

SHEDDING LIGHT ON CALICO



2009 Chris Hardaker
chardaker@earthmeasure.com

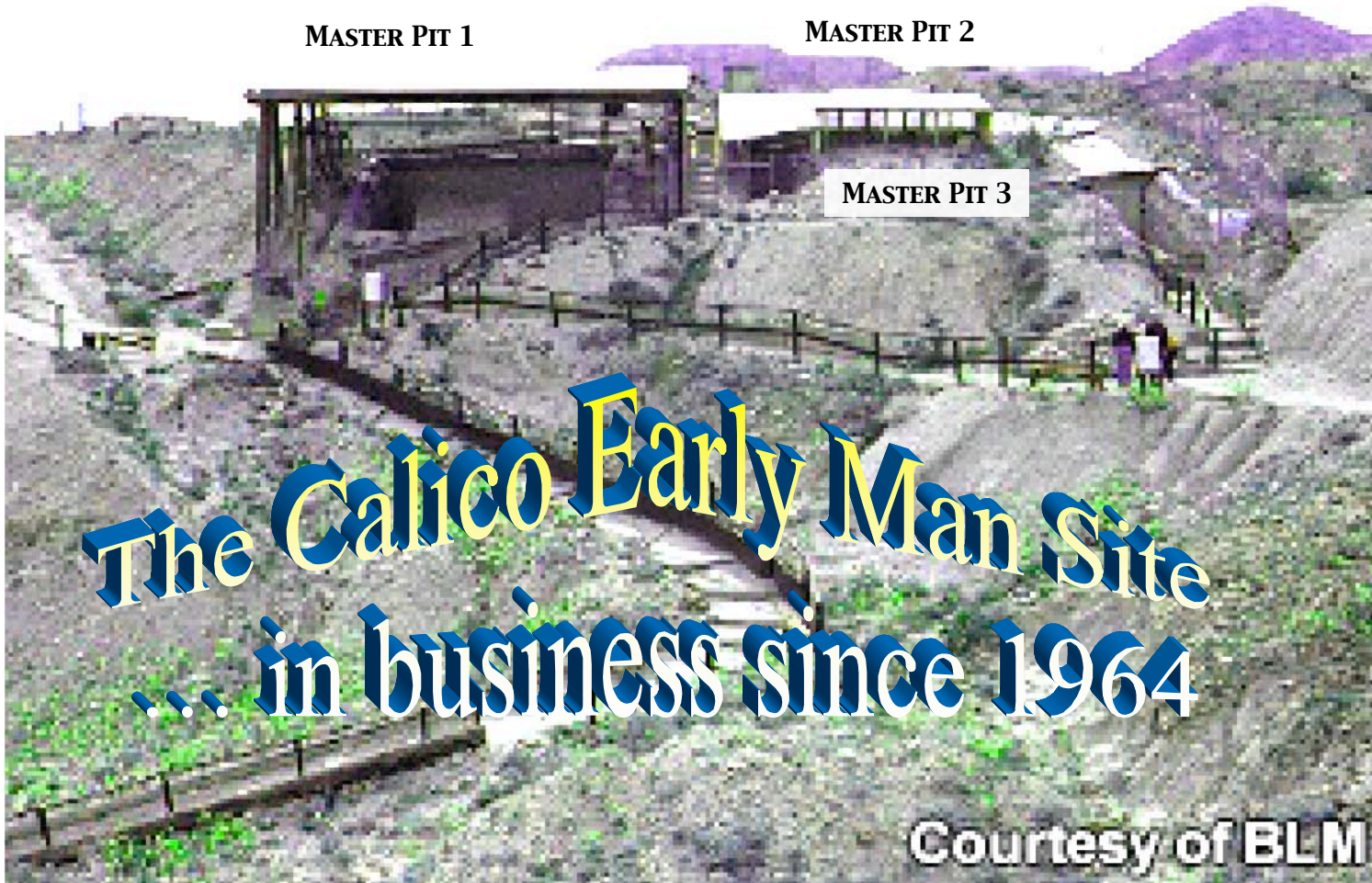
MASTER PIT 1

MASTER PIT 2

MASTER PIT 3

The Calico Early Man Site
... in business since 1964

Courtesy of BLM





Calico Mountains

Bismarck

