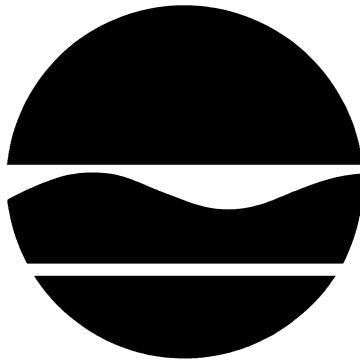


Site Characterization Report

Cold Spring Former Manufactured Gas Plant



**Cold Spring (V), Putnam County, N.Y.
Site No. 3-40-026
July 2005**

Prepared by:
Remedial Bureau C
Division of Environmental Remediation

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Purpose of a Site Characterization

A Site Characterization is undertaken to identify and investigate any potentially contaminated areas of concern at a site. The site characterization is the initial two-step process to determine whether or not a site requires remediation. The first step is a records search. Based upon the results of the record search, the need for a field characterization will be determined and a work plan will be developed and implemented.

The field characterization is intended to determine whether:

1. The applicable standards, criteria and guidelines (SCGs), are contravened;
2. An adverse impact to fish and wildlife resources exists or potentially exists,
3. A public health exposure exists or potentially exists,
4. The identified contamination emanates beyond the property boundary of the site being characterized; and
5. Consequential hazardous waste disposal has been identified at the site, which represents a significant threat to public health or the environment.

A field characterization is undertaken to determine if any contaminants are present at the site at levels that indicate the need for a remedial investigation. If no such contaminants are present at the site, then the DER may determine that no further investigation is required.

Based upon a review of the site characterization report, the NYSDEC will determine whether:

1. No further investigation is required at the site, because no potentially contaminated areas of concern were identified, or no area of concern characterized is determined to require a remedial investigation; or
2. A remedial investigation pursuant to this section will be required due to the presence of contamination identified by the site characterization; or
3. A decision regarding remediation for the site can be made based upon the presence of the contamination identified, where the nature and extent was sufficiently defined by the site characterization to determine an appropriate remedy.

Background:

On February 11, 2005, during an archeological investigation at One Main Street in the Village of Cold Spring, black stained soil that appeared to be petroleum impacted was uncovered and reported to the NYSDEC as a petroleum spill (Spill #04-12054). An environmental contractor was hired by the site owner to investigate the suspected spill. Soil samples were collected from the four archeological test pits for laboratory analysis. Soil samples were also collected from four new soil borings. The analysis of these samples indicated that significant subsurface contamination was present at only one of the test pit locations. The contamination found appeared to be coal tar, not the suspected petroleum spill. As such Spill #04-12054 has been closed and the site was referred to the staff at the NYSDEC experienced in the investigation of coal tar contaminated sites.

A review of historic documents determined that a manufactured gas plant (MGP) had operated in the late 1800's in the area of the current boat club property, which is across New Street from the reported spill location at One Main Street. A map dated 1887 identified a gas holder and a retort building, a specialized oven for making coke and gas from coal. The retort building was identified as vacant, which indicates that the plant was no longer operating at that time. A review of the available Public Service Commission Records revealed the Cold Spring Light Heat and Power Company was established on October 16, 1899, however this company did not have any history of gas service. Based on the review of historical information, no viable corporate successor to the original gas plant operation has been identified to date.

This former MGP was operated to produce a combustible gas from coal, which was used for lighting, heating and cooking in the community. The contamination identified is characteristic of coal tar, which is the primary byproduct associated with MGP plant sites. Coal tar condensed from the hot gas produced by the plant as it cooled. Coal tar is a brownish to black liquid with an odor similar to driveway sealer. Coal tar contains chemicals including polycyclic aromatic hydrocarbons (PAHs) and benzene, toluene, ethylbenzene, and xylene (BTEX). Coal tar was also sometimes used in chemical processing and for wood treatment, which may be relevant at this location since the property at One Main Street was historically a lumber yard.

The former MGP is located in the Village of Cold Spring, approximately 250 feet uphill (east-northeast) of the Hudson River along New Street and approximately 280 feet downhill from the Metro North railroad tracks. The Cold Spring Boat Club is situated between the former MGP site and the river. There is a rock outcrop to the south of the site. The ground is relatively level to the north, between the former MGP and Main Street.

Field Characterization Activity

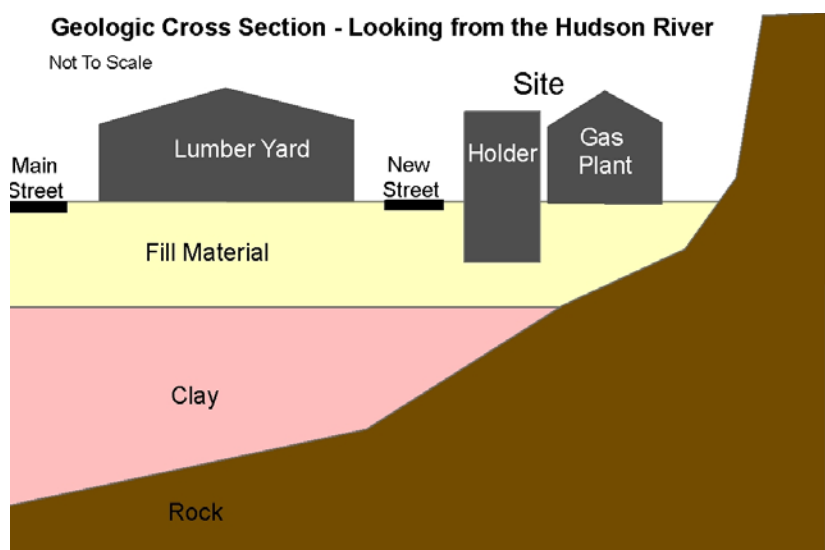
Based on the records search and findings of the spill investigation which identified the presence of the MGP, between May 11 and 13, 2005, a field characterization field investigation was conducted. The following activities were performed during this investigation:

1. Eleven (11) soil borings were completed. Boring logs detailing the findings from each boring location are included in Appendix D.
2. Five (5) subsurface soil samples were collected.
 - a. These samples were collected to characterize locations up-gradient, down-gradient, and below the observed contamination, to confirm the limits and nature of the contamination.
 - b. No samples of the gross visual contamination were collected.
 - c. Analytical results of these samples are appended to this report as Appendix E and are summarized in Figure 2.
3. Three (3) borings were completed as groundwater monitoring wells and the groundwater was sampled. Analytical results of the groundwater samples are appended to this report as Appendix E and are summarized in Figure 3.
4. The locations of all of the above work are shown on the Figure 1.
5. Sample collection locations and analytical results are summarized in Figures 2 and 3.

Findings of the Investigation:

Geological Setting:

The soils to the north of the site and the northern side of the site consist of historic fill material for the first 11-13 feet, which is underlain by a clay layer which appears to be at least 15 feet thick. To the south of the site is a rock outcrop. Between the rock outcrop and the north side of the site, the depth to rock appears to increase steadily. The groundwater and surface water would all be expected to flow from the northeast to the southwest, toward the Hudson River. Most of the groundwater flow would be expected to be seen in the historic fill layer, since the rock and clay would be expected to be much less permeable.



The field investigation yielded four principal observations:

1. Coal tar was observed in soil borings 3-6, 8, and 9. Based on these borings, a significant quantity of MGP related hazardous waste is present in the subsurface at this site.
2. Soil borings 3 and 4 both encountered concrete at a depth of approximately 6-7.5 feet below ground surface in the former gas holder location. This indicates that the gas holder foundation, and possibly other MGP structures, are likely still in place at the site. Coal tar was observed above the concrete within this structure.
3. A clay layer was identified at approximately 11-13 feet below grade, and appears to be acting as a confining layer. This clay layer was observed to be at least 15 feet thick. The soil above this layer is largely historic fill. Soil samples collected within this clay layer below visually contaminated areas (borings 6 and 8) confirm that this clay appears to effectively limit the downward migration of contamination.
4. Analytical results from the groundwater in the immediate vicinity of the coal tar (the source area) contain site-related contamination at levels above state standards. The groundwater from the two wells further from this source area have not been impacted
5. Based on the observation of free phase coal tar and groundwater impacts, a full remedial investigation is needed at this site.

Recommendations


Based on the findings of the Site Characterization, a Remedial Investigation will be required to determine the full nature and extent of contamination at this site. A detailed work plan will be prepared for Remedial Investigation activities, to include:

1. Additional borings are needed to accurately define:
 - a. the location of the holder foundation and any other subsurface MGP structures which may remain at the site;
 - b. the surface of the clay layer and the bedrock surface, which are expected to control the migration of coal tar, and thus detailed topographic information on these surfaces will be gathered.; and
 - c. the extent of coal tar contamination will be further delineated, particularly to the west, toward the Hudson River.
2. Because coal tar was observed in contact with the bedrock at boring 5, an investigation of the bedrock will be required to determine if the contamination has entered the bedrock.
3. Additional monitoring wells will be considered based on the extent of the coal tar delineation.
4. A soil gas and vapor intrusion evaluation will be required on the boat club property.
5. A Remedial Investigation report will be prepared.
6. A Feasibility Study will then be developed based on the full Remedial Investigation which will evaluate remedial alternatives to address the contamination.


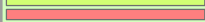
Appendix A

Figures













DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NEW YORK STATE

Total PAHs	
	< 500 ppm PAHs
	> 500 ppm PAHs

MGP Site Borings

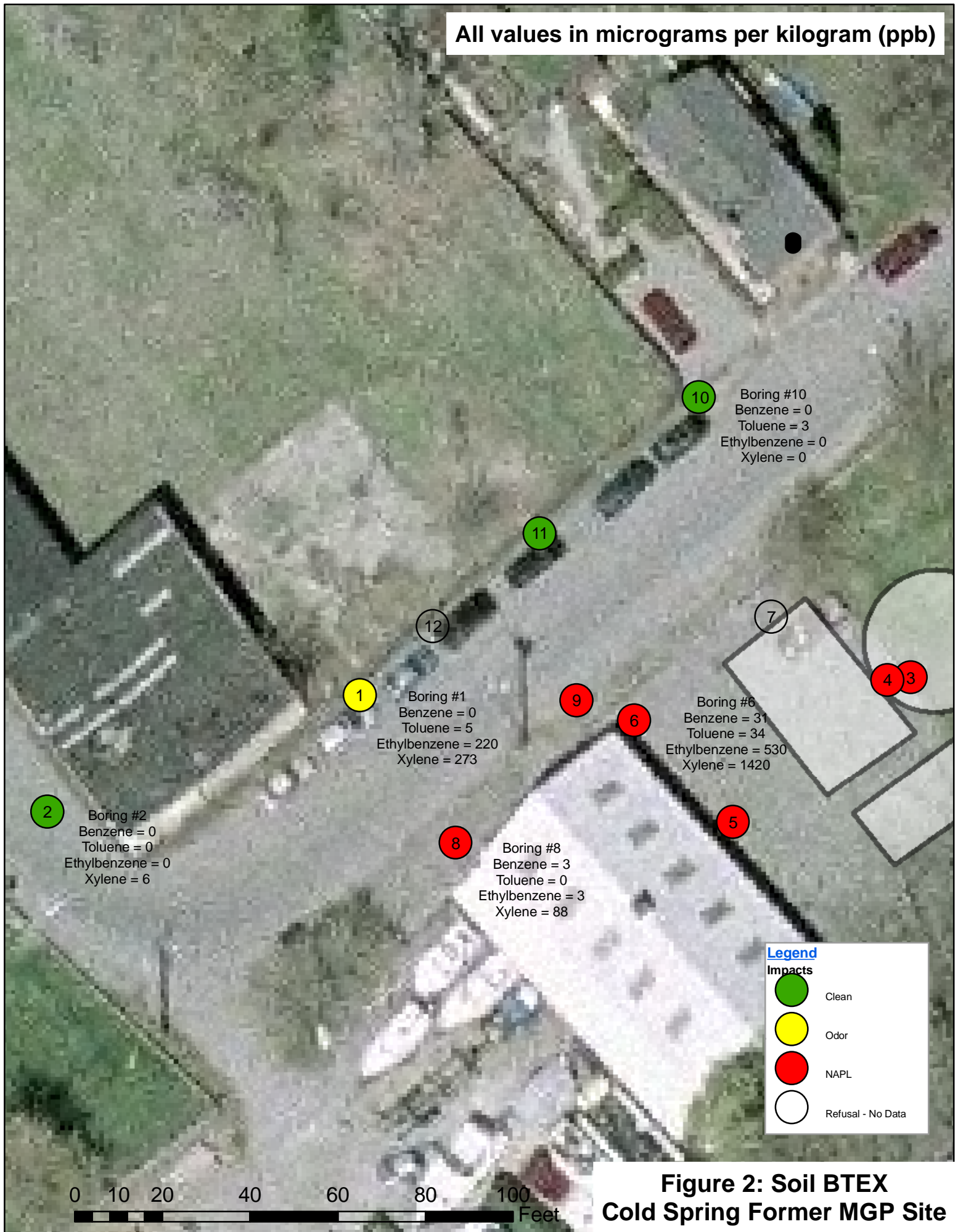
	Clean
	Odor
	NAPL
	Refusal - No Data

Lumberyard Borings

	Clean
	Shallow Odor
	Shallow sheen
	NAPL

**Cold Spring
Former MGP Site
Figure 1**

All values in micrograms per kilogram (ppb)



All results in parts per billion (micrograms per liter)
ND= Not Detected

Well -2
Chrysene = ND
Benzo(a)pyrene = ND
indeno(1,2,3-cd)pyrene = ND
Benzo(g,h,i)perylene = ND

Well -1
Chrysene = 0.5
Benzo(a)pyrene = 0.5
indeno(1,2,3-cd)pyrene = 0.4
Benzo(g,h,i)perylene = 0.8

Well -3
Chrysene = ND
Benzo(a)pyrene = ND
indeno(1,2,3-cd)pyrene = ND
Benzo(g,h,i)perylene = ND

New Street

**Cold Spring Former MGP Site
Figure 3 - Groundwater Results**

0 5 10 20 30 40 50 Feet

Appendix B

Photographs



Starting boring #2 at the intersection of New Street and West Street (facing north).



Soil sample from boring #2 showing the top of the clay layer. (Interval from 12 to 14 feet).



Coal Tar in boring #3 (interval from 4 to 6 feet).



Coal tar in boring #5 (interval from 4 to 6 feet).



Coal tar at boring #8 (interval from 10 to 12 feet).

