

Stat.

1. This is 11.5 B.M. Hole # 7 - it is
a drain pipe on S. edge of pit.
2. Elev. at bottom of stake.
3. Elev. at top of stake.
4. Elev. at ~~bottom~~ top of stake.
5. Bottom of stake.
6. Top of stake.
7. Top of stake.
8. Top of cut of top of stake.
9. Top of cut " " "
10. Top cut.

- 638 east side - mouth of
 narrow cut extending N
- 639 back end
- 640 " " other ends
- 641 other side - mouth
- 642 point
- 643 top
- 644 angle
- 645 slope
- 646 top
- 647 top
- 648 top near station E
- 649 top beyond A E
- 650 cut across from SE
- 651 corner
- 652 top
- 653 top
- 654 corner
- 655 pencil into top
- 656 slope
- 657 for dip to pencil
- 658 corner
- 659 point
- 660 back of point

M.L. Rutile July 1947

655 foot of cut, Green igneous Rock, just below O.A.

656 " " " at corner, Green Rock wall weathered, flint to E and N

657 foot of cut, flint to E

658 " " " in angle

659 " " "

660 " " " at corner

661 E end of Green see sketch

662 foot of cut, Siphole and small between

663 " " " Siphole

664 " " " small between, flint N.

665 " " " at sharp small

666 Corner of Basalt. see sketch

667 foot of cut, Siphole to us, 6' O.A. to edge of igneous.

668 foot of cut, flint N

669 " " " Siphole

670 center of 6' wide work weathered Rock at head also

671 foot of cut, lead to E about 15', edge of Basalt, solid for 10' to us

672 corner of cut, rock at base, 10' weathered here to the center

673 foot cut, W.R., flint W

July 11, 1947

1947

655



666



M.C. Rutile

July 11, 1947

- 674 foot of cut
675 " " , at corner
676 " " , across W.
677 " " , at corner
678 ~~across of Broom~~
679 foot of cut at corner, weathered R.
680 " " , S. hole, Broom to W.
681 " " , at small, Broom side
682 " " , angle, across between
weathered green rock.
683 foot cut, at corner Broom S.
684 " " " , flat W.
685 top cut, center of valley
686 at corner, big small, flat E.
687 in S. hole, foot cut, flat E.
688 small, flat S.
689 foot cut small, across rock all along
690 " " small, across rock
691 flat to S., weathered across rock
and brown here.
692 flat S.
P.M.
693 flat to W.
694 S.W. corner of brown

July 16, 1998

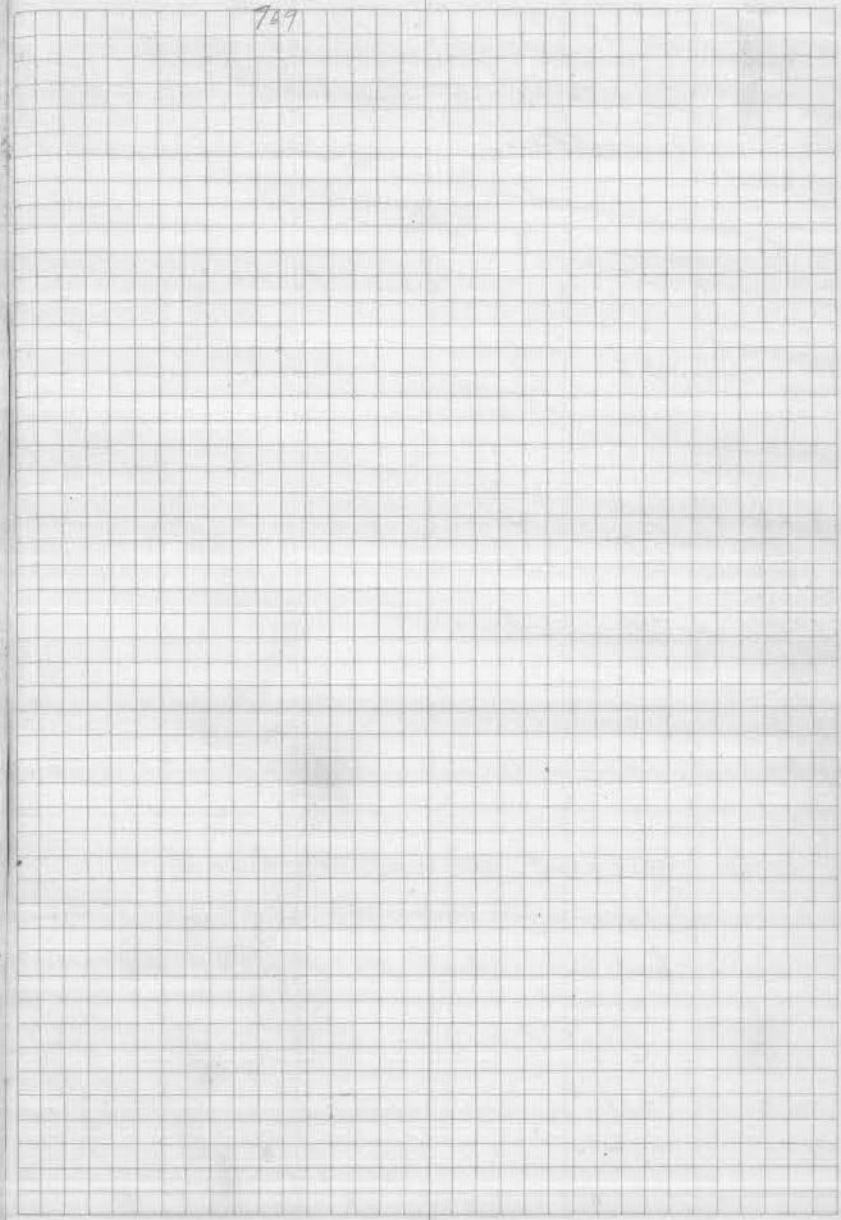
- 721 } top of cut from cut
 722 }
 723 }
 724 } top of other cut
 725 }
 726 } corner of cut
 727 } angle
 728 } corner
 729 } angle + dip
 730 } top + corner
 731 } dip + angle (end of cut)
 732 } start of cut
 733 } top of cut
 734 } ~~top of cut~~ corner
 735 } corner
 736 } ~~corner~~ corner
 737 } top
 738 } top
 739 } top
 740 } top
 741 } top + end of cut

M.C. Rutile July 15, 1957

- 759 Corners, weathered rock, float N.W.
- 760 in angle, W. R. N. Top out.
- 761 Small, feet of out, top out also.
- 762 In green weathered rocks;
broad white lenticles.
- 763 on west, white lenticles.
- 764 in rubble. Green rocks
emerging in broken up by
brown, weathered.
- 765 Small, feet out, all float in
bottom of this thing.
- 766 Small, float to small from here.
- 767 feet out small pile of float.
- 768 weathered rock S. float N.
- 769 feet out. 3' from lowest thick
sample
- 770 at Corners, feet out, float E.
- 771 feet of out, same as 760.
- 772 " " " " " " " "
- 773 " " " " " " " "
- 774 edge of foliated shale, very 8' in
Jungle 72 from top.
This shale also out of the
top of the out. It goes off
into some smaller masses
near top. Photographs

71
749

21927.22



M.C. Rutile

July 15, 1947

11/11/47

775 top cut, down "Dike"
this is all basalt up here
uncut the morning in the
weathered.

776 Top cut

777 top cut at small.
The area seems to be in place
and it has more of the "breccia"
like appearance in the west pit
it all appears to be Basalt in
any way degrees of alteration.

778 top cut, small small on "Dike"

779 top cut Basalt (unweathered)

780 top cut.

781 " "

782 " "

783 " "

784 " " in small angle

785 front cut, W. basalt. Fresh Basalt
E. N.