Calico Ghost Town

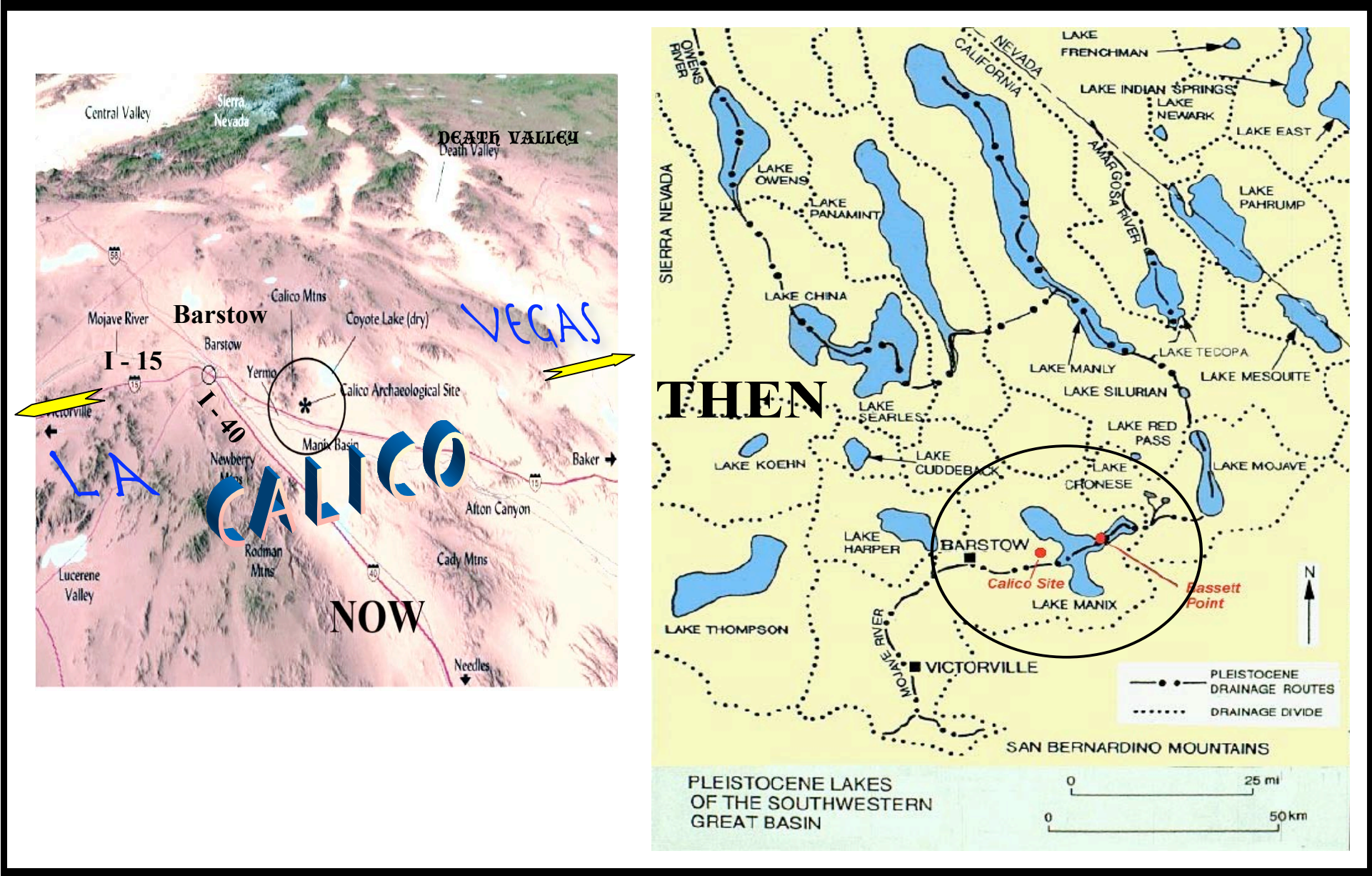
Calico EMS

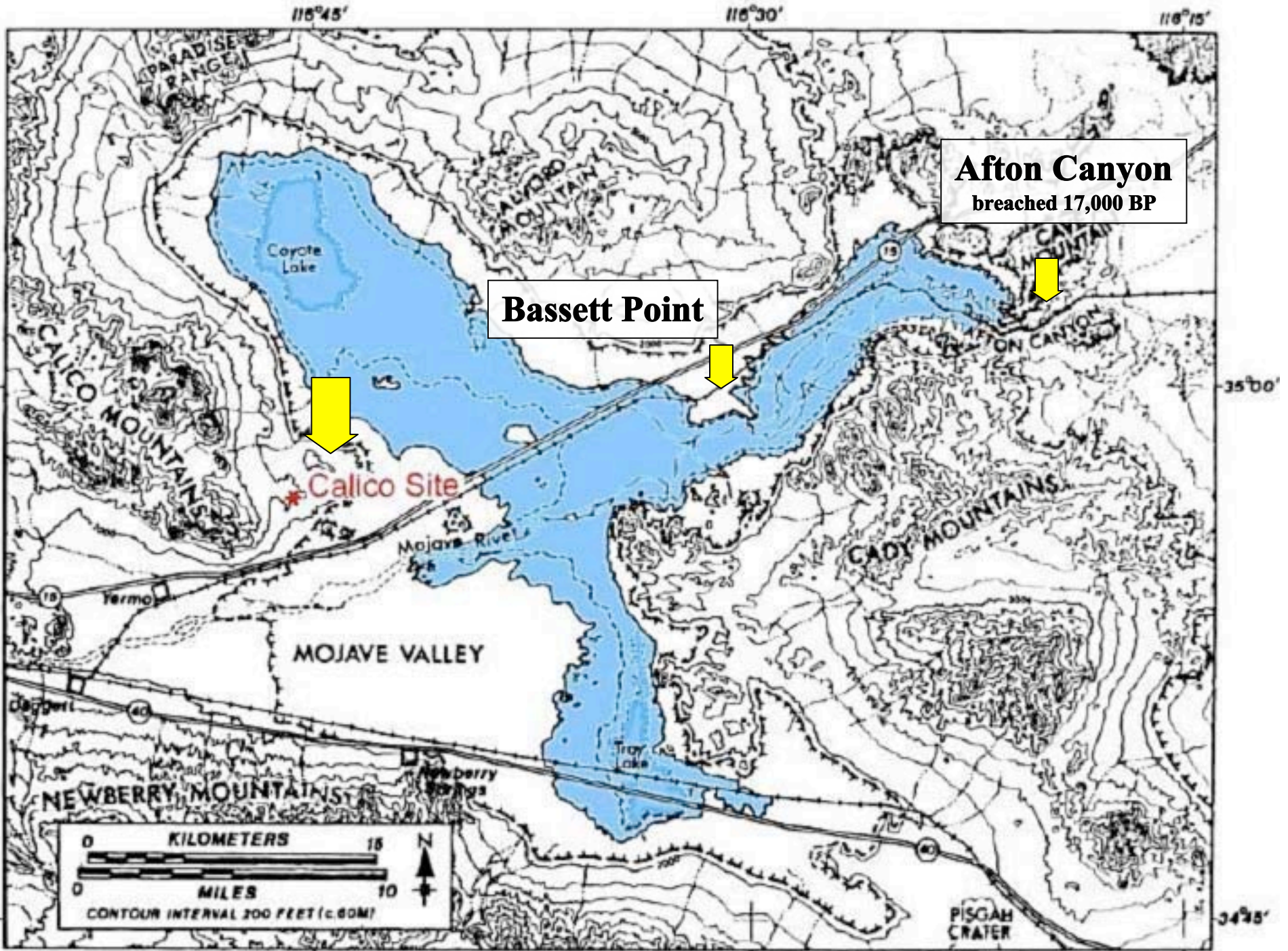
Harvard

Yermo

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Maps: Now and Then

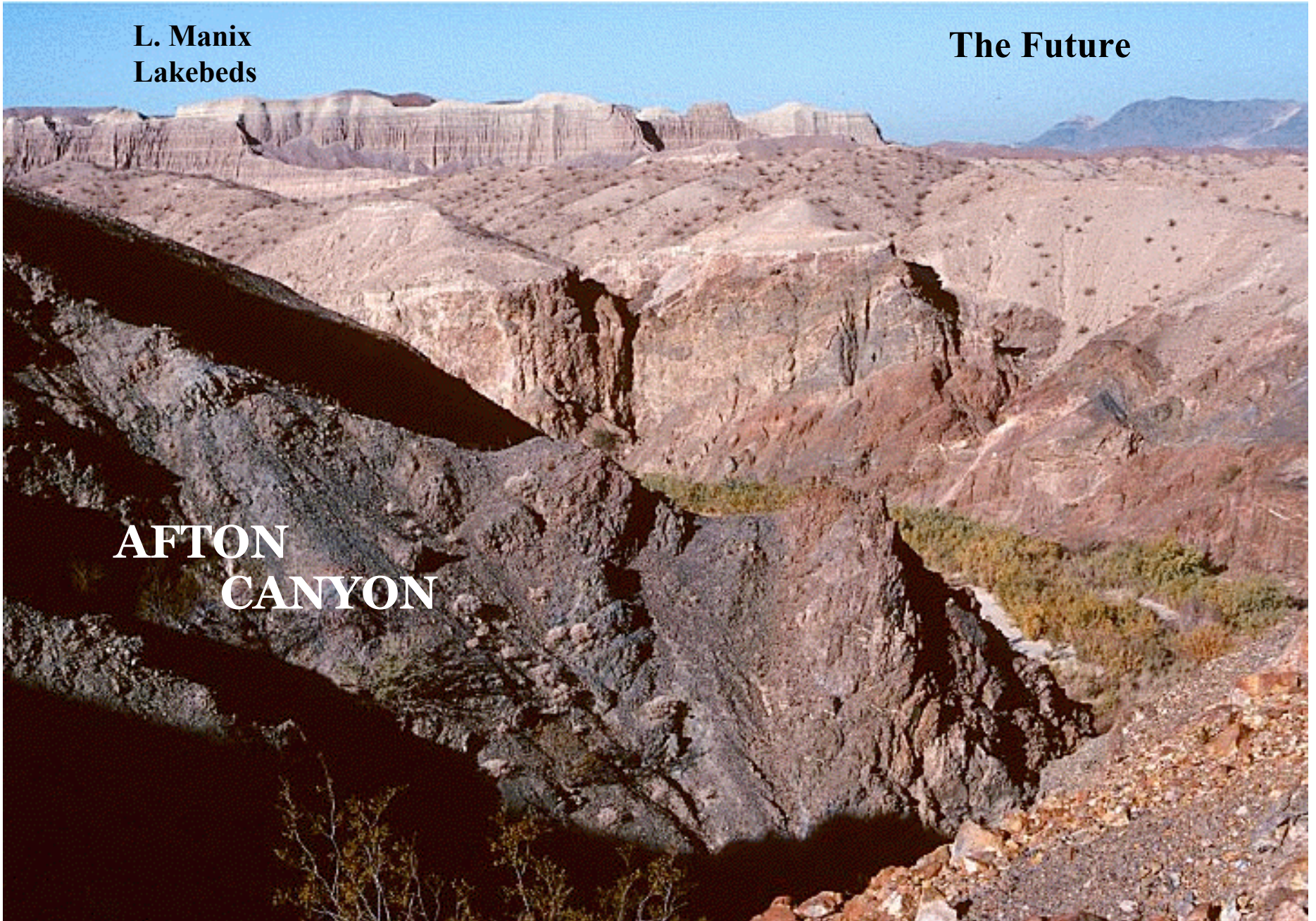




