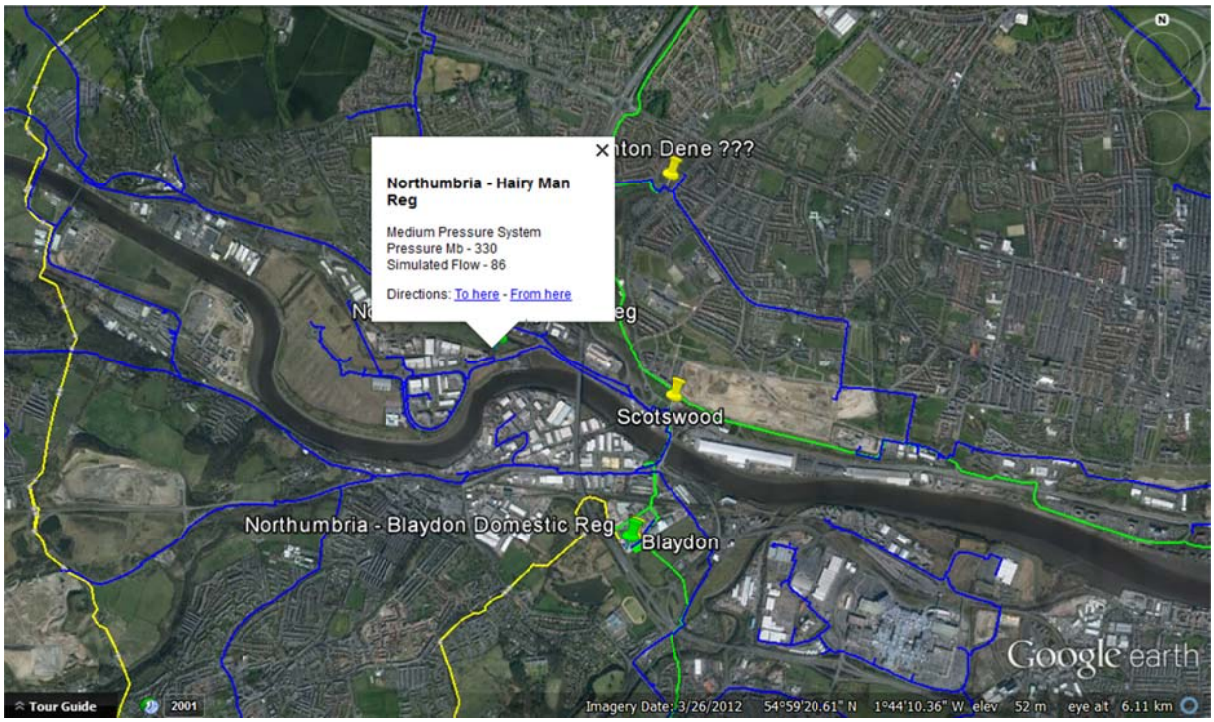


Name of Regulator	Pressure in Millibar	Available Capacity
Blaydon Domestic Regulator	1940	1

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

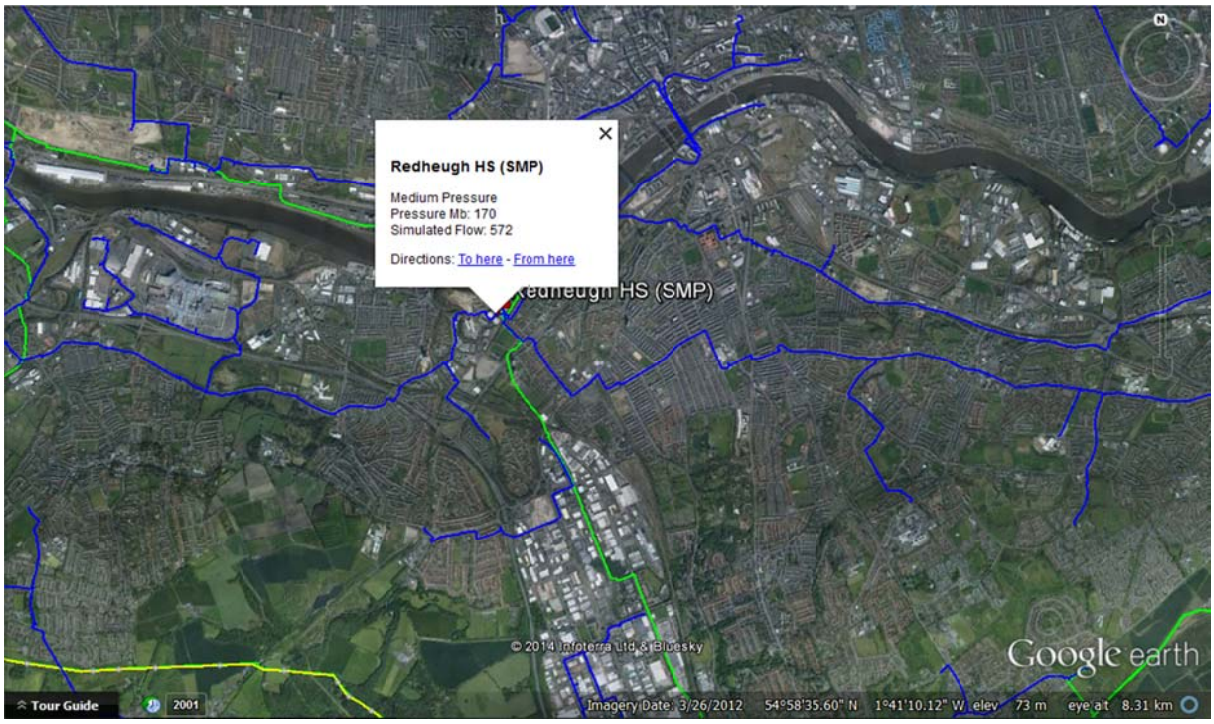
Name of Regulator	Pressure in Millibar	Available Capacity
Hairy Man Reg	330	86

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



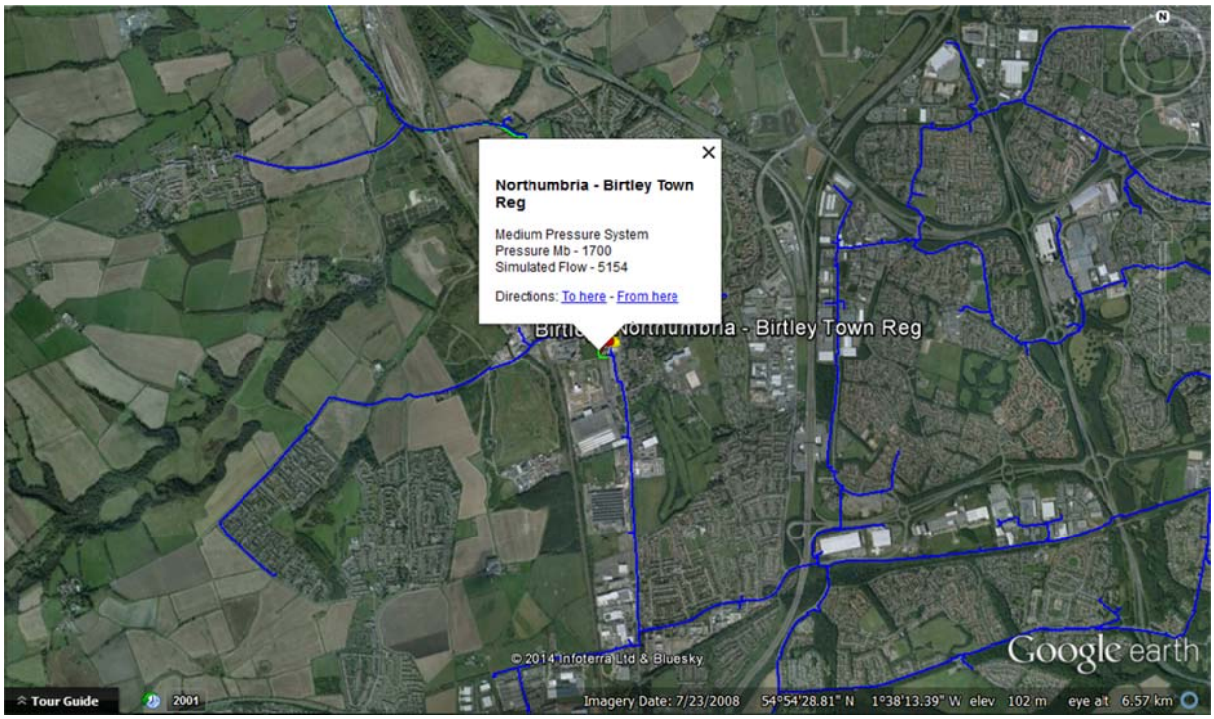
Name of Regulator	Pressure in Millibar	Available Capacity
Redheugh HS (SMP)	170	572

