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Knows about places Brookite at Rockport

40 Samples for U.S. - Kateris
Sent July 10, 1947.

July 2, 1947 (Birthdays)

42

This is the contact between the last solid basalt and the well weathered rusted. The transition is apparently gradual. The zoning is as follows.

4th clay

soft green rock

weathered basalt

The green rock has what appears to be FeCO_3 along fractures. This is a pyrite veinlet which bleached rock on either side to soft to get a sample through.

This shot will be on the contact with a yellow rock in situ to a yellow clay. It is the most abundantly mineralized rock with large pyrite cubes and abundant rutile. (Sample 5)

West end of D3 island. Dug through 4" of clay (Sample #6) into altered basalt. There are spots of clay along N. Side of island. The spots do not seem to be connected. Too much rust to tell.

P. 101 July 2, 1957

- 56 On corner of Ig. Rock. (Basalt?)
- 57 On S.W. corner of Basalt
- 58 On corner of yellow rock. Rather heavily mineralized. Sample 15 here.
- 59 On small patch of Ig. rock, quite small.
Sample 16 from here.
15' distant line with Table E
plant around
- 60 Basalt S., edge of alluvial brown rock
- 61 N.W. corner of basalt Mass.
- 62 East of Basalt. This mass surrounded by yellow rock. Highly mineralized.
(Sample 17 from here) Sample 18
12' S of 62
- 63 S. corner of Basalt. Igneous.
- ~~64~~ Basalt with abundant inclusions similar to Sample 17.
- 64 On Basalt. Many small veins of Ti on rock. High. massive yellow rock to south. Carbonate mass S. (Sample 18)
- 65 Corner of water. On Basalt. end Basalt 10' along shore to E.
- 66 Sample 19, corner of pond.
- 67 Edge bank of water. Much S. highly alluvial igneous to North (clay the more)
- 68 Coarse Colts 5' N., Much South.
- 69 Much S.
- 70 S. alluvial rock N.

July 3, 1947

- 88 In igneous (Sample 200)
- 89 W. end of Gault mass. Has abundant
micaceous (Sample 30 is an extreme)
- 90 See sketch
- 91 S. end of Gault. All around a crushed
carbonate mass in highly altered
rock. pyrite cubes sleeping in bed
throughout.
- 92 N. end of igneous mass.
- 93 See sketch
- 94 In Gault.
- 95 Corner of Gault above.
- 96 Edge of Gault.
- 97 re. extent in Gault. 20' S to creek.
- 98 Corner of Gault. 15' S to creek.
- 99 E. end of Gault. 10' S to creek.
- 100 W. end of Gault.
- 101 N.E. corner of large Gault mass.
- 102 Edge of Gault. 3' to float N.
- 103 N.W. corner of Gault. float N.
- 104 extension of Carbonate to base of Gault
- skid pan 105 Churn drill hole
- 106 Top cut, slight S. side.
- 107 " " , at corner (sample) Residual fill
only 1' thick.
- 108 Slight S. side here.
- 109 See sketch
- 110 Top cut, slight S. side.

July 3, 1947

- 111 Top angle of cut
112 Corner of cut. Heavily weathered material to E.
113 Top cut. Here the cut is only 2-3 feet deep. Weathered to E.
114 Weathered S. Soil black N. (down)
115 Edge of island on cut.
116 " " " " " "
117 " " " " " " Rats can be found at surface on this island.
118 Corner of island. Weathered exposure to W. Soil South.
119 Edge of weathered rock. Soil S.
120 " " " " " "
121 Part of cut. Weathered rock on surface.
122 " " " " " " at corner, soil S.
123 " " " " " "
124 " " " " " " Soil N.
125 " " " " " "
126 " " " " " " (at corner, top of cut on board.)
127 Top cut, on rock.
128 " " " " " "
129 top cut
130 top cut
131 Churn drill hole
132 Top cut, on weathered rock.
133 top cut " "
134 " " " " " "

July 3, 1947

V.V.F.

- 135 top out, at corner.
- 136 " " "
- 137 " " "
- 138 top out
- 139 W. end of Black Igneous rock.
Sample 30 in 7' N.C.S.
- 140 Sample 31 from igneous rocks
on E. end of igneous (Basalt?)
float to S of last 2 holes.
- 141 Bit dug in float. (2 dug out)
It looks like basalt fragments in
clay. too solid to get any things.
Sample 32 in 7' clay
- 142 foot cut, much W. highly weathered
to S.
- 143 foot cut, much W.
- 144 " " " ; sample 33 from
bank. dug in deep. (much W.)
- 145 foot cut (on E side) cut 7' 8" wide
thoroughly weathered out.
- 146 In cut of foot. to clay.
- 147 Brown. some yellow. foot cut sample.
- 148 All pit, see sketch. (Sample 34)
- 149 Churn drill hole
- 150 M. sh. E., Brown W. to 16' 20'
to certain through the base of igneous
rocks fragment.