**L. Manix
Lakebeds**

The Future

**AFTON
CANYON**



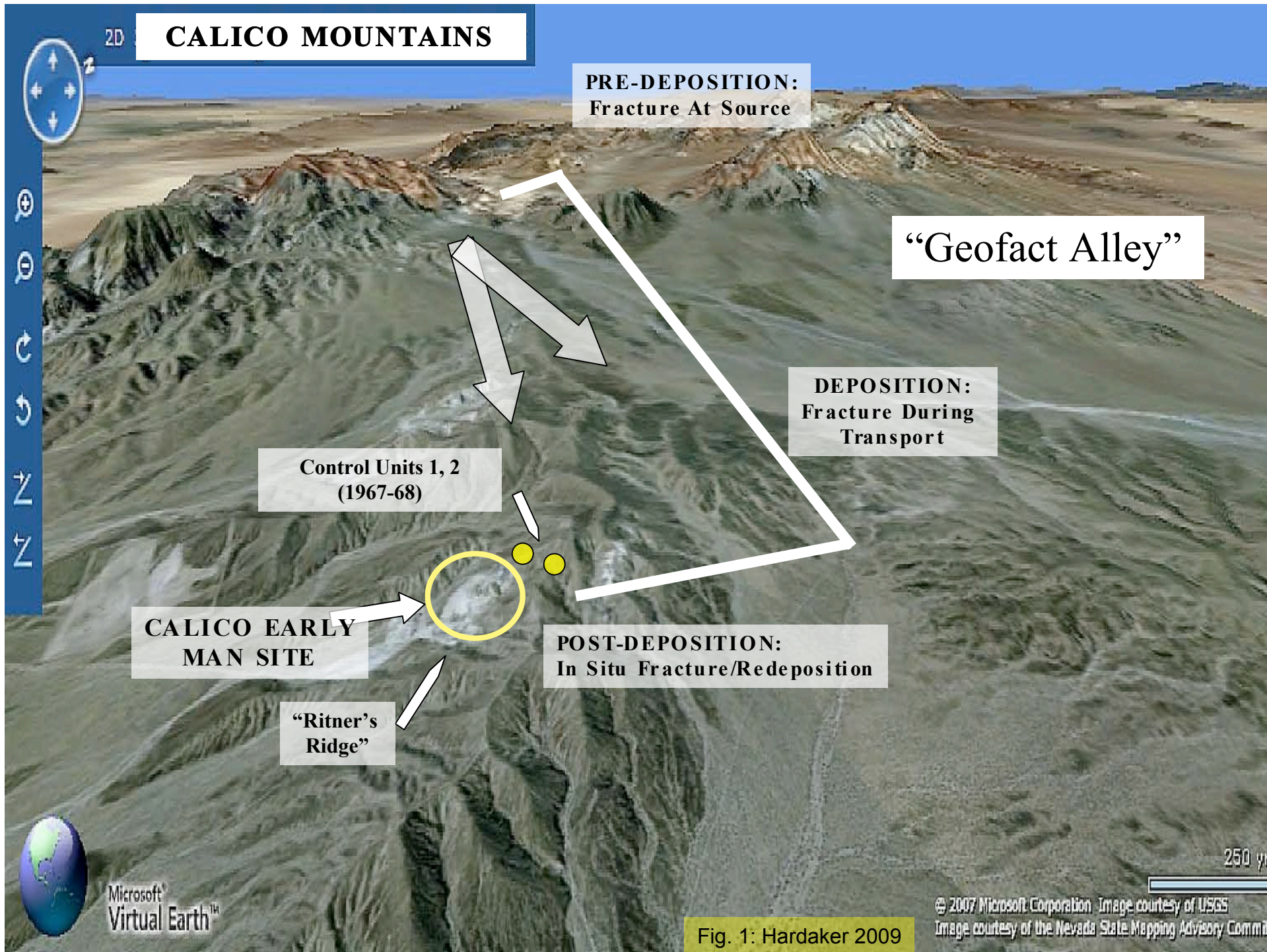
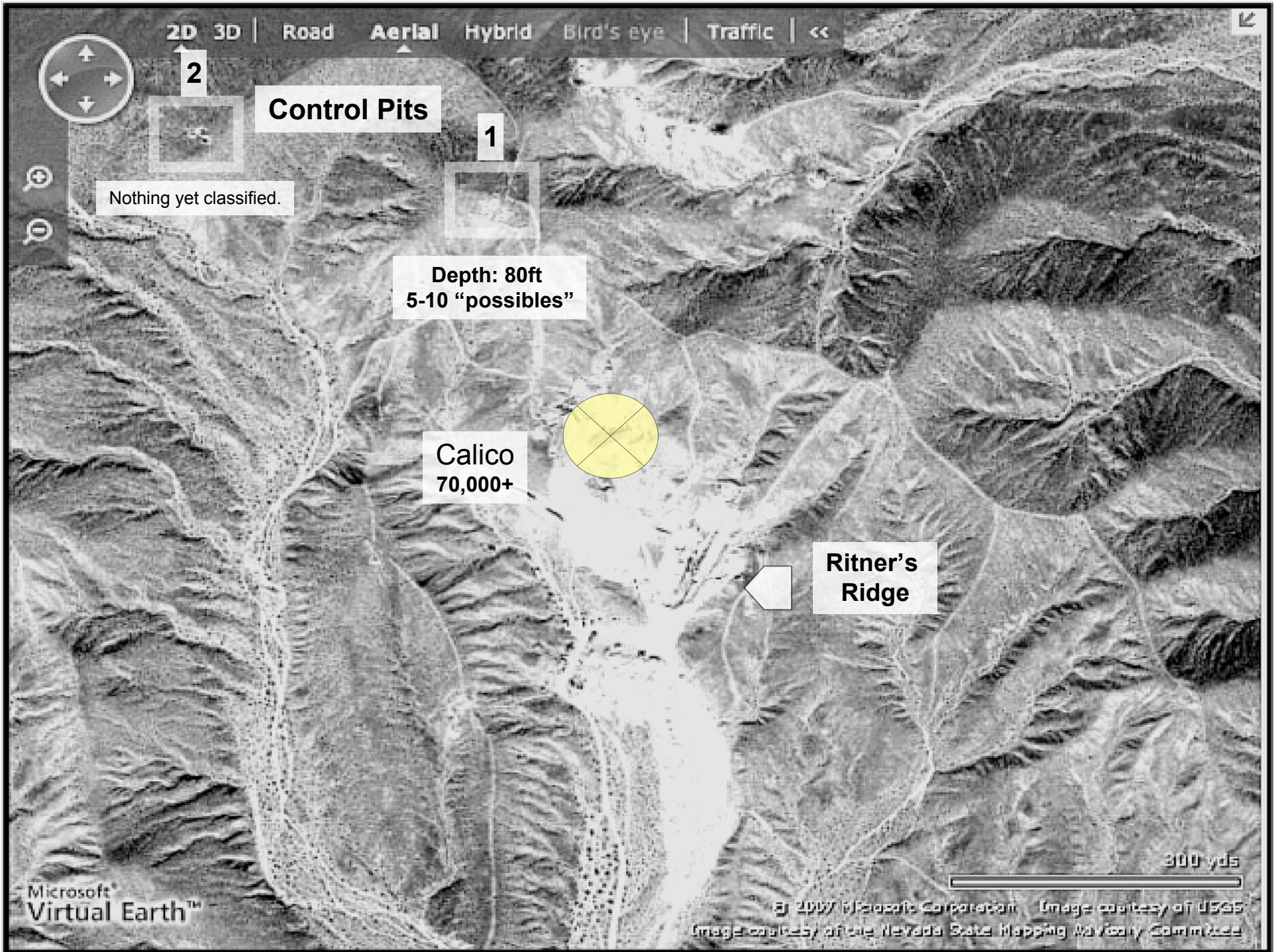


Fig. 1: Hardaker 2009



2D 3D | Road Aerial Hybrid Bird's eye Traffic | <<



2



Control Pits

1



Nothing yet classified.

