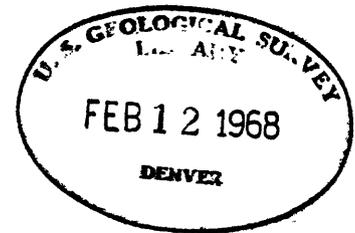


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Weld - Int. 2905

U. S. GEOLOGICAL SURVEY
Washington, D. C.
20242



For release FEBRUARY 21, 1968

The U. S. Geological Survey is releasing in open files the following reports. Copies are available for consultation in the Geological Survey Libraries, 1033 GSA Bldg., Washington, D. C. 20242; Bldg. 25, Federal Center, Denver, Colo. 80225; and 345 Middlefield Rd., Menlo Park, Calif. 94025. They are also available for consultation in other offices as listed:

1. Platinum deposits of Alaska, by John B. Mertie, Jr. 65 p., 2 black-and-white plates, 6 tables. Brooks Bldg., College, Alaska 99701; 108 Skyline Bldg., 508 2nd Ave., Anchorage, Alaska 99501; 441 Federal Bldg., Juneau, Alaska 99801; 504 Custom House, San Francisco, Calif. 94111; 7638 Federal Bldg., Los Angeles, Calif. 90012. Reproducible material for the two plates from which copy can be made at private expense is available in the San Francisco office shown above.

2. Availability of palynological material from Naval Petroleum Reserve No. 4, IV: North Simpson Test Well No. 1, by Richard A. Scott. 2 p.

3. Map showing location of subbottom acoustic profiles in San Francisco Bay from Bay Farm Island westward toward Hunter's Point, filed with the National Oceanographic Data Center, by the U. S. Geological Survey. 1 p., 4 maps (page size). 504 Custom House, San Francisco, Calif. 94111.

Master copies of the continuous profiler records are filed with the National Oceanographic Data Center, Bldg. 150, Washington Navy Yard, Washington D.C. 20390, and may be inspected there. Single copies of the maps may be obtained from the Data Center and arrangements may be made with them to secure material from which copies of the data may be made at private expense.

4. Preliminary geologic map of Bancroft quadrangle, Caribou and Bannock Counties, Idaho, by S. S. Oriel. 1 sheet, scale 1:48,000. Copies of the report are also available for consultation at 678 U. S. Court House Bldg., West 920 Riverside Ave., Spokane, Wash. 99201; 1012 Federal Bldg., Denver, Colo. 80202; and 8102 Federal Office Bldg., Salt Lake City, Utah 84111; and material from which copy can be made at private expense is also on file in those three offices.

5. Preliminary materials map, Blandford quadrangle, Massachusetts, by G. William Holmes. 1 map, scale 1:24,000; 4 tables. Massachusetts Dept. of Public Works, 100 Nashua St., Boston, Mass. 02114; USGS, 80 Broad St., Boston, Mass. 02110. - Latter office also holding material from which copy can be made at private expense.

6. Preliminary materials map, Cheshire quadrangle, Massachusetts, by G. William Holmes. 1 map, scale 1:24,000; 22 tables. (See No. 5, above.)

68-134 [7.] Preliminary materials map, Pittsfield East quadrangle, Massachusetts, by G. William Holmes. 1 map, scale 1:24,000; 15 tables. (See No. 5, above.)

8. Preliminary materials map, Plainfield quadrangle, Massachusetts, by G. William Holmes. 1 map, scale 1:24,000; 3 tables. (See No. 5, above.)

* * * * *

Field and megascopic observations:

Station number 1,1a

Location: County Berkshire Town Pittsfield Pit X Active
Inactive

Coordinates 42°24'57"N
73°14'43"W

Road location East of Holmes Road

Geologic unit or occurrence Delta

Textural description Sand Eng. Soil Type SW

Dimensions of deposit: Areal extent 8000' x 2500' Estimated thickness 60'

Dimensions of pit: Areal extent 100' x 300' Exposed thickness 10'