Appendix C

Historical Maps

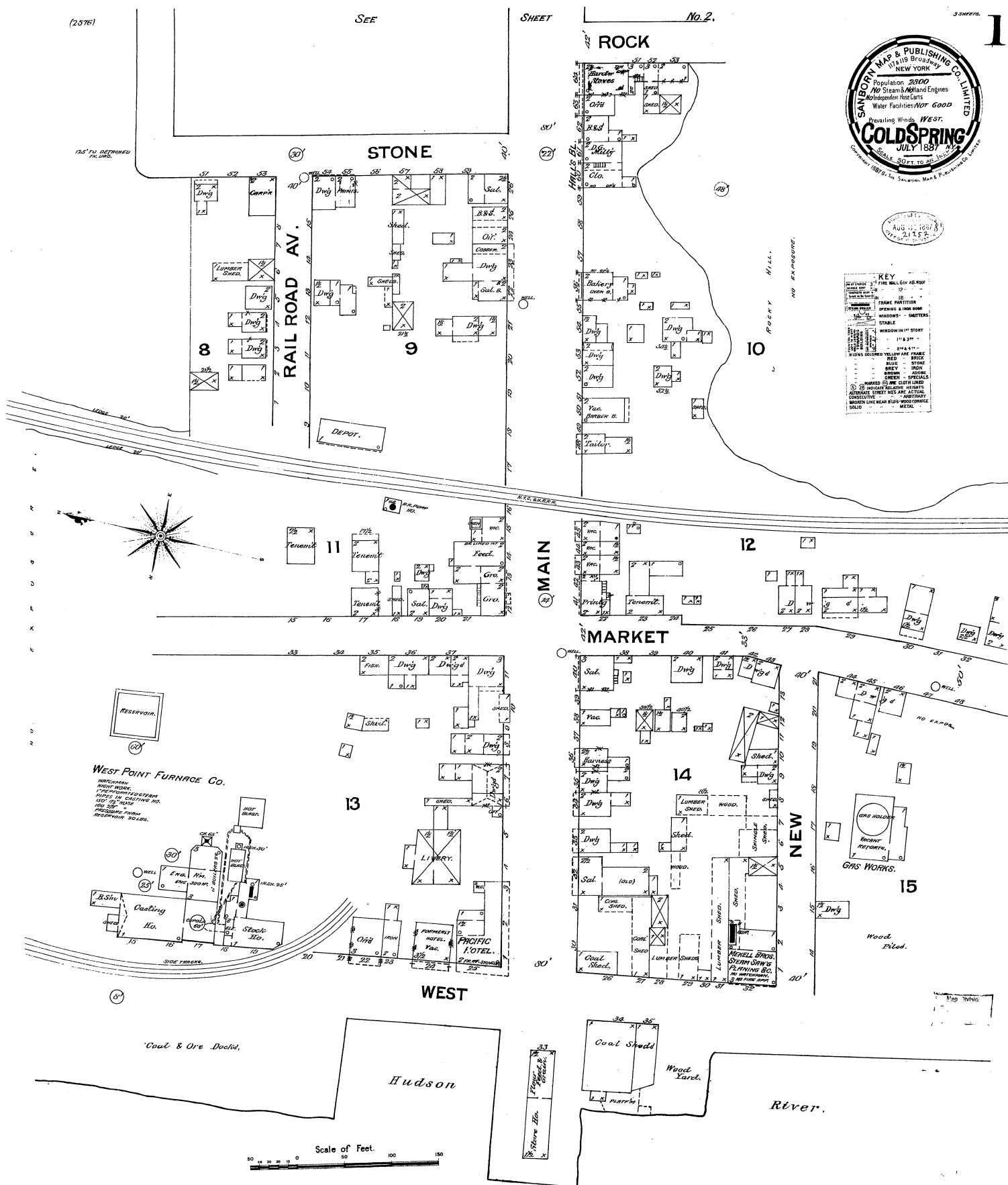
Sanborn Maps

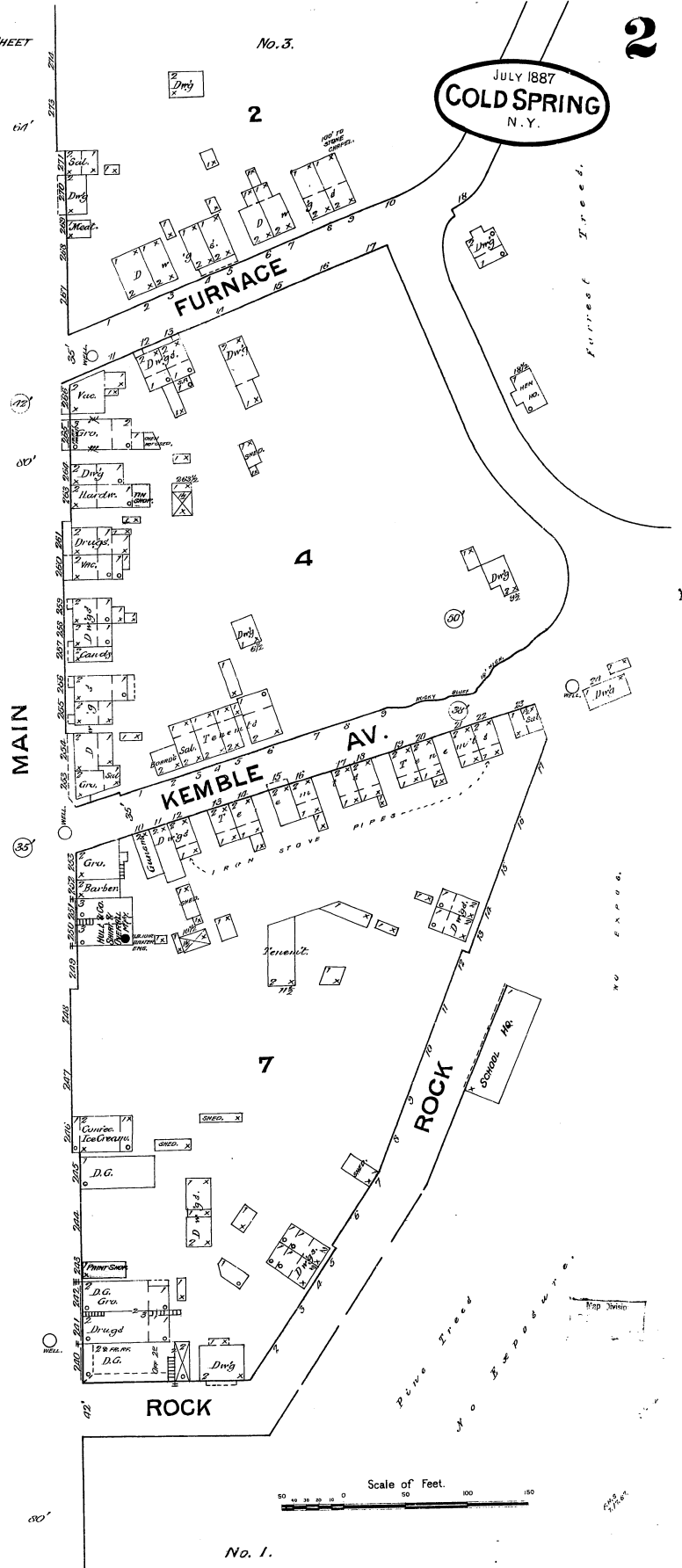
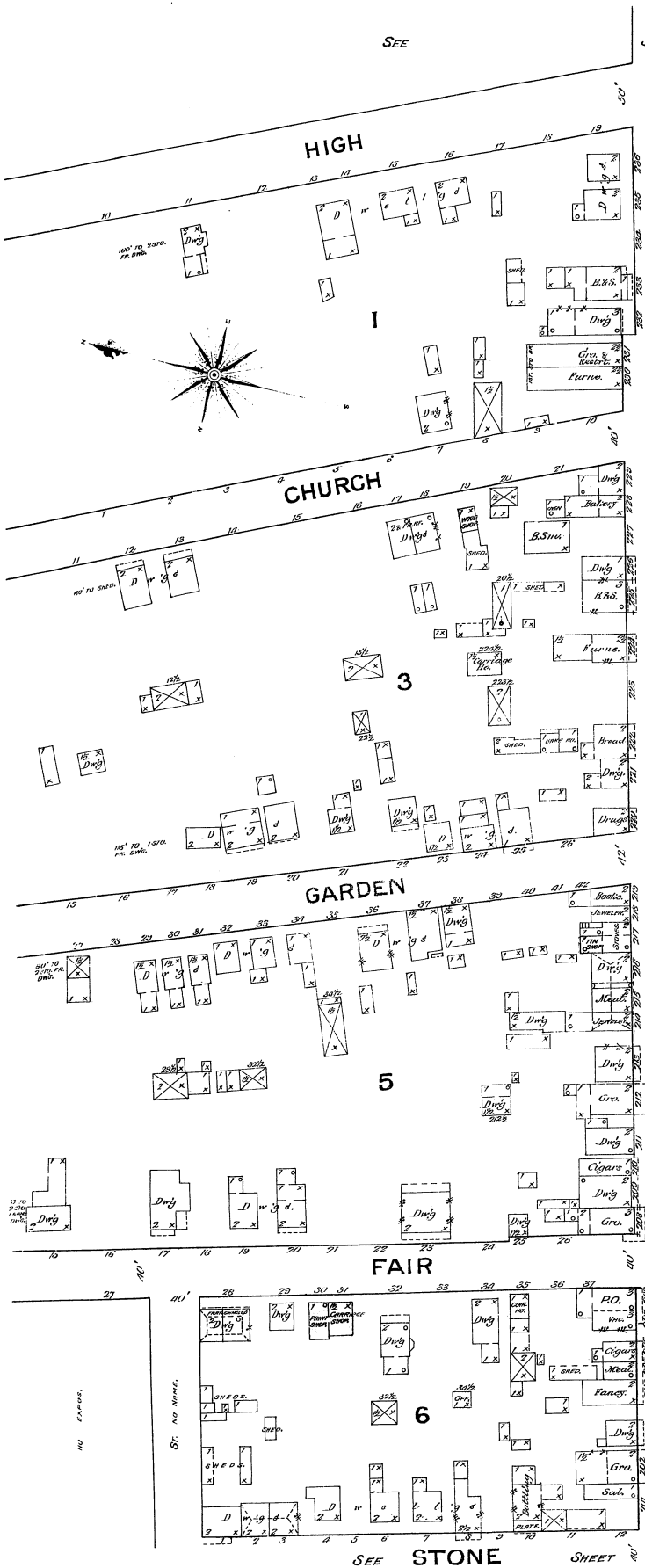
July 1887

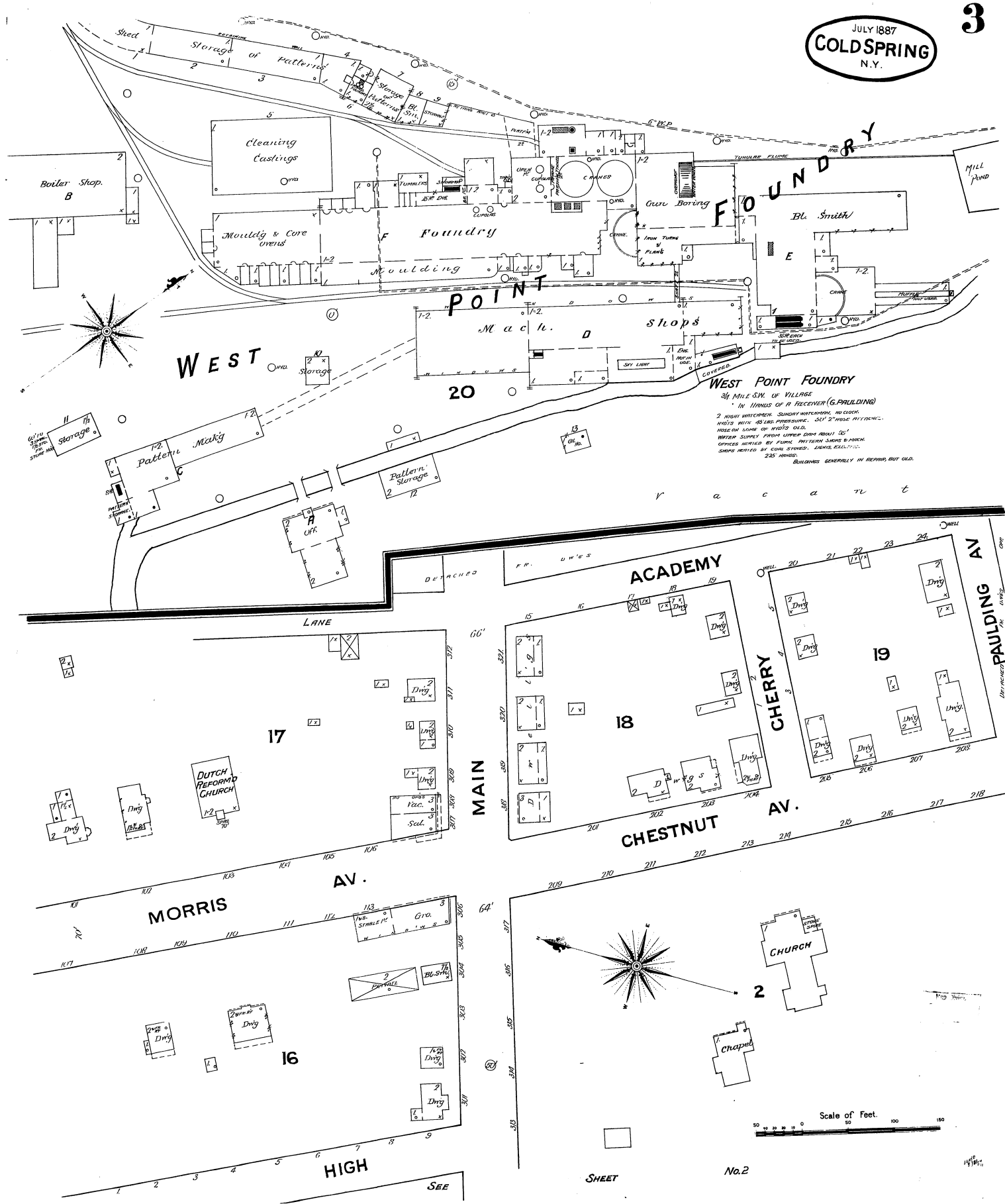
Credit: <http://sanborn.umi.com/>



KEY
FIRE MALLIGN AB. WOOD
12"
18"
FRAME PARTITION
OPENING & INOR. ROOM
WINDOWS - SHUTTER
STABLE
WINDOW IN 1ST STORY
11" & 3 1/2"
2 1/2" & 4 1/2"
BLDG'S COLORED YELLOW ARE FRAME
RED - BRICK
BLUE - STONE
GREY - IRON
BROWN - ADGEE
SPECIAL
MARKED (S) ARE CLOTH LINE
(S) INDICATE RELATIVE HEIGHTS
ALTERNATE SPECK'S ARE ACTUAL
CONSTRUCTIVE - ARBITRARY
DASHED LINE NEAR BLDG'S WOOD CORNICE
SOLID - METAL.