Depth: 80ft
5-10 "possibles"

Calico
70,000+



Ritner's
Ridge

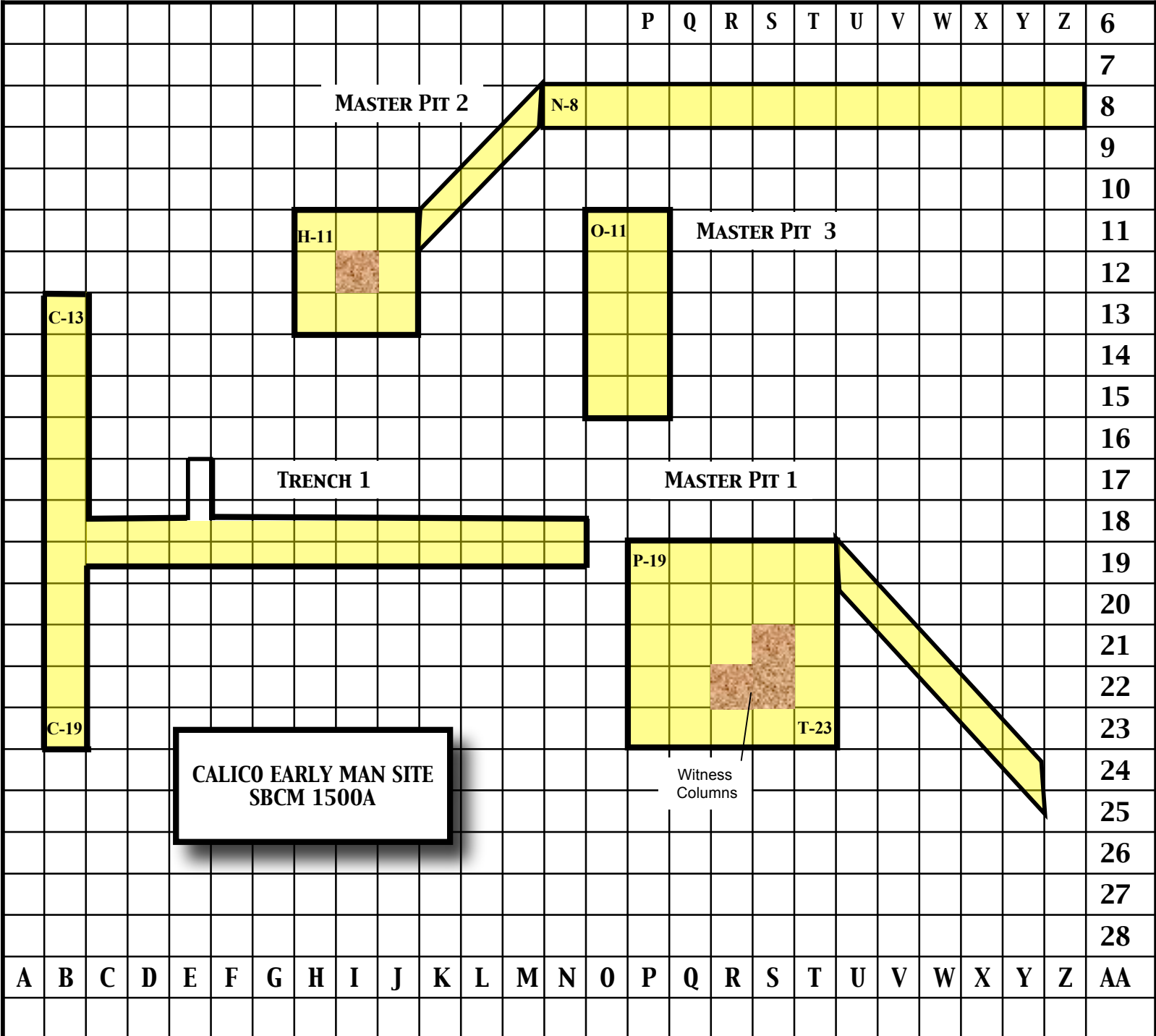


300 yds



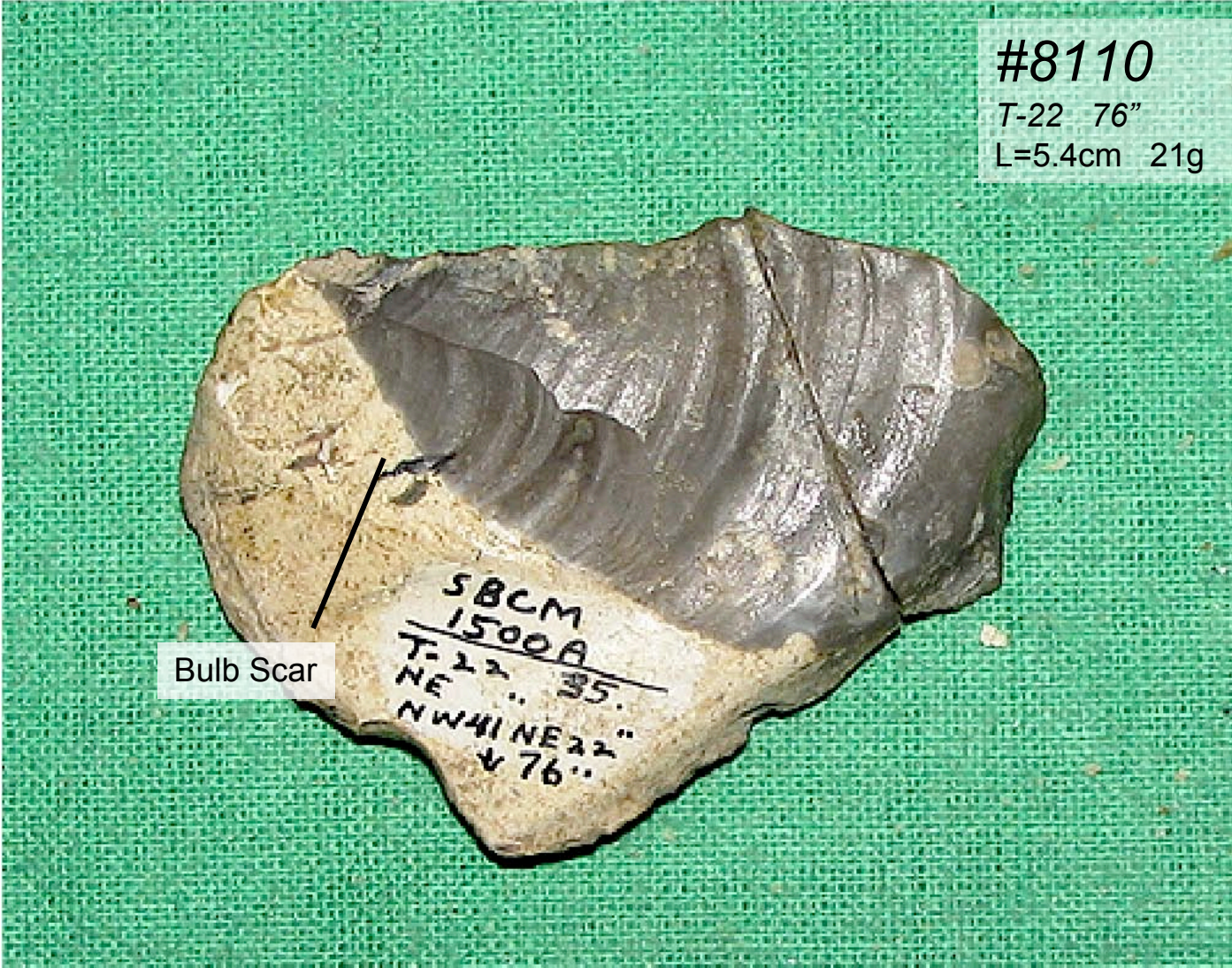
Microsoft
Virtual Earth™

© 2007 Microsoft Corporation. Image courtesy of USGS
Image courtesy of the Nevada State Mapping Advisory Committee