Lithologic composition (approximate %) _____

Grain size: Maximum 2" Mean .02" Est. % of sand 80 Est. % fines 5

Rounding Well Grading Poor Sorting Good

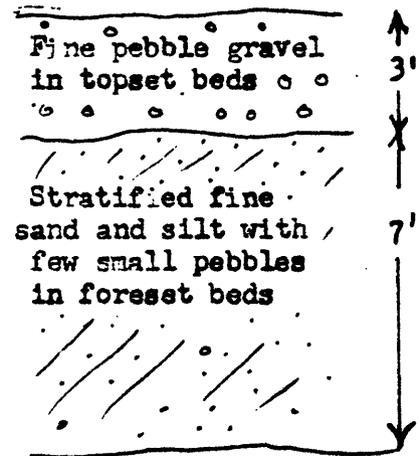
Soil development Stripped Color ---

Oxidation or staining --- Leaching ---

Secondary deposition --- Reactive matter None noted

Section:

| Rock type | % |
|-----------|----|
| Schist | 30 |
| Shale | 12 |
| Granite | 6 |
| Quartz | 34 |
| Quartzite | 14 |
| Sandstone | 4 |
| | |
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General Description:

Pit 1a is at 42°14'20"N, 73°24'42"W. Both pits consist of dipping stratified sand with half-inch pebbles in the topset beds.

U.S. Geological Survey
OPEN FILE REPORT

This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

Pittsfield East
 QUADRANGLE
 STATE
 Mass.
 G. C. Kelley
 GEOLOGIST
 7-25-67
 DATE
 Materials
 PROJECT

Field and macroscopic observations:

Station number 2,2a

Location: County Berkshire Town Pittsfield Pit X Active
Inactive
42°25'17"N
 Road location West of New Lenox Road Coordinates 73°13'50"W

Geologic unit or occurrence Delta

Textural description Pebble sand Eng. Soil Type SP

Dimensions of deposit: Areal extent 1500' x 3000' Estimated thickness 70'

Dimensions of pit: Areal extent 300' x 200' Exposed thickness 25'

Lithologic composition (approximate %) _____

Grain size: Maximum 6" Mean .02" Est. % of sand 85 Est. % fines 2 - 4

Rounding Well to subrounded Grading Poor Sorting Good

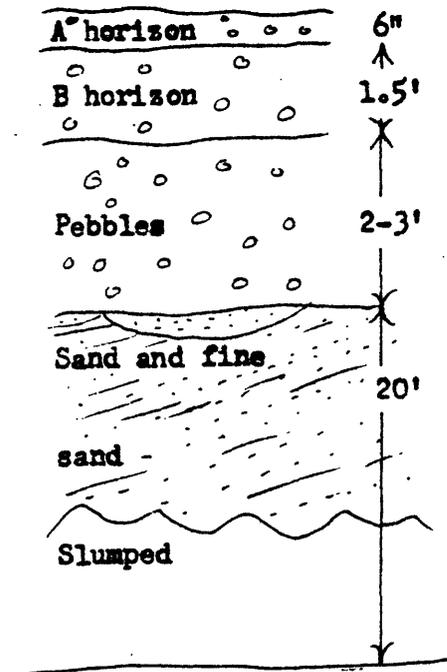
Soil development A = 6"
B = 18" Color 10YR 7/6 dry B

Oxidation or staining Usually stripped
Fe minor Leaching -

Secondary deposition _____ Reactive matter Minor CaCO₃

| Rock type | |
|------------------------|--|
| Too few to make random | |
| analysis or estimate | |
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Section:



General Description:

Well exposed delta structure with cut and fill bedding. Topset contact well exposed. Pit 2a in same deposit, located ca. 1/2 mile south, is poorly exposed, but is approximately same composition as pit 2.

Pittsfield East
 QUADRANGLE
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 Mass.
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 7-25-67
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 Materials
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Field and megascopic observations:

Station number 3

Location: County Berkshire Town Pittsfield Pit X Active
Inactive

42° 26.5' N

Road location East Street Coordinates 73° 12.5' W

Geologic unit or occurrence Stream terrace deposit

Textural description Pebble sand Eng. Soil Type SP

Dimensions of deposit: Areal extent 1500' x 1500' Estimated thickness 30'

Dimensions of pit: Areal extent 150' x 150' Exposed thickness 20'

Lithologic composition (approximate %) Quartzite 60, Sandstone 15, Schist 15,
Quartz 10