July 9, 1947.

174 at corner

175 " " deep crevice between

176 On in cut, top cut

177 top cut in crevice

178 on post

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} on top of cut.

at left side of cut with rock on
a back of it with a small
a right side of slope, back
on top of cut, south side of cut

} on weathered rock

Weathered rock

on south side of cut

on back of cut

"

on south side of cut

top of cut (right)

"

"

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End of Fall across pit

R/3 End of Fall West side
East side

Top of ant

July 7, 1947

- 271 foot out, strongly altered, N, part 5.
272 " " at green rock, probably
weathered basalt. (Sample 44)
cut by many calcite veins.
273 foot alt., Outcrop, part 5.
274 foot out, basal S, weathered
to N.
275 foot out, small, 10' deep, cut back to
end of fault, part 5, weathered
rock N.
276 heavily mineralized, foot out on
subtle. ~~Sample 45~~
277 top out.
278 top out.
279 top out, deep, small.
280 foot of out - soft rock.
281 small fragment of
almost to
282 some of basal S, cut to W. E
end of fault. Sample
283 Calcite fault of 283 - Sample
S. side of fault, zone 7 N.
15' to 20' high & about 10' thick, fault
between.
284 E. end of fault, part 1 N S.
285 W. end of fault. This block is
very clearly resting on top of S. side
of fault & depth indicated here
Sample 46. Excavation showed at once very clearly outcropping
on top of claystone.

July 7, 1997

- 286 Edge Bonnet 12" N - to mid also
On brown, float South.
- 287 N.E. corner bonnet, about N.
- 288 N.E. corner " " Abundant
Calcite, 7" to float N.
- 289 S.W. corner of bonnet, light colored
rock to about about block.
- 290 S.E. corner Sample area (A.7)
on light colored rock
- 291 E. corner of Bonnet.
- 292 West of Bonnet, along float W.
- 293 N. side of ~~bonnet~~ " " float N.
- 294 float N.
- 295 E. end of Bonnet about a long of ~~rock~~
float all around, calcite to S.
for 7 feet
- 296 large calcite masses (float S.)
- 297 Calcite, float E. (Sample 10)
- 298 float E. in angle
- 299 On small bonnet block 7' long.
Calcite to S.
- 300 float E. Brown rock
- 301 float S.
- 302 float S.
- 303 float W, S.W. all.
- 304
305
306
307
308
- Top of ~~rock~~ ~~sample~~
from ~~of~~ ~~the~~ ~~sample~~

- 09 top of cut angle
- 10
- 11
- 12
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- 15
- 16
- 17 sharp bend at end of cut
- 18 start of cut by 2.
- 19
- 20 dip of plane at 7.11
- 21 top of cut (corner)
- 22 angle
- 23
- 24 corner
- 25 top in top of cut.
- 26
- 27 angle
- 28
- 29
- 30 ~~corner~~ ~~start~~
- 31 corner
- 32 angle
- 33
- 34 angle a start of pack.
- 35
- 36 back south side of cut
- 37
- 38 angle on north side

- 337 pond
- 340 angle
- 341 angle
- 342 angle
- 343 pond
- 344 pond
- 346 angle
- 347 pond
- 348 angle
- 349 pond
- 350 angle
- 351 pond

- Bottom of
- 352 flat, small, weathered rock
 - 353 Bottom of cut Side of road going up
 - 354 foot cut, weathered rock
 - 355 " "
 - 356 Embankment, bottom cut
 - 357 Small " "
 - 358 wedge 6' wide vein (Sample
Bottom of cut, flat S.
 - 359 foot cut, flat S., white weathered Rock
with chert veins
 - 360 foot cut, weathered Rock S.
 - 361 " " " " " "
 - 362 flat W., W. R. E.
 - 363 foot cut, small
 - 364 " " " " flat W.