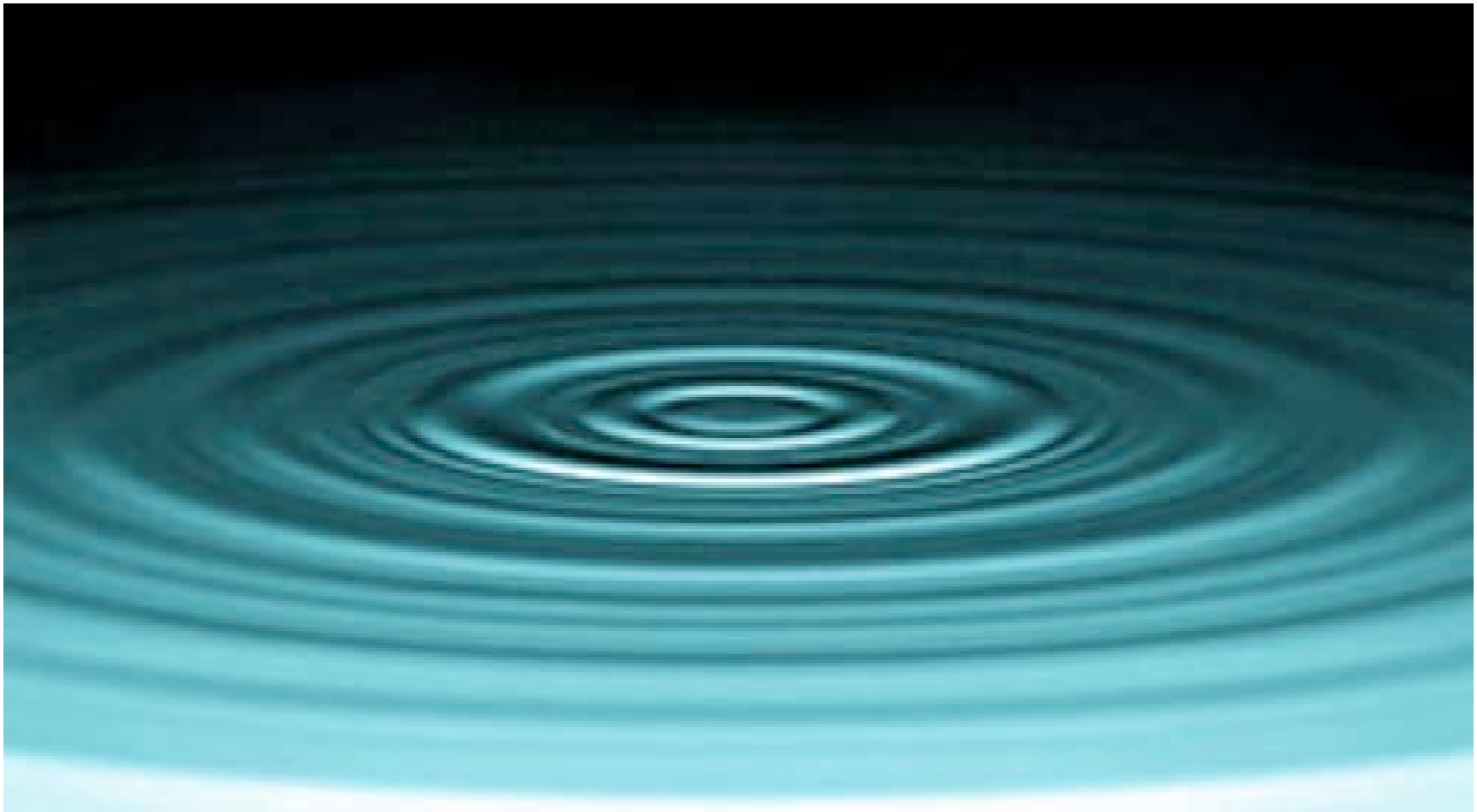


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When you begin to start looking at stone artifacts, besides arrowheads, you usually start to notice the ripples, concentric rings emanating from the place the flake was struck. Nature can do this too. You just see it a lot more in prehistoric sites. Also notice the bulb scar running down the middle. This is another clue. It is like a flake within a flake.



*Metaphorically, the rings of fracture mechanics
can be likened to a pebble dropping
on still water.*

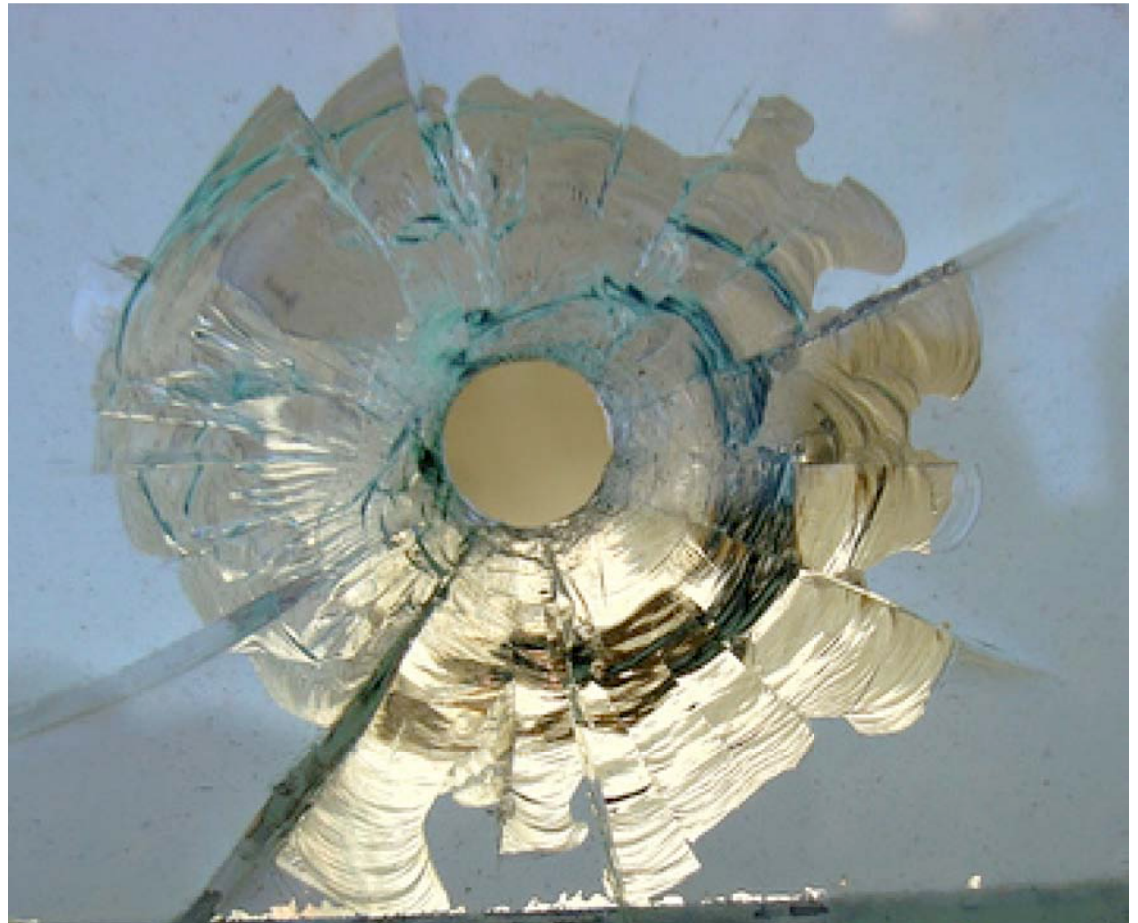


A BB hole in a school window can be a practical physical model for the fracture mechanics of conchoidal fracture. It is comprised of a cone, “rings”, and radial lines. The “rings” emanate out from the center like the water model. The radial fracture lines, something visibly absent on the water, are features not much discussed in lithic analyst circles beyond occurrences of split flakes -- percussion flakes broken longitudinally that roughly bisect the bulb.

When they turn up on the inner, ventral faces of flakes, these radial fracture lines have been called radii or fissures by some lithic analysts, and run perpendicular to the rings.

Radial fractures are much more common in split core methods like bipolar reduction and block-on-block techniques. These will be shown in great detail in the bipolar tech sections.