Grain size: Maximum 30" Mean .02" Est. % of sand 85 Est. % fines 4

Rounding Well-rounded Grading Poor Sorting Well

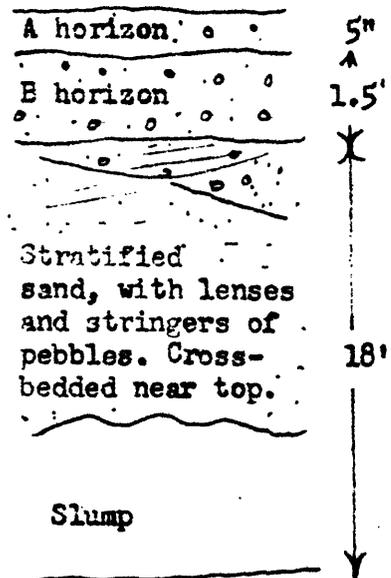
Soil development A 5", B 12-18" Color 10YR 6/4 dry

Oxidation or staining Some Fe Leaching ---

Secondary deposition --- Reactive matter Minor CaCO₃

Section:

| Rock type | % |
|-----------|---|
| | |
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General Description:

This was the best exposure of several around the power substation. Fine stratified layers of silt and sand containing lenses and stringers of pebbles clearly observed. Cut and fill well developed. Collapse absent. Topset beds not evident.

Pittsfield East
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 Materials

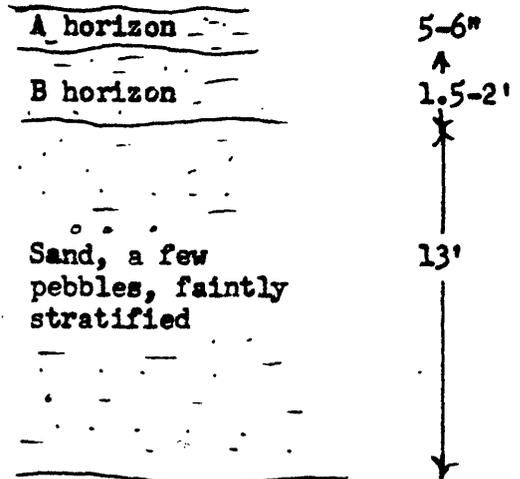
Field and megascopic observations:

Station number 4
 Active Inactive
 Location: County Berkshire Town Pittsfield Pit X
 Road location East Street Coordinates: 42° 27.0' N
73° 12.0' W

Geologic unit or occurrence Stream terrace deposit
 Textural description Sand Eng. Soil Type SP
 Dimensions of deposit: Areal extent 1.3 x 0.7 mi. Estimated thickness 25'
 Dimensions of pit: Areal extent 300' x 50' Exposed thickness 15'
 Lithologic composition (approximate %) _____
 Grain size: Maximum 40" Mean .02" Est. % of sand 85 Est. % fines 5
 Rounding Well-rounded Grading Poor Sorting Good
 Soil development A 6", B 18 24" Color 10YR 5/4 4/4
 Oxidation or staining Minor Fe Leaching ----
 Secondary deposition --- Reactive matter Minor CaCO₃

Section:

| Rock type | % |
|-------------|----|
| Quartzite | 44 |
| Schist | 16 |
| Quartz | 14 |
| Sandstone | 12 |
| Limestone | 10 |
| Black shale | 4 |
| | |
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General Description:

These pits seem to be partly stream terrace deposits and partly ice contact material. One area is mainly sand. Another has pebbles and boulders. A third is fine sand and silt. Sand is the dominant fraction. Pebbles are usually concentrated in the surface materials to a depth of 3 feet.

Pittsfield East
 QUADRANGLE
 STATE
 Mass.
 G. C. Kelley
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 Materials
 PROJECT
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Field and megascopic observations:

Station number 5

Location: County Berkshire Town Pittsfield Pit Active Inactive
 42°27'40"N
 Road location West of Hubbard Road Coordinates 73°11'25"W

Geologic unit or occurrence Ice-contact stratified drift in Kame.