July 3, 1947

405. foot cut, about to W. on cut, W. R. E.
flint No
- 406 foot of cut.
- 407 " " "
- 408 W. end of horizon
409. flint N., Creek S.
- 410 " " " " " S.
- 411 W. end of horizon. flint end.
- 412 Cut to N. of other flint, on corner of
horoll
- 413 10' to flint N., in bank.
- 414 8' to " N., on edge of cut.
- 415 end of horizon.
- 416 edge of "
- 417 " " "
- 418 " " "
- 419 flint S. highly altered N.
- 420 flint " " "
- 421 flint S.
- 422 Contact to cut. flint S.
- 423 The next few points are on the
area mapped as pheidolite. There are
no basalt masses, merely a
conglomerate of weathered rocks varying
from brown to yellow. Sample 57
- 424 on W.R. Sample 58
- 425 on W.R. Sample 59
- 426 on E. margin. Yellow R. to H.S.

July 8, 1947

B. 11

- 454 post
455 on top
456 near top
457 on top
458 post
459 cut starts to drop
460 top
461 corner
462 start of second cut
463 top of corner
464 top
465 top corner
466 top of East cut.
467 top
468 start of sweeping angle
469 top
470 top
471 top
472 top end of above angle
473 corner starting cut

- 476 474 plot 5. 3 w.
77 475 2' Sq. Brass with 6" dia
Sample 61 in Dike. Dike cut Brass 4
only. plot around
78 476 plot 5. S. E. W. Cont. N.
79 477 plot 5. Cont. N.
80 478 foot of cut w. 9.
81 479 " " " Sample 62
Green with now 10' W. then to E

July 3, 1927

- 486 2 float S., Canal N.
483 wedge green dol. at 286, foot of w.
484 face to here to W. green rock.
Canal W.
485 at corner, foot cut.
486 75' angle foot
487 75' angle
488 foot cut, float to W & S.
489 " " float W.
490 Canal S., float N. Bit with massive
Sulphide. Sample 63.
491 E end 12' long Bonalt 4000.
492 float N. Canal S., 12' S. is Sample 67
from 493 Foot cut should be almost on one
side Bonit (450)
494 foot cut, yellow & brown W. rock.
495 Muck South.
496 float S., Canal N.
497 " " " " " "
498 " " " " " "
499 to corner float E., Canal N. from
here to end of water.
500 foot cut. Small patch of Bonalt to D
501 " " " " " "
502 " " " " " "
503 " " Sulphide. W. Green rock.
504 at corner.
505 edge water.
506 " " " " " " foot cut.

- 531. Edge of "pendula", amount to cut.
- 532. " " " " " "
- 533. " " " " " "
- 534. " " " " " "
- 535. W. side of B. - Sample 66 from here.
- 536. N. edge of "pendula"
- 537. edge of B.
- 538. " " " " " "
- 539. " " " " " "
- 540. top of W. bank.
- 541. S. edge of B.
- 542. " " " " " "
- 543. " " " " " "
- 544. " " " " " "
- 545. foot of cut, fence.
- 546. " " " " " "
- 547. " " " " " "
- 548. " " " " " "
- 549. } island → SW
- 550. } fence
- 551. } " "
- 552. east cut angle
- 553. on top are large angle and starts
- 554. an arc
- 555. " " " " " "
- 556. back of an
- 557. " " " " " "
- 558. side of an
- 559. main instrument
- 560. corner
- 561. top of cut
- 562. top of cut north east of the instrument
- 563. angle
- 564. point
- 565. top

July 7, 1947. 567.

- 567. foot cut, edge starts in sand
 - 568. " " " " " "
 - 569. " " " " " "
 - 570. S. side of B., foot cut.
 - 571. top corner
 - 572. cut in soil from 571, angle flat to N
 - 573. soil, foot cut.
 - 574. foot cut, on "pendula" ... Transferred
 - Back gone in between 5-7 feet
 - thick in E end
 - 575. foot cut, "pendula" without rock
 - 576. " " " " " "
 - 577. " " " " " "
 - 578. " " " " " "
 - 579. " " " " " "
 - 580. " " " " " "
 - 581. " " " " " "
 - 582. " " " " " "
 - 583. foot cut.
 - 584. foot cut, corner of island
 - 585. " " " " " "
- July 9, 1947.
- 586. foot of cut camp. This block is
 - sharply contrasted with contour
 - lines in which "pendula" is
 - 587. " " " " " "
 - 588. " " " " " "
 - 589. " " " " " "
 - 590. " " " " " "

566 top of cut
 567 top of cut
 568 angle in cut
 569 angle in cut
 570 top of cut
 571 ~~top~~ corner
 572 small
 573 ~~top~~ top
 574 ~~top~~ corner
 575 top angle
 576 top
 577 front
 578 top
 579 top
 580 top of island
 581 " " "
 582 " " "
 583 " " "