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



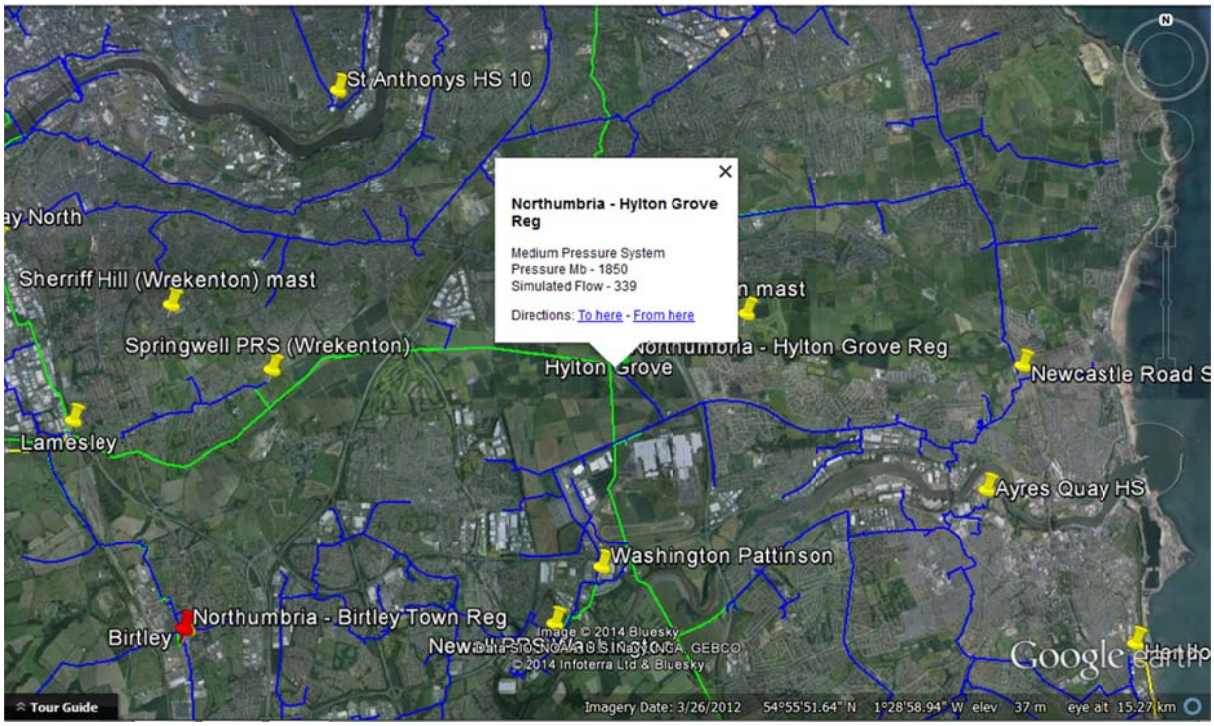
Name of Regulator	Pressure in Millibar	Available Capacity
Birtley Town Reg	1700	5154

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



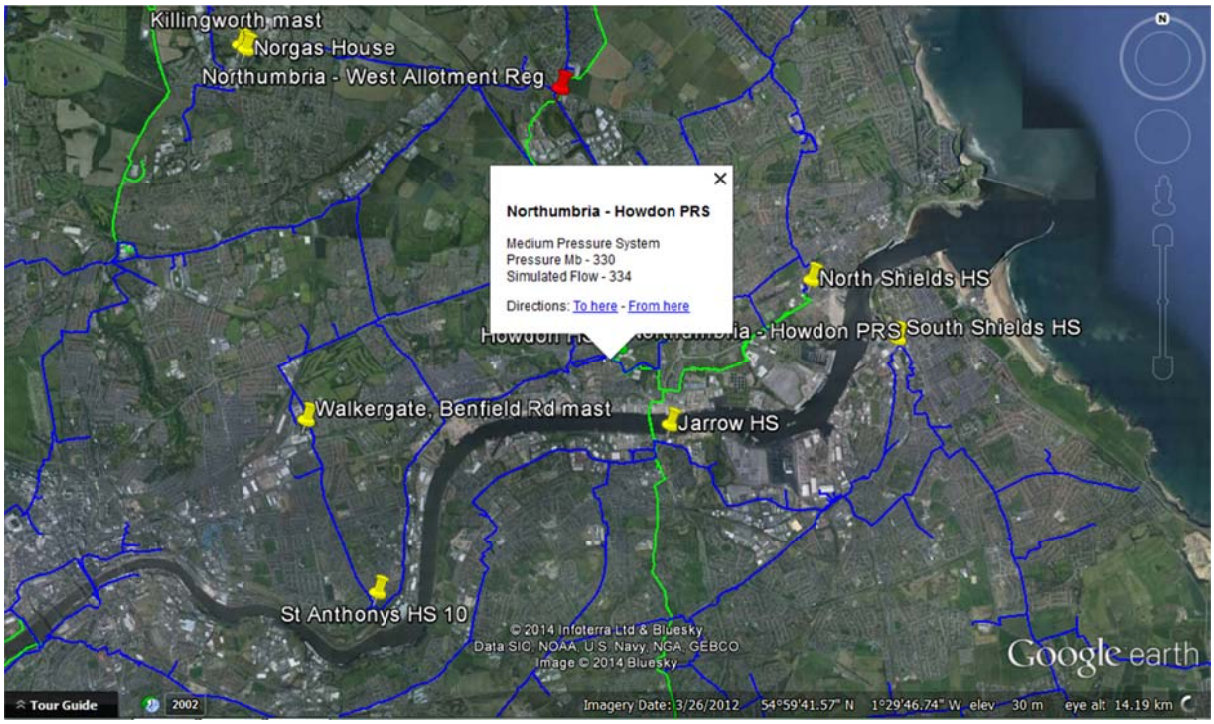
Name of Regulator	Pressure in Millibar	Available Capacity
Hylton Grove Regulator	1850	339

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Howdon PRS	330	334

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



As always the Bio Source's must be prioritised to allow injection.

6. South Yorkshire Distribution Network

The South Yorkshire distribution network provides gas to the surrounding areas.

6.1 South Yorkshire Intermediate Pressure Main

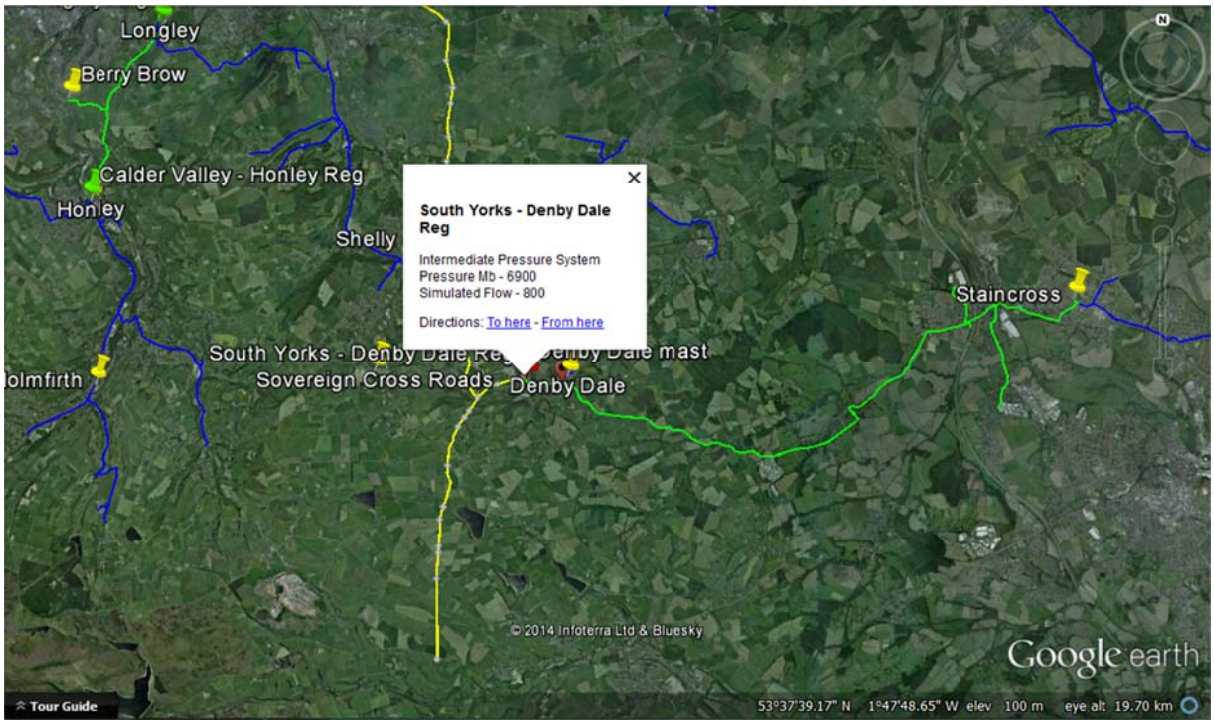
The South Yorkshire Intermediate Pressure Main system operates from 2 to 6.9 bar. The grid locations of the Intermediate pressure main considered is: **E: 438498.26, N: 418411.14**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Intermediate Network identified one location as detailed and depicted below.

Name of Regulator	Pressure in Millibar	Available Capacity
Denby Dale Regulator	6900	800scm/h

The google map depicts the location of the regulator and the intermediate pressure main with the capacity identified above.



6.2 South Yorkshire Medium Pressure Main

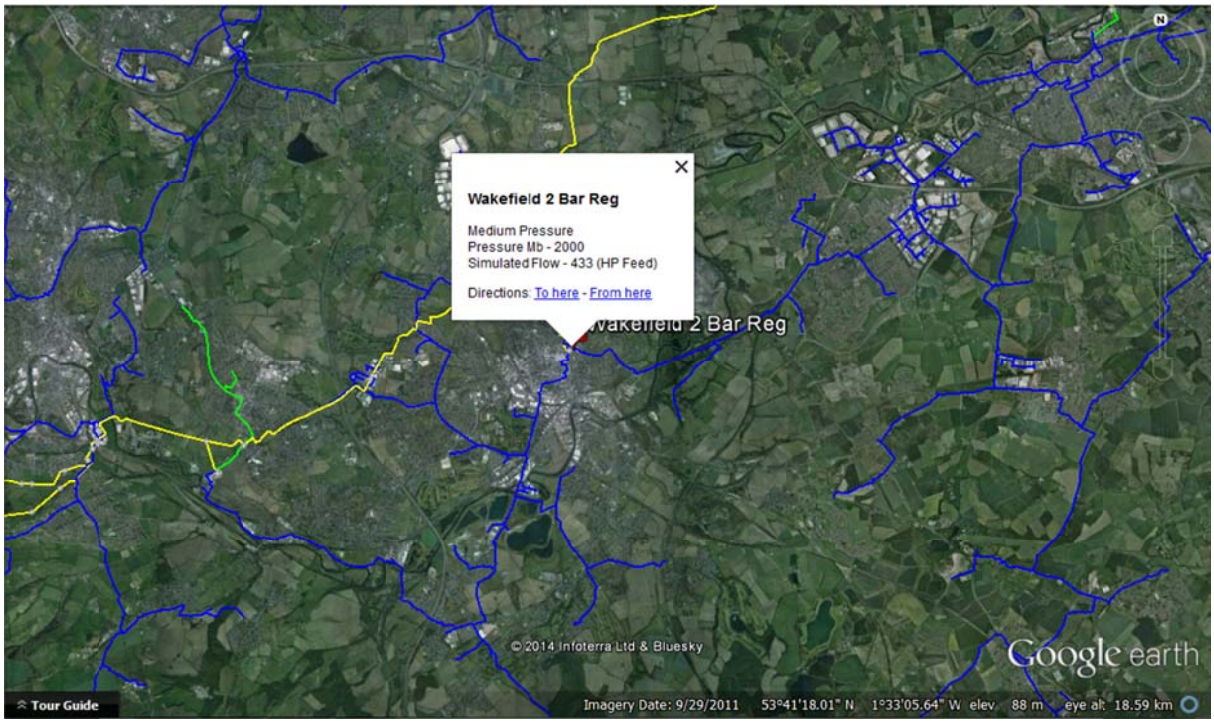
The South Yorkshire Medium Pressure Main system operates up to 2 bar. The grid locations of the medium pressure main considered is: **E: 438498.26, N: 418411.14**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Medium Network identified five locations as detailed and depicted below.