Textural description Gravel of mixed sizes Eng. Soil Type GW

Dimensions of deposit: Areal extent 600' x 2000' Estimated thickness 50'

Dimensions of pit: Areal extent 200' x 75' Exposed thickness 20'

Lithologic composition (approximate %) _____

Grain size: Maximum 12" Mean .08" Est. % of sand 50 Est. % fines 3

Rounding Well-subrounded Grading Fair to good Sorting Poor to fair

Soil development A = 6"
B = 12" - 20" Color 10YR 5/4 dry

Oxidation or staining --- Leaching ---

Secondary deposition Weak Fe Reactive matter Some CaCO₃

Section:

| Rock type | % |
|-------------|----|
| Quartzite | 52 |
| Sandstone | 12 |
| Schist | 20 |
| Quartz | 10 |
| Gneiss | 4 |
| Black shale | 2 |
| | |
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Slumped

General Description:

This is one of a complex of gravel pits. Below approximately 20", sand seems to dominate. Use of material is generally restricted to top 20'. Several shallow borrow pits to northwest and west.

Pittsfield East
 QUADRANGLE
 STATE
 Mass.
 G. C. Kelley
 GEOLOGIST
 7-24-67
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 Materials
 PROJECT

Field and macroscopic observations:

Station number 6

Location: County Berkshire Town Pittsfield Pit X Active
Inactive
 Road location Hubbard Avenue Coordinates 42° 28.0' N
73° 11.5' W

Geologic unit or occurrence Ice-contact stratified drift in kame

Textural description Pebble sand Eng. Soil Type SW

Dimensions of deposit: Areal extent 3500' x 2000' Estimated thickness 20-50'

Dimensions of pit: Areal extent 150' x 50' Exposed thickness 15'

Lithologic composition (approximate %) _____

Grain size: Maximum 12" Mean .08" Est. % of sand 80 Est. % fines 4

Rounding Subrounded Grading Medium Sorting Medium

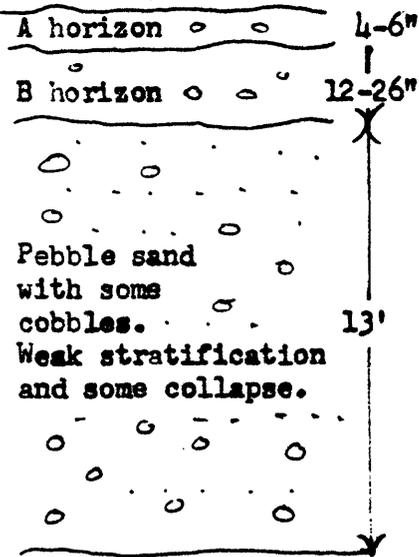
Soil development A 4-6", B 12-20" Color 10YR 4/2-3/2

Oxidation or staining --- Leaching ---

Secondary deposition --- Reactive matter Some CaCO₃

Section:

| Rock type | % |
|-----------|----|
| Quartzite | 48 |
| Sandstone | 16 |
| Gneiss | 2 |
| Limestone | 6 |
| Schist | 16 |
| Quartz | 12 |
| | |
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General Description:

This pit has been used as a sizing and storage area. Slumping of surface materials obscures section.

Pittsfield East
 MASS.
 STATE
 G. C. Kelley
 GEOLOGIST
 7-24-67
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 PROJECT

Field and macroscopic observations:

Station number 7

Location: County Berkshire Town Pittsfield Pit X Active
Inactive
 Road location Hubbard Avenue Coordinates 42° 28.0'N
73° 11.5'W

Geologic unit or occurrence Ice-contact stratified drift in kame

Textural description Coarse sand Eng. Soil Type SP

Dimensions of deposit: Areal extent 3500' x 2000' Estimated thickness 20'-50'

Dimensions of pit: Areal extent 250' x 200' Exposed thickness 20'

Lithologic composition (approximate %) Quartzite 50-60, Sandstone 5-10,

Grain size: Maximum 8" Mean .06" Schist 5-10, Quartz 5-6, Misc. 5-10
 Est. % of sand 85 Est. % fines 3

Rounding Well-subrounded Grading Poor Sorting Good

Soil development A 4", B 12-18" Color 10YR 6/4 dry

Oxidation or staining Minor Fe Leaching ---

Secondary deposition --- Reactive matter Minor CaCO₃

Section:

| Rock type | |
|-----------|--|
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Slumped

General Description:

Uniform coarse sand--water washed. Stratification weak or absent. Topsoil generally stripped.