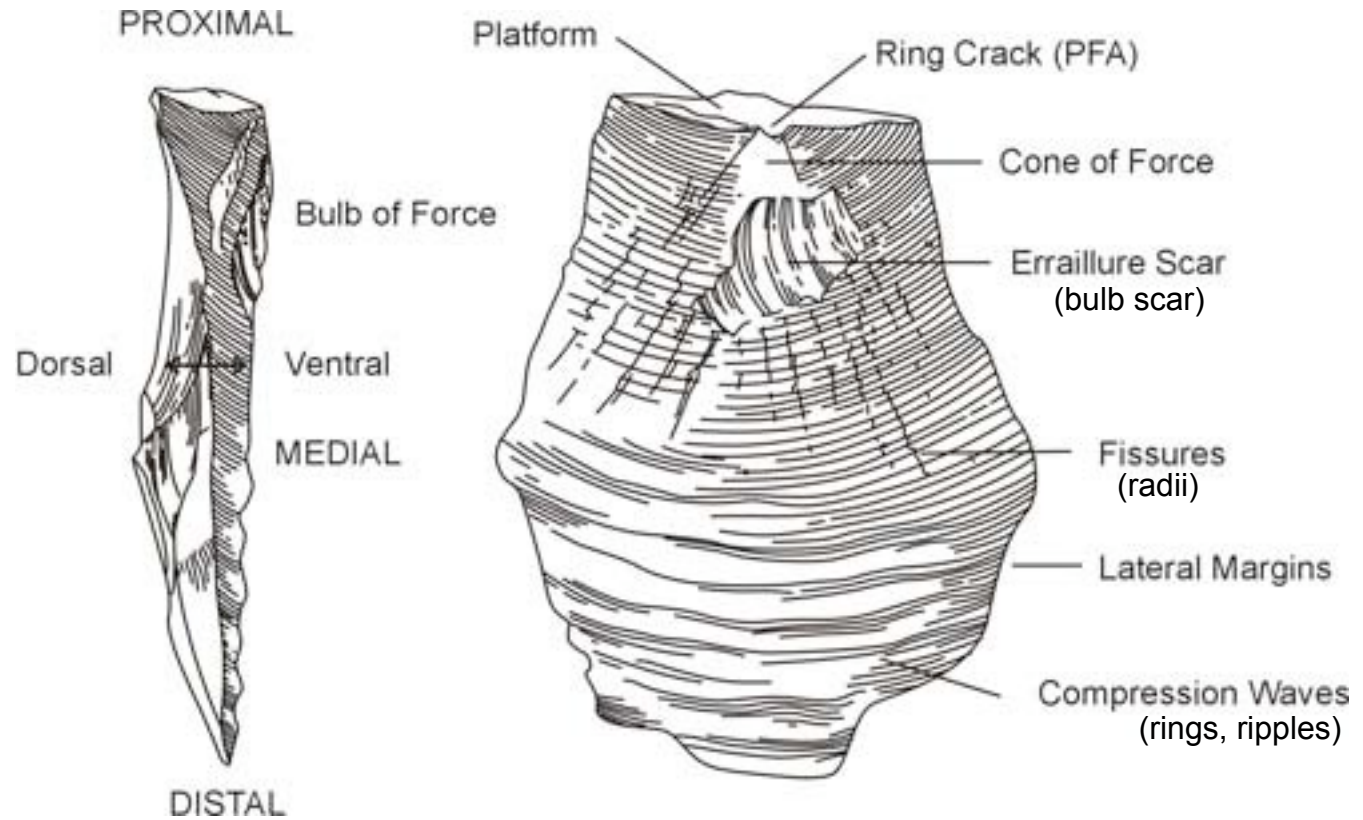
For now, the focus will be on simple flakes and the ripples emanating from the point of fracture initiation. This is the aspect we usually think about when we analyze stone artifacts. The ripples arise from the point of impact, and move away from it.

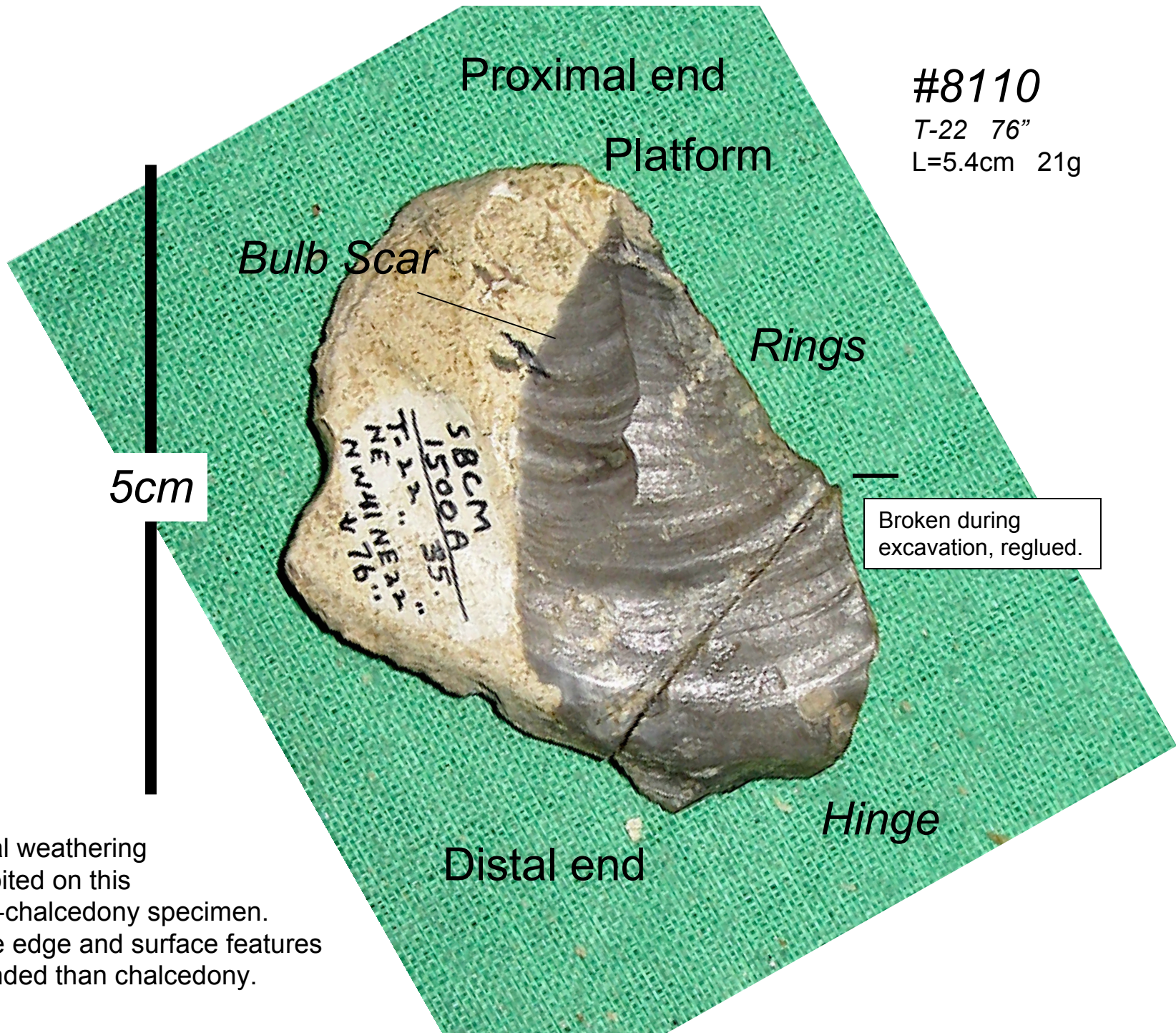




Welcome to the GemologyOnline.com Forum
<http://media.photobucket.com/image/conchoidal%20fracture/rawilus/conchoidal.jpg>

Basic force features on flaked artifacts.





#8110

T-22 76"

L=5.4cm 21g

Proximal end

Platform

Bulb Scar

Rings

5cm

Broken during excavation, reglued.