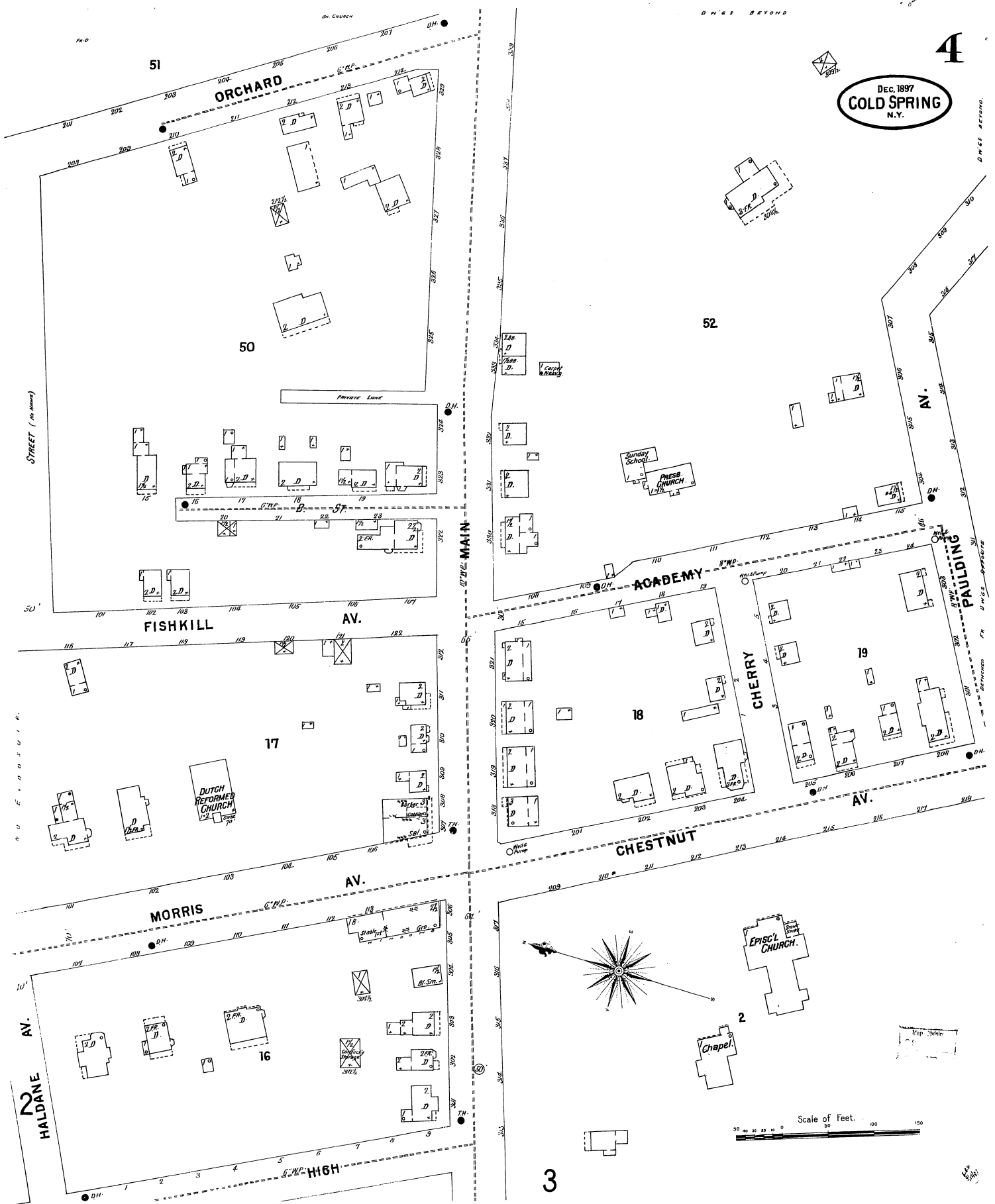






Sanborn Maps
December 1897

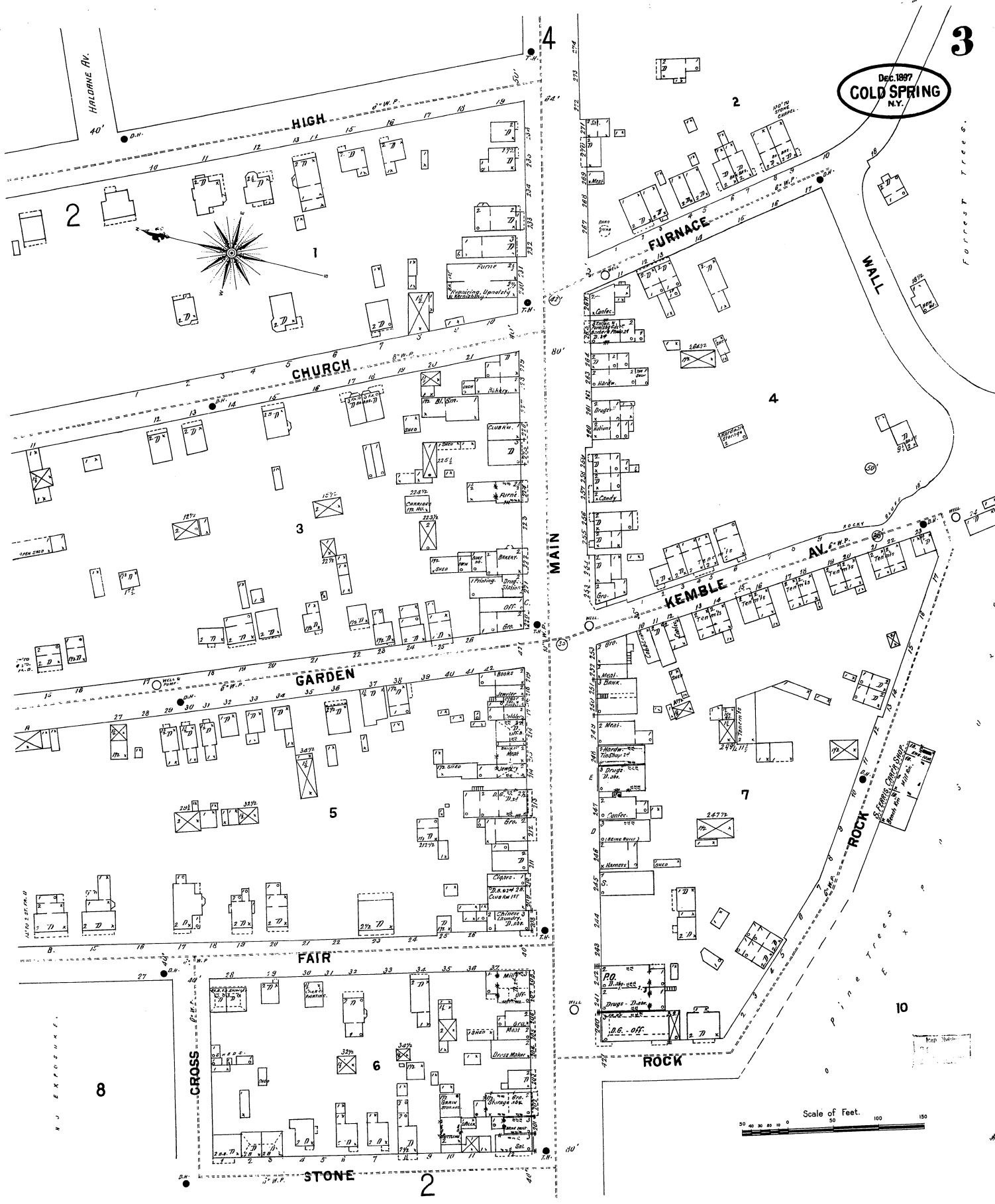
Credit: <http://sanborn.umi.com/>



DEC. 1897
GOLD SPRING
N.Y.

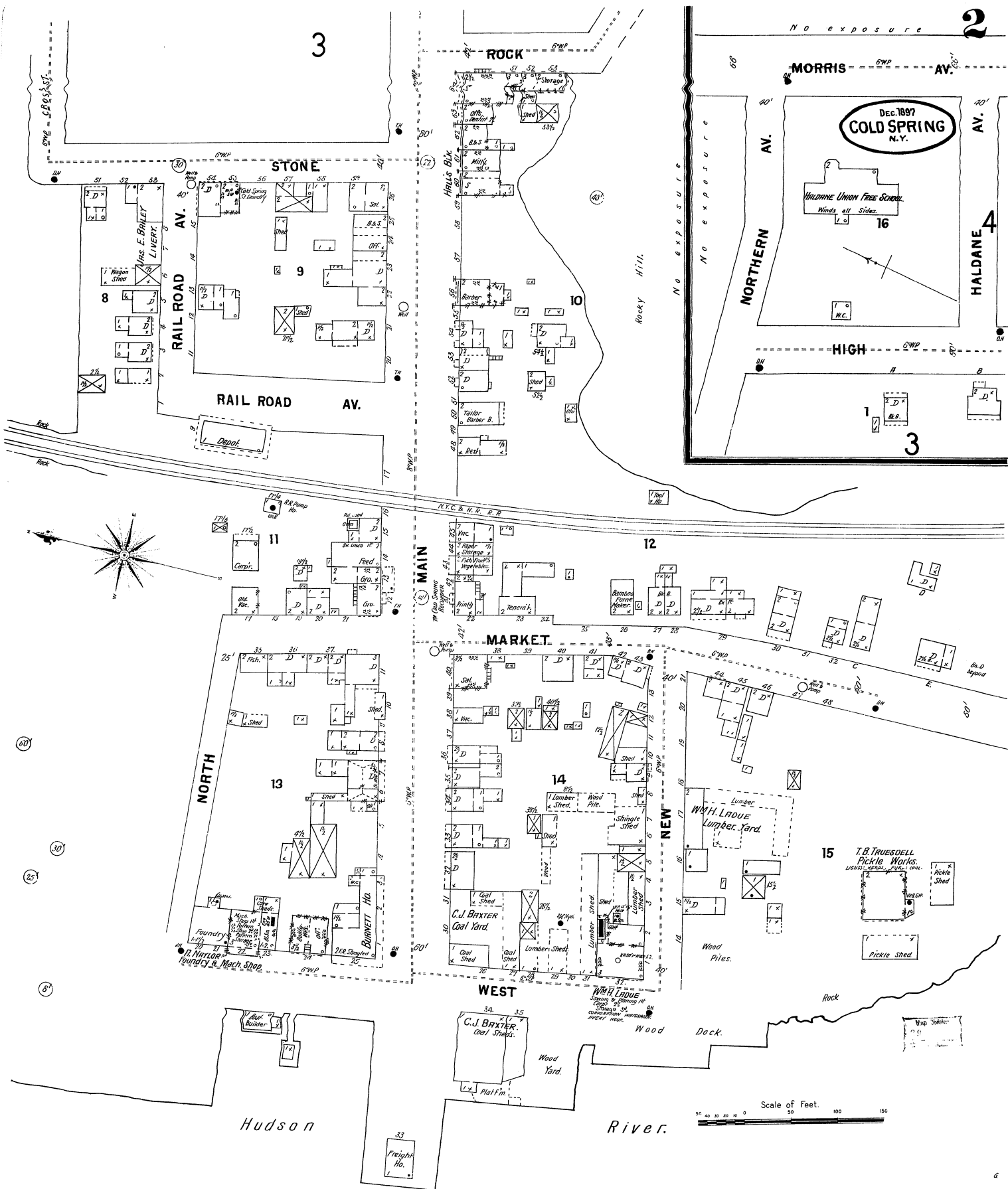
4

3



Dec. 1897
GOLD SPRING
N.Y.

Scale of Feet.
0 50 100 150



No exposure

2

MORRIS AV.

Dec. 1897
COLD SPRING
N.Y.

HILDANE UNION FREE SCHOOL
Winds all Sides

3

HILDANE

HIGH ST.

ROCK

STONE

RAIL ROAD AV.

RAIL ROAD AV.

MARKET

NORTH

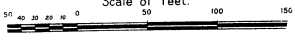
WEST

NEW

Hudson

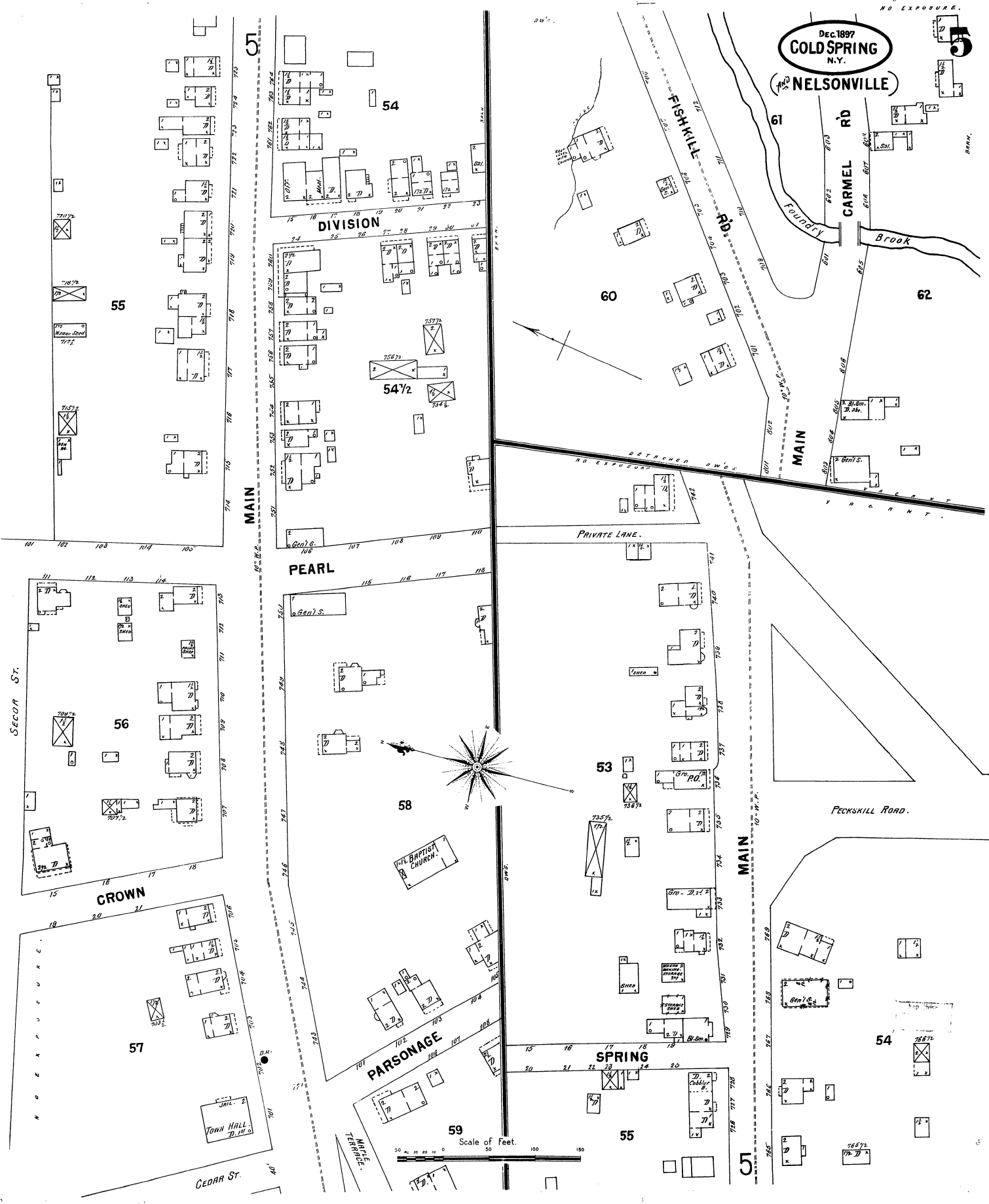
River.

Scale of Feet.



NO EXPOSURE.