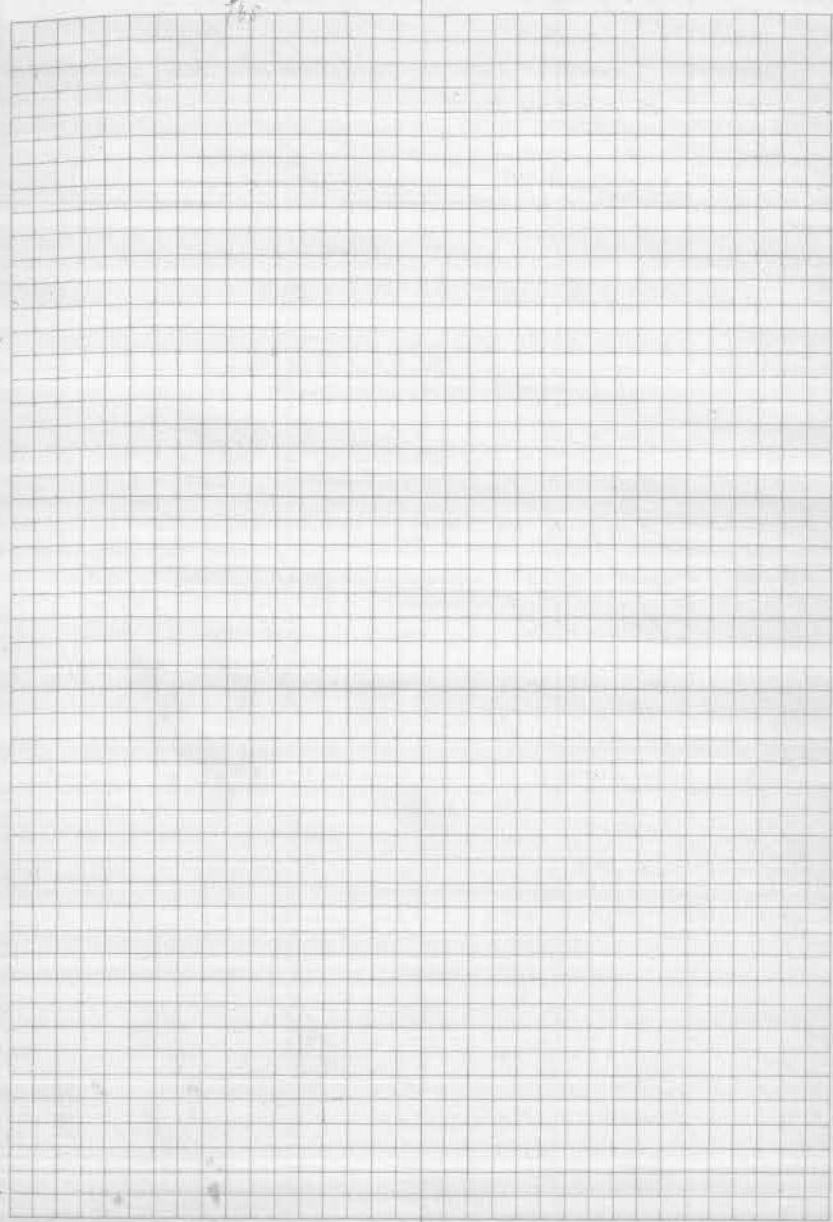
786 front cut, float No.

787 " " " "

788 " " " W

789 " " " "

790 " " " "



July 15, 1947

- 791 foot cut, front w.
 792 " " " " " "
 793. E. edge of float.
 794 at road intersection. No. 100.
 795 N. Road 7' inside float
 796 N. edge road. This is on hill
 bank. Level 2' inside edge
 only cut edge
 797. edge road (N) of wall
 798 Corner of westward Barrett.
 799 corner point (westward)
 800 End road here.
 801 foot cut. Various other school blocks
 here. May be only westward Barrett
 or so-called Barrett
 802 foot of cut, westward green
 803 " " " " " " small
 804 " " " " " " " "
 805 at corner.
 806 foot cut.
 807 " " " " " " " "
 808 " " " " " " " " sharp small.
 809 top cut, 2' to corner of
 small cut.
 810 top cut.

808

M.C. Rutile

July, 1947
15

- 811 top of cut, in angle, flat
to N.
- 812 Sward, top cut.
- 813 Top cut include bottom.
- 814 S. side corner from base.
- 815 Top of fill 15' wide
cut top and bottom on E.
side.
- 816 S. side of fill 15' wide at top
- 817 S.W. corner of fill top.
Misc site to South. Top is
about 17' wide base
- 818 top fill. bottom 7' South
- 819 " " " 5' S.
- 820 " " " " "
- 821 foot of fill.
- 822 " " " " "
- 823 Corner of fill. at foot
- 824 " " " " at foot
- 825 S. corner of fill top about 15' wide
- 826 top feet bottom. " 7' S.
- 827 top & bottom of cut, fill
- 828 " " " " " fill.
- 829 E. edge road 10' wide
- 830 W. " " " "
- 831 E. " " " "

M.C. Rutile July 1927

912 yellow sand (specimens - crushed)
L.N.

913 common yellow rock

914 Small, foot of cut.

Except for the few places noted
this end of the pit (which runs
to E.) has corals which are
either smaller Basalt or a
green weathered rock probably
Andite. There are also thin
yellow sand only at the bottom
in the bottom of the pit.

915 Brown weathered rock. Small
foot of cut (Corals, low Basalt)

916 " " of cut. Definite Basalt
beyond this.

917 at Camp Basalt.

918 foot and beginning of cut.

919 " " top cut.

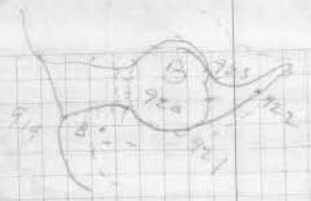
920 top and part of cut.

921 On Basalt, top cut. Small L.N.

922 top cut.

923 top cut. Small.

924 foot of cut big sand at Basalt

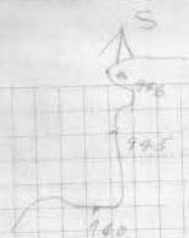


M.C. Rutile

July 16, 1947

- 925 top cut.
- 926 " "
- 927 " " 20' NE of cut.
- 928 " " at corner.
- 929 top cut.
- 930 " " foot of cut.
- 931 foot of cut. W. side of Gully, R.
- 932 " " this is at corner.
- 933 Top of cut.
- 934 " " at corner.
- 935 Top of cut irregular shape below.
- 936 " "
- 937 " "
- 938 " " end of cut at corner top.
- 939 " " " " " "
- ~~940~~ ⁹⁴⁰ Top cut, E. side of gully.
- 941 top of cut " at small.
- 942 " " " angle.
- 943 " " " "
- 944 " " " "
- 945 " " " "
- 946 " " " "
- 947 " " " "
- 948 " " Sharp Point.

NOTE to cut



M.C. Rutile

- 949 Top E horizon of cut
 950 " " of cut
 951 angle of cut
 952 " " " "
 953 top cut
 954 " " "
 955 Top Blunt of cut
 956 foot cut. weathered Basalt to
 here. Fresh bedding here
 957 dark, sigmoidal rock 2" like
 here. Dips E.
 958 Completely weathered black dikes
 959 foot cut
 960 " " " " " "
 961 E edge 10' wide road
 962 " " " " " "
 963 Center of Creek
 964 July 19, 1941
 → Δ
 965 S.E. corner of road
 966 N.E. " "
 967 N. edge of road 10' wide
 968 " " " "
 969 S " " "
 970 N " " "
 971 S " " "

M. C. Rutile

July 13, 1947

972 N. edge ground.

973 S

974 N

975 E

976 " " at corner. 15' wide

977 E edge ground

978 " " " "

M.C. Rutile.