Hinge

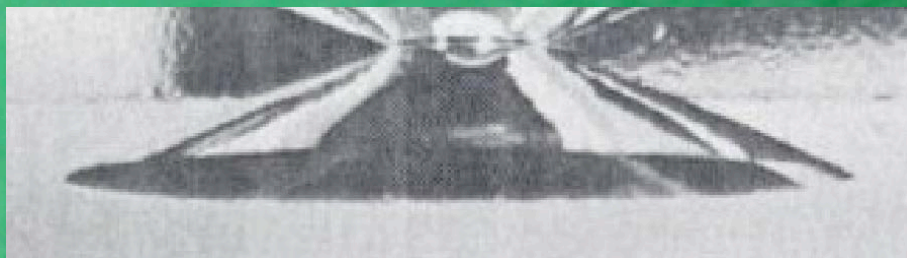
Distal end

Differential weathering also exhibited on this limestone-chalcedony specimen. Limestone edge and surface features more rounded than chalcedony.

#1704

U-20 284"

L= 2.8cm 2.9g



Hertzian Cone

Hertzian Cone Feature



#1651

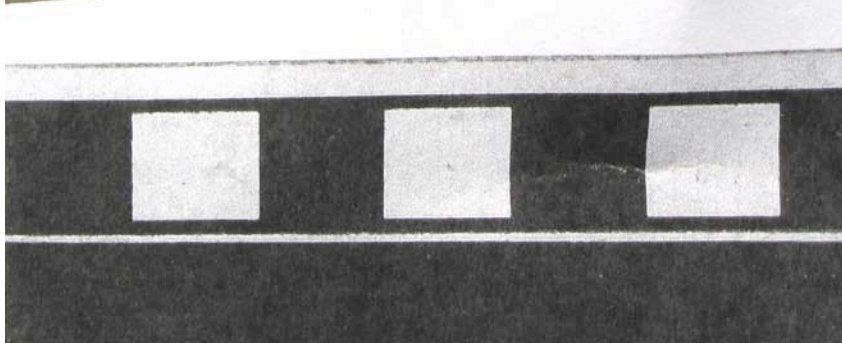
H-11 242"

L=5.2cm 19.4g

#9217

W-8 272-276"

L=9.5cm 100g



#1679

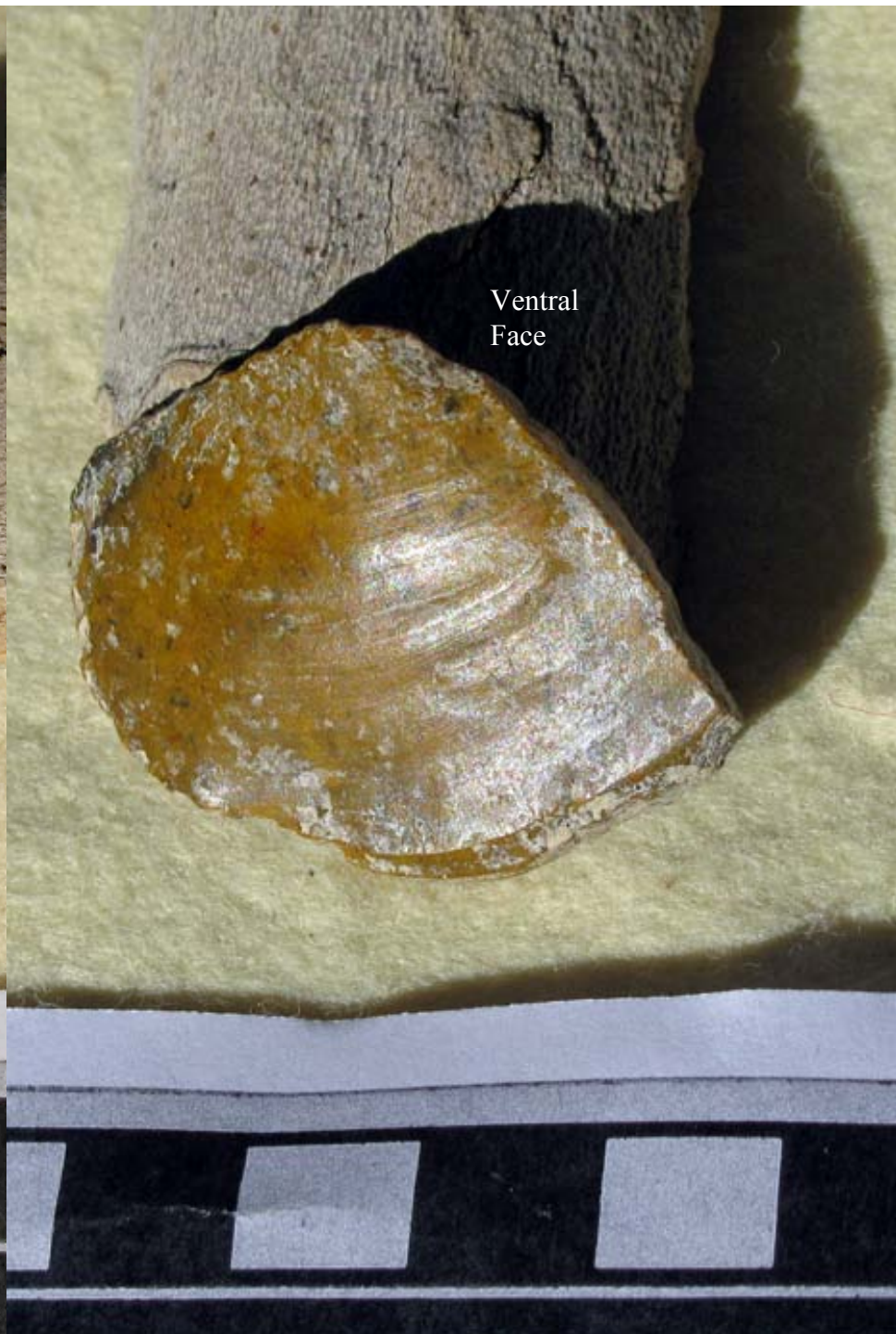
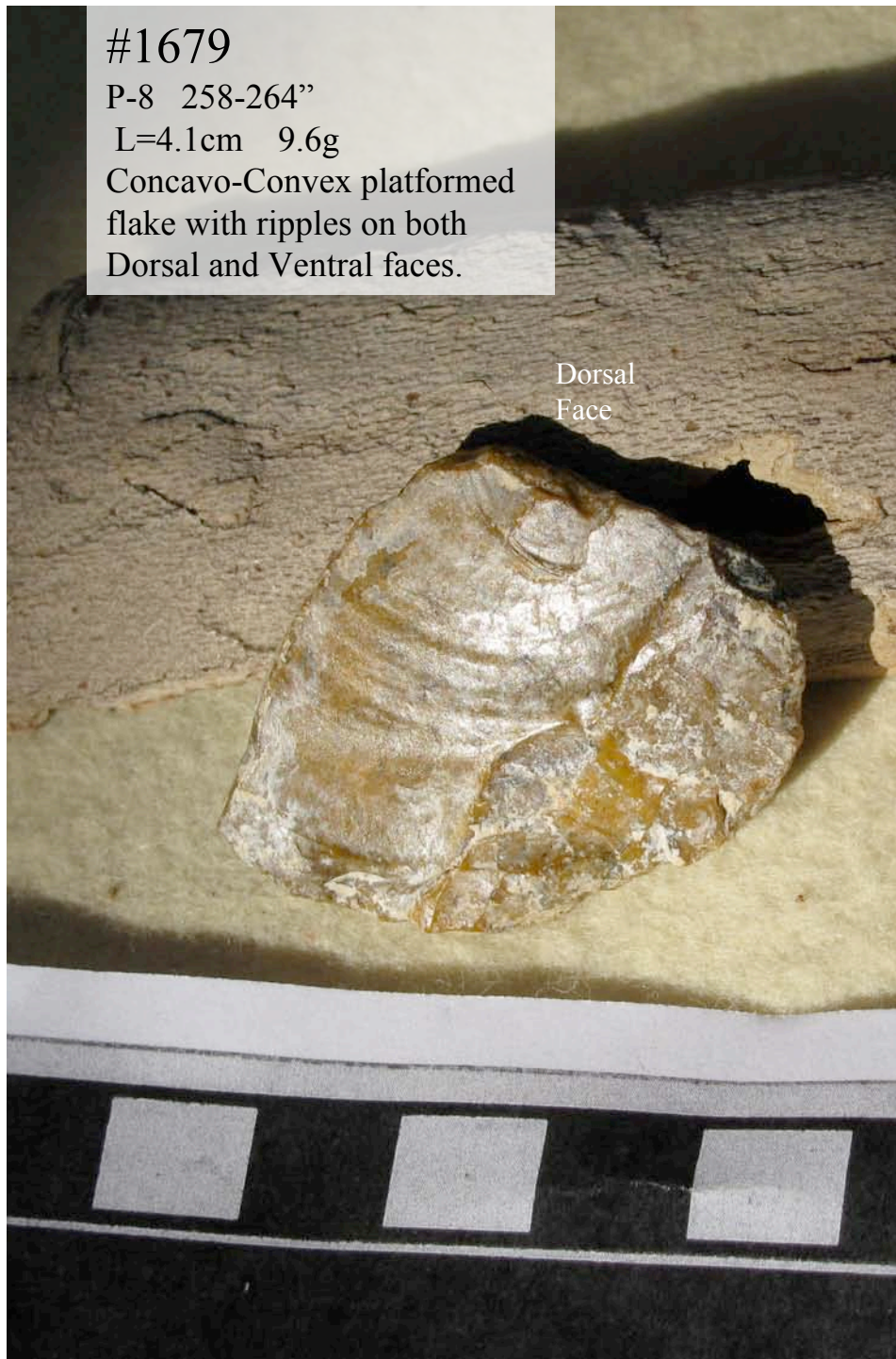
P-8 258-264"