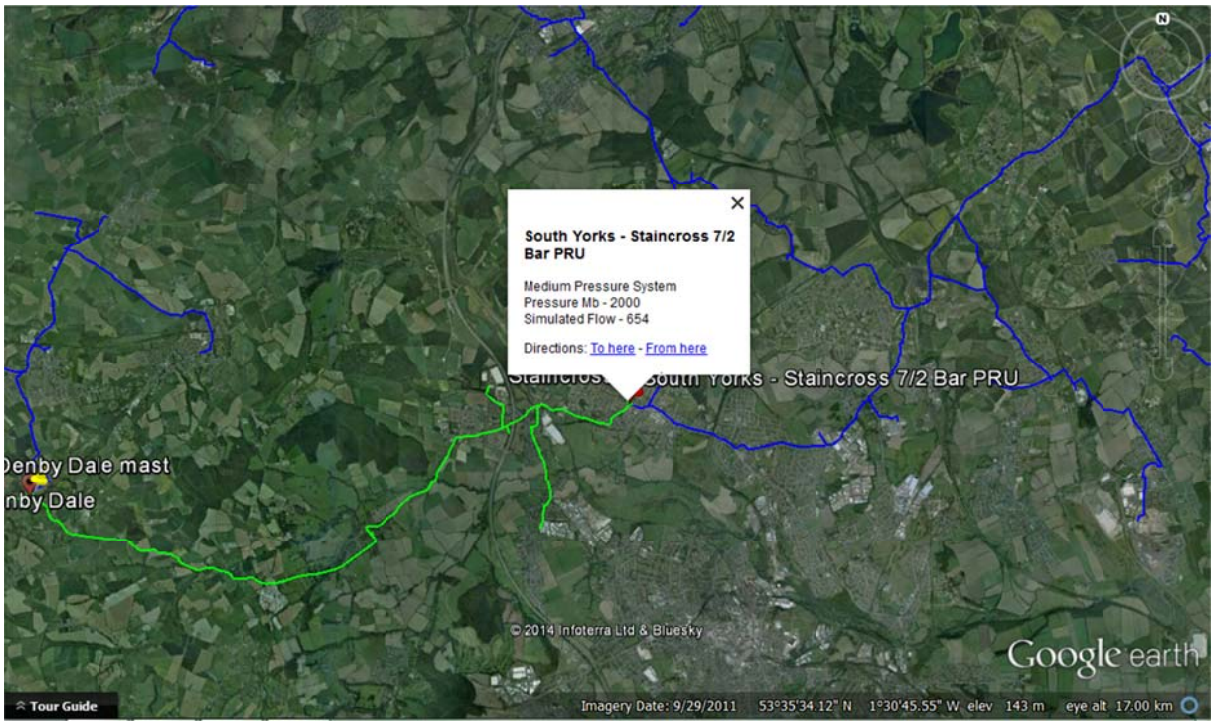
Name of Regulator	Pressure in Millibar	Available Capacity
Wakefield 2 bar Reg	2000	433scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



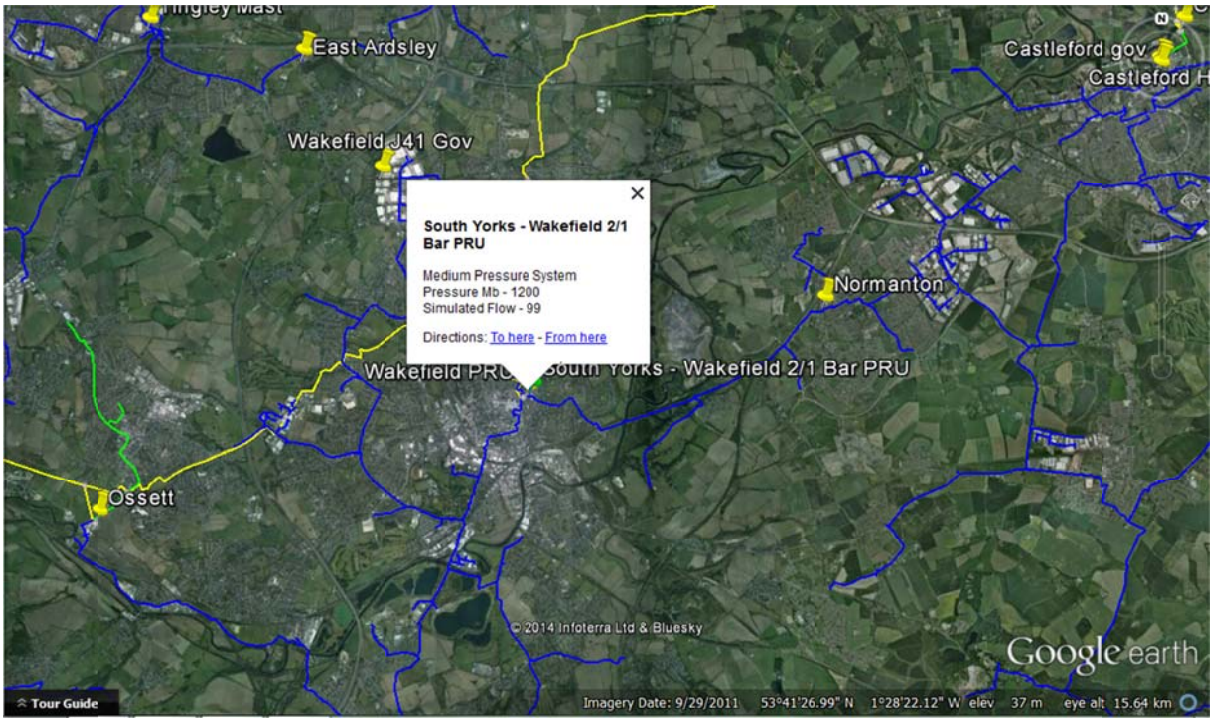
Name of Regulator	Pressure in Millibar	Available Capacity
Staincross 7/2 Bar PRU	2000	654scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



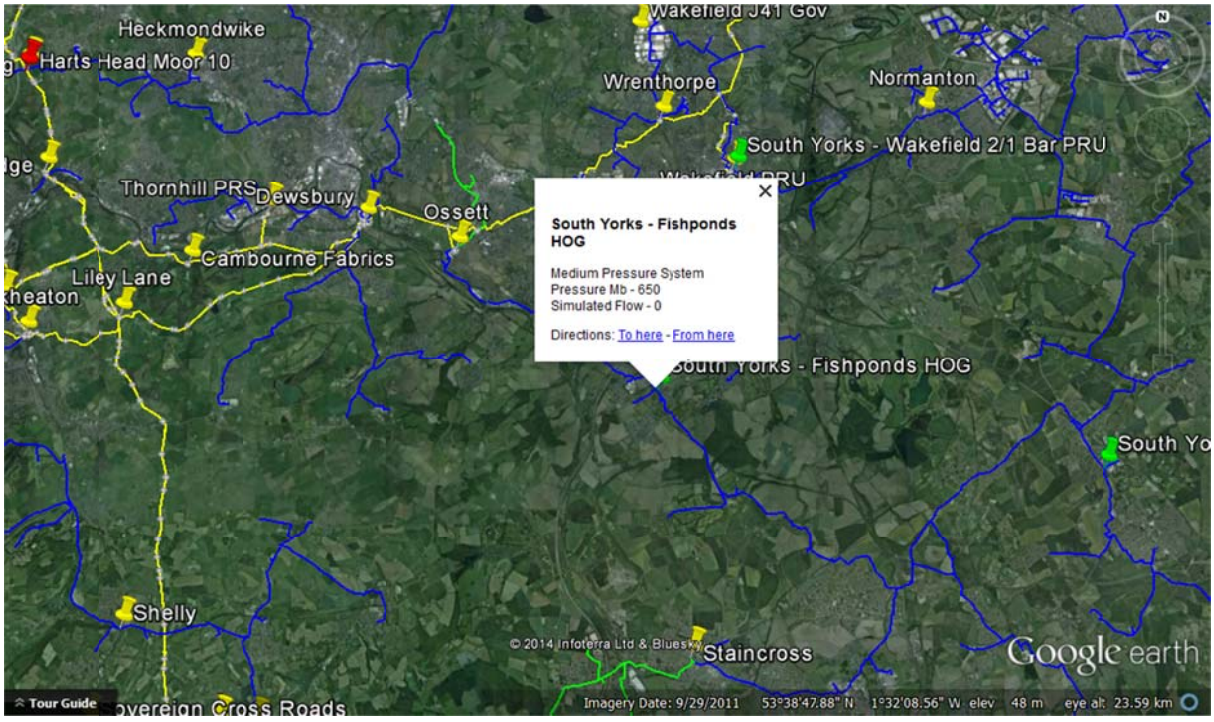
Name of Regulator	Pressure in Millibar	Available Capacity
Wakefield 2/1 bar PRU	1200	99scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