Pittsfield East
 QUADRANGLE
 Mass.
 STATE
 G. C. Kelley
 GEOLOGIST
 7-24-67
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 Materials
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Field and macroscopic observations:

Station number 8

Location: County Berkshire Town Dalton Pit X Active
Inactive

42° 29.0' N
73° 10.0' W

Road location High Road Coordinates

Geologic unit or occurrence Ice-contact stratified drift in kame

Textural description Gravel of mixed sizes Eng. Soil Type GW

Dimensions of deposit: Areal extent 1.3 x 0.4 mi. Estimated thickness ca. 120'

A complex of pits each about

Dimensions of pit: Areal extent 150' x 150' Exposed thickness 30'

Lithologic composition (approximate %) _____

Grain size: Maximum 3' Mean 1/2-1" Est. % of sand 50 Est. % fines 3-5

Rounding Subrounded Grading Medium-well Sorting Fair-medium

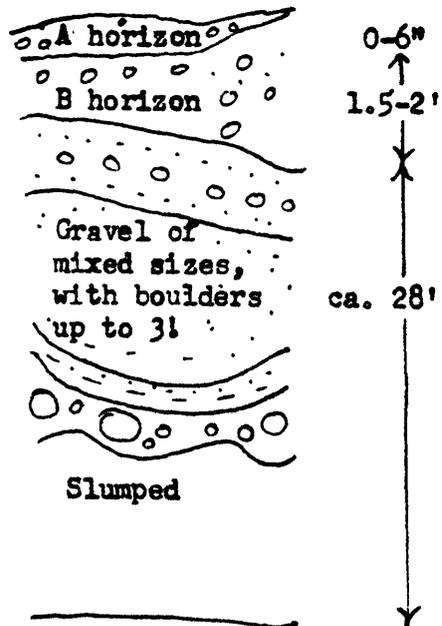
Soil development A 6", B 18-24" Color 10YR 6/6-5/6

Oxidation or staining Minor Fe Leaching ---

Secondary deposition --- Reactive matter Minor CaCO₃

Section:

| Rock type | % |
|-----------|----|
| Sandstone | 30 |
| Quartzite | 42 |
| Schist | 10 |
| Limestone | 6 |
| Quartz | 10 |
| Gneiss | 2 |
| | |
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General Description:

Collapsed and distorted stratified layers, composed of silt, sand, pebbles, cobbles and boulders. Typical kame.

QUADRANGLE
 STATE
 PROJECT
 Pittsfield East
 Mass.
 G. C. Kelley
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 Mass.

Field and megascopic observations:

Station number 9

Location: County Berkshire Town Dalton Pit X Active
Inactive
 Road location Tower Road Coordinates 42° 29.0' N
73° 9.5' W

Geologic unit or occurrence Ice-contact stratified drift in kame

Textural description Gravel of mixed sizes Eng. Soil Type GW

Dimensions of deposit: Areal extent 1.3-0.4 mi. Estimated thickness ca 120'

Dimensions of pit: Areal extent 600' x 200' Exposed thickness 30'

Lithologic composition (approximate %) _____

Grain size: Maximum 2' Mean .04" Est. % of sand 65 Est. % fines 3-5

Rounding Subrounded Grading Medium Sorting Medium

Soil development A 6" B 18-24" Color 10YR 6/4-5/4 dry
 (A has silty loam and pebbles)

Oxidation or staining _____ Leaching _____

Secondary deposition _____ Reactive matter CaCO₃

Section:

| Rock type | % |
|-------------|----|
| Quartzite | 48 |
| Sandstone | 26 |
| Quartz | 10 |
| Schist | 6 |
| Limestone | 6 |
| Gneiss | 2 |
| Black shale | 2 |
| | |
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General Description:

Pit has been abandoned for only a year or two. This is a typical kame. Slumping of surface material has obscured the section.