July 27

A

A1 Rutile streaks run roughly E-W.
Cryolite is disseminated through-
out the material. 77A from here
the Basalt block has been
found and altered by the
mineralization. Sample 18A
is of altered Basalt

A2 These points are all
A3 stakes in the small area
A4 mapped on 10 scale.

A5

A6

A7

A8

A9

A10

A11

A12

A13

A14

A15

A16

A17

A18

A19

These numbers will be

in the first spread area. Scale = 10"
Orientation was from 03 to 04.
The ground is not oriented in a
North-South direction, and this has
to be fitted on the map.

M. C. Rutile

BA

Here length is altered by
Klein's etc. to a blunt, rounded

A 20

A 21

Special area Bointo

A 22

A 23

A 24

A 25

A 26

A 27

~~28~~

~~29~~

Hardy Property

July 24 1947

Now on Hardy Property - Numbers will be "H" numbers.

H1 These are Traverse Stations

2

3

4

5

6

7

8

9

10

11

H12 Top of dump at W. end of pit.

13 Slope - 0

14 N. end of pit 3' wide (and center pit is in red clay with few rock rock fragments.

(Note in one pit determine the type of rock and shapes)

15 S. end of pit, 3' wide. 3' deep at this end.

16 N. end of pit. 8' deep at this end (Bit in end)

17 S. end of pit. 3' deep. about same depth all along.

Hardy Property July 25, 1957

- H 18. E. end of pit, 9' deep.
- 19 W. end " " , 9' deep. much more fragmental material at this end.
- 20 E. end 5' deep trench 2' deep. in red clay.
- 21 W. end of pit. some abundant fragments.
22. E. end 3' deep. In solid Novaculite. no more flint at the surface here than anywhere else in the pit area either. Sample H1 from here.
- 23 W. end of pit. 3' deep all Novaculite.
24. Sinkhole. edge of completely frozen covered ground.
- 25 Bank flint to W.
- * 26. W. end of trench 10' deep. in red clay. Good place for samples.
- 27 E. end of trench 2' deep.
28. Edge of rock flint. E. end of 3' deep trench. abundant fragments but still red clay.
- 29 W. end of trench. 5' deep.
- 30 Heavy rock flint

Note all pits (trenches)

are roughly 3' wide and pits are taken in center of each end.

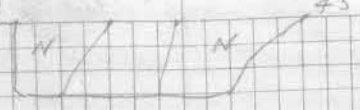
#26 the bottom of the pit is a yellow soft "clay" like material unlike the material to the surface is red clay. In the bottom of the pit there are abundant novaculite fragments and fragments of unidentifiable material. Samples H-4 etc are from here.

Hardy Property

July 25, 1947

- H 32 W. end of pit 3' deep in red clay
 23 E. " " " " 9' deep
 34 Nothing, not even heavy flint.
 I would put pit a trench up in
 here. Heavy flint 40-5
 35 Heavy flint to N.
 36 At sharp corner of heavy flint.
 37 W. end of 4' deep trench E-E
 heavy flint. Put in in clay
 38 E. end of 4' deep trench.
 39 On heavy rock flat, south.
 40 S. end of trench 3' deep. Forest
 clay fragments not abundant.
 *41 W. end of trench. Too deep to
 measure with rod. Get sample
 here probably deepest in a
 topographic low for a good sample
 42 W. end of 6' deep trench. In red
 clay.
 43 E. end of 3' deep pit.
 *44 W. end of 7' " pit
 45 E. end pit.
 *46 W. end of pit. 4' deep. red in
 2' below surface, clay to N.
 N. end of pit 10-15'

S 44



At S 44 we have a bed of
 red clay bed dipping about 50° S.
 which is passing through solid
 Manganese. Get a sample of
 red stuff here, also of Manganese.
 PHOTOGRAPH ALSO.

Sample H-6 is from bottom of
 this trench.

*47 On this is the highest part in
 the pit area.
 The material is much less weathered
 and some of the rock fragments are
 fresh. Quartz is present in various
 sizes of decomposition. It is this part
 of material which consist of the Permian
 "Barnes" shales. Manganese is not
 abundant (or even present below the soil
 level). Get in 5' deep into E. end
 Sample H-7

Hardy Property July 25, 1947.

- 47 E end of 8' deep trench.
In clay at this end
- 48 W end of 4' deep pit, in clay.
edge of heavy plant.
- 49 E. end of pit.
- 50 S.W. corner of 3' wide trench. In
broken Nannulite bed. - run
about 3' W. 3' deep.
Nannulite flat to E.
- 51 ^{W. edge.} at angle 4' deep. Mainly red
clay.
- 52 W. end of trench 9' ~~to~~ deep. W
dip.
- 53 Nannulite. flat to E.
- 54 S. end of trench 8' deep, in red clay.
- 55 N. " " " 5' deep.
- 56 S. end of trench 14' deep in clay.
- 57 W. edge of trench 3 1/2' deep.
- 58 ^{N.E. corner} end of pit 9' deep
- 59 E. end of 3' deep trench.
- 60 W. " " 9' " " in red clay.
- 61 E. end of 5' deep trench
- 62 W. " " 4' " " in clay.
- 63 E. end trench. 3' deep
in Nannulite bed. 5' W. in red clay.

64. W. end of trench, 2 1/2' deep. in
mainly red clay, about 10' W to
Heavy Noveboracite float.

65. Heavy Noveboracite float to W.

Part 66 S.W. ^{corner} of trench, 2' deep.

67. Core of red clay with lots of float
which was mixed down on soil.

68. at Corner, W. side of trench.

69. E. side of trench. In Noveboracite to E.
and 10' W.

70. N. edge of trench 3' wide area 8' E
in solid Noveboracite.

71. E. edge of trench. Red clay but with a
lot of fragments mixed in.

72. In side corner of trench. Small to
lost print.

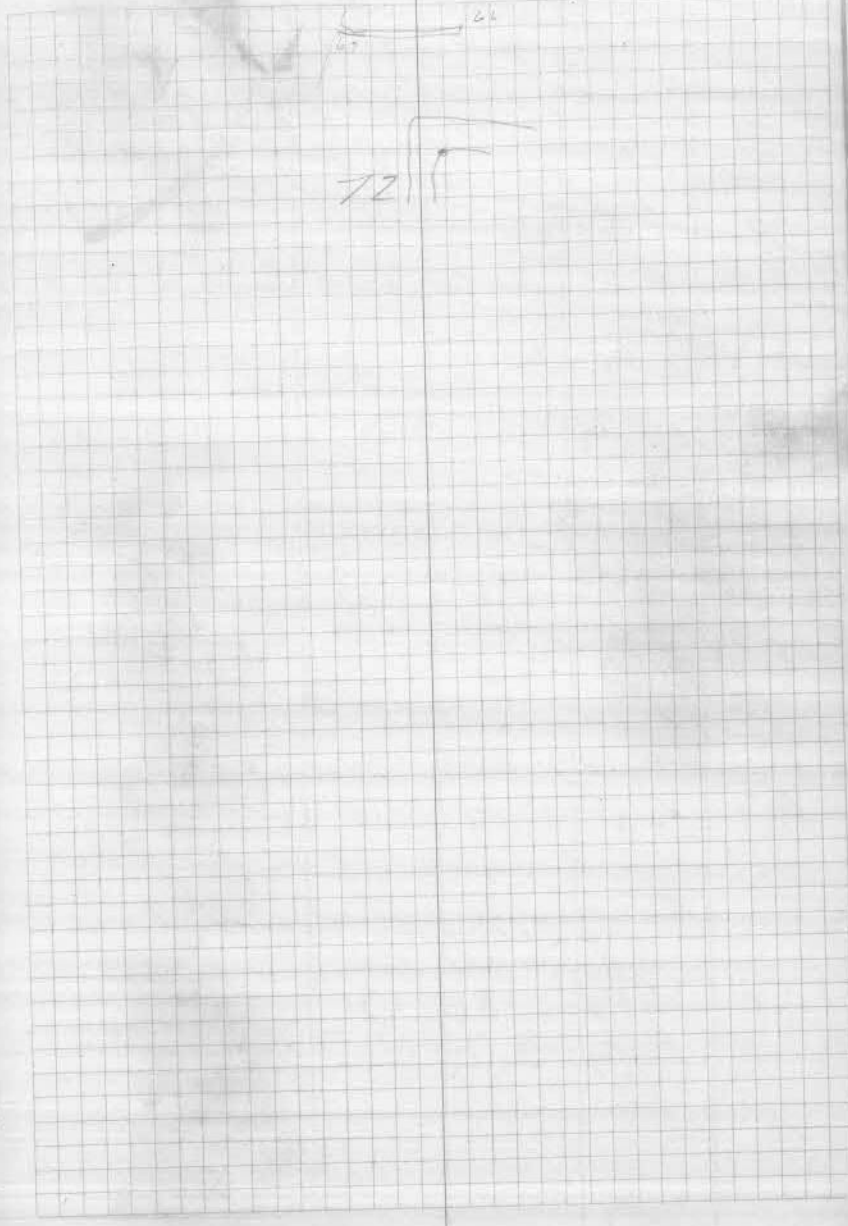
1 foot trench in front 3-3 1/2 feet deep