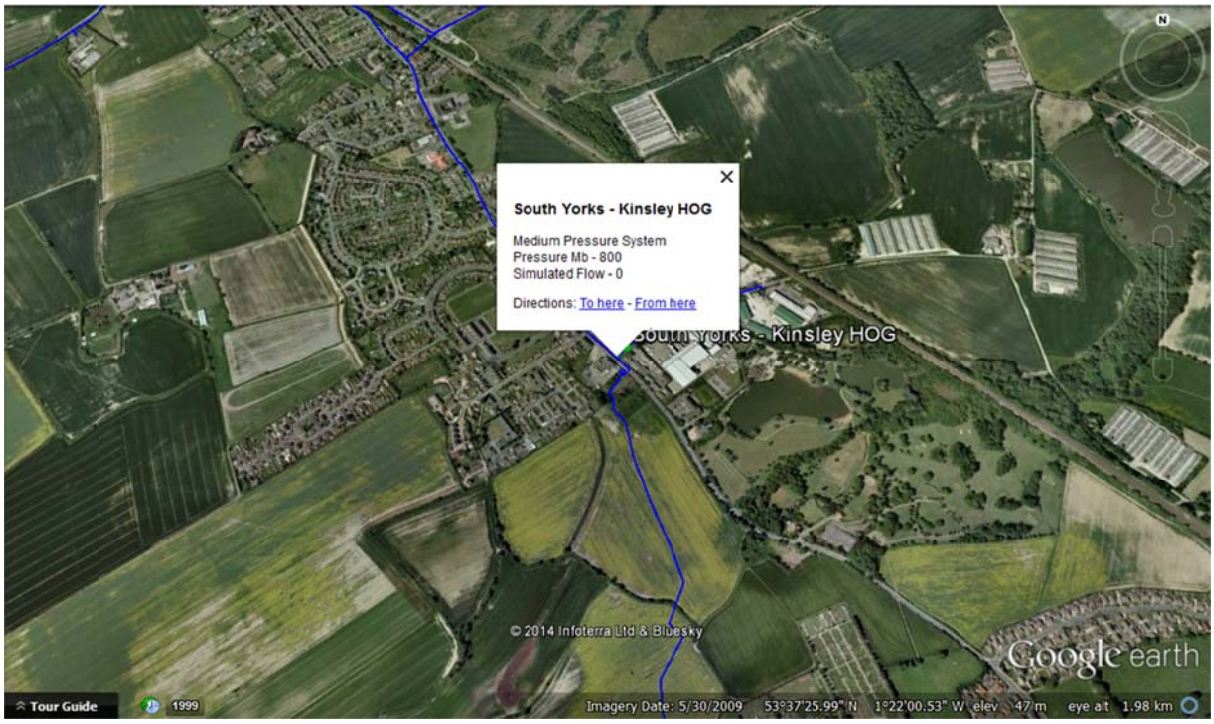
Name of Regulator	Pressure in Millibar	Available Capacity
Fishponds HOG	650	0scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Kinsley HOG	800	0scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



As always the Bio Source's must be prioritised to allow injection.

7. Thornaby Distribution Network

The Thornaby distribution network is located in North Yorkshire. The network provides gas to the surrounding areas.

7.1 Thornaby Medium Pressure Main

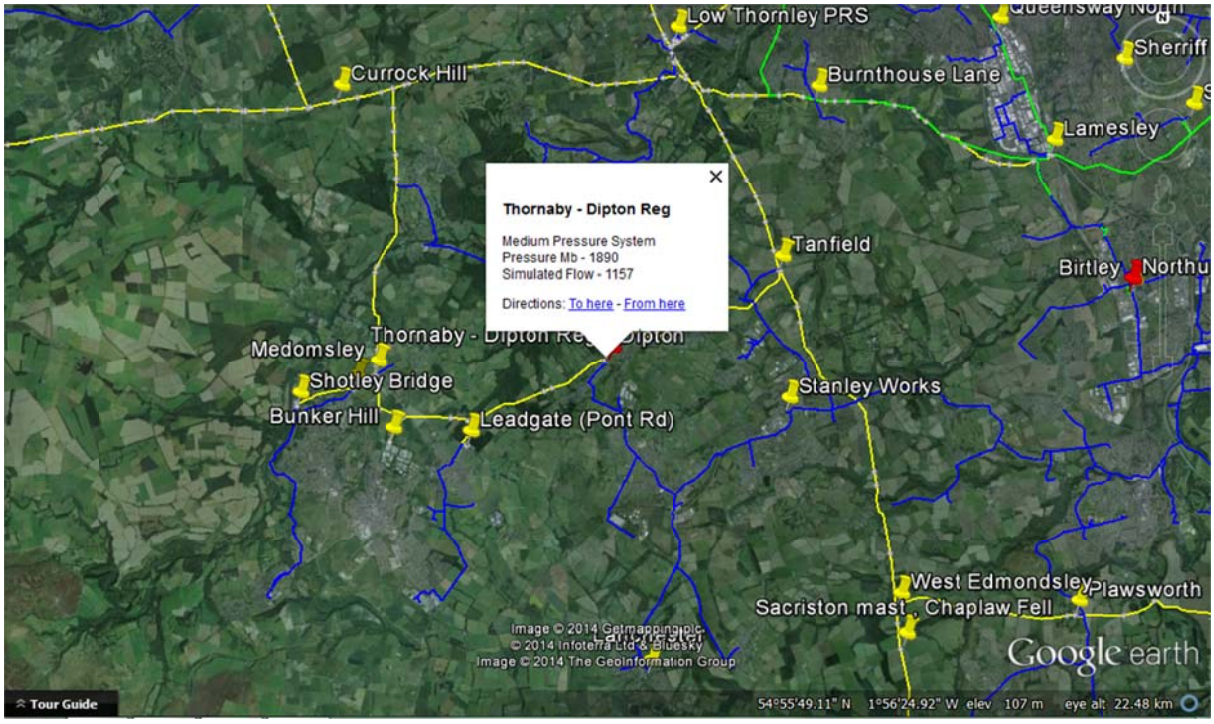
The Thornaby Medium Pressure system operates up to 2 bar. The grid locations of the Medium pressure main considered is: **E: 437240, N: 523663**

The network analysis conditions are set at all demands Temperature & Non Temperature Sensitive set to 1% (Summer Night).

The analysis of the Medium Network identified fifteen locations as detailed and depicted below.

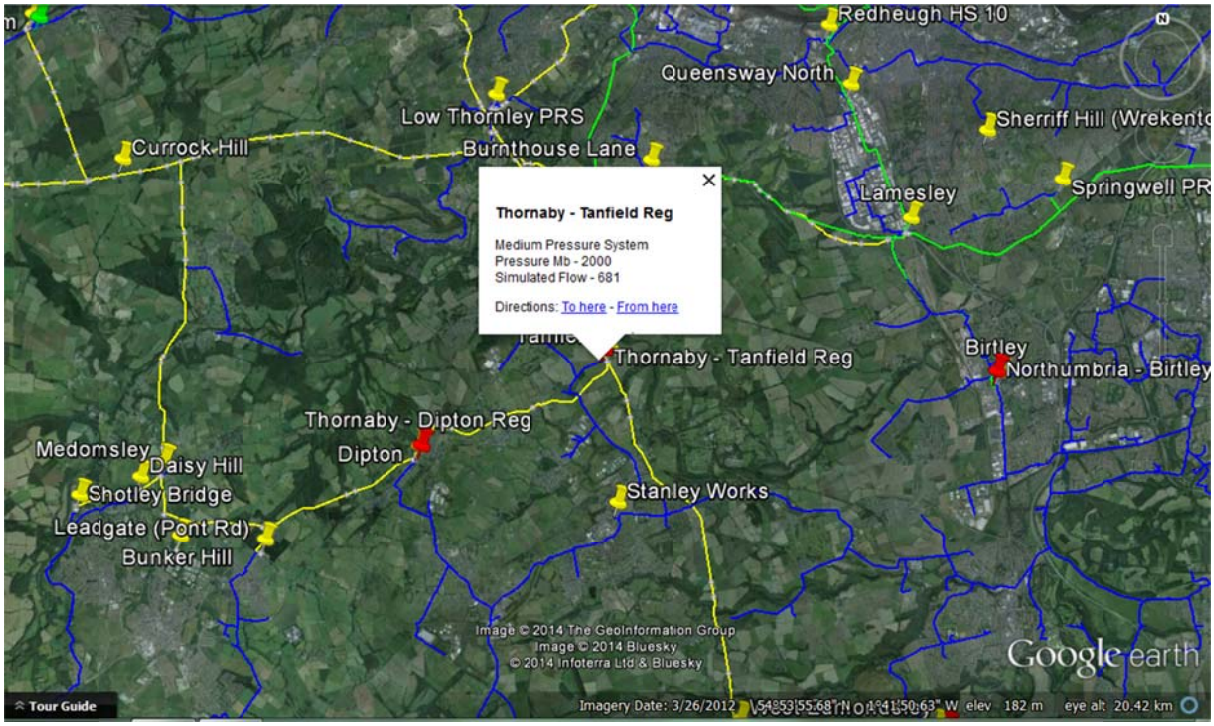
Name of Regulator	Pressure in Millibar	Available Capacity
Dipton Reg	1890	1157 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above