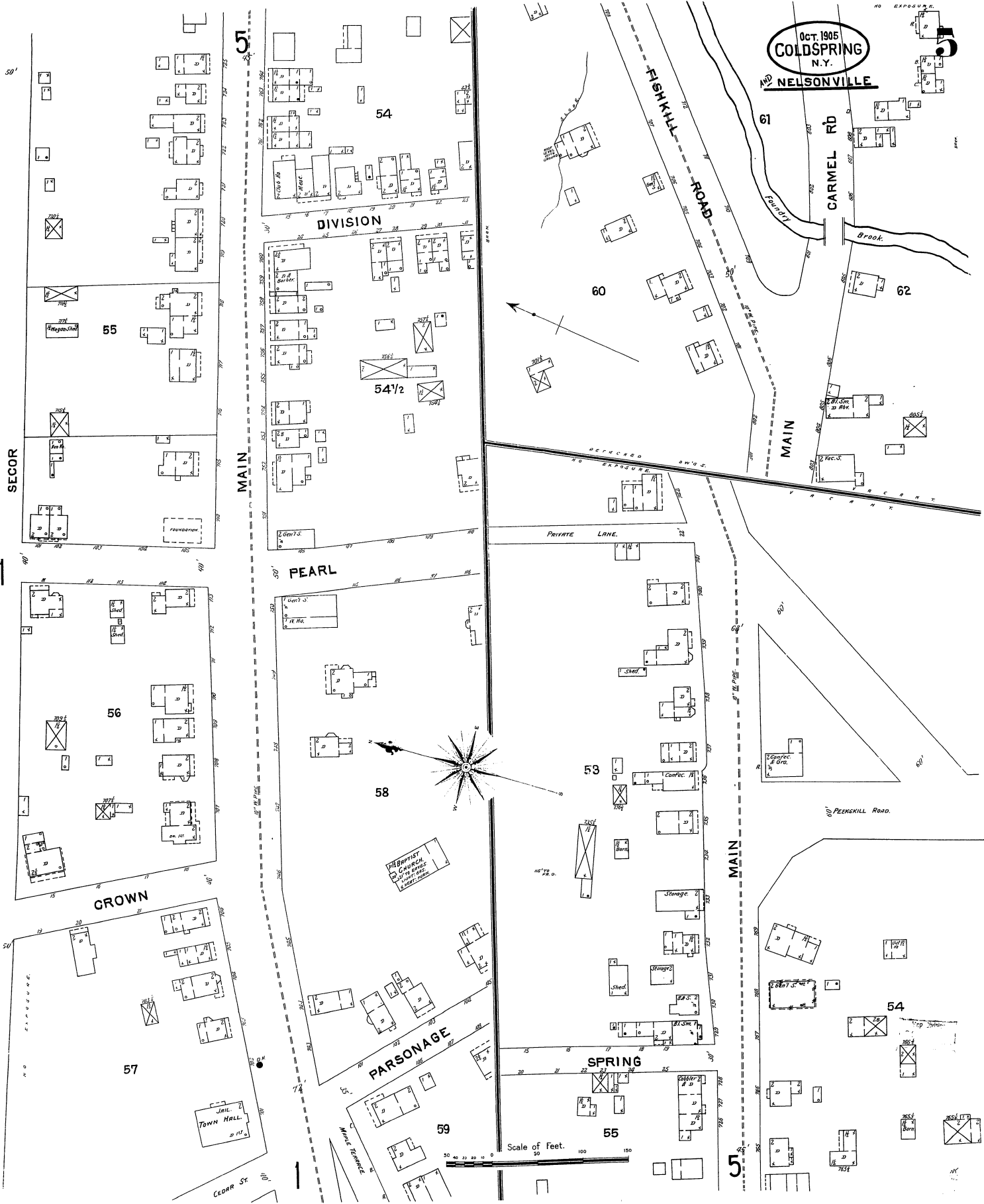
DEC 1897
COLD SPRING
N.Y.
(AND NELSONVILLE)



Sanborn Maps

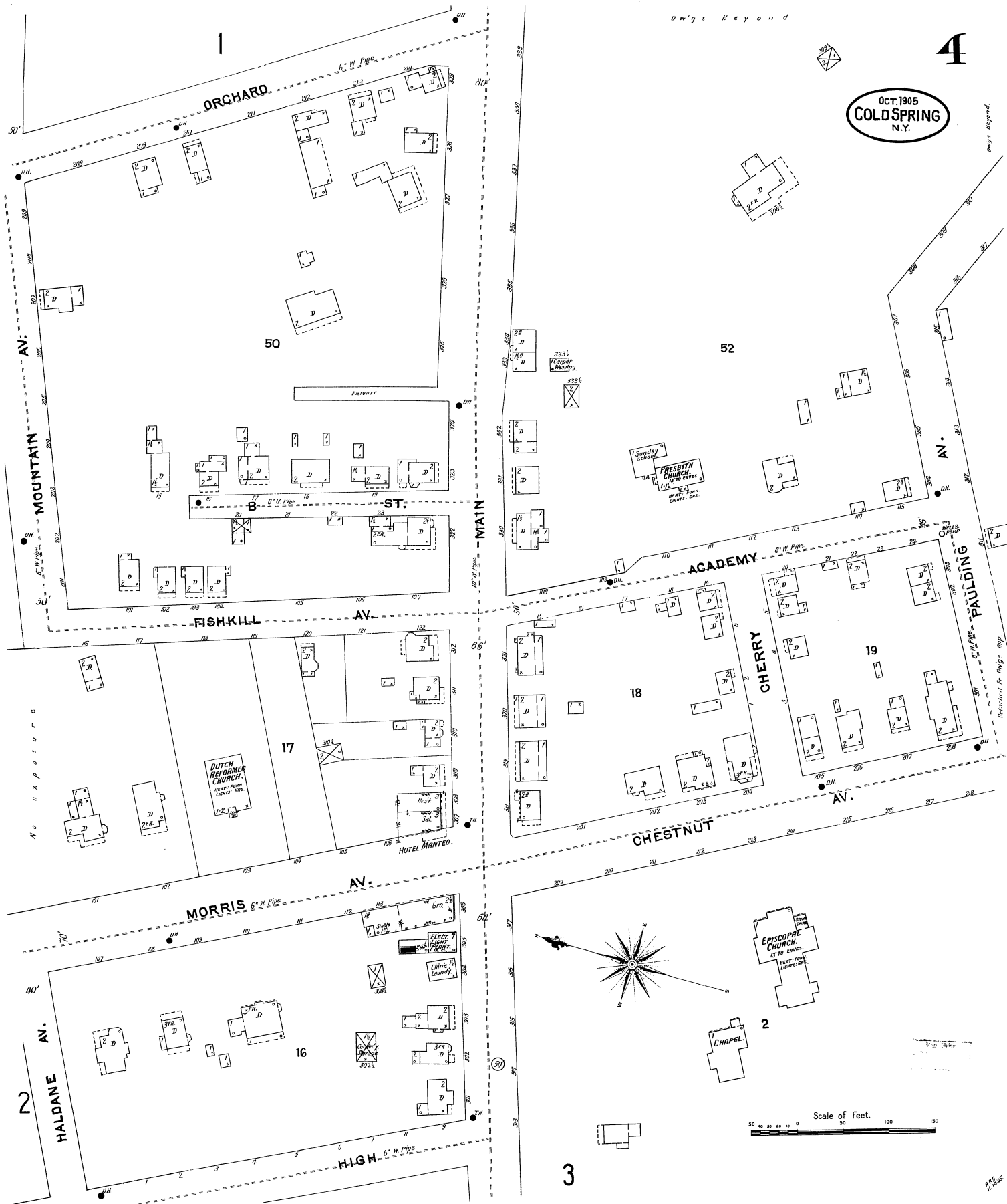
October 1905

Credit: <http://sanborn.umi.com/>



OCT. 1905
COLDSPRING
N.Y.
AND NELSONVILLE

Scale of Feet.
0 50 100 150



OCT. 1905
COLDSPRING
N.Y.

4

52

50

17

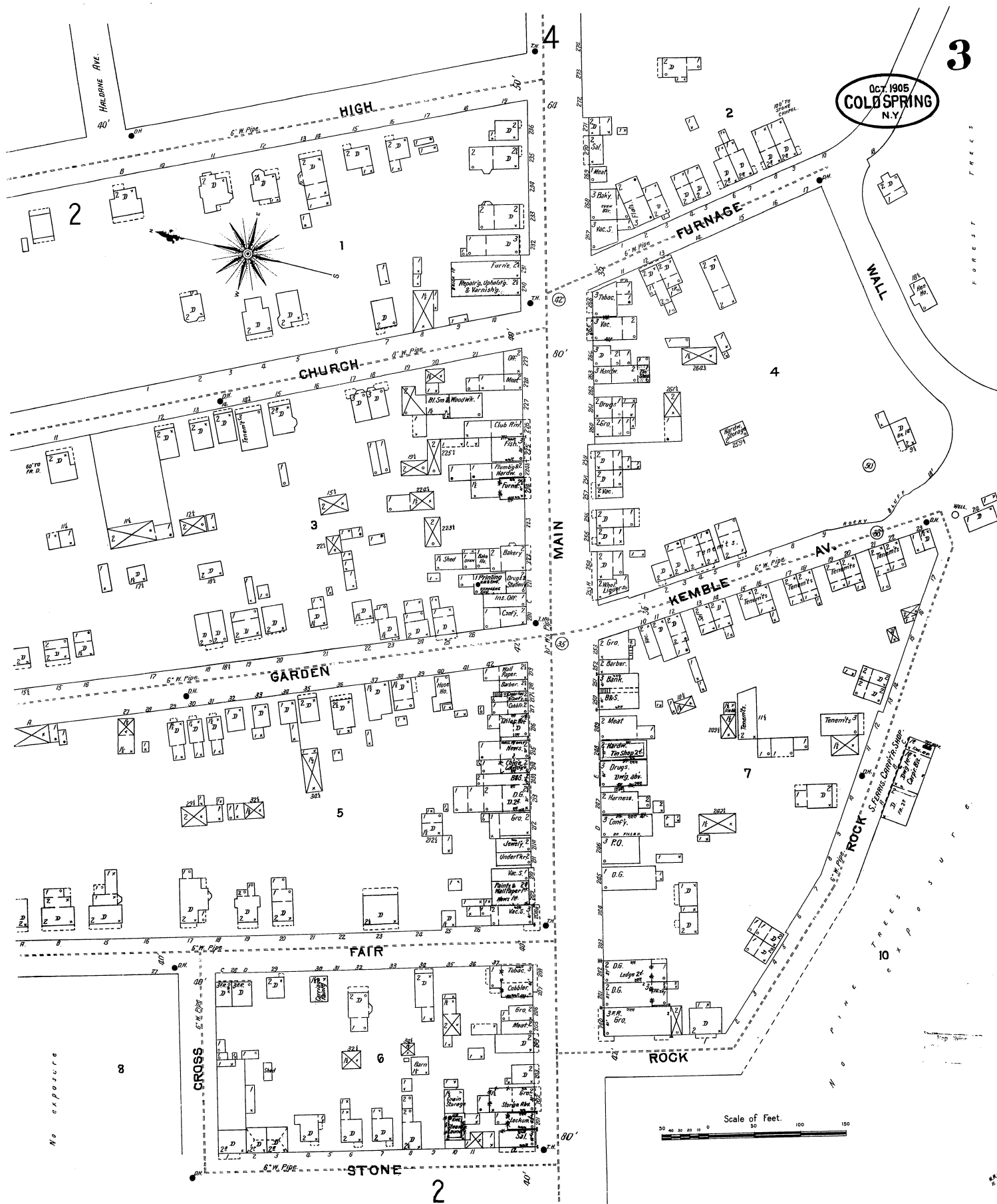
18

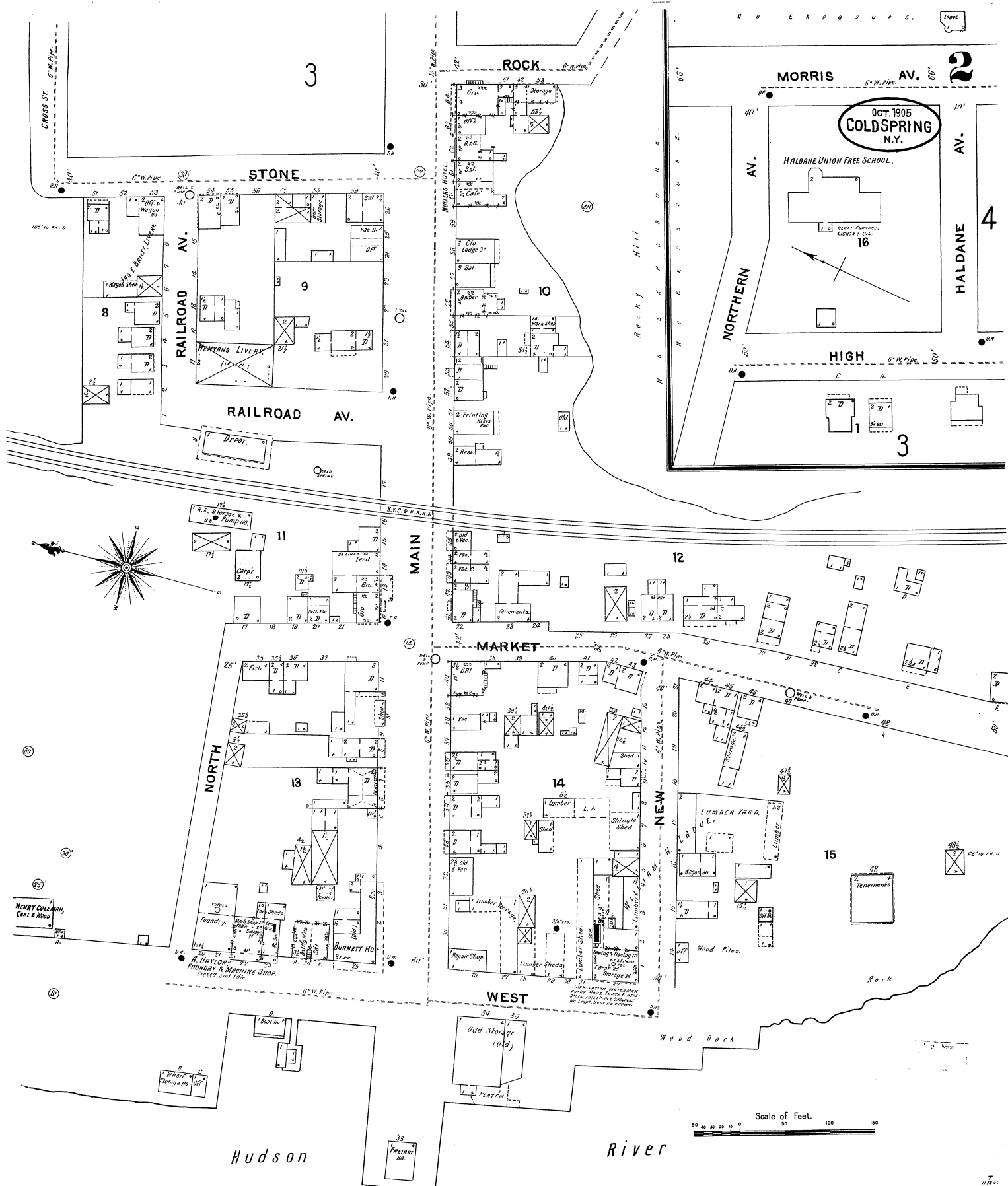
19

16

2

3





OCT. 1905
COLDSPRING
N.Y.

MORRIS

AV. 2

HALDANE UNION FREE SCHOOL

16

HIGH

3

ROCK

STONE

RAILROAD AV.

DEPOT

MAIN

MARKET

NORTH

NEW

WEST

Hudson

River

Scale of Feet.

0 50 100 150

Mill Pond.

6

OCT. 1905
COLD SPRING
N.Y.

CORNELL ART METAL CO. LESSEES.

Mach. Work
Gen'l Work
Storage

6

WEST POINT FOUNDRY.
J.B. & J.M. CORNELL CO., Props.