Pittsfield East
 MASSACHUSETTS
 STATE
 GEOLOGIST
 DATE
 PROJECT
 G. C. Kelley
 7-21-67
 Materials

Field and macroscopic observations:

Station number 10

Location: County Berkshire Town Dalton Pit X Active
Inactive
42° 29.0' N
 Road location High Road Coordinates 73° 10.5' W

Geologic unit or occurrence Ice-contact stratified drift in Kame

Textural description Pebble sand Eng. Soil Type SW

Dimensions of deposit: Areal extent 1.3-0.4 mi. Estimated thickness ca. 120'

Dimensions of pit: Areal extent 250' x 250' Exposed thickness 50'

Lithologic composition (approximate %)

Grain size: Maximum 24" Mean 1/4" Est. % of sand 60 Est. % fines 3-5

Rounding Subrounded Grading Medium Sorting Medium

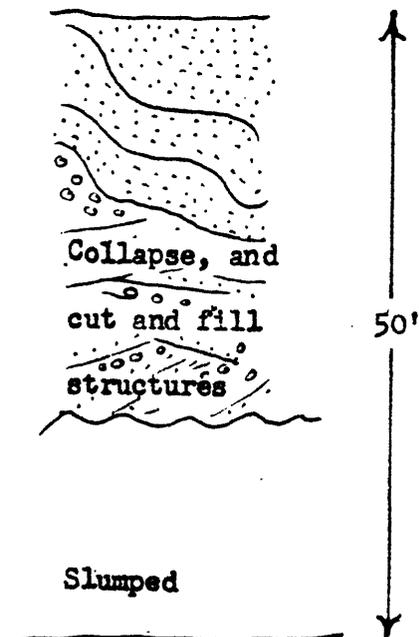
Soil development Stripped Color ---

Oxidation or staining --- Leaching ---

Secondary deposition --- Reactive matter CaCO₃

| Rock type | % |
|-----------|----|
| Quartzite | 44 |
| Schist | 16 |
| Sandstone | 18 |
| Limestone | 8 |
| Quartz | 10 |
| Gneiss | 4 |
| | |
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Section:



General Description:

Collapse, and cut and fill observed. Layers of pebbles, sand and fines typical of kames are present. Cobbles and boulders randomly included.

Pittsfield East
 QUADRANGLE
 Mass.
 STATE
 G. C. Kelley
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 DATE
 Materials
 PROJECT
 Mass.

Field and megascopic observations:

Station number 11

Location: County Berkshire Town Lanesborough Pit Active
Inactive

Coordinates 42°29'25"N
73°11'51"W

Road location South of Gulf Road

Geologic unit or occurrence Ice-contact stratified drift in kame

Textural description Gravel of mixed sizes Eng. Soil Type GW

Dimensions of deposit: Areal extent 2000' x 1200' Estimated thickness 70'

Dimensions of pit: Areal extent 150' x 100' Exposed thickness 13'

Lithologic composition (approximate %) _____

Grain size: Maximum 1.5' Mean .04" Est. % of sand 60 Est. % fines 3
rounded

Rounding Subrounded to well Grading Poor to medium Sorting Medium to well

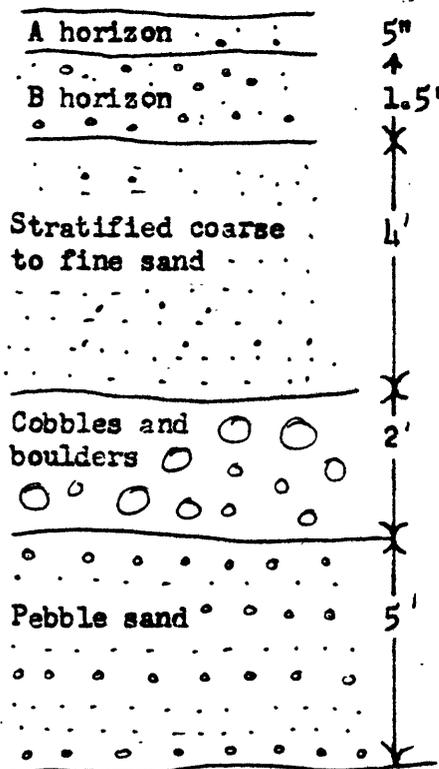
Soil development A = 5"; B = 18-24" Color 10YR 5/6 dry

Oxidation or staining --- Leaching ---

Secondary deposition Minor Fe Reactive matter CaCO₃

| Rock type | % |
|-------------|----|
| Granite | 2 |
| Quartzite | 66 |
| Black shale | 2 |
| Sandstone | 8 |
| Limestone | 4 |
| Schist | 12 |
| Quartz | 6 |
| | |
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Section:



General Description:

Not a pit! owner is filling swamp area around house. Appears to be stratified material with minor collapse.