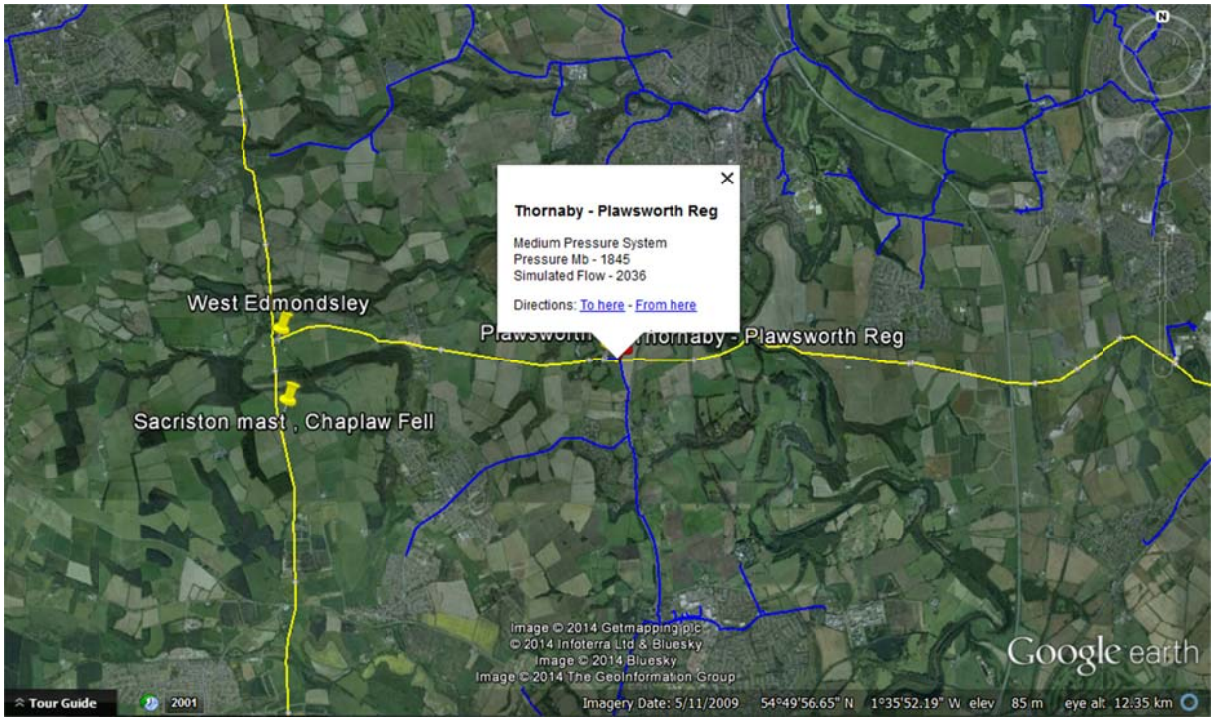
Name of Regulator	Pressure in Millibar	Available Capacity
Tanfield Reg	2000	681 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above



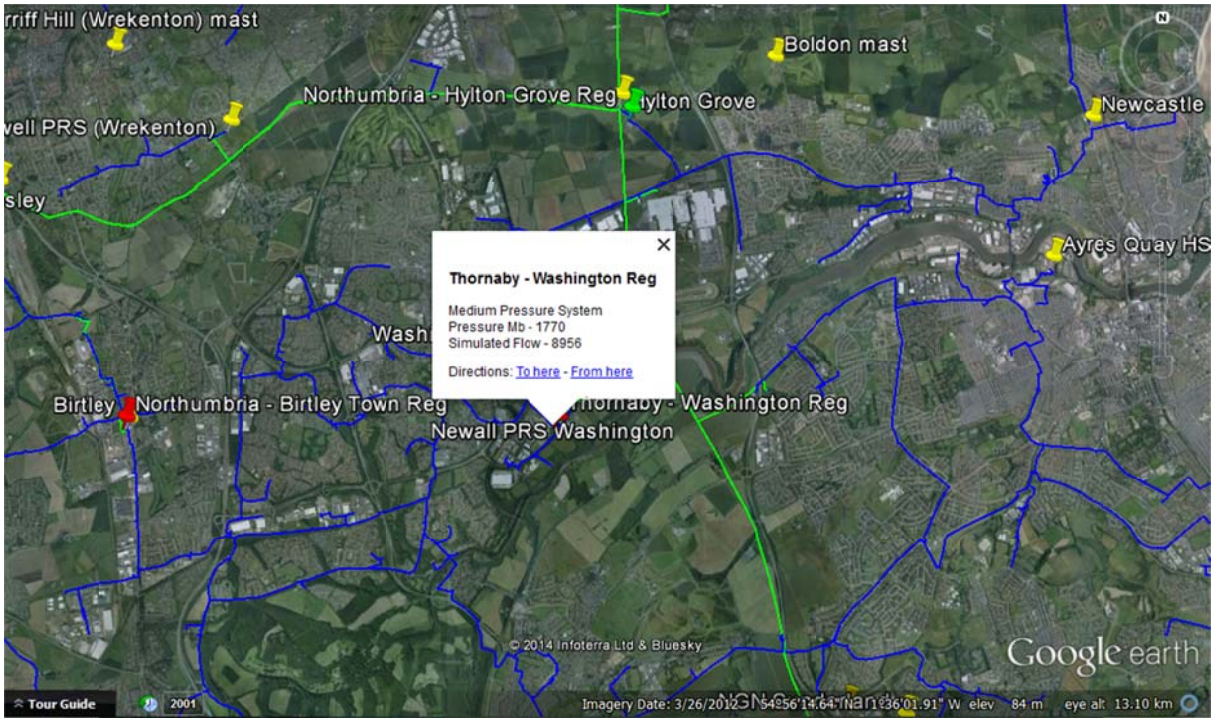
Name of Regulator	Pressure in Millibar	Available Capacity
Plawsworth Reg	1845	2036 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above



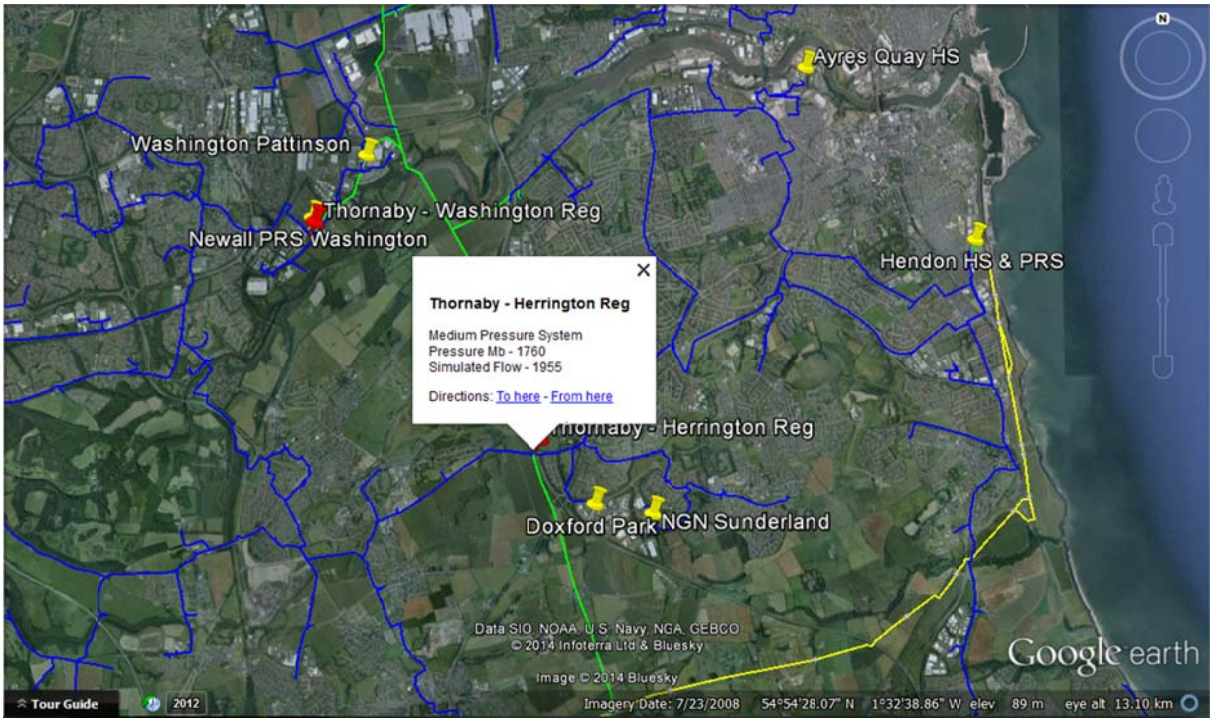
Name of Regulator	Pressure in Millibar	Available Capacity
Washington Reg	1770	8956 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above



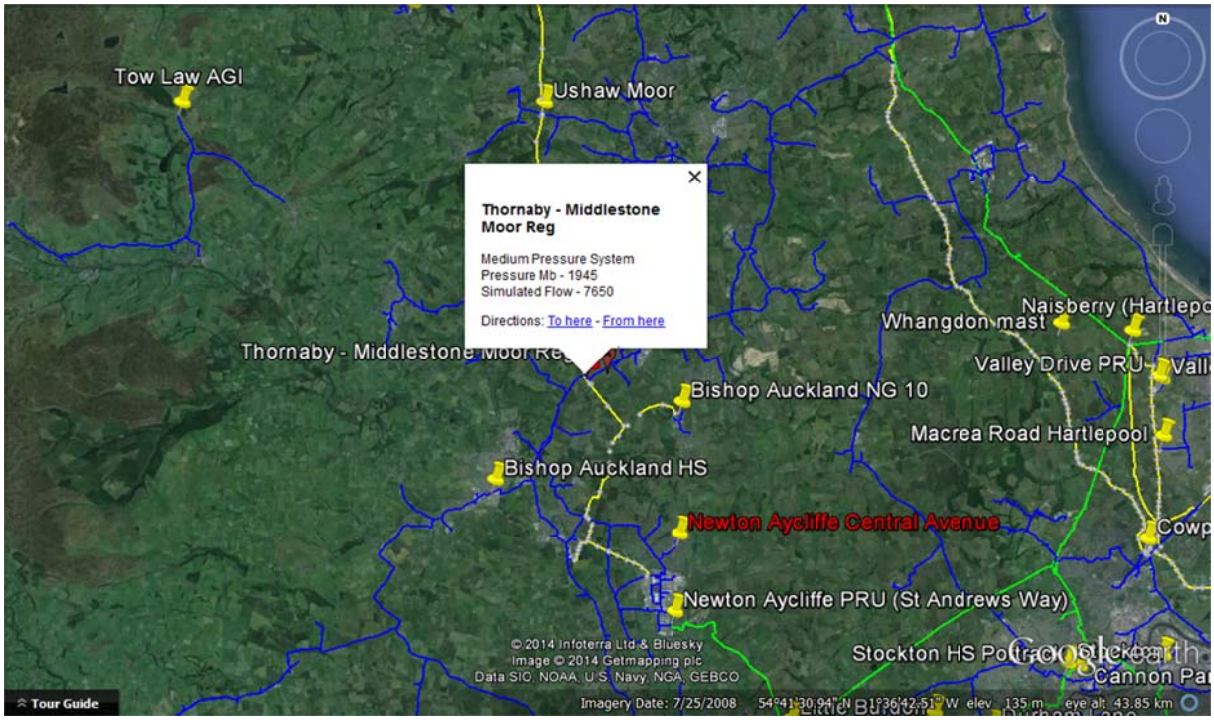
Name of Regulator	Pressure in Millibar	Available Capacity
Herrington Reg	1760	1955 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above