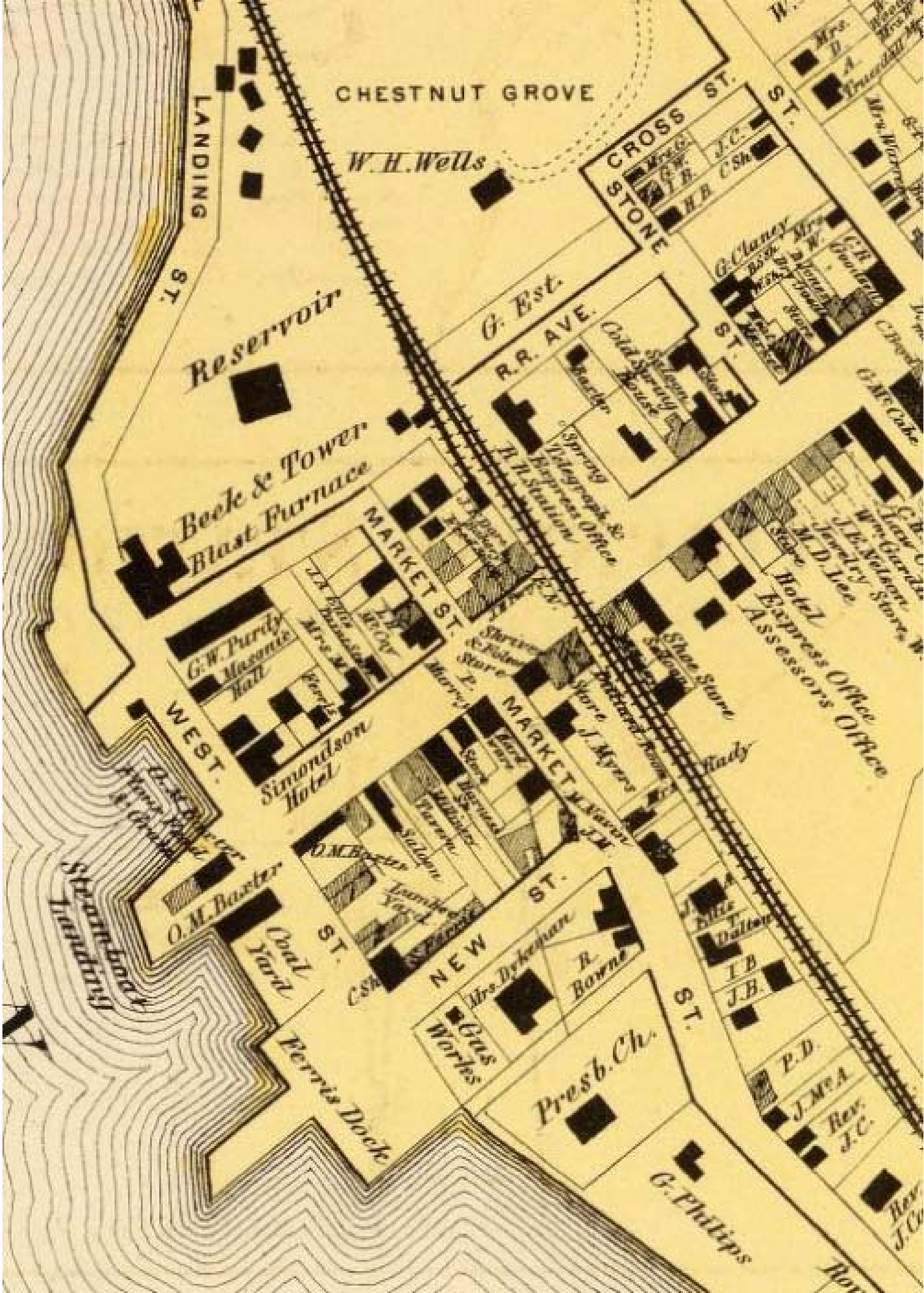
BUILDINGS HERE LET TO TENANTS WITH POWER
LINES & LIGHT WATERWORKS, NO CLOCK WORKERS.
LAMP & GAS, VENT SYSTEMS & STEEL CORRUGATED
PIPELINES, AVOID AS PER PLAN, RED FROM TOWN
IN WORK, NO LEE PRESSURE, ALSO FROM POND
IS TO BE LEE PRESSURE, AND "B" MADE IN CASE
PIPE BUILT, DIRT, ALONG WITH PIPE IN CASE
KENT CEMENT & IN GOOD REPAIR, 8" PIPE FROM
TOWN IN P.L.

Scale of Feet.
50 100 150

SALT MARSH BEYOND.

Beers County Atlas 1868

Credit: <http://www.davidrumsey.com/view.html>



Appendix D

Boring Logs

				Test Boring Log			Boring No. CS-1
PROJECT: COLD SPRING PSA FORMER MGP							Sheet 1 of 3
CLIENT: DER - BUR C							
DRILLING CONTRACTOR: HANDEX							Meas. Pt. Elev.:
PURPOSE:							Ground Elev.:
DRILLING METHOD: GEOPROBE				SAMPLE	CORE	CASING	Datum:
DRILL RIG TYPE:		TYPE					Date Started: 5/11/05
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/11/05
MEAS. PT.:		WEIGHT					Driller: GLENN
DATE OF MEAS.:		FALL					Inspector: SCOTT DEYETTE
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION	Contamination/Notes	
2			3.4 ppm	20"	Brown c-m gravel and sand, shell fragments, little ash, loose	Water at 9" No odor	
4			3.4 ppm	20"	Brown, wet c-m gravel and sand, shell fragments, little ash, loose.	No odor	
6			2.2 ppm	13"	Wet c-m sand and gravel, brown gray silt, f. sand. (2") Wet, brown m-f sand and gravel	No odor	
8			1.7 ppm	12"	Saturated brown m-f sand and gravel. Large cobble in nose	No odor	
10							

Test Boring Log

Boring No. CS-1

PROJECT: COLD SPRING TSA FORMER MGP

Sheet 2 OF 3

CLIENT: DER - BUR C

Depth (Feet)	Sample Number	Blow Counts	PID	Recovery	Geologic Description	Contamination
10			1.7ppm	12"	Saturated brown m-f sand and gravel. Large cobble in nose.	No odor
12						
	#1		3.9ppm	48"	Wet c-m sand and gravel to 13'. Dark gray clay, dense, some darker staining to 13'4". Dark gray clay to 16'	No odor Slight coal tar odor in stained area. No odor
15						
16			1.7ppm	36"	Dark gray clay, some shell fragments, little gravel.	No odor
20			0.7ppm	36"	Same as 16-20' interval	No odor
24					Same as 20-24' interval	No odor
25						

[illegible]

Sheet 3 OF 3

					Test Boring Log	Boring No. CS-2
PROJECT: COLD SPRING PIA FORMER MGP SITE					Sheet 1 of 2	
CLIENT: DER - BUL C						
DRILLING CONTRACTOR: HANDEX					Meas. Pt. Elev.:	
PURPOSE:					Ground Elev.:	
DRILLING METHOD: GEOPROBE			SAMPLE	CORE	CASING	Datum:
DRILL RIG TYPE:		TYPE				Date Started: 5/11/05
GROUNDWATER DEPTH:		DIAM.				Date Finished: 5/11/05
MEAS. PT.:		WEIGHT		Driller: GLENN		
DATE OF MEAS.:		FALL		Inspector: SCOTT DEYETTE		
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION	Contamination/Notes
4			0.0ppm	26"	Brown c-m sand, organics 0-0.5' Brown c-m sand and gravel, brick 0.5-1.5'. Wet brown c-m sand and gravel, trace organics	No odor Water at 1.5'.
5			1.7ppm	36"	Wet c-m sand and gravel, some shell fragments. Black staining (organic) at 8'.	No odor. Organic odor at 8'
8			2.2ppm	18"	Same wet c-m sand and gravel	No odor.
10						

				Test Boring Log			Boring No. CS-3	
PROJECT: COLD SPRING PSA FORMER MGP							Sheet 1 of 2	
CLIENT: DER-BURL								
DRILLING CONTRACTOR: HANDEX							Meas. Pt. Elev.:	
PURPOSE:							Ground Elev.:	
DRILLING METHOD: GEOPROBE				SAMPLE	CORE	CASING	Datum:	
DRILL RIG TYPE:		TYPE					Date Started: 5/11/05	
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/11/05	
MEAS. PT.:		WEIGHT					Driller: GLENN	
DATE OF MEAS.:		FALL					Inspector: SCOTT DENETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION		Contamination/Notes	
			0.0ppm	20"	Brown c-m sand and gravel, organics 0-1.5'. Wet c-m sand and gravel 1.5-1.8'.		No Odor Water at 16". No odor.	
5			128ppm	14"	Tar saturated c-m sand and gravel, pooled tar. Piece of metal with rivet. Had 4" of concrete at bottom. Refusal at 6.0'.		Strong odor.	
					END OF BORING			
10								

		Test Boring Log				Boring No. CS-4
PROJECT: COLD SPRING PSA FORMER MGP						Sheet 1 of 2
CLIENT: DEL-BURC						
DRILLING CONTRACTOR: HANDEX						Meas. Pt. Elev.:
PURPOSE:						Ground Elev.:
DRILLING METHOD: GEOPROBE		SAMPLE	CORE	CASING	Datum:	
DRILL RIG TYPE:	TYPE				Date Started: 5/11/05	
GROUNDWATER DEPTH:	DIAM.				Date Finished: 5/11/05	
MEAS. PT.:	WEIGHT				Driller: GUENN	
DATE OF MEAS.:	FALL				Inspector: SCOTT DEYETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION	Contamination/Notes
			14 ppm	12"	Gravel top 3". Brown c-m sand and gravel, Some brick.	No odor.
5			137 ppm	24"	Wet c-m sand and gravel 4-5.5' Tan saturated soil 5.5-6', with 3" of concrete at bottom REFUSAL AT 6'.	Water at 4'. Strong odor.
					END OF BORING.	
10						

				Test Boring Log		Boring No. CS-5	
PROJECT: COLD SPRING TSA FORMER MGP						Sheet 1 of 2	
CLIENT: DER - BURC							
DRILLING CONTRACTOR: HANDEX						Meas. Pt. Elev.:	
PURPOSE:						Ground Elev.:	
DRILLING METHOD: GEOPROBE				SAMPLE	CORE	CASING	Datum:
DRILL RIG TYPE:		TYPE					Date Started: 5/11/05
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/11/05
MEAS. PT.:		WEIGHT					Driller: GLENN
DATE OF MEAS.:		FALL					Inspector: SUE DEYETTE
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION	Contamination/Notes	
			0.0ppm	36"	Brown c-m sand and gravel 0-0.5' Brick 0.5-1'. M-F sand and gravel, ash, brick 1-1.5'. 1" Hardened tar at 1.5'	No odor. Slight weathered odor.	
					C-m sand and gravel, ash, brick.	No odor.	
5			5.4ppm	36"	Brown c-m sand and gravel, brick, ash 4-4.5'. M-F sand and gravel, wet 4.5-7.3'	No odor. Water at 4.5'.	
					Coarse gravel, wet, sheer, NAPL Blebs 7.3-7.5'	Coal tar odor.	
					Refusal at 7.5'		
					END OF BORING.		
10							

				Test Boring Log			Boring No. CS-6	
PROJECT: COLD SPRING T&A FORMER MGP SITE							Sheet 1 of 2	
CLIENT: DETL-BURC								
DRILLING CONTRACTOR: HANDEX							Meas. Pt. Elev.:	
PURPOSE:							Ground Elev.:	
DRILLING METHOD: GEOPROBE				SAMPLE	CORE	CASING	Datum:	
DRILL RIG TYPE:		TYPE					Date Started: 5/11/05	
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/11/05	
MEAS. PT.:		WEIGHT					Driller: GLENN	
DATE OF MEAS.:		FALL					Inspector: SCOTT DEYETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION		Contamination/Notes	
4			9.8ppm	24"	Gravel 0-0.5'. Brown c-m sand and gravel, coal 0.5-1.5'. Moist f. sand 1.5-1.7'. Same c-m sand and gravel, some staining 1.7-2.0'. Coarse gravel, sheer, NAPL blebs 2.0-2.2".		Slight coal tar odor. Moderate odor.	
5			55ppm	24"	Tan saturated c-m sand and gravel, sheer		Strong odor.	
8			32ppm	24"	Brown c-m sand and gravel, sheer, NAPL 8-9.8'. Stained clay 9.8-10'.		Moderate coal tar odor	
10								

[illegible]

				Test Boring Log			Boring No. CS-7	
PROJECT: COLD SPRING PSA FORMER MGP SITE							Sheet 1 of 4	
CLIENT: DER - BUR C								
DRILLING CONTRACTOR: HANDEX							Meas. Pt. Elev.:	
PURPOSE:							Ground Elev.:	
DRILLING METHOD: GED PROBE				SAMPLE	CORE	CASING	Datum:	
DRILL RIG TYPE:		TYPE					Date Started: 5/11/05	
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/11/05	
MEAS. PT.:		WEIGHT					Driller: GLENN	
DATE OF MEAS.:		FALL					Inspector: SCOTT DEVERETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION		Contamination/Notes	
4			6.5 ppm	36"	Gravel 0-0.5'. Brown c-m sand and gravel, ash, brick 0.5-3'. Refusal at 3'. Moved north 2', refusal at 4'. Same material as above. Refusal at 4'. END OF BORING		No odor,	
5								
10								

		Test Boring Log				Boring No. CS-8
PROJECT: COLD SPRING PSA FORMER MGP SITE						Sheet 1 of 2
CLIENT: DER-BUR C						
DRILLING CONTRACTOR: HANDEX						Meas. Pt. Elev.:
PURPOSE:						Ground Elev.:
DRILLING METHOD: GEOPROBE		SAMPLE	CORE	CASING	Datum:	
DRILL RIG TYPE:	TYPE				Date Started: 5/12/05	
GROUNDWATER DEPTH:	DIAM.				Date Finished: 5/12/05	
MEAS. PT.:	WEIGHT				Driller: GLENN	
DATE OF MEAS.:	FALL				Inspector: S DEYETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION	Contamination/Notes
4			0.1ppm	24"	Brown coarse to medium sand and gravel, little coal, brick	No odor
5			0.3ppm	24"	Brown medium to fine sand and gravel 4-5'. Wet coarse to medium sand and gravel 5-8'.	Water at 5'. No odor.
8			0.3ppm	12"	Brown, wet, coarse to medium sand and gravel	No odor.
10						

				Test Boring Log			Boring No. CS-9	
PROJECT: COLD SPRING FORMER MGP PSA							Sheet 1 of 2	
CLIENT: DEIR - BURC								
DRILLING CONTRACTOR: HANDEX							Meas. Pt. Elev.:	
PURPOSE:							Ground Elev.:	
DRILLING METHOD: GEOPROBE				SAMPLE	CORE	CASING	Datum:	
DRILL RIG TYPE:		TYPE					Date Started: 5/12/05	
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/12/05	
MEAS. PT.:		WEIGHT					Driller: GLENN	
DATE OF MEAS.:		FALL					Inspector: S. DEYETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION		Contamination/Notes	
					Brown coarse to medium sand and gravel 0-1.5'.		No odor.	
			0.0ppm	29"	Wet coarse to medium sand and gravel 1.5-4'.		No odor.	
4					Medium to fine sand 4-4.5'.		No odor.	
5					Coarse gravel, sand, silt, NAPL blebs, saturated 4.5-8'.		Water at 4.5'. Coal tar odor.	
			34ppm	30"				
8					Coarse to medium sand and gravel, silt, NAPL blebs 8-8.2'.		Coal tar odor.	
			24ppm	16"	Dark gray clay, trace organics 8.2-10'.		Slight oil odor	
10								

				Test Boring Log			Boring No. CS-10	
PROJECT: COLD SPRING FORMER MGP PSA							Sheet 1 of 2	
CLIENT: DCR - Bul C								
DRILLING CONTRACTOR: HANDEX							Meas. Pt. Elev.:	
PURPOSE:							Ground Elev.:	
DRILLING METHOD: GEDPROBE				SAMPLE	CORE	CASING	Datum:	
DRILL RIG TYPE:		TYPE					Date Started: 5/12/05	
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/12/05	
MEAS. PT.:		WEIGHT					Driller: GLENN	
DATE OF MEAS.:		FALL					Inspector: S DEYETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION		Contamination/Notes	
4			6.5ppm	29"	Brown coarse to medium sand and gravel, organics, ash 0-16". Wet coarse to medium sand and gravel, ash 16-48".		No odor. Water at 1.5'. No odor.	
5			2.3ppm	28"	Saturated coarse to medium sand and gravel		No odor.	
8			0.3ppm	10"	Saturated coarse to medium sand and gravel 8-8.5" Dark gray silt and clay 8.5-10".		No odor. No odor.	
10								