QUADRANGLE
 STATE
 PROJECT
 Pittsfield East
 Mass.
 G. C. Kelley
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 7-25-67
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 Materials
 Mass.

Field and macroscopic observations:

Station number 12

Location: County Berkshire Town Pittsfield Pit X Active
Inactive

Road location East of Route 8 Coordinates 42°29'10"N
73°11'55"W

Geologic unit or occurrence Ice-contact stratified drift in Kame

Textural description Gravel of mixed sizes Eng. Soil Type GW

Dimensions of deposit: Areal extent 800' x 1500' Estimated thickness 100'

Dimensions of pit: Areal extent 700' x 300' Exposed thickness 30'

Lithologic composition (approximate %) _____

Grain size: Maximum 7' Mean 1/2" Est. % of sand 50 Est. % fines 5

Rounding Well to subrounded Grading Poor to medium Sorting Medium to well

Soil development Stripped, probably A = 5"; B = 12-18" Color Light yellowish brown; dry

Oxidation or staining --- Leaching ---

Secondary deposition --- Reactive matter CaCO₃

Section:

| Rock type | % |
|-------------|----|
| Quartzite | 44 |
| Quartz | 16 |
| Schist | 18 |
| Black shale | 6 |
| Granite | 6 |
| Sandstone | 8 |
| Limestone | 2 |
| | |
| | |
| | |

Slumped

General Description:

Slump of surface prevents viewing most of section. Many large boulders present. Collapse only vague; may be cut and fill. Pit complex.

Pittsfield East
 QUADRANGLE
 Mass.
 STATE
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Field and megascopic observations:

Station number 13

Location: County Berkshire Town Pittsfield Pit Active Inactive

Road location West of Route 8 Coordinates _____

Geologic unit or occurrence Ice-contact stratified drift in kame

Textural description Gravel of mixed sizes Eng. Soil Type GW

Dimensions of deposit: Areal extent 2000' x 3000' Estimated thickness 100'

Dimensions of pit: Areal extent 30' x 50' Exposed thickness 15'
This part of complex is

Lithologic composition (approximate %) _____

Grain size: Maximum 3' Mean 0.16" Est. % of sand 55 Est. % fines 4

Rounding Well to subrounded Grading Poor to medium Sorting Medium to well

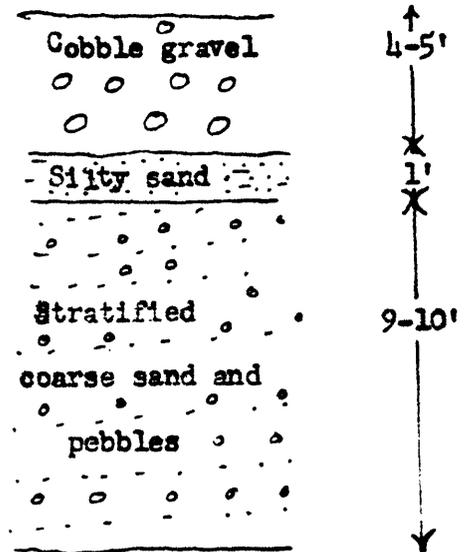
Soil development Stripped Color ---

Oxidation or staining --- Leaching ---

Secondary deposition --- Reactive matter Some CaCO₃

Section:

| Rock type | % |
|---------------|----|
| Schist | 14 |
| Quartzite | 54 |
| Sandstone | 20 |
| Quartz | 8 |
| Limestone | 2 |
| Miscellaneous | 2 |
| | |
| | |
| | |
| | |



General Description:

Series of pits.