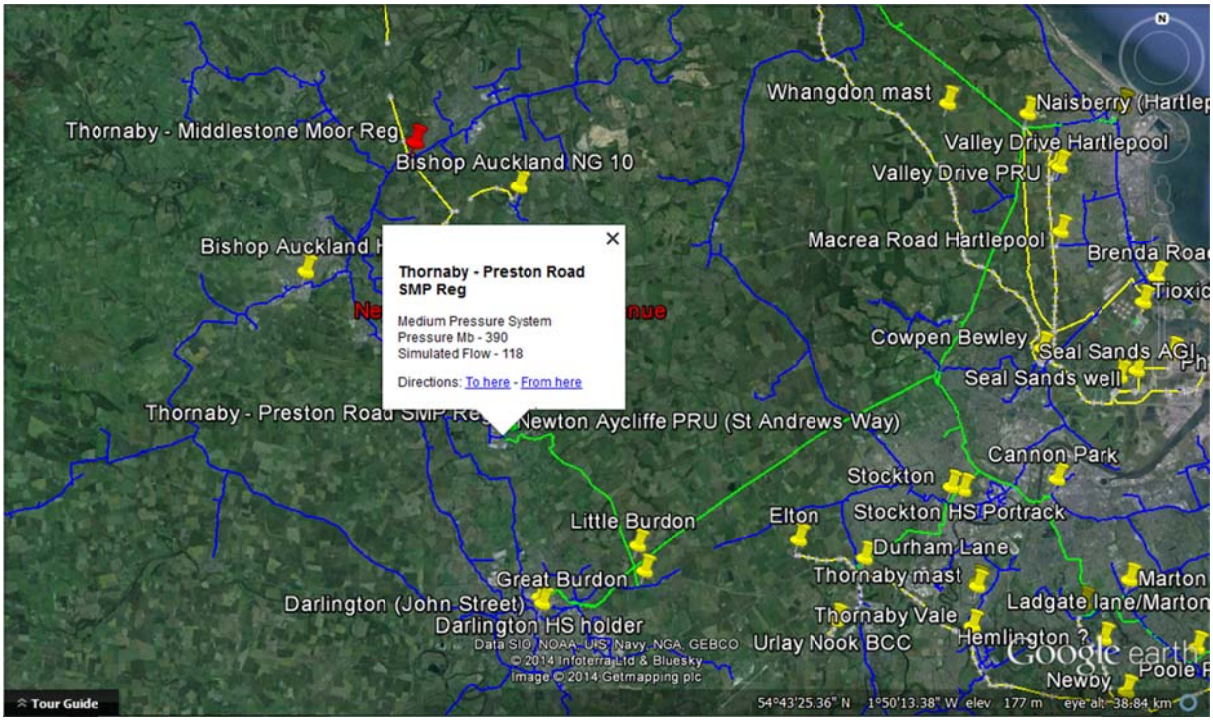
Name of Regulator	Pressure in Millibar	Available Capacity
Middlestone Moor Reg	1945	7650 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above



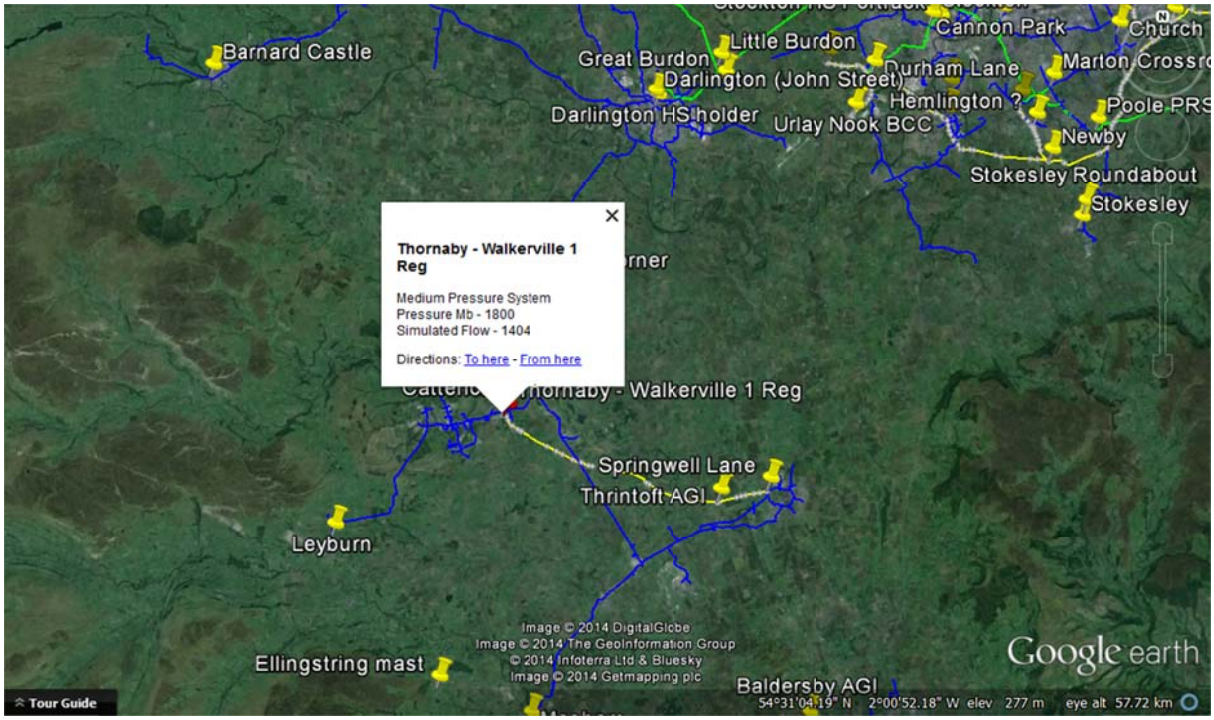
Name of Regulator	Pressure in Millibar	Available Capacity
Preston Rd SMP Reg	390	118 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



Name of Regulator	Pressure in Millibar	Available Capacity
Walkerville 1 Reg	1800	1404 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

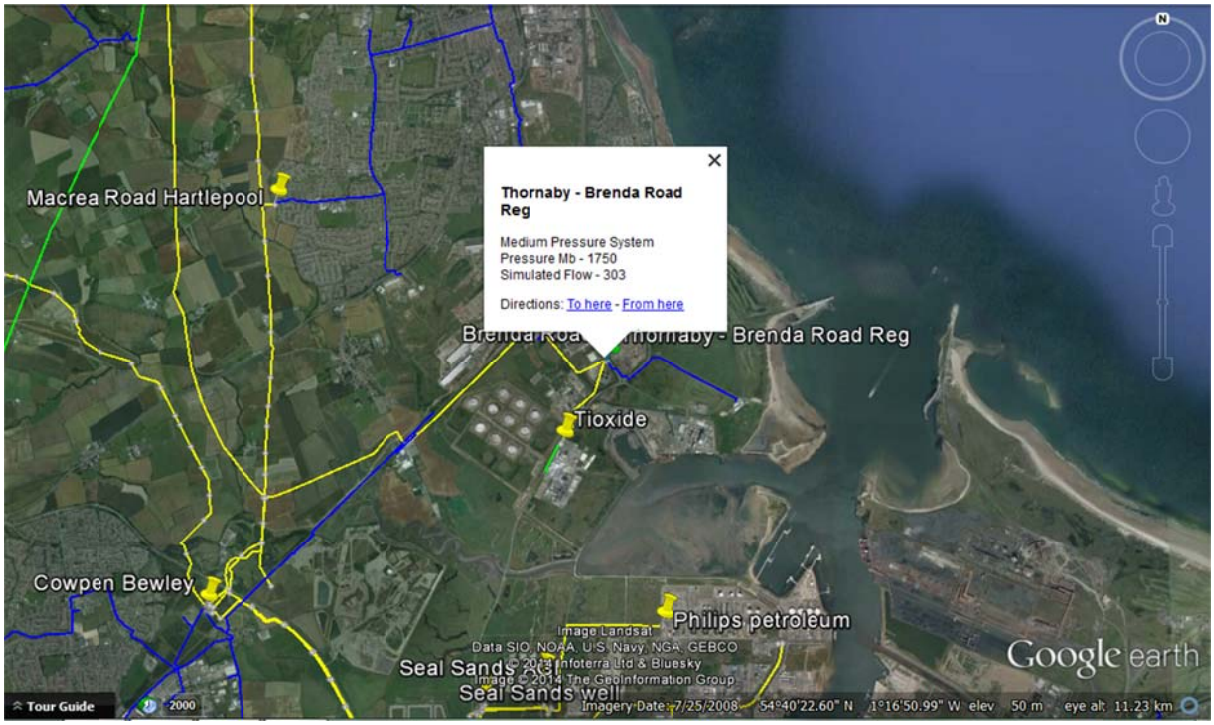


Name of Regulator	Pressure in Millibar	Available Capacity
Springwell Lane Reg	1950	630 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.