73. N. side of trench, 8' deep here.

74. S. end of trench, 10' clay & float.

75. N. side of another, 4
max. deep.

76. E. end of trench, 10' W to Noveboracite
contact. This is very sharp for contact



Hardy Property

July 25, 1947

- H 88 S.E. Corner of pit, 2' deep
- 89 } Corner alignments of 2' deep pit, see
- 90 } floor.
- 91 Center of pit about 5' wide
- 92 E. edge of pit, also N.E. Corner of shaft. 12 to water level in shaft
- 93 S.E. Corner of shaft.
- 94 ~~W.E.~~ S.E. corner of 3' wide deep pit.
- 95 N.W. Corner of shaft. water in shaft is 3' deep. Sample H-2 is of "Clay" in this pit.
- 96. S.W. Corner of pit. appears to have gone underground a little way.



75. 6'

Solid Navaculite

"Clay"

Navaculite

W side of pit

E. side of pit is solid Navaculite.

91 ←

Nov.

92 93

Nov.

O₂ crystals

best developed in Aug 31 and abundant also in Nov. O₂ all as seen through log FCOX Corrosion and U.S. No Sulphide remaining.



July 29, 1947
Christy Property

C-1	First Station	
C-2	Second Station	
C-3	NW Corner Pit A-1	1
C-4	NW Corner Pit A-2	2
C-5	NW Corner Pit C-1	
C-6	NW Corner Pit C-2	
C-7	NW Corner Pit C-3	
C-8	NW Corner Pit C-4	
C-9	NW Corner Pit C-5	
C-10	SE Corner Christy Garage	
C-11	NW Corner Pit D-1	
C-12	NW Corner Pit D-2	
C-13	NW Corner Pit D-3	
C-14	NW Corner Pit D-4	
C-15	NW Corner Pit D-5	
C-16	Third Station	
C-17	NW Corner Pit A-3	
C-18	NW Corner Pit A-4	
C-19	NW Corner Pit A-5	
C-20	NW Cor Pit B-1	
C-21	NW Cor Pit B-2	
C-22	NW Cor Pit B-3	
C-23	NW Cor Pit B-4	

↑
N

Test Pits

Row A

□ 1

□ 2

□ 3

□ 4

□ 5

Note: test pits are 5 ft. square

Nonexistent in Pit Patterns

Christy Property

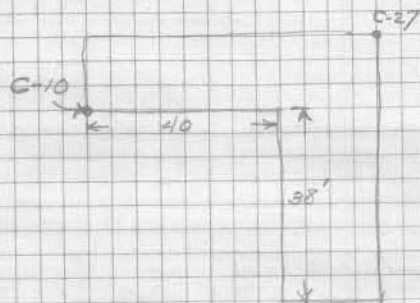
July 29, 1947

Christy Property

- C-24 NW Cor Pit B-5
- C-25 NW Cor Pit B-6
- C-26 Center of Road - Elevation Shot
- C-27 NW Corner Christy House
- C-28 NW Corner Pit E-1
- C-29 NW Corner Pit E-2
- C-30 NW Corner Pit E-3
- C-31 NW Corner Pit E-4
- C-32 NW Corner Pit E-5
- C-33 S end of N-S trench
- C-34 East Pit in trench of C-33
- C-35 N end of C-33 trench
- C-36 NW Corner Pit F-1
- C-37 NW Corner Pit F-2
- C-38 NW Corner Pit F-3
- C-39 NW Corner Pit F-4
- C-40 E side of road
- C-41 W side of road
- C-42 E Side of road
- C-43 E Side of road
- C-44 W Side of road
- C-45 Eureka Station

Average width of road = 11 feet

Sketch of Christy House + Garage



4' W of W side of rd.

Christy Property

July 29, 1947

Christy Property

Pit notes.

A1 6' clay and rock fragments
resting on Nonsuchite.

No concentration of fragments
toward the solid rock. The
asphalt seems to be just
resting on the nonsuchite. The
nonsuchite surface is sloping
gently to the south 10° - 15° .

The nonsuchite is the hard
flinty variety, not at all porous.

Sample ~~A~~ is from pit. -
Nonsuchite sample.

C1 is solid material in clay.

Pit A1 is 13' deep.

A2 6' deep.

NE side of pit - gossan
fragments in clay.

C-2 is sample of above.

In southeast corner 3 ft of
red clay - underlain by
1 ft of pure clay underlain
by gossan material in clay.
C-3 is sample of pure clay.

Pit A1

The top of nonsuchite is some clay
veins of ^{white} clay in nonsuchite
probably in fractures.

In west wall vein in nonsuchite
dips 25° to south - the vein
is clay with heavy iron oxide
concentration.

Sample 5-6 is vein material.

Nonsuchite is cherty - gray toward
top and is white.

Christy Property

H-2 Cont.