Pittsfield East
 QUADRANGLE
 STATE
 Mass.
 G. C. Kelley
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 7-24-67
 PROJECT
 Materials

Field and megascopic observations:

Station number 11

Location: County Berkshire Town Pittsfield Pit X Active
Inactive

42°29'10"N

Road location West of Route 8 Coordinates 73°12'45"W

Geologic unit or occurrence Ice-contact stratified drift in Kame

Textural description Boulder gravel Eng. Soil Type GW

Dimensions of deposit: Areal extent 2000' x 3000' Estimated thickness 100'

Dimensions of pit: Areal extent 50' x 150' Exposed thickness 15' - 20'

Lithologic composition (approximate %) _____

Grain size: Maximum 3' Mean 0.2" Est. % of sand 40 Est. % fines < 2%

Rounding Well to subrounded Grading Fair to medium Sorting Medium to well

Soil development A = 6"; B = 18-24" Color Dark brown

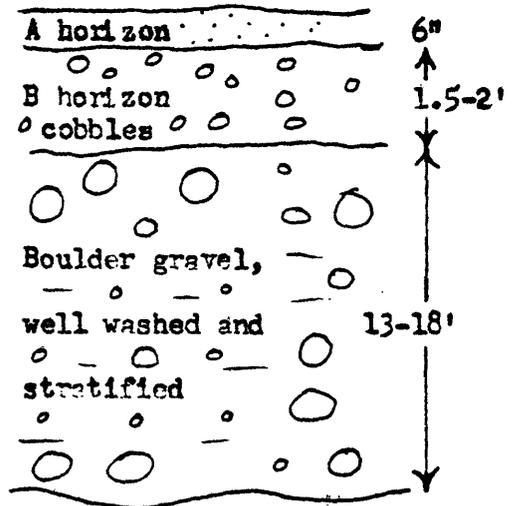
Cobbles present

Oxidation or staining --- Leaching ---

Secondary deposition --- Reactive matter Minor CaCO₃

| Rock type | % |
|---------------|----|
| Schist | 14 |
| Quartzite | 54 |
| Sandstone | 20 |
| Quartz | 8 |
| Limestone | 2 |
| Miscellaneous | 2 |
| | |
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| | |

Section:



General Description:

This is part of complex with Pit 13. Becomes much coarser toward the west where boulders are common.

Pittsfield East
 MASS.
 G. C. Kelley
 GEOLGICIST
 7-24-67
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 Materials
 PROJECT

Field and microscopic observations:

Station number 15
 Location: County Berkshire Town Lanesborough Pit X Active Inactive
 Coordinates 42°29'33"N
73°12'20"W

Geologic unit or occurrence Ice-contact stratified drift in Kame

Textural description Silty sand with pebble bands Eng. Soil Type SP

Dimensions of deposit: Areal extent 600' x 1000' Estimated thickness 60'

Dimensions of pit: Areal extent 500' x 300' Exposed thickness 25'

Lithologic composition (approximate %) _____

Grain size: Maximum 18" Mean 0.02" Est. % of sand 70 Est. % fines 4

Rounding Well to subrounded Grading Poor to medium Sorting Medium to well

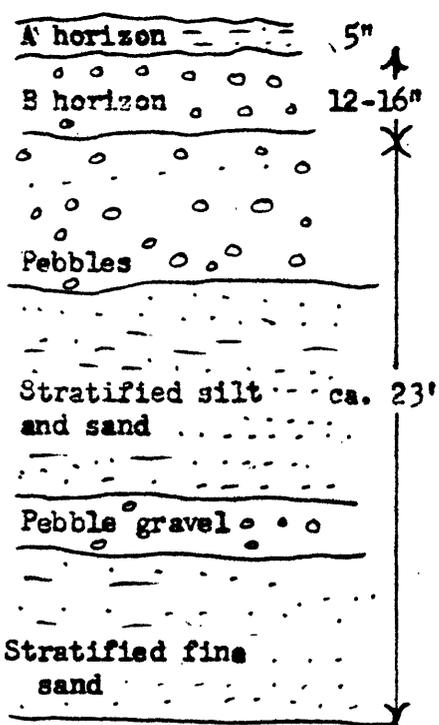
Soil development A = 5"; B = 12-16" Color 10YR 4/4

Oxidation or staining --- Leaching ---

Secondary deposition --- Reactive matter CaCO₃

| Rock type | % |
|-----------|----|
| Quartz | 6 |
| Quartzite | 62 |
| Schist | 12 |
| Limestone | 2 |
| Sandstone | 16 |
| Gneiss | 2 |
| | |
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Section:



General Description:

Surface slumping. Collapse in some layers.

Pittsfield East
 MASS.
 STATE
 GEOLOGIST
 DATE
 PROJECT
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 7-25-67
 Materials