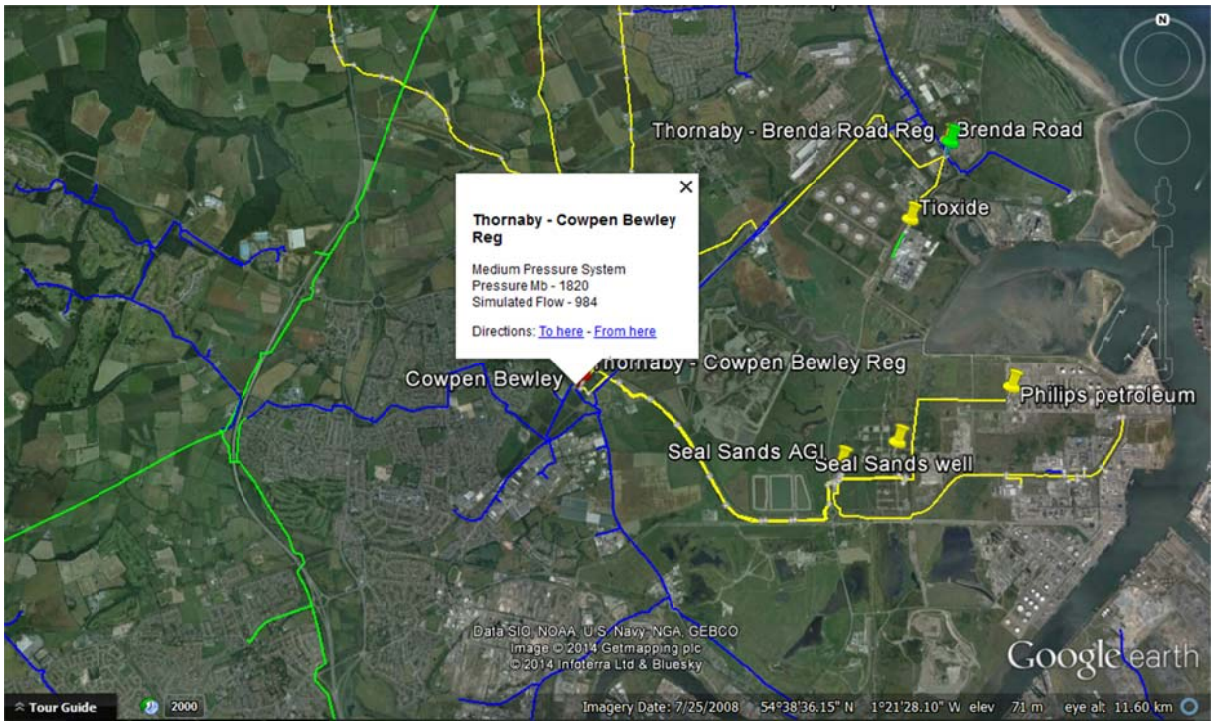
Name of Regulator	Pressure in Millibar	Available Capacity
Brenda Road Reg	1750	303 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



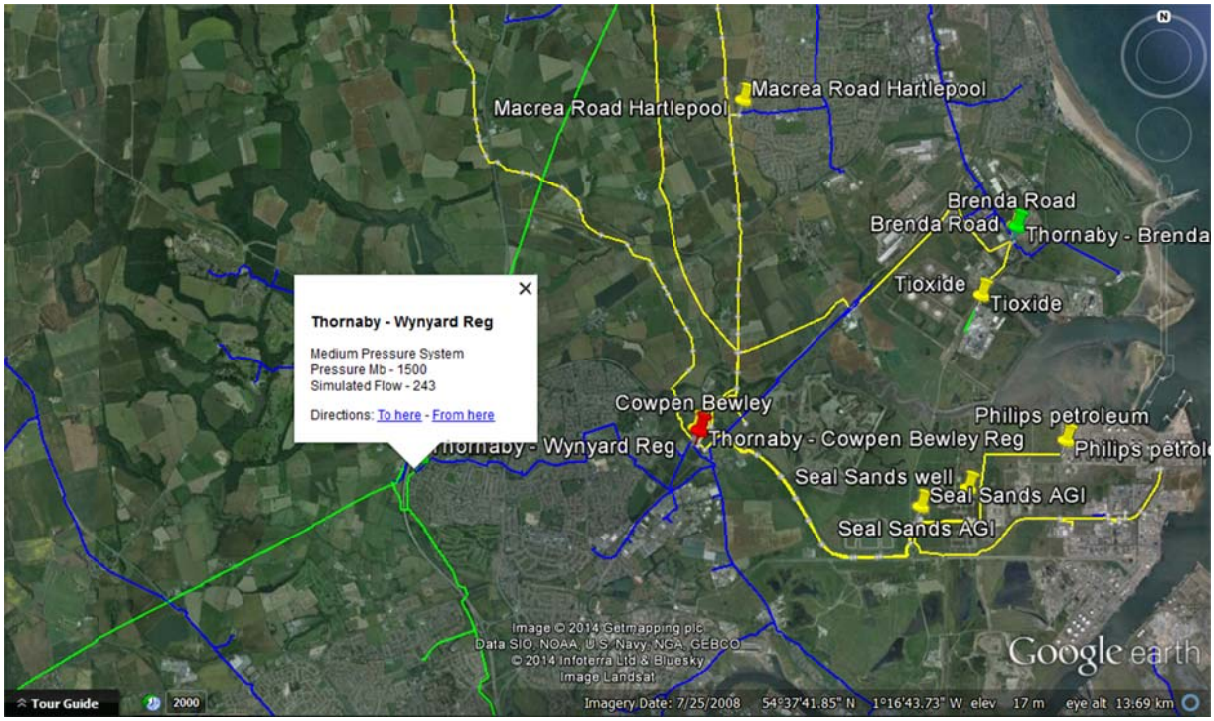
Name of Regulator	Pressure in Millibar	Available Capacity
Cowpen Bewley Reg	1820	984 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



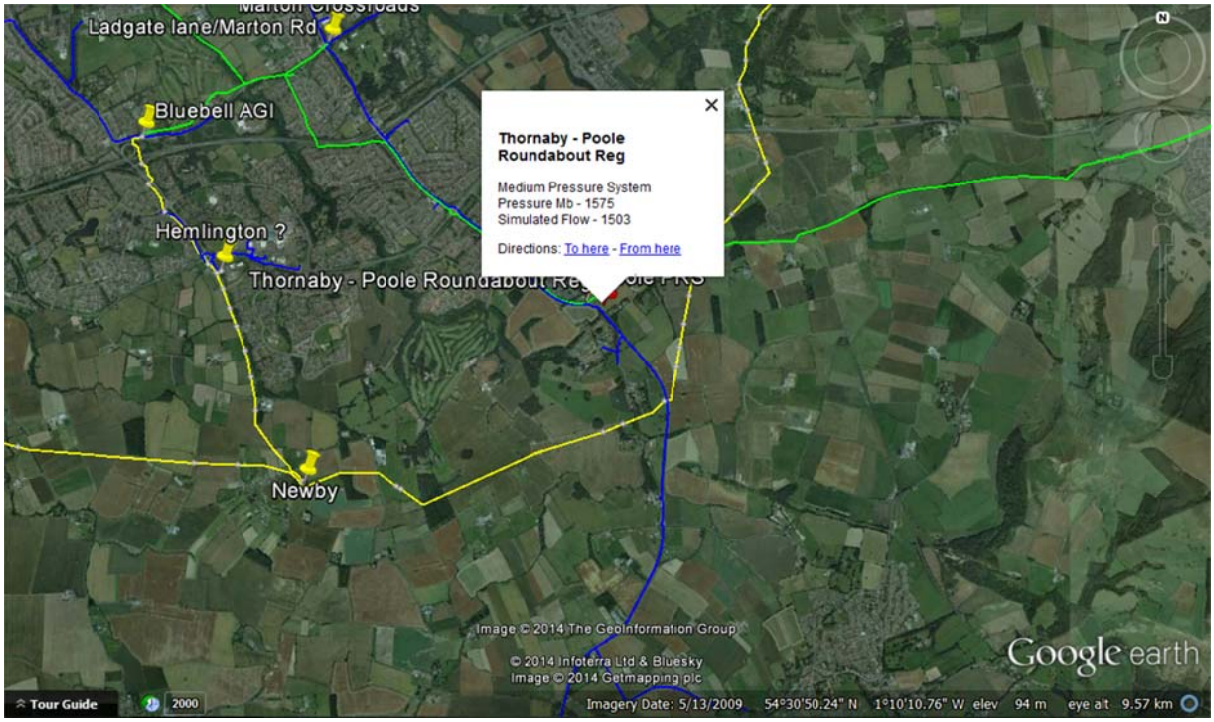
Name of Regulator	Pressure in Millibar	Available Capacity
Wynyard Reg	1500	243 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



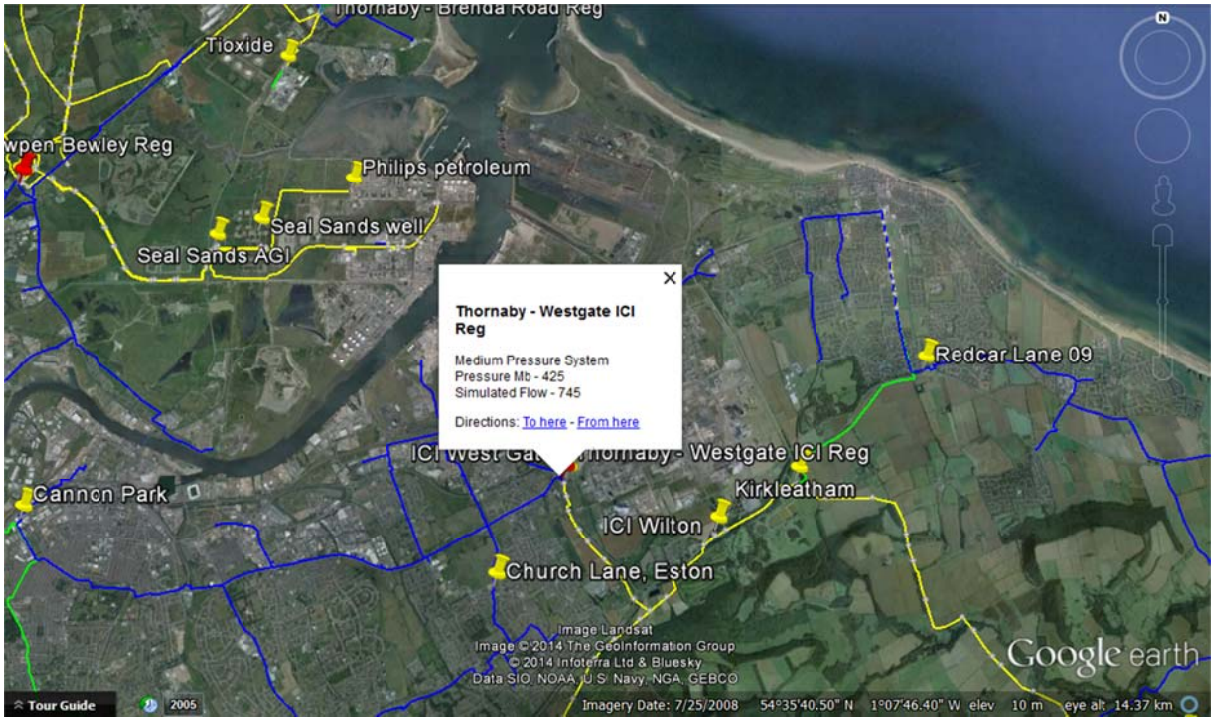
Name of Regulator	Pressure in Millibar	Available Capacity
Poole Roundabout Reg	1575	1503 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