C-4 is sample of gossan material -

Gossan material has dip of about 30° to the south

Bluish Noveboracite on dump bottom is slumped clay at moment

Gossan material gets more solid toward bottom

C-6 is most solid of gossan material

H-3 Six inch veins of white clay interspersed in gossan
Pit is 9 feet deep

Blue gray noveboracite on dump

One clay vein in gossan dips 10° to the south

Clay veins are variable in thickness

H-4 Depth 11 ft

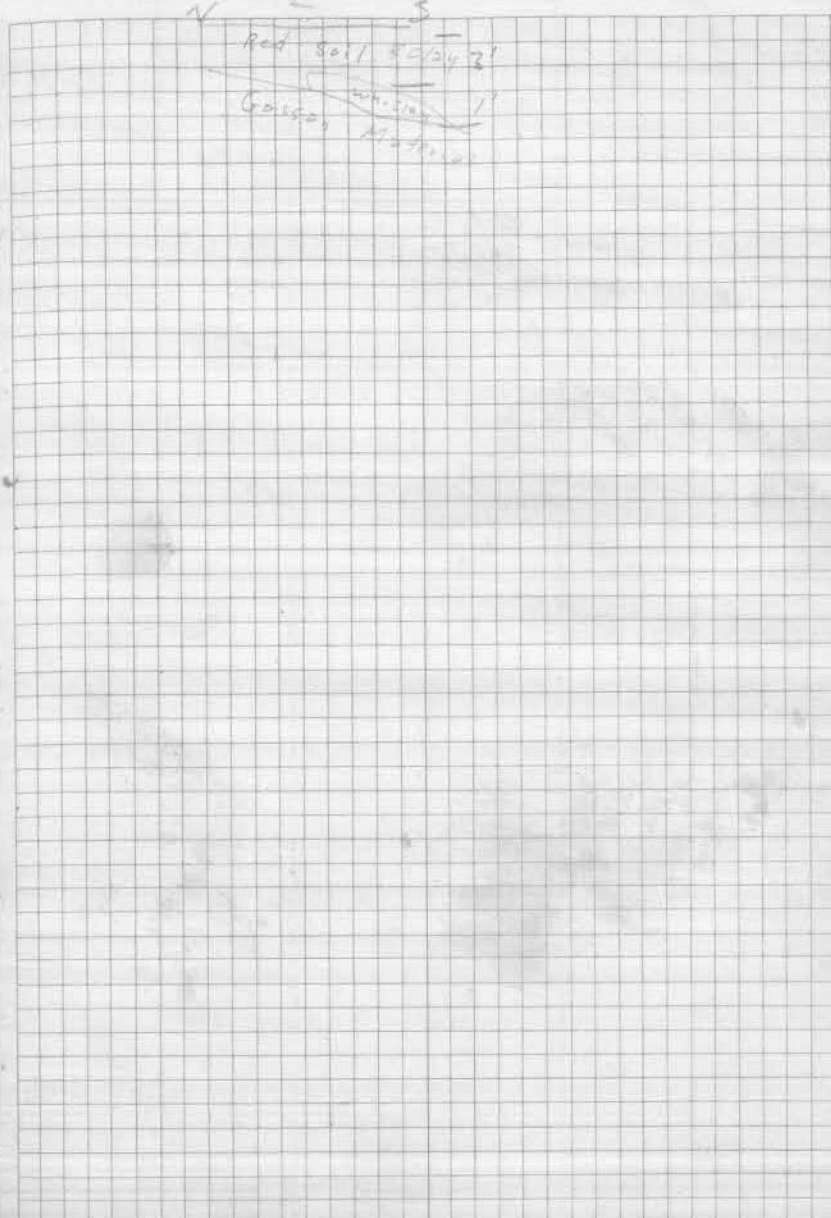
One vertical clay vein

Mixture of clay & gossan

No Noveboracite on Dump

A-2 Pit

Christy Property



Christy Property

Pit A-5 6 ft Average depth
No Navaculite on
Dump

B-6 4 ft deep Crud

B-5 15 ft deep Crud

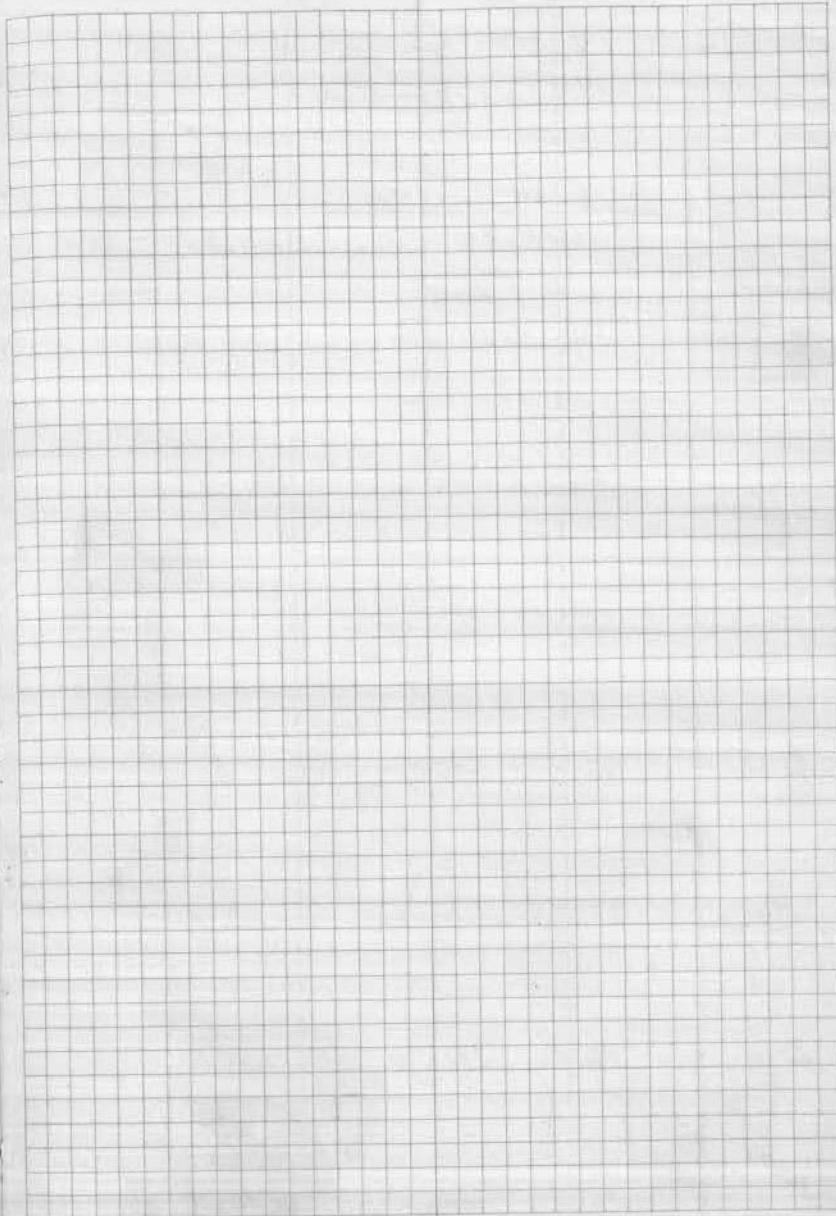
B-4 11 ft deep Crud

B-3 8 $\frac{1}{2}$ ft Crud Black Nodules
on dump

B-2 4 ft deep Crud, ^{Black} Navaculite
on dump

B-1 4 ft top in Navaculite

C-1 16 ft deep in Crud



Christy Property

- B+C-2 14 ft Deep
Abundant Clay
- C-3 15 ft Deep
White Clay Seams
+ Crud
- C-4 13 ft. Deep
Crud
- C-5 14 ft Deep Crud
- D-1 14 ft Deep Crud
- D-2 12 ft Deep Crud
- D-3 27 ft Deep Crud
- D-4 12 ft Deep Crud
- D-5 13 ft Deep Crud

Christy Property

Pit E-1

4.5 ft to Nevada in NW
Corner of Pit

7.5 ft to Nevada in SW
corner of pit

Dip 40° S } Noracutite
Strike 575 E }

Noracutite shattered and
Blueschist in color

Total Depth 15'