				Test Boring Log		Boring No. CS-10
PROJECT: COLD SPRING FORMER MAP PSA						Sheet 2 OF 2
CLIENT: DFL BURL						
Depth (Feet)	Sample Number	Blow Counts	PID	Recovery	Geologic Description	Contamination
10			0.0ppm	6"	Dark gray clay.	No odor.
12			0.0ppm	30"	Dark gray clay. Refusal at 14.5'	No odor.
					END OF BORING	
15						
20						
25						

				Test Boring Log			Boring No. CS-11	
PROJECT: COLD SPRING FORMER MGP PSA							Sheet 1 of 2	
CLIENT: DEL BULC								
DRILLING CONTRACTOR: HANDEX							Mess. Pt. Elev.:	
PURPOSE:							Ground Elev.:	
DRILLING METHOD: GEOPROBE				SAMPLE	CORE	CASING	Datum:	
DRILL RIG TYPE:		TYPE					Date Started: 5/12/05	
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/12/05	
MEAS. PT.:		WEIGHT					Driller: GLENN	
DATE OF MEAS.:		FALL					Inspector: S. DEYETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION		Contamination/Notes	
			2.6ppm	32"	Gravel 0-6", Brown coarse to medium sand and gravel 6"-1.5'. Wet coarse to medium sand and gravel, ash, brick, coal 1.5'-4'.		No odor. No odor. Water at 1.5'.	
4			2.9ppm	18"	Wet coarse to medium sand and gravel 4-5'. Wet medium to fine sand 5-8'.		No odor No odor.	
8			3.1ppm	6"	Wet medium to fine sand.		No odor	
10								

Test Boring Log

Boring No. CS-11

PROJECT: COLD SPRING FORMER MGP PSA

Sheet 2 of 2

CLIENT: DEN BUREAU

Depth (Feet)	Sample Number	Blow Counts	PID	Recovery	Geologic Description	Contamination
10			3.1 ppm	6"	Wet medium to fine sand	No odor
12			4.7 ppm	23"	Dark gray clay	No odor
15					END OF BORING	
20						
25						

		Test Boring Log				Boring No. CS-12	
PROJECT: COLD SPRING FORMER MCP PSA						Sheet 1 of 2	
CLIENT: DEL BULL							
DRILLING CONTRACTOR: HANDEL						Meas. Pt. Elev.:	
PURPOSE:						Ground Elev.:	
DRILLING METHOD: GEO PROBE				SAMPLE	CORE	CASING	Datum:
DRILL RIG TYPE:		TYPE				Date Started: 5/12/05	
GROUNDWATER DEPTH:		DIAM.				Date Finished: 5/12/05	
MEAS. PT.:		WEIGHT				Driller: GLENN	
DATE OF MEAS.:		FALL				Inspector: S. DEYETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION		Contamination/Notes
4			4.1 ppm	20"	GRAVEL 0-6"		No odor
					Brown medium to fine sand and gravel 6-1.5'.		
					Wet, brick, little medium to fine sand 1.5'-4'.		
5			0.2 ppm	12"	Brown medium to fine sand and gravel. Refusal at 5'.		
					Moved 1' closer to road edge. Same m/f sand and gravel 4-4.5'. Stained soil, weathered tur odor 4.5-4.6'.		
					Brick 4.6-5'.		
					Refusal again at 5'.		
					End of Boring.		
10							

						Test Boring Log		Boring No. HW-1
PROJECT: COLD SPRING FORMER MGP PSA								Sheet 1 of 2
CLIENT: DETL - BULL								
DRILLING CONTRACTOR: HANDEX								Meas. Pt. Elev.:
PURPOSE:								Ground Elev.:
DRILLING METHOD: GEOPROBE				SAMPLE	CORE	CASING	Datum:	
DRILL RIG TYPE:		TYPE					Date Started: 5/12/05	
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/12/05	
MEAS. PT.:		WEIGHT					Driller: GLENN	
DATE OF MEAS.:		FALL					Inspector: S. BEYETTE	
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION		Contamination/Notes	
						0'-1'	SEE SOIL BORING CS-9 LOG. Set 0.75" PVC WELL AT 6', WITH 3' OF 10-SLOT SCREEN (PRE-PACKED) AND 3' OF REG. Filter sand from 1'-3'. Concrete and flush mounted roadbox from 0-1'.	
						1'-3'		
						3'-6'		
5								
6								
10								

		Test Boring Log				Boring No. MW-2	
PROJECT: COLD SPRING FORMER MGP PSA						Sheet 1 of 2	
CLIENT: DER BURL C							
DRILLING CONTRACTOR: HANDEX						Meas. Pt. Elev.:	
PURPOSE:						Ground Elev.:	
DRILLING METHOD: GEOPROBE				SAMPLE	CORE	CASING	Datum:
DRILL RIG TYPE:		TYPE					Date Started: 5/12/05
GROUNDWATER DEPTH:		DIAM.					Date Finished: 5/12/05
MEAS. PT.:		WEIGHT					Driller: GLENN
DATE OF MEAS.:		FALL					Inspector: S. DEYETTE
Depth (Feet)	Sample Number	Blow Count	PID	Recovery	GEOLOGIC DESCRIPTION		Contamination/Notes
						0' - 1'	SEE CS-10 SOIL BORING LOG. Set 0.75" PVC WELL AT 5', WITH 3' OF PRE-PACKED SCREEN AND 2' OF REGR. Filter sand from 1'-2'. Concrete and flush mounted roadbox from 0-1'
						1' - 2'	
						2' - 5'	
5							
10							

Appendix E

Analytical Results

Case Narrative

Site Name: Cold Spring MGP

Date received: 05/12/05

For sample delivery group(s): 132-01

All QA/QC associated with this sample delivery group were within acceptable method criteria, except that one target mass in the Semi-Volatile tune - Mass 127 - exceeded the higher limit for the relative abundance by 4.3 percent. This however, did not effect the qualitative or quantitative results for the samples.

Two samples had analytes that were reported with an 'E' qualifier because the lab was not able to do dilutions due to instrumentation problems and lack of available sample.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-1

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-001

Sample wt/vol: 30 (g/ml) G Lab File ID: 05F0179.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 28.48 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-95-2	phenol	930	U
95-57-8	2-chlorophenol	930	U
111-44-4	bis(2-chloroethyl)ether	930	U
541-73-1	1,3-dichlorobenzene	930	U
106-46-7	1,4-dichlorobenzene	930	U
95-50-1	1,2-dichlorobenzene	930	U
100-51-6	benzyl alcohol	930	U
108-60-1	bis(2-chloroisopropyl)ether	930	U
95-48-7	2-methylphenol	930	U
67-72-1	Hexachloroethane	930	U
621-64-7	N-nitros-di-n-propylamine	930	U
106-44-5	4-methylphenol	930	U
98-95-3	Nitrobenzene	930	U
78-59-1	Isophorone	930	U
88-75-5	2-nitrophenol	930	U
105-67-9	2,4-dimethylphenol	930	U
111-91-1	bis(2-chloroethoxy)methane	930	U
120-83-2	2,4-dichlorophenol	930	U
120-82-1	1,2,4-Trichlorobenzene	930	U
91-20-3	Naphthalene	5300	
106-47-8	4-chloroaniline	930	U
87-68-3	Hexachlorobutadiene	930	U
59-50-7	4-chloro-3-methylphenol	930	U
91-57-6	2-Methylnaphthalene	550	J
77-47-4	Hexachlorocyclopentadiene	930	U
88-06-2	2,4,6-trichlorophenol	930	U
95-95-4	2,4,5-trichlorophenol	930	U
91-58-7	2-chloronaphthalene	930	U
88-74-4	2-nitroaniline	1900	U
208-96-8	acenaphthylene	930	U
131-11-3	dimethylphthalate	930	U
606-20-2	2,6-Dinitrotoluene	930	U
83-32-9	acenaphthene	410	J
99-09-2	3-nitroaniline	1900	U
51-28-5	2,4-dinitrophenol	1900	U
132-64-9	Dibenzofuran	930	U
100-02-7	4-nitrophenol	1900	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-1

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-001

Sample wt/vol: 30 (g/ml) G Lab File ID: 05F0179.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 28.48 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

86-73-7	fluorene	130	J
7005-72-3	4-chlorophenyl phenyl ether	930	U
84-66-2	Diethyl phthalate	930	U
100-01-6	4-nitroaniline	1900	U
534-52-1	2-methyl-4,6-dinitrophenol	1900	U
86-30-6	N-nitrosodiphenylamine	930	U
101-55-3	4-bromophenyl phenyl ether	930	U
118-74-1	Hexachlorobenzene	930	U
87-86-5	pentachlorophenol	1900	U
85-01-8	phenanthrene	400	J
120-12-7	anthracene	930	U
86-74-8	Carbazole	930	U
84-74-2	di-n-butyl phthalate	930	U
206-44-0	fluoranthene	930	U
129-00-0	pyrene	930	U
85-68-7	butyl benzyl phthalate	930	U
56-55-3	benzo(a)anthracene	930	U
218-01-9	chrysene	930	U
91-94-1	3,3'-dichlorobenzidine	930	U
117-81-7	bis(2-ethylhexyl)phthalate	930	U
117-84-0	di-n-octyl phthalate	930	U
205-99-2	benzo(b)fluoranthene	930	U
207-08-9	benzo(k)fluoranthene	930	U
50-32-8	benzo(a)pyrene	930	U
193-39-5	indeno(1,2,3-cd)pyrene	930	U
53-70-3	dibenzo(a,h)anthracene	930	U
191-24-2	benzo(g,h,i)perylene	930	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CS-1

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-001

Sample wt/vol: 30 (g/ml) G Lab File ID: 05F0179.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 28.48 decanted: (Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

Number TICs found: 8 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000108-67-8	Benzene, 1,3,5-trimethyl-	8.44	280	JN
2. 000496-11-7	Indane	9.65	480	JN
3. 002177-47-1	2-Methylindene	12.58	210	JN
4. 000090-12-0	Naphthalene, 1-methyl-	15.69	660	JN
5. 006566-19-4	10,18-Bisnorabieta-5,7,9(10),11,	26.84	1400	JN
6. 000630-03-5	Nonacosane	34.47	310	JN
7. 000629-94-7	Heneicosane	36.09	200	JN
8. 000083-46-5	.beta.-Sitosterol	38.04	260	JN

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-2

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-002

Sample wt/vol: 30.3 (g/ml) G Lab File ID: 05F0180.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 39.5 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-95-2	phenol	1100	U
95-57-8	2-chlorophenol	1100	U
111-44-4	bis(2-chloroethyl)ether	1100	U
541-73-1	1,3-dichlorobenzene	1100	U
106-46-7	1,4-dichlorobenzene	1100	U
95-50-1	1,2-dichlorobenzene	1100	U
100-51-6	benzyl alcohol	1100	U
108-60-1	bis(2-chloroisopropyl)ether	1100	U
95-48-7	2-methylphenol	1100	U
67-72-1	Hexachloroethane	1100	U
621-64-7	N-nitros-di-n-propylamine	1100	U
106-44-5	4-methylphenol	1100	U
98-95-3	Nitrobenzene	1100	U
78-59-1	Isophorone	1100	U
88-75-5	2-nitrophenol	1100	U
105-67-9	2,4-dimethylphenol	1100	U
111-91-1	bis(2-chloroethoxy)methane	1100	U
120-83-2	2,4-dichlorophenol	1100	U
120-82-1	1,2,4-Trichlorobenzene	1100	U
91-20-3	Naphthalene	1100	U
106-47-8	4-chloroaniline	1100	U
87-68-3	Hexachlorobutadiene	1100	U
59-50-7	4-chloro-3-methylphenol	1100	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	1100	U
88-06-2	2,4,6-trichlorophenol	1100	U
95-95-4	2,4,5-trichlorophenol	1100	U
91-58-7	2-chloronaphthalene	1100	U
88-74-4	2-nitroaniline	2200	U
208-96-8	acenaphthylene	1100	U
131-11-3	dimethylphthalate	1100	U
606-20-2	2,6-Dinitrotoluene	1100	U
83-32-9	acenaphthene	160	J
99-09-2	3-nitroaniline	2200	U
51-28-5	2,4-dinitrophenol	2200	U
132-64-9	Dibenzofuran	1100	U
100-02-7	4-nitrophenol	2200	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-2

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-002

Sample wt/vol: 30.3 (g/ml) G Lab File ID: 05F0180.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 39.5 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

86-73-7	fluorene	1100	U
7005-72-3	4-chlorophenyl phenyl ether	1100	U
84-66-2	Diethyl phthalate	1100	U
100-01-6	4-nitroaniline	2200	U
534-52-1	2-methyl-4,6-dinitrophenol	2200	U
86-30-6	N-nitrosodiphenylamine	1100	U
101-55-3	4-bromophenyl phenyl ether	1100	U
118-74-1	Hexachlorobenzene	1100	U
87-86-5	pentachlorophenol	2200	U
85-01-8	phenanthrene	1100	U
120-12-7	anthracene	1100	U
86-74-8	Carbazole	1100	U
84-74-2	di-n-butyl phthalate	1100	U
206-44-0	fluoranthene	1100	U
129-00-0	pyrene	1100	U
85-68-7	butyl benzyl phthalate	1100	U
56-55-3	benzo(a)anthracene	1100	U
218-01-9	chrysene	1100	U
91-94-1	3,3'-dichlorobenzidine	1100	U
117-81-7	bis(2-ethylhexyl)phthalate	1100	U
117-84-0	di-n-octyl phthalate	1100	U
205-99-2	benzo(b)fluoranthene	1100	U
207-08-9	benzo(k)fluoranthene	1100	U
50-32-8	benzo(a)pyrene	1100	U
193-39-5	indeno(1,2,3-cd)pyrene	1100	U
53-70-3	dibenzo(a,h)anthracene	1100	U
191-24-2	benzo(g,h,i)perylene	1100	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CS-2

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-002

Sample wt/vol: 30.3 (g/ml) G Lab File ID: 05F0180.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 39.5 decanted: (Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

Number TICs found: 7 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 074685-30-6	5-Eicosene, (E)-	30.79	280	JN
2. 001599-67-3	1-Docosene	32.70	710	JN
3. 1000131-09-4	Z-12-Pentacosene	34.47	990	JN
4. 000192-97-2	Benzo[e]pyrene	34.63	850	JN
5. 013475-75-7	Pentadecane, 8-hexyl-	36.10	500	JN
6. 000630-03-5	Nonacosane	39.15	280	JN
7. 000559-74-0	Friedelan-3-one	39.96	370	JN

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-6

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-003

Sample wt/vol: 30.02 (g/ml) G Lab File ID: 05F0181.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 41.83 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-95-2	phenol	1100	U
95-57-8	2-chlorophenol	1100	U
111-44-4	bis(2-chloroethyl)ether	1100	U
541-73-1	1,3-dichlorobenzene	1100	U
106-46-7	1,4-dichlorobenzene	1100	U
95-50-1	1,2-dichlorobenzene	1100	U
100-51-6	benzyl alcohol	1100	U
108-60-1	bis(2-chloroisopropyl)ether	1100	U
95-48-7	2-methylphenol	1100	U
67-72-1	Hexachloroethane	1100	U
621-64-7	N-nitros-di-n-propylamine	1100	U
106-44-5	4-methylphenol	1100	U
98-95-3	Nitrobenzene	1100	U
78-59-1	Isophorone	1100	U
88-75-5	2-nitrophenol	1100	U
105-67-9	2,4-dimethylphenol	1100	U
111-91-1	bis(2-chloroethoxy)methane	1100	U
120-83-2	2,4-dichlorophenol	1100	U
120-82-1	1,2,4-Trichlorobenzene	1100	U
91-20-3	Naphthalene	14000	E
106-47-8	4-chloroaniline	1100	U
87-68-3	Hexachlorobutadiene	1100	U
59-50-7	4-chloro-3-methylphenol	1100	U
91-57-6	2-Methylnaphthalene	4500	
77-47-4	Hexachlorocyclopentadiene	1100	U
88-06-2	2,4,6-trichlorophenol	1100	U
95-95-4	2,4,5-trichlorophenol	1100	U
91-58-7	2-chloronaphthalene	1100	U
88-74-4	2-nitroaniline	2300	U
208-96-8	acenaphthylene	580	J
131-11-3	dimethylphthalate	1100	U
606-20-2	2,6-Dinitrotoluene	1100	U
83-32-9	acenaphthene	2700	
99-09-2	3-nitroaniline	2300	U
51-28-5	2,4-dinitrophenol	2300	U
132-64-9	Dibenzofuran	410	J
100-02-7	4-nitrophenol	2300	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-6