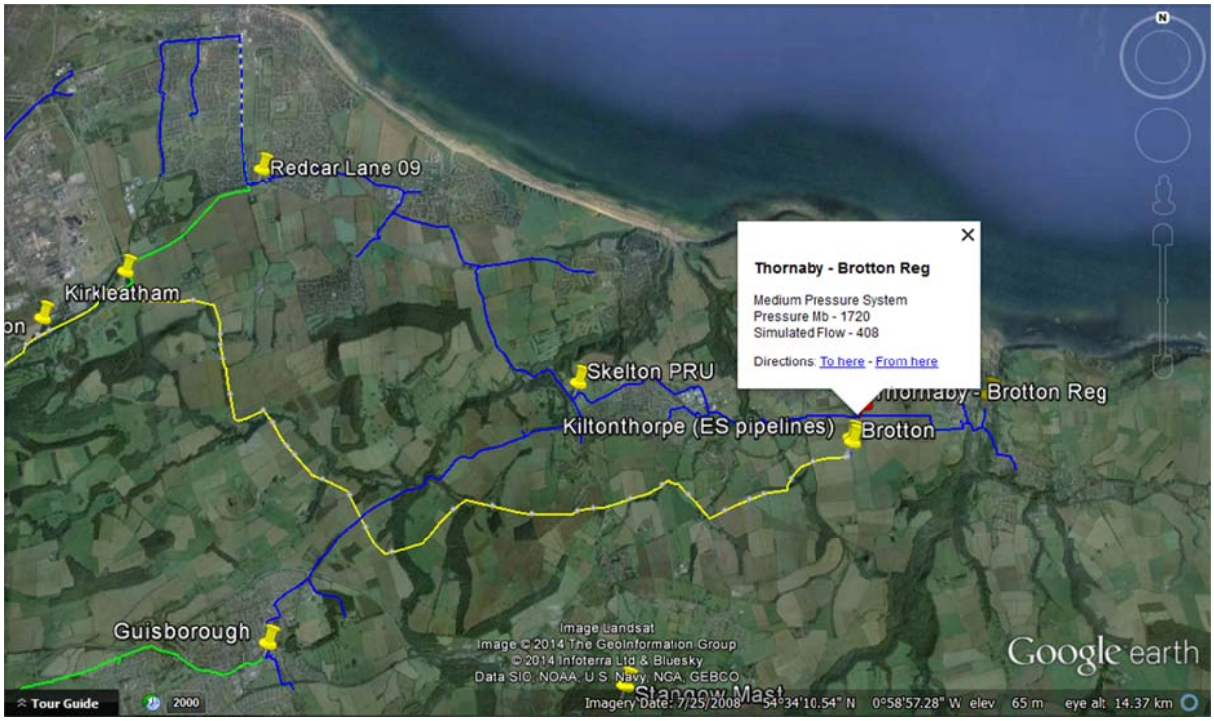
Name of Regulator	Pressure in Millibar	Available Capacity
Westgate ICI Reg	425	745 scm/h

The google map depicts the location of the regulator and the medium pressure main with the capacity identified above



Name of Regulator	Pressure in Millibar	Available Capacity
Brotton Reg	1720	408 scm/h

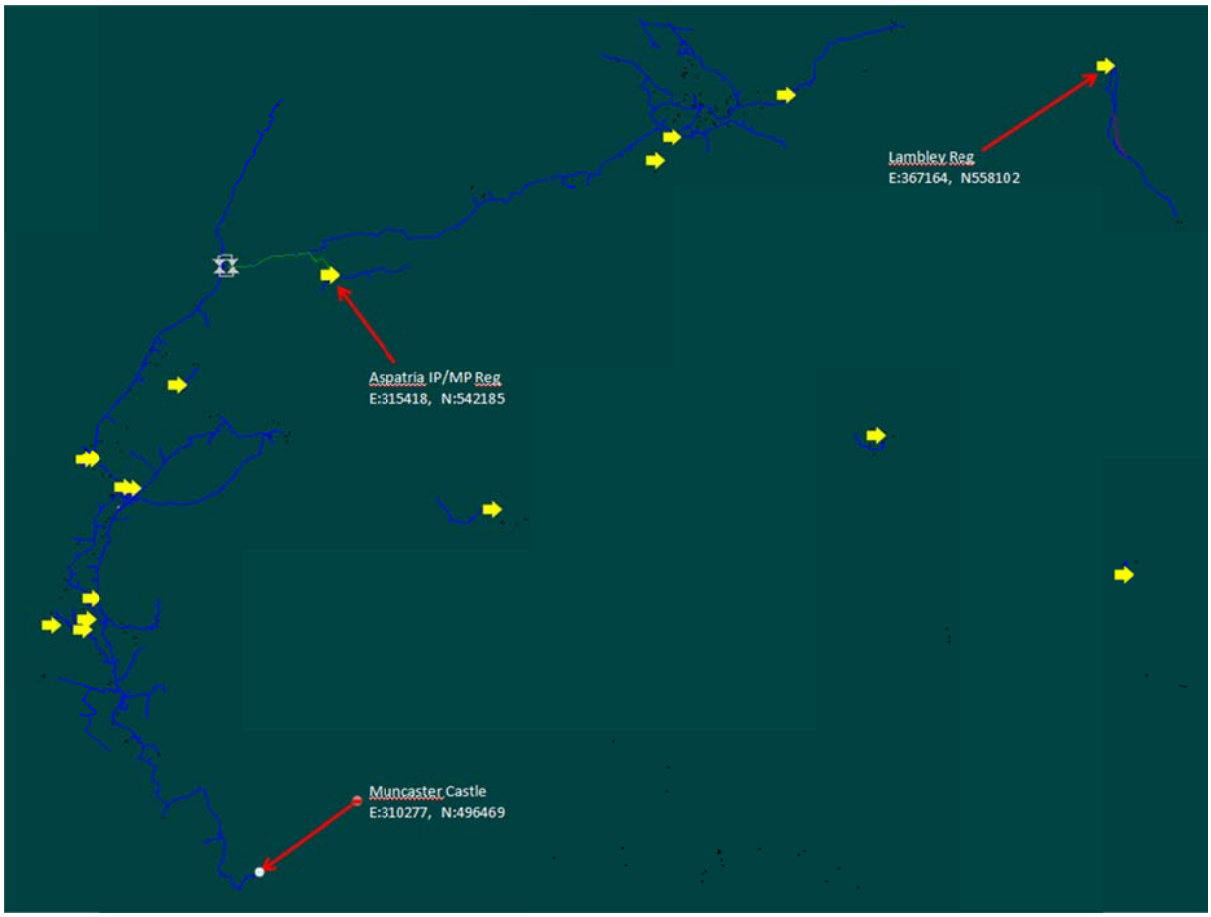
The google map depicts the location of the regulator and the medium pressure main with the capacity identified above.



As always the Bio Source's must be prioritised to allow injection.

There is no capacity for Bio-methane injection in the Cumbria MP 2Bar System.

The plan below is just for info.



Network Name	HP or IP Feed	Single Feed or Integrated	SCMH Flow @ 1% demand
Whitly MP	HP	Single	88
Pickering MP/IP	IP	Single	55
Ebberston MP	HP	Single	16
West Ayton MP	HP	Single	9
Scarborough MP	HP	Int x 2	206 & 161
Malton MP	HP	Single	64
Hunmanby MP	HP	Single	18
Bridlington MP	HP	Int x 2	129 & 94
North Frodingham MP	HP	Single	6
Leven IP	HP	Single	14
Long Riston IP	HP	Single	11
Hornsea MP	HP	Single	42
Beverley MP	HP	Single	167
HOSM MP	HP	Single	83
Hull MP/IP	IP/HP	Int Complex System	
Wawne MP	HP	Single	3
Asselby M P/IP	IP/HP	Single	110
Goole MP/IP	IP/HP	Single	214 & 18
Selby MP/IP	IP/HP	Int x 2	24 & 137
South Yorks MP/IP	IP/HP	Int Complex System	
York MP/IP	HP	Single	1027
Harrogate MP/IP	HP	Single	488
Thirsk MP	HP	Single	78
Aire Valley MP/IP	IP/HP	Int x 2	185 & 260
Bradford MP/IP	IP/HP	Int Complex System	
Calder Valley MP/IP	IP/HP	Int Complex System	
Hebden Bridge MP	HP	Single	113
Ilkley MP/IP	HP	Single	109
Leeds MP/IP	IP/HP	Int Complex System	
Wharfe Valley MP/IP	IP/HP	Int x 2	236 & 199
Northumberland MP	IP/HP	Int Complex System	
Cumbria MP/IP	IP/HP	Int Complex System	
Hexham IP	HP	Single	69
Berwick IP	HP	Single	101 & 7 & 117
Shap IP	HP	Single	23
Slaley IP	HP	Single	4
Melkinthorpe IP	HP	Single	40
East Coast Grid IP	HP	Int Complex System	
Thornaby MP	IP	Int Complex System	

Int. Complex System indicates there are many sources on a large network.
Int. x 2 & if the flow's are split it means there are 2 sources in this network only.