Pit E-2

Seven foot deep

Pit E-3 14 ft deep Gunk

Pit E-4 12 $\frac{1}{2}$ ft. deep Gunk

Pit E-5 12 ft deep Gunk

Trench betw. E + F pits
3 ft. deep

Christy Property

P11 F-4 9 ft Deep Gunk

F-3 9 ft Deep Gunk

F-2 11 ft Deep Gunk

F-1 12 ft Deep Gunk
Necessitate in dump

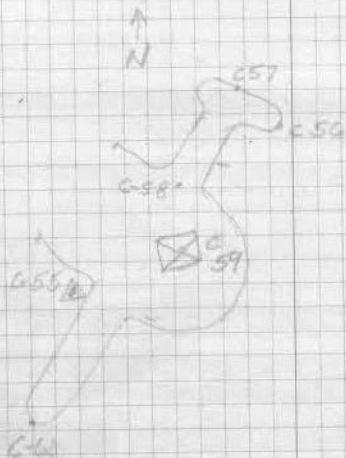
Christy Property

- C-46 Fifth Station
- C-47 SW corner Sec 16 4 ft west
- C-48 wedge of road s. edge of
- C-49 SW corner of test pit - Pit is
- C-50 s.e. end of trench 4' deep
- C-51 NW end of above trench
- C-52 N end of NE Trench
- C-53 S end of above Trench
- C-54 SW corner of excavation
above tunnel.
exposed $S 75^{\circ} N 25^{\circ} E$ Dip $50^{\circ} S$
- C-55 Station 6 1 ft west of trench
- C-56 Center E end of "L" shaped trench,
4' deep 4' wide
- C-57 N end of "L" shaped trench
- C-58 Center and s. end of above trench
- C-59 Center of caved shaft 4' x 5'
Sample C-7 taken from dump
- C-60 Center S. end of trench 3' wide
3' deep

of edge of road
marked 1/2 - 2 ft of quartz above it
located at bottom of excavation
7 ft deep 13" in diam
→ 4 ft wide

→ 2 to 4' deep 4' wide

Thin-bedded Naracutite - with
shale partings,
weathered in places to a soft rock



Christy Property

C-54 to Mouth of Tunnel N-17W
 Div of elev below
 Floor of Tunnel at
 Portal and C-54 = 30.5'
 C-54 is above portal
 Tunnel bears S 30° E at portal

C-54 - Portal Slope Distance = 39
 slope \angle = 30°

$$39 \times .5 = 17.5$$

Sample = C-8 from portal of
 tunnel probably Hot Springs S.S.

C-61 E end of square trench
 2 1/2 ft deep 4' square

C-62 Station 2 - 1' south of road

C-63 E-W Trench 3' x 7'
 sugary novaculite on dump

C-64 N end of N-3 trench
 Sugary white Novaculite on
 dump - Pit 4' x 7'

$$\begin{array}{r} 3 \times 5.5 = 16.5 \\ + 2.0 \\ \hline + 12.0 \\ \hline 30.5 \end{array}$$

$$\begin{array}{r} .577 \\ \hline 39 \\ \hline 5196 \\ \hline 1731 \\ \hline 23506 \end{array}$$



A = 30°
 B = 60°
 C = 90°

AB = 39
 BC = 17.5
 AC = 30.5

Christy Property

C-65 NE end of rectangular
 4' x 8' trench 3 ft deep
 massive sugary white
 maraculite in bottom
 Sugary maraculite with
 white quartz veins in dump

C-66 E side of N.S. Road at →
 bottom of hill - C

C-67 N. side of road

C-68 Station 8 - 11' N. of Hedge at rd.

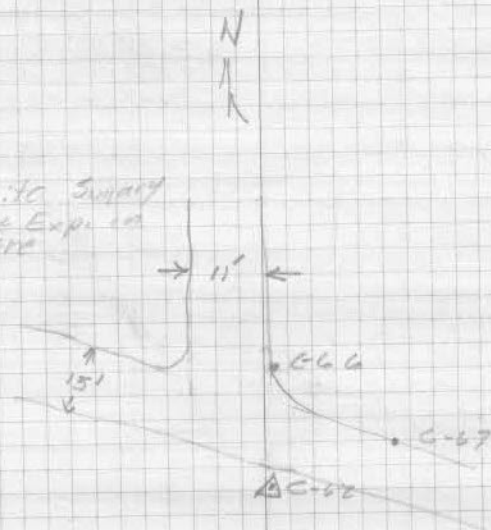
C-69 S. side of road

C-70 N. side of road
 on contact at God +
 Blue gray sugary Marac.

C-71 center of road at high point

C-72 N side of road sugary white
 maraculite

Blue-white Sugary
 Maraculite Exp. in
 Road here



Christy Property

C-73 Soggy white Navasota
massive boulders on
side of ravine probably
in place

C-74 massive syenite outcrop
in steep bank at
Chamberlain Creek ravine

C-75 massive syenite in
cut 8' north of road
Sample #

C-76 massive syenite on
slope at Chamberlain
Creek ravine

C-77 we dug a trench $4\frac{1}{2}'$ deep by 6'
the North end of the pit was
in "Syenite" fragments from
about $2\frac{1}{2}'$ down. The remainder
of the pit was in clay.

C-77 Whether we got part the
"Soil" profile or not is a question.
The syenite fragments were abundant
in the North end of the pit and not
in the South end and we may
have been digging near the contact
of an igneous body. In fact
we had only a fragment of the quartz
in the North end. The syenite
is the same as at C-74 & C-75 at the
Christy Property.

U.C.R.
Bot.

Aug 9, 1946
Wall Geology of Pit.

West of D 270 and D 199 the
pit walls are in one. The soil
is 2-3' thick with no
evidence of a gravel bed. Presumably
excavation to the depth would still
be in one for a few feet.

D 163 Being to North this might
best be mapped as indeterminate.
There is abundant weathering
in gullies weathered rock. The
floor of the pit is a soft brown
weathered rock, probably argillaceous.
The materials consisted in color
and of varying hardness. No definite
deposits.

Island weathered residual soil may
be weathered granite, sample 98
10' W of D 352 is this material. The
weathered rock is cut by numerous
weathered veins, even by the
yellow mineralized rock.

West of A 352 - Here there
is evidence of alteration
found by veins cutting the
"Quartzite". West to the vein
the rock is greener in color and
harder, with abundant pyrite.
2' from the vein (the yellow
Mineralized material) the
igneous rock is dark green,
and very soft. Sample
99 is from the contact zone.

A 593 Green, weathered rock
Sample 100 from here.
There are numerous veins
cutting the rock. It looks
like weathered "Quartzite".
The west side is just the
this point.

A 590 Green weathered rock.
Sample 101 from here.

4.11.11

Hard contact zone
X 99

Soft weathered

Aug. 9, 1947

Δ 358. ~~East~~ of here the wall rock is bleached to white or very light green. It is cut by a large concentration of veinlets. This same general zone goes E to Δ 535. The strata just south is the usual green washed rock.

Sample 102 is at Δ 359
Sample 103 is at Δ 364

Δ 584 Contact of bleached and green rock. The contact is along a vein and is quite sharp.
104 is the bleached rock
105 is green rock. The strata just to the south is the same bleached rock and numerous veins.

Δ 576. From here East the gravel lies on top of the rock.

Δ 571 East end gravel is about 8' deep this goes to the end of pit E.

W. 576 E



Aug. 9, 1947

Δ 518, green from green to bleached
rocks Eastward Sample
106 is bleached rock.

Δ 507 fresh patch of rock, wall
is in green rock with numerous
worms. Sample 107 further south.

Δ 489 Green, weathered rock.
all along here. Sample 108

Δ 483, green, weathered rock along
this wall to Δ 506. Worms are
not abundant.

Δ 671 "fine fresh, abundant" no
weathering to a block of green
rock. Sample 110 from
here 111 to 112 in weathered
rock.

Aug 9, 1957

East Post.

D 890 from here West the wall shows areas of fresh rock like here - Sample 112 is green weathered rock. The Bossy appears to be the country rock in place. This is true for the wall from D 772 to 886. This area has abundant breccia fragments remaining in weathered green rock to show its true character.

Same for 771-731 along that wall. Sample A 112, ^{112A} 802

D 904 here the wall looks like weathered peridotite. The general contact may run to W. of 893, and E. of 897. Sample 114 from here.