July 9, 1947

584 feet 2' cut. Small Westland green rock
 give 10' further to cut along cut.
 585 - feet cut, white rock
 586 Corner, feet part
 587 Δ in cut
 588 feet cut, small
 589 " " Green rock
 590 " " small on Green rock
 591 feet cut. Green rock
 592 " " small between, green rock
 593 " " at small
 594 " " "
 595 " " small
 596 " " green rock
 597 " " small
 598 " " green rock
 599 " " green rock
 600 " " green rock
 601 " "
 602 " "
 603 " " small
 604 " " small
 605 " " small between

- ✓ 54 at Δ 382 Hydrated, attempt Bonalt.
- ✓ 55 At 395 using L.S. Bonalt.
- ✓ 56 at 396 calcite in Bonalt.
- ✓ 57 at Δ 423, Chem. Retention.
- 58 at 424.
- 59 at Δ 425.
- ✓ 60 Δ 433, fresh bonalt.
- ✓ 61 477, Dike.
- ✓ 62 Δ 481, Green Igneous Rock.
- 63 Δ 490 Mammal sulphide in
clay.
- ✓ 64 12' 5" Δ 492,
- ✓ 65 Dysthene, Δ 507 & 493
fairly fresh, sec. surrounded by G.W.R.
- 66 Honey B. at Δ 534
- 67 Δ 590, Weathered green rock.

68 South^{W.} Corner of bonalt mass
at Δ 3. Inclusion in the
bonalt. Seems to be lime or
carbonate.

July 7, 1947

- ✓ 31 at Start, 139. for thin section.
32 Clay from D 191.
33 at D 144 clay material.
34 at D 148 Sample from pit
missing 35 Dike at A 153 found
36 Sample of weathered rock. D 238
thin section. also T.D. 2.
37 Green material, particles scattered in
dipole concentrations at D 240
✓ 38 Inclusion in Basalt. D 250
39 Flat from top of Knot thin section
found.
40 Sg. D 256, good crack
✓ 41 Small fragment D 263
✓ 42 at D 266 - Dike
✓ 43 at D 266 Basalt (Dike in it)
✓ 44 A 272. thin section
✓ 45 D ~~280~~ 282, Calcite 2.
✓ 46 D 285, very in Basalt
✓ 47 Calcite mass sample of 290
48 Calcite at D 297
✓ 49 Thin sample D 358. Fine 2d.
✓ 50 ~~Weathered rock D 364~~ D 369
Weathered Basalt.
✓ 51 D 376, very dark altered part of Basalt.
✓ 52 D 396-10 → D Small dikelet.
✓ 53 Basalt (B) D 380.

Sample Notes.

- ✓ 10 Sample of basalt in Canal. at
 D 48
- ✓ 11. Altered purple inclusion in basalt
 at D 50, ^{D 49} polish pyrite to study
 inclusions. Some pyrite cleavages
 a purple tawny.
- send → 13 at D 53.
- ✓ 14 at D 56 - for thin-section.
- ~~missed~~ at D 58, polish & thin-section
- 16 at D 59
- ✓ 17 at D 62. - thin-section. (Thin section done
 in Kew.)
- ✓ 18 Used in yellow rock. at D 64
- ~~missed~~ Coarse grained carbonate with Ti etc
 in highly altered igneous rocks.
 at D 66 thin-section & Polish
- ✓ 20 Taken at D 68, altered rock.
- send → 21 Altered material at D 73
- 22 Igneous taken at 74
- ✓ 23 D 76, altered Igneous.
- ✓ 24 D 77, may be thin slice.
- ✓ 25 D 78, igneous?
- 26 D 79
- July 3, 1947
- ✓ 27 D 82, carbonate rock,
- 28 D 81 igneous.
- 29 D 88 igneous.
- ✓ 30 D 119. These are solid pieces in
 heavily in-soluble rocks. Would
 material appear to be the same

Samples

✓ Thin-sect.

- ✓ 1. Representative of "island" ^{Basalt} ~~Basalt~~ at 43. Black ~~felite~~ ^{Basalt} with abundant pyrite. (T, O₂ ~~Basalt~~, and thin-section)
- ✓ 2. These are light-gray coarse gr. inclusions in the black ~~felite~~ ^{Basalt}. They are characterized by large biotite flakes. Thin-section only.
3. Sample of small vein running through inclusion (#2) it also cuts the Basalt.
- ✓ 4. Altered Basalt at 442. Some MnO₂ present.
- ✓ 5. yellow felite for thin-section and ground samples.
6. Clay from wind of #3 island.
- ✓ 7. solid material beneath clay on N. side of island.
- ✓ 8. at 443, see sample and Pet sample.
9. Dark material on yellow rock. also see material.