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-003

Sample wt/vol: 30.02 (g/ml) G Lab File ID: 05F0181.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 41.83 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

86-73-7	fluorene	1300	
7005-72-3	4-chlorophenyl phenyl ether	1100	U
84-66-2	Diethyl phthalate	1100	U
100-01-6	4-nitroaniline	2300	U
534-52-1	2-methyl-4,6-dinitrophenol	2300	U
86-30-6	N-nitrosodiphenylamine	1100	U
101-55-3	4-bromophenyl phenyl ether	1100	U
118-74-1	Hexachlorobenzene	1100	U
87-86-5	pentachlorophenol	2300	U
85-01-8	phenanthrene	6500	
120-12-7	anthracene	1600	
86-74-8	Carbazole	270	J
84-74-2	di-n-butyl phthalate	1100	U
206-44-0	fluoranthene	2400	
129-00-0	pyrene	4600	
85-68-7	butyl benzyl phthalate	1100	U
56-55-3	benzo(a)anthracene	1600	
218-01-9	chrysene	1700	
91-94-1	3,3'-dichlorobenzidine	1100	U
117-81-7	bis(2-ethylhexyl)phthalate	1100	U
117-84-0	di-n-octyl phthalate	1100	U
205-99-2	benzo(b)fluoranthene	560	J
207-08-9	benzo(k)fluoranthene	670	J
50-32-8	benzo(a)pyrene	1200	
193-39-5	indeno(1,2,3-cd)pyrene	530	J
53-70-3	dibenzo(a,h)anthracene	230	J
191-24-2	benzo(g,h,i)perylene	820	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CS-6

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-003

Sample wt/vol: 30.02 (g/ml) G Lab File ID: 05F0181.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 41.83 decanted: (Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

Number TICs found: 7 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000090-12-0	Naphthalene, 1-methyl-	15.70	3400	JN
2. 002531-84-2	Substitutes PAH	24.41	800	JN
3. 002531-84-2	Substituted PAH	24.48	910	JN
4. 002531-84-2	Substituted PAH	24.80	1000	JN
5. 077899-03-7	1-Heneicosyl formate	32.71	1000	JN
6. 000192-97-2	Benzo[e]pyrene	34.64	1200	JN
7. 000630-04-6	Hentriacontane	36.10	880	JN

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-8

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-004

Sample wt/vol: 30.25 (g/ml) G Lab File ID: 05F0183.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 32.67 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-95-2	phenol	990	U
95-57-8	2-chlorophenol	990	U
111-44-4	bis(2-chloroethyl)ether	990	U
541-73-1	1,3-dichlorobenzene	990	U
106-46-7	1,4-dichlorobenzene	990	U
95-50-1	1,2-dichlorobenzene	990	U
100-51-6	benzyl alcohol	990	U
108-60-1	bis(2-chloroisopropyl)ether	990	U
95-48-7	2-methylphenol	990	U
67-72-1	Hexachloroethane	990	U
621-64-7	N-nitros-di-n-propylamine	990	U
106-44-5	4-methylphenol	990	U
98-95-3	Nitrobenzene	990	U
78-59-1	Isophorone	990	U
88-75-5	2-nitrophenol	990	U
105-67-9	2,4-dimethylphenol	990	U
111-91-1	bis(2-chloroethoxy)methane	990	U
120-83-2	2,4-dichlorophenol	990	U
120-82-1	1,2,4-Trichlorobenzene	990	U
91-20-3	Naphthalene	1700	
106-47-8	4-chloroaniline	990	U
87-68-3	Hexachlorobutadiene	990	U
59-50-7	4-chloro-3-methylphenol	990	U
91-57-6	2-Methylnaphthalene	620	J
77-47-4	Hexachlorocyclopentadiene	990	U
88-06-2	2,4,6-trichlorophenol	990	U
95-95-4	2,4,5-trichlorophenol	990	U
91-58-7	2-chloronaphthalene	990	U
88-74-4	2-nitroaniline	2000	U
208-96-8	acenaphthylene	900	J
131-11-3	dimethylphthalate	990	U
606-20-2	2,6-Dinitrotoluene	990	U
83-32-9	acenaphthene	3900	
99-09-2	3-nitroaniline	2000	U
51-28-5	2,4-dinitrophenol	2000	U
132-64-9	Dibenzofuran	860	J
100-02-7	4-nitrophenol	2000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-8

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-004

Sample wt/vol: 30.25 (g/ml) G Lab File ID: 05F0183.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 32.67 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

86-73-7	fluorene	2600	
7005-72-3	4-chlorophenyl phenyl ether	990	U
84-66-2	Diethyl phthalate	990	U
100-01-6	4-nitroaniline	2000	U
534-52-1	2-methyl-4,6-dinitrophenol	2000	U
86-30-6	N-nitrosodiphenylamine	990	U
101-55-3	4-bromophenyl phenyl ether	990	U
118-74-1	Hexachlorobenzene	990	U
87-86-5	pentachlorophenol	2000	U
85-01-8	phenanthrene	11000	E
120-12-7	anthracene	4800	
86-74-8	Carbazole	230	J
84-74-2	di-n-butyl phthalate	990	U
206-44-0	fluoranthene	9100	
129-00-0	pyrene	12000	E
85-68-7	butyl benzyl phthalate	990	U
56-55-3	benzo(a)anthracene	5500	
218-01-9	chrysene	5700	
91-94-1	3,3'-dichlorobenzidine	990	U
117-81-7	bis(2-ethylhexyl)phthalate	990	U
117-84-0	di-n-octyl phthalate	990	U
205-99-2	benzo(b)fluoranthene	2200	
207-08-9	benzo(k)fluoranthene	2400	
50-32-8	benzo(a)pyrene	4100	
193-39-5	indeno(1,2,3-cd)pyrene	1900	
53-70-3	dibenzo(a,h)anthracene	750	J
191-24-2	benzo(g,h,i)perylene	2500	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CS-8

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-004

Sample wt/vol: 30.25 (g/ml) G Lab File ID: 05F0183.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 32.67 decanted: (Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

Number TICs found: 10 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000090-12-0	Naphthalene, 1-methyl-	15.69	1400	JN
2. 000490-65-3	Naphthalene, 1-methyl-7-(1-meth	19.87	1600	JN
3. 002531-84-2	Substituted PAH	24.42	2800	JN
4. 002531-84-2	Substituted PAH	24.50	2900	JN
5. 002531-84-2	Substituted PAH	24.61	1500	JN
6. 000203-64-5	4H-Cyclopenta[def]phenanthrene	24.72	1900	JN
7. 002531-84-2	Substituted PAH	24.81	2600	JN
8. 001576-67-6	Substituted Dimethyl PAH	26.19	2000	JN
9. 003442-78-2	Pyrene, 2-methyl-	28.17	1600	JN
10. 000198-55-0	Perylene	34.32	1900	JN

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-10

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-005

Sample wt/vol: 30.18 (g/ml) G Lab File ID: 05F0184.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 33.86 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-95-2	phenol	1000	U
95-57-8	2-chlorophenol	1000	U
111-44-4	bis(2-chloroethyl)ether	1000	U
541-73-1	1,3-dichlorobenzene	1000	U
106-46-7	1,4-dichlorobenzene	1000	U
95-50-1	1,2-dichlorobenzene	1000	U
100-51-6	benzyl alcohol	1000	U
108-60-1	bis(2-chloroisopropyl)ether	1000	U
95-48-7	2-methylphenol	1000	U
67-72-1	Hexachloroethane	1000	U
621-64-7	N-nitros-di-n-propylamine	1000	U
106-44-5	4-methylphenol	1000	U
98-95-3	Nitrobenzene	1000	U
78-59-1	Isophorone	1000	U
88-75-5	2-nitrophenol	1000	U
105-67-9	2,4-dimethylphenol	1000	U
111-91-1	bis(2-chloroethoxy)methane	1000	U
120-83-2	2,4-dichlorophenol	1000	U
120-82-1	1,2,4-Trichlorobenzene	1000	U
91-20-3	Naphthalene	1000	U
106-47-8	4-chloroaniline	1000	U
87-68-3	Hexachlorobutadiene	1000	U
59-50-7	4-chloro-3-methylphenol	1000	U
91-57-6	2-Methylnaphthalene	1000	U
77-47-4	Hexachlorocyclopentadiene	1000	U
88-06-2	2,4,6-trichlorophenol	1000	U
95-95-4	2,4,5-trichlorophenol	1000	U
91-58-7	2-chloronaphthalene	1000	U
88-74-4	2-nitroaniline	2000	U
208-96-8	acenaphthylene	1000	U
131-11-3	dimethylphthalate	1000	U
606-20-2	2,6-Dinitrotoluene	1000	U
83-32-9	acenaphthene	1000	U
99-09-2	3-nitroaniline	2000	U
51-28-5	2,4-dinitrophenol	2000	U
132-64-9	Dibenzofuran	1000	U
100-02-7	4-nitrophenol	2000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS-10

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-005

Sample wt/vol: 30.18 (g/ml) G Lab File ID: 05F0184.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 33.86 decanted:(Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

86-73-7	fluorene	1000	U
7005-72-3	4-chlorophenyl phenyl ether	1000	U
84-66-2	Diethyl phthalate	1000	U
100-01-6	4-nitroaniline	2000	U
534-52-1	2-methyl-4,6-dinitrophenol	2000	U
86-30-6	N-nitrosodiphenylamine	1000	U
101-55-3	4-bromophenyl phenyl ether	1000	U
118-74-1	Hexachlorobenzene	1000	U
87-86-5	pentachlorophenol	2000	U
85-01-8	phenanthrene	1000	U
120-12-7	anthracene	1000	U
86-74-8	Carbazole	1000	U
84-74-2	di-n-butyl phthalate	1000	U
206-44-0	fluoranthene	1000	U
129-00-0	pyrene	1000	U
85-68-7	butyl benzyl phthalate	1000	U
56-55-3	benzo(a)anthracene	1000	U
218-01-9	chrysene	1000	U
91-94-1	3,3'-dichlorobenzidine	1000	U
117-81-7	bis(2-ethylhexyl)phthalate	1000	U
117-84-0	di-n-octyl phthalate	1000	U
205-99-2	benzo(b)fluoranthene	1000	U
207-08-9	benzo(k)fluoranthene	1000	U
50-32-8	benzo(a)pyrene	1000	U
193-39-5	indeno(1,2,3-cd)pyrene	1000	U
53-70-3	dibenzo(a,h)anthracene	1000	U
191-24-2	benzo(g,h,i)perylene	1000	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CS-10

Lab Name: Cold Spring MGP Contract: _____

Lab Code: 340--- Case No.: _____ SAS No.: _____ SDG No.: 132-01

Matrix: (soil/water) SOIL Lab Sample ID: 305-132-005

Sample wt/vol: 30.18 (g/ml) G Lab File ID: 05F0184.D

Level: (low/med) LOW Date Received: 5/12/2005

% Moisture: 33.86 decanted: (Y/N) N Date Extracted: 5/17/2005

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 6/18/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Case Narrative

Site Name: Cold Spring MGP

Date received: 05/12/05

For sample delivery group(s): 132-01

The calibration verification that these samples were run under had one of the target analytes exceeding the calibration verification criteria that is associated with this method. However, since the initial calibration that these samples were quantitated against was valid, any reported values for that analyte should be considered valid. The analyte that exceeded the calibration verification criteria was not found in the samples.

All other QA/QC associated with this sample delivery group were within acceptable method criteria, except that two target masses in the Volatile tune - Mass 75 and Mass 96 - did not meet the higher limit for the relative abundance by 2.0 percent and 0.6 percent, respectively. This however, did not effect the qualitative or quantitative results for the samples.

Carbon dioxide was reported as a TIC in some of the samples - this is a lab contaminant and should be disregarded. It is reported because the method requires it and would be qualified with a B if it were a target analyte.



**NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
LABORATORY ANALYTICAL REPORT**

ELAP LABORATORY ID NUMBER: 11625
EPA LABORATORY ID NUMBER: NY01358

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

Site Name: Cold Spring MGP

Site Code: 340---

Date Collected: 5/11/05

SDG No.: 132-01

CS-1

Matrix: (soil/water) SOIL Date Received: 05/12/05

Lab Sample ID: 305-132-001

Sample wt/vol: 2.8 (g/ml) G

Lab File ID: 05C0300A.D

GC Column: rtx-624 ID: 0.25 (mm)

Date Analyzed: 05/17/05

% Moisture: 29 decanted:(Y/N) N

Dilution Factor: 1.0

CONCENTRATION UNITS:

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
75-71-8	Dichlorodifluoromethane	25	U
74-87-3	Chloromethane	25	U
75-01-4	Vinyl Chloride	25	U
74-83-9	Bromomethane	25	U
75-00-3	Chloroethane	25	U
75-69-4	Trichlorofluoromethane	25	U
75-35-4	1,1-Dichloroethene	25	U
75-15-0	Carbon Disulfide	25	U
67-64-1	Acetone	110	
75-09-2	Methylene Chloride	25	U
1634-04-4	methyl-tert butyl ether	25	U
540-59-0	trans 1,2-Dichloroethene	25	U
75-34-4	1,1-Dichloroethane	25	U
108-05-4	Vinyl acetate	25	U
540-59-0	cis 1,2-Dichloroethene	25	U
78-93-3	2-Butanone	13	J
67-66-3	Chloroform	25	U
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon tetrachloride	25	U
71-43-2	Benzene	25	U
107-06-2	1,2-Dichloroethane	25	U
79-01-6	Trichloroethene	25	U
78-87-5	1,2-Dichloropropane	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
108-10-1	4-Methyl-2-pentanone	25	U
108-88-3	Toluene	5	J
10061-02-6	trans-1,3-Dichloropropen	25	U
79-00-5	1,1,2-Trichloroethane	25	U
127-18-4	Tetrachloroethene	25	U
591-78-6	2-Hexanone	25	U
124-48-1	Dibromochloromethane	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	220	
1330-20-7	m,p-Xylenes	73	
1330-20-7	o-Xylene	200	
100-42-5	Styrene	25	U
75-25-2	Bromoform	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
95-49-8	2-Chlorotoluene	25	U
106-43-4	4-Chlorotoluene	25	U
541-73-1	1,3-Dichlorobenzene	25	U

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
106-46-7	1,4-Dichlorobenzene	25	U
95-50-1	1,2-Dichlorobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	25	U
87-61-6	1,2,3-Trichlorobenzene	25	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD SAMPLE ID:

Site Name: Cold Spring MGP

CS-1

Site Code: 340---

SDG No.: 132-01

Matrix: (soil/water) SOIL

Lab Sample ID: 305-132-001

Sample wt/vol: 2.8 (g/ml) G

Lab File ID: 05C0300A.D

Level: (low/med) LOW

Date Received: 05/12/05

% Moisture: not dec. 28.5

Date Analyzed: 05/17/05

GC Column: rtx-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

Number TICs found: 8

(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000098-82-8	Benzene, (1-methylethyl)-	26.08	230	JN
2. 000141-93-5	Benzene, 1,3-diethyl-	29.73	290	JN
3. 000611-15-4	Benzene, 1-ethenyl-2-methyl-	29.91	840	JN
4. 002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	30.79	220	JN
5. 004920-99-4	Benzene, 1-ethyl-3-(1-methylethyl)	31.02	300	JN
6. 027133-93-3	2,3-Dihydro-1-methylindene	31.12	350	JN
7. 027133-93-3	2,3-Dihydro-1-methylindene	32.40	320	JN
8. 000767-59-9	1H-Indene, 1-methyl-	33.20	440	JN



**NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
LABORATORY ANALYTICAL REPORT**

ELAP LABORATORY ID NUMBER: 11625
EPA LABORATORY ID NUMBER: NY01358

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

Site Name: Cold Spring MGP

Site Code: 340---

Date Collected: 5/11/05

SDG No.: 132-01

CS-2

Matrix: (soil/water) SOIL Date Received: 05/12/05

Lab Sample ID: 305-132-002

Sample wt/vol: 2.9 (g/ml) G

Lab File ID: 05C0298A.D

GC Column: rtx-624 ID: 0.25 (mm)

Date Analyzed: 05/17/05

% Moisture: 40 decanted:(Y/N) N

Dilution Factor: 1.0

CONCENTRATION UNITS:

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
75-71-8	Dichlorodifluoromethane	29	U
74-87-3	Chloromethane	29	U
75-01-4	Vinyl Chloride	29	U
74-83-9	Bromomethane	29	U
75-00-3	Chloroethane	29	U
75-69-4	Trichlorofluoromethane	29	U
75-35-4	1,1-Dichloroethene	29	U
75-15-0	Carbon Disulfide	29	U
67-64-1	Acetone	200	
75-09-2	Methylene Chloride	29	U
1634-04-4	methyl-tert butyl ether	29	U
540-59-0	trans 1,2-Dichloroethene	29	U
75-34-4	1,1-Dichloroethane	29	U
108-05-4	Vinyl acetate	29	U
540-59-0	cis 1,2-Dichloroethene	29	U
78-93-3	2-Butanone	23	J
67-66-3	Chloroform	29	U
71-55-6	1,1,1-Trichloroethane	29	U
56-23-5	Carbon tetrachloride	29	U
71-43-2	Benzene	29	U
107-06-2	1,2-Dichloroethane	29	U
79-01-6	Trichloroethene	29	U
78-87-5	1,2-Dichloropropane	29	U
75-27-4	Bromodichloromethane	29	U
10061-01-5	cis-1,3-Dichloropropene	29	U
108-10-1	4-Methyl-2-pentanone	29	U
108-88-3	Toluene	29	U
10061-02-6	trans-1,3-Dichloropropen	29	U
79-00-5	1,1,2-Trichloroethane	29	U
127-18-4	Tetrachloroethene	29	U
591-78-6	2-Hexanone	29	U
124-48-1	Dibromochloromethane	29	U
108-90-7	Chlorobenzene	29	U
100-41-4	Ethylbenzene	29	U
1330-20-7	m,p-Xylenes	29	U
1330-20-7	o-Xylene	6	J
100-42-5	Styrene	29	U
75-25-2	Bromoform	29	U
79-34-5	1,1,2,2-Tetrachloroethane	29	U
95-49-8	2-Chlorotoluene	29	U
106-43-4	4-Chlorotoluene	29	U
541-73-1	1,3-Dichlorobenzene	29	U

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
106-46-7	1,4-Dichlorobenzene	29	U
95-50-1	1,2-Dichlorobenzene	29	U
120-82-1	1,2,4-Trichlorobenzene	29	U
87-61-6	1,2,3-Trichlorobenzene	29	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD SAMPLE ID:

Site Name: Cold Spring MGP

CS-2

Site Code: 340---

SDG No.: 132-01

Matrix: (soil/water) SOIL

Lab Sample ID: 305-132-002

Sample wt/vol: 2.9 (g/ml) G

Lab File ID: 05C0298A.D

Level: (low/med) LOW

Date Received: 05/12/05

% Moisture: not dec. 39.5

Date Analyzed: 05/17/05

GC Column: rtx-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

Number TICs found: 1

(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000124-38-9	Carbon dioxide	6.02	120	JN



**NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
LABORATORY ANALYTICAL REPORT**

ELAP LABORATORY ID NUMBER: 11625
EPA LABORATORY ID NUMBER: NY01358

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

Site Name: Cold Spring MGP

Site Code: 340---

Date Collected: 5/11/05

SDG No.: 132-01

CS-6

Matrix: (soil/water) SOIL Date Received: 05/12/05

Lab Sample ID: 305-132-003

Sample wt/vol: 2.1 (g/ml) G

Lab File ID: 05C0302A.D

GC Column: rtx-624 ID: 0.25 (mm)

Date Analyzed: 05/17/05

% Moisture: 42 decanted:(Y/N) N

Dilution Factor: 1.0

CONCENTRATION UNITS:

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
75-71-8	Dichlorodifluoromethane	41	U
74-87-3	Chloromethane	41	U
75-01-4	Vinyl Chloride	41	U
74-83-9	Bromomethane	41	U
75-00-3	Chloroethane	41	U
75-69-4	Trichlorofluoromethane	41	U
75-35-4	1,1-Dichloroethene	41	U
75-15-0	Carbon Disulfide	11	J
67-64-1	Acetone	640	
75-09-2	Methylene Chloride	41	U
1634-04-4	methyl-tert butyl ether	41	U
540-59-0	trans 1,2-Dichloroethene	41	U
75-34-4	1,1-Dichloroethane	41	U
108-05-4	Vinyl acetate	41	U
540-59-0	cis 1,2-Dichloroethene	41	U
78-93-3	2-Butanone	92	
67-66-3	Chloroform	41	U
71-55-6	1,1,1-Trichloroethane	41	U
56-23-5	Carbon tetrachloride	41	U
71-43-2	Benzene	31	J
107-06-2	1,2-Dichloroethane	41	U
79-01-6	Trichloroethene	41	U
78-87-5	1,2-Dichloropropane	41	U
75-27-4	Bromodichloromethane	41	U
10061-01-5	cis-1,3-Dichloropropene	41	U
108-10-1	4-Methyl-2-pentanone	41	U
108-88-3	Toluene	34	J
10061-02-6	trans-1,3-Dichloropropen	41	U
79-00-5	1,1,2-Trichloroethane	41	U
127-18-4	Tetrachloroethene	41	U
591-78-6	2-Hexanone	41	U
124-48-1	Dibromochloromethane	41	U
108-90-7	Chlorobenzene	41	U
100-41-4	Ethylbenzene	530	
1330-20-7	m,p-Xylenes	840	
1330-20-7	o-Xylene	580	
100-42-5	Styrene	41	U
75-25-2	Bromoform	41	U
79-34-5	1,1,2,2-Tetrachloroethane	41	U
95-49-8	2-Chlorotoluene	41	U
106-43-4	4-Chlorotoluene	41	U
541-73-1	1,3-Dichlorobenzene	41	U

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
106-46-7	1,4-Dichlorobenzene	41	U
95-50-1	1,2-Dichlorobenzene	41	U
120-82-1	1,2,4-Trichlorobenzene	41	U
87-61-6	1,2,3-Trichlorobenzene	41	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD SAMPLE ID:

Site Name: Cold Spring MGP

CS-6

Site Code: 340---

SDG No.: 132-01

Matrix: (soil/water) SOIL

Lab Sample ID: 305-132-003

Sample wt/vol: 2.1 (g/ml) G

Lab File ID: 05C0302A.D

Level: (low/med) LOW

Date Received: 05/12/05

% Moisture: not dec. 41.8

Date Analyzed: 05/17/05

GC Column: rtx-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

Number TICs found: 8

(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000098-82-8	Benzene, (1-methylethyl)-	26.08	420	JN
2. 000622-96-8	Benzene, 1-ethyl-4-methyl-	27.33	400	JN
3. 000622-96-8	Benzene, 1-ethyl-4-methyl-	27.99	370	JN
4. 000526-73-8	Benzene, 1,2,3-trimethyl-	29.40	280	JN
5. 000141-93-5	Benzene, 1,3-diethyl-	29.73	260	JN
6. 000496-11-7	Indane	29.91	1300	JN
7. 000095-13-6	Indene	30.44	370	JN
8. 000767-59-9	1H-Indene, 1-methyl-	33.18	440	JN



NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
LABORATORY ANALYTICAL REPORT

ELAP LABORATORY ID NUMBER: 11625
EPA LABORATORY ID NUMBER: NY01358

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

Site Name: Cold Spring MGP

Site Code: 340---

Date Collected: 5/12/05

SDG No.: 132-01

CS-8

Matrix: (soil/water) SOIL Date Received: 05/12/05

Lab Sample ID: 305-132-004

Sample wt/vol: 3.0 (g/ml) G

Lab File ID: 05C0303A.D

GC Column: rtx-624 ID: 0.25 (mm)

Date Analyzed: 05/17/05

% Moisture: 33 decanted:(Y/N) N

Dilution Factor: 1.0

CONCENTRATION UNITS:

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
75-71-8	Dichlorodifluoromethane	25	U
74-87-3	Chloromethane	25	U
75-01-4	Vinyl Chloride	25	U
74-83-9	Bromomethane	25	U
75-00-3	Chloroethane	25	U
75-69-4	Trichlorofluoromethane	25	U
75-35-4	1,1-Dichloroethene	25	U
75-15-0	Carbon Disulfide	25	U
67-64-1	Acetone	95	
75-09-2	Methylene Chloride	25	U
1634-04-4	methyl-tert butyl ether	25	U
540-59-0	trans 1,2-Dichloroethene	25	U
75-34-4	1,1-Dichloroethane	25	U
108-05-4	Vinyl acetate	25	U
540-59-0	cis 1,2-Dichloroethene	25	U
78-93-3	2-Butanone	14	J
67-66-3	Chloroform	25	U
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon tetrachloride	25	U
71-43-2	Benzene	3	J
107-06-2	1,2-Dichloroethane	25	U
79-01-6	Trichloroethene	25	U
78-87-5	1,2-Dichloropropane	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
108-10-1	4-Methyl-2-pentanone	25	U
108-88-3	Toluene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
127-18-4	Tetrachloroethene	25	U
591-78-6	2-Hexanone	25	U
124-48-1	Dibromochloromethane	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	3	J
1330-20-7	m,p-Xylenes	8	J
1330-20-7	o-Xylene	80	
100-42-5	Styrene	25	U
75-25-2	Bromoform	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
95-49-8	2-Chlorotoluene	25	U
106-43-4	4-Chlorotoluene	25	U
541-73-1	1,3-Dichlorobenzene	25	U

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
106-46-7	1,4-Dichlorobenzene	25	U
95-50-1	1,2-Dichlorobenzene	25	U
120-82-1	1,2,4-Trichlorobenzene	25	U
87-61-6	1,2,3-Trichlorobenzene	25	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD SAMPLE ID:

CS-8

Site Name: Cold Spring MGP

Site Code: 340---

SDG No.: 132-01

Matrix: (soil/water) SOIL

Lab Sample ID: 305-132-004

Sample wt/vol: 3.0 (g/ml) G

Lab File ID: 05C0303A.D

Level: (low/med) LOW

Date Received: 05/12/05

% Moisture: not dec. 32.7

Date Analyzed: 05/17/05

GC Column: rtx-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 5

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000124-38-9	Carbon dioxide	6.02	110	JN
2. 000591-49-1	Cyclohexene, 1-methyl-	20.18	22	JN
3. 000098-82-8	Benzene, (1-methylethyl)-	27.99	9	JN
4. 000098-82-8	Benzene, (1-methylethyl)-	28.39	7	JN
5. 000496-11-7	Indane	29.91	52	JN



NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
LABORATORY ANALYTICAL REPORT

ELAP LABORATORY ID NUMBER: 11625
EPA LABORATORY ID NUMBER: NY01358

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

Site Name: Cold Spring MGP

Site Code: 340---

Date Collected: 5/12/05

SDG No.: 132-01

CS-10

Matrix: (soil/water) SOIL Date Received: 05/12/05

Lab Sample ID: 305-132-005

Sample wt/vol: 3.4 (g/ml) G

Lab File ID: 05C0299A.D

GC Column: rtx-624 ID: 0.25 (mm)

Date Analyzed: 05/17/05

% Moisture: 34 decanted:(Y/N) N

Dilution Factor: 1.0

CONCENTRATION UNITS:

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
75-71-8	Dichlorodifluoromethane	22	U
74-87-3	Chloromethane	22	U
75-01-4	Vinyl Chloride	22	U
74-83-9	Bromomethane	22	U
75-00-3	Chloroethane	22	U
75-69-4	Trichlorofluoromethane	22	U
75-35-4	1,1-Dichloroethene	22	U
75-15-0	Carbon Disulfide	22	U
67-64-1	Acetone	120	
75-09-2	Methylene Chloride	22	U
1634-04-4	methyl-tert butyl ether	22	U
540-59-0	trans 1,2-Dichloroethene	22	U
75-34-4	1,1-Dichloroethane	22	U
108-05-4	Vinyl acetate	22	U
540-59-0	cis 1,2-Dichloroethene	22	U
78-93-3	2-Butanone	14	J
67-66-3	Chloroform	22	U
71-55-6	1,1,1-Trichloroethane	22	U
56-23-5	Carbon tetrachloride	22	U
71-43-2	Benzene	22	U
107-06-2	1,2-Dichloroethane	22	U
79-01-6	Trichloroethene	22	U
78-87-5	1,2-Dichloropropane	22	U
75-27-4	Bromodichloromethane	22	U
10061-01-5	cis-1,3-Dichloropropene	22	U
108-10-1	4-Methyl-2-pentanone	22	U
108-88-3	Toluene	3	J
10061-02-6	trans-1,3-Dichloropropene	22	U
79-00-5	1,1,2-Trichloroethane	22	U
127-18-4	Tetrachloroethene	22	U
591-78-6	2-Hexanone	22	U
124-48-1	Dibromochloromethane	22	U
108-90-7	Chlorobenzene	22	U
100-41-4	Ethylbenzene	22	U
1330-20-7	m,p-Xylenes	22	U
1330-20-7	o-Xylene	22	U
100-42-5	Styrene	22	U
75-25-2	Bromoform	22	U
79-34-5	1,1,2,2-Tetrachloroethane	22	U
95-49-8	2-Chlorotoluene	22	U
106-43-4	4-Chlorotoluene	22	U
541-73-1	1,3-Dichlorobenzene	22	U

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
106-46-7	1,4-Dichlorobenzene	22	U
95-50-1	1,2-Dichlorobenzene	22	U
120-82-1	1,2,4-Trichlorobenzene	22	U
87-61-6	1,2,3-Trichlorobenzene	22	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD SAMPLE ID:

CS-10

Site Name: Cold Spring MGP

Site Code: 340---

SDG No.: 132-01

Matrix: (soil/water) SOIL

Lab Sample ID: 305-132-005

Sample wt/vol: 3.4 (g/ml) G

Lab File ID: 05C0299A.D

Level: (low/med) LOW

Date Received: 05/12/05

% Moisture: not dec. 33.9

Date Analyzed: 05/17/05

GC Column: rtx-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 1 (uL)

Soil Aliquot Volume: 1 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000124-38-9	Carbon dioxide	6.02	190	JN