Aug. 13, 1957

- 980 Δ on Traverses
- 981 "
- 982 "
- 983 "
- 984 "
- 985 " Obvious drill hole (countdown hole.)
- 986 "
- 987 "
- 988 "
- 989 "
- 990 "
- 991 "
- 992 "
- 993 "
- 994 "
- 995 "

- 996 Bad smell, red clay
Sample 116 in 6' below
surface
- 997 Slightly above S. edge of Bonett
- 998 Very hard soil. Sample 117 on
Bonett. Soil depth is 10' N
- that is Sample 118
- 999 slight white, light

Note traverses closed on line.

Aug 13, 1957, Wed.

1000 Small, at contact with Barlett
South

XI Small, on Sycamore

2 Small, south edge of Barlett.
a few feet clay south.

3 Edge of cut, south edge Barlett.

4 ? in a few feet clay

5 E. end of cut. 12-15' wide

this is center. cut is in clay

6 straight, on clay

7 Small, clay and mixed sycamore
flint

8 On clay, small

9 On Barlett

10 Station, flatter of hill

11 flitting out slightly, but on
larger sand. flitting but
flat.

12 cut crop finally, deep, flint
purple. Flint on sand
to contact of clay. flint, black
rock. (Can this be an inclusion
of Barlett?)

13 One of V. Barlett rock - Barlett
X. One at least 15' in
in a small south

Question: Is this in clay

cut or does flint follow Barlett

Aug 13, 1947

- X-14 S. edge basal flint
below.
- 15 Saint Suckhole, No outcrop.
flint is Sycamore
- 16 Largest Small Dark. very off
black rock basal. outcrop.
Contact with Sycamore is 15' E.
- 17 On Sycamore in small Suckhole.
- 18 On Sycamore
- 19 Straight, flint is Sycamore.
- 20 Dark gray, porphyritic rock in
place.
- 21 about corner of all the sediments
(from north to south
flint).
- 22 about ~~at~~ ^{100'} ~~the~~ outcrop zone
6' W.
- 23 N. side - sediments.
- 24 Sycamore around.
- 25 Sycamore
- 26 must be across the whole of
hill (flint) - Sycamore to the top.
- 27 Sycamore.
- 28 Sycamore outcrop.
- 29 Only to N. 15-20 feet

Sediments of 20 521832
might have been all the Sycamore
a vein. I did not see any flint though.
How likely it was reached white flint
like in 1st well 7 ft.

Aug 14, 1937 Thursday

- X 30 gentle slope, sycamores, flat only
on top of clay & gesso
- 31 on clay on S - many plants.
- 32 on flat
- 33 Patch of succalt. clay below
plane, East hill.
- A 38+ is adjacent at edge of flat.
- 34 Sycamores out on top, flat to S
- 35 Heavy sycamores, plants
- 36 Flat, fairly straight, flat
- 37 flat
- 38 flat. Small through low
flat is succalt, not sycamores.
- 39 Edge of cut
- 40 flat, about 30' into top, cuts
- 41 flat area about 20' from E.
- 42 sycamore flat.
- 43 slight incline here
- 44 about 10' into top
- 45 sycamores flat, clay to South
sycamores
- 46 clay
- 47 Edge 4' down shaft.
20+ feet deep. shaft down in
eye to
Top shaft is well clay like stuff

July 14, 1947

- 478 Small, sylvanite flat.
49 Small sylvanite and cup
50 small sylvanite.
51 small sylvanite.
52 Small, sylvanite, red clay
53 On red clay, sylvanite 10' Small
95986
54 Small, red clay.
55 N. edge, 25' wide pit in
overlaid rock like Big But wall,
56 Small sylvanite flat, cup

July 15, 1947

- 57
x 58 On small, red clay
59 Churn, small flat.
60 N. edge, out, 10' wide in red
clay, with sylvanite ground yet,
about 3' deep, cup
61 flat, heavy, sylvanite, flat, in
bar and s.
62 flat, red clay.
x 63 clay, small.
x 64 center N.E. corner of small
square in red clay, sylvanite
65 Small, flat, red clay.
66 Small, flat, red clay.

Aug 10, 1947

- X.67 flint only, red clay.
 68 Very heavy quartzite flint.
 69 quartzite in place
 70 In cutting Creek.
 Sample 121 & 122, quartzite.
~~70~~ 70 10' W. & 10' S. of
 grotto.
 71 In hill of cutting
 72 Cutting Creek, in quartzite.
 73 Cutting Creek - quartzite from
 here flint about 25' to 30' thick
 weathered. Banks on either side
 are in flint.
 74 Contact with weathered
 quartzite. 24' thick, like flint
 Basalt - 2' thick, weathered
 suggests this is shale
 There are some thin
 sandstones through this
 Sample 123 in the "Basalt"
 75 In Basalt. Basalt to S.
 Gneiss to the South is well
 consolidated - almost conglomerate.

74

Basalt and units
Sample 122

quartzite, just like
rest of quartzite.
Sample 124

Basalt ← weathered
Sample 123

75
gneiss

M.C.R. Sample Notes

- 116 at A 996, Red clay, Bulb Sample
6" deep. TiO_2 denied
check ilmenite.
- 117 at A 998, Bulb + Sample
near north contact.
- 118 at A 998 + 10' N. Gneiss in
place - thin section.
- 119 at A 981, gneiss rock.
- 120 at A 21 altered shale (3)
fresh iron roots in yellow almost
clay like material.
- 121 at A 69 + 20', gneiss
- 122 In division of gneiss at sample
place as 121. The gneiss
appears to have the chilled
contact.
- 123 at A X 74 Sample of "Basalt"
in creek bed.
- 124 See sketch for A X 75.

M. C. R. Pit Sample No. 104,

106 at D 518, bleached rock for heavy minerals.

107 at D 567 for thin-section.

108 at A 989, Green, unweathered Pit for Heavy Minerals.

109 at D 983 Green weathered rock for heavy minerals.

110 at 671 Fresh rock for thin-section.

111 W. of 671, green, unweathered rock for heavy minerals.

112 "Basalt" from wall at D 890.

90 x
thin-section

Here the sample is from a fairly fresh remnant surrounded by weathered rock.

113 Green weathered rock for heavy minerals at D 902.

114 at D 901, weathered rock for heavy mineral analysis.

115 D 906 Sample of "Basaltite"

thin-section

This is a remnant from well weathered material.

Sample Numbers and Notes

98. M.C.R. Pit, Sample from Platform
 labeled residual soil. For Heavy
 mineral work. From 10' w_g 352
- 99 Contact zone between yellow
 clay and "Basilite". No. 93.
- 100 at Δ 593, weathered wall rock
 for heavy mineral analyses
 the contact.
- 101 at Δ 590 Same Green weathered
 rock from Pit wall. For
 heavy minerals.
- 102 at Δ 359 Bleached rock for
 heavy minerals.
- 103 at Δ 364 weathered green
 This is for Heavy Minerals
- 104 ^{Δ 585} Bleached rock w_g contact for
 Heavy mineral work.
- 105 ^{Δ 584} Green Rock. F_g contact for Heavy
 Minerals.

802 - C2

803 - C3

804 - A92

805 - A94

806 - C6

← My Numbers.

↪ Chemist Numbers.

these are clay samples for
T.O₂ Analyses only.

9:30 Sunday M.

at Barlow Hotel.

XX Sample Rock at 2671
again.

Sample of Igneous rock below
D.B. also indicated on Map.

Sample Walls of pit and
map colors. Accessory specimens
may permit correlations.

Photographed

- #1 Basalt mass on top of sand.
Bottom 7' wide at contact.
- #2 "Felsite Dike"
- #3 Side of stack showing weathered
veins. Probably same as
"Felsite".
- #4 Pat face showing 3 feet
of soil, then 4' of transported
gravel. Fragments are felsites
and igneous.
- #5 Photos of Kurnips
Felsite dike on E. Pat.
- #6 Alteration of Basalt to
usual green wall rock 7
ft.

Things to do.

1. Hardy Property.

1. Go over pit at 446 again.
2. " " " " 60
3. Shoot change holes
4. Look for N extension.

2. Shoot Polaris at Big Pit.

3. Take Photographs.

4. See McKnight

12 B Hickory St., Apt. 3

5. Shoot road corners at Big Pit. for orientation purposes, and tie to Main Map.

6. Check the Geology under the island.

Mo-Ti Property Samples

- ~~M-1~~ Altered pyroxenite
in footwall of vein
- ~~M-2~~ Feldspar - pyrite sample
From M-28
- M-3 Molybdenite sample
from M-40
- M-4 Fresh Pyroxenite.
Drew - section.
- M-5 Porphyry dike in S.W. corner
- M-6 Qz - pyrite material.

- M-1 Vein material, fine grained
feldspar - pyrite.
- M-2 Fresh Pyroxenite
- M-3 Porphyry dike. S.W. corner.
- M-4 Coarse grained feldspar pyrite
material.
- M-5 High grade Molyb. material.
- ✓ M-6 Qz - pyrite material.

← What about the samples - One
of fresh igneous rock and the
Qz samples?

✓ M-7 Altered pyroxenite.

Drew has section for M-1, M-2, M-3

Christy Property

- ~~C-1~~ Non-sulfate sample ^{Pit} Cut A1
- ✓ C-1 Solid material from clay ^{Pit} A1
- C-2 Gossar fragments in clay from ^{Pit} A2
- C-3 Clay sample from P. + A-2
- C-4 Gossar material from A-2
- ✓ C-5 Hardest gossar material from A-2
- C-6 Clay vein from pit A-1
- ✓ C-7 Brookite-quartz from shaft
dump
- ✓ C-8 Hot Springs S.S. (3) sample from
portal of tunnel in ravine on
Chamberlain Creek
- ✓ C-9 Massive syenite from Point
C-7b
- C-10a Clay from "Bus pit." at A-77
- ✓ C-10b Fragments from " " at A-77

Sample Notes

Hardy Property Sample Notes

H10 Thin veins across beneath
(at 893) Central part of vein
is FeO and O_2 . Not much is
solid O_2 (coarse grains), then
Sugary Nomenclite



137
100/100
+ 1/82
Novas
8°

Some Nomenclite shows sharp
regular surfaces with the ends
of crystals. They appear to have
been long in time. Sample
H12 is this sort.

H11 FeO & O_2 from center of vein

✓ H12 Nomenclite with crystals
D 83

H13 D 87, Sample of fresh stuff
very hard like shale

H14 D 84 This is a weathered
fragment in the clay
for this section.

✓ H-15 - Sample of material at
North end of pit at D 86

✓ H-17 ^{H10} Hot Springs S.S. from
N. side of Chamberlain Creek Syncline

Hardy Prophylo Sample Nibs

Hardy Prophylo Samples

- ✓ H1 Specimen of altered Novaculite
at A 22.
- H2 Clay material in Pit at
H 95
- ✓ H3 Sample of ^{slaty shale} dike in soil, at Δ H, 107
- H4A Station 26; at ^{clay} bottom of pit
- H4B 3 feet from bottom of pit Δ 26
- H4C from same place as B. Looks like
it might be something other than clay
- H4D Rock fragment about 2' from
bottom of pit (26)
- H4E Rock fragment from side of pit (26)
- H5 Δ 41, clay from bottom of pit
- H6 Δ 44 This is from the bottom of the
pit in the "clay" vein in the
Novaculite.
- ✓ H7A Δ 46; Rock fragment from half way
up east side of pit.
- H7B material around rock fragment
- ✓ H8 Novaculite from contact with clay
vein at A 44.
- H9 Material from center of trench
Near A 78

H 3 discarded.

July 18, 1997

M.C. Purtilo, Sample Notes in

"A" area

VA 95 This is exposed vein in
Basalt. The purple X's may
be fluorite. (This is from
a block of float F-1A/B)

96 Photograph #3

This is the vein material
in block, etc.

97 "Bridgite" sample of rock
on North wall of very east
extension of Pit.

July 18, 1927

A89 This is a sample of *Uva* in
Basalt.

A90 This is sample of *Uva*
material - solid anyway -
clay and soft stuff to south.

A91 Blue Clay - selected from
general clay material. This
is mostly for X-ray.

A92 This is the typical "clay" material.
To me it looks like altered
"Basalt".

A93 This is a sample of *Uva* material
from the clay.

A94 This is sample of clay
material. The so-called "grey
clay" have no fossils.

While rutile crystals found
in the "grey clay" material
it is not abundant in
either the Yellow Rock or
the large *Uva* masses.

M. G. Rutilo, Special Ass., Sample
notes.

July 15, 1957

A27 The yellowish brown
sample A27 is typical of all
the other samples in the set.

The material is altered to
a clay in spots. Probably due
to weathering while the remainder
of the material is hard and dense
at 4500' (see notes) There is some
evidence of leaching on the
rock surface from the surface.
Even the sulfides are fresh at that
level for a depth.

The Rutile is in narrow
streaks which do not extend
for any distance. They do
not have clear cut well walls.

The pyrite is quite disseminated
out in places.

Sample A27-1 is light
material.

✓ Sample A27-2 is harder material.

A28 I clay like like A27-1

M.C. Rutile, Special Area Sample
notes

July 13, 1957

The vein at A84 is hard
and with acid shows abundant
calcite. These veins run off into
the gray clay matrix.

The veins then
carry veins of Rutile down
the center.

A84-1 This is a fairly good specimen
of the material thin
matrix.

A86-1 Sample from contact of the
yellow hard mineralized
rock and a small basalt
mass. This sample may be
in red yellow but on the
surface it is darker colored
than the rest of the rocks.

A86-2 This is 5" square slabs
the basalt.

A86-3 This is about the first part
in the block it lies 1 1/2 feet
from A86-1.

M. C. Rutile, Opuntia Area
Sample Notes.

July 17

✓ A81 In this altitude Bonnet
along the edge of mass to
N. Is as this just more
"Clay?"

The yellow streaks and
the white ones seem to be
the same as the yellow,
apparently due to Fe Ox stain.
Cut across an area which
under the surface was not
different except for Oxide
streaks.

A82 Blue clay sample weathered
bonnet.

✓ A83 Sample of upper cutting bonnet.
Chert in upper mass a collection of
the bonnet.

✓ A84 Sample of vein in Bonnet.
Vein is 6" wide. N. of this
collection in Bonnet.

✓ A85 Abstraction of bonnet caused
by veins. (M. 1000)

the

M.C. Rutile, Special Area
Sample Notes

Sample # July 17, 1947

M.C. Antile, General Sample No.

- 70 at A 671, Dike (3) (Missing.)
- 71 Basalt (?) Δ 769 *so muddled by Kennedy*
- ✓ 72 "False" dike Δ 774
- ✓ 73 at A 892 Dark Dike
- 74 ~~Dike at 892~~ Δ 897 Dike (Hold)
- 75 Igneous rock at Δ 956 (Hold)
- 76 2" dike at 957

Special Area

- ✓ A 77 at contact zone with and Basalt with fine gr. material which has a lot of carbonate. At this contact there are white veins at Δ 1
- ✓ 78 at Δ 1 sampling altered Basalt.
- 79 This is clay-like material. I do not think it is altered Basalt. It is typical of the light colored material. Clay at top and solid when deep.
- 80 Is a typical white vein at in the clay-like material. This veinlets like the Basalt. No effect can be seen on the clay-like material. (Missing)

✓ - These are for thin-sections

No sample # 69

hold