L=4.1cm 9.6g

Concavo-Convex platformed
flake with ripples on both
Dorsal and Ventral faces.

Dorsal
Face

Ventral
Face



Sometimes the rings are hard to see



*Two sides of the same weathered flake.
Photo taken with a flash.*

#3847

S-23 50"

L=5.9cm 39g



#3847

S-23 50"

L=5.9cm 39g



*Using the Cheap Yellowlight Technique,
details can be drawn out.*



#4564

Q-21 130"

L=9cm 79g



(flash)

Bulb Scar



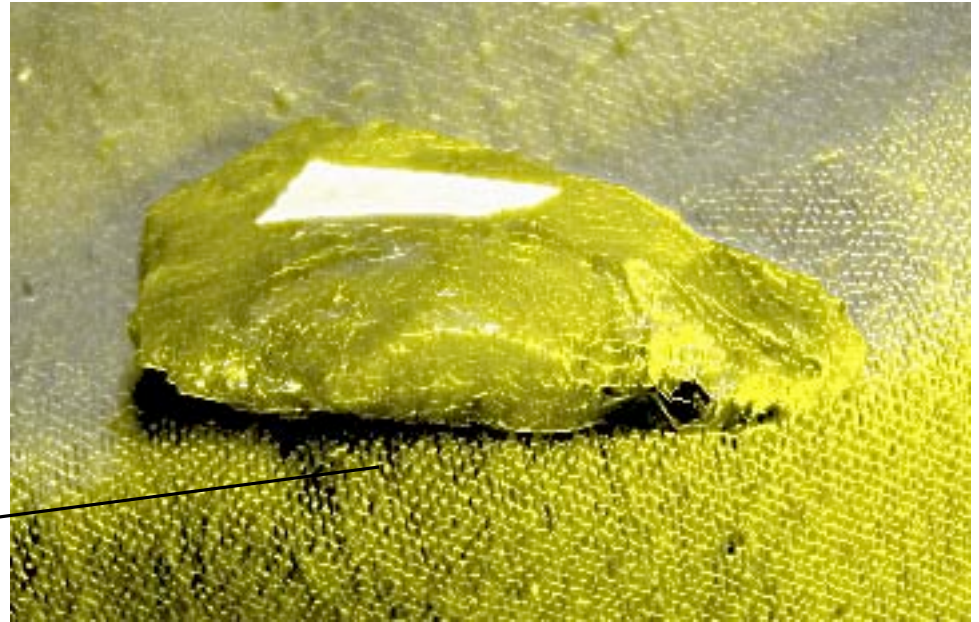
An excellent specimen to gauge differential weathering of chalcidony (left) and limestone (right). Limestone is assuming the appearance of "new cortex."

#1709

N/O-19 48-54"

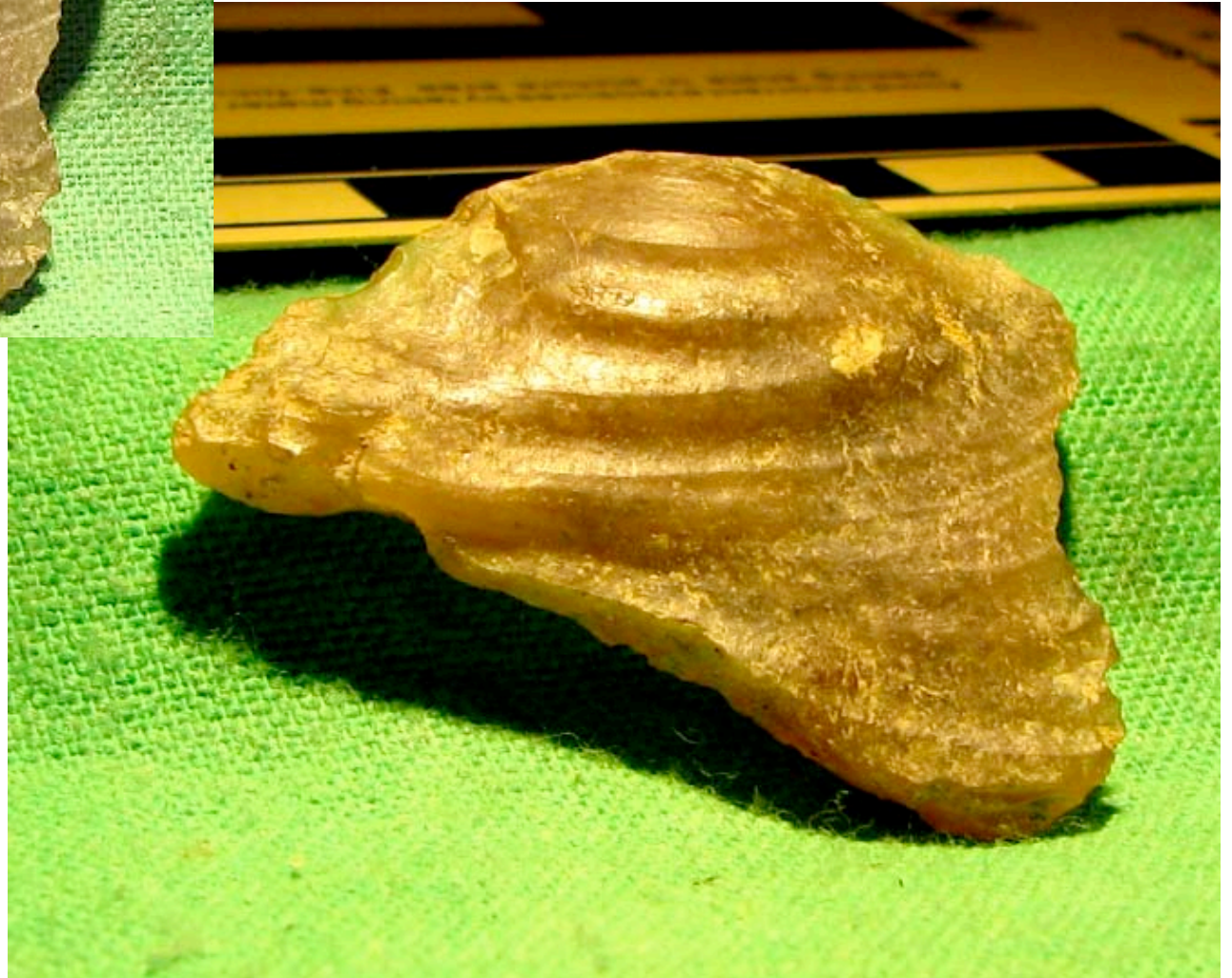
(T-Trench)

L=5.6cm 18g



Flat, cortex-free platform

Mega-rings



#8294

V-22 60-66"

L= 4.2cm 8.4g



#10504

U-8 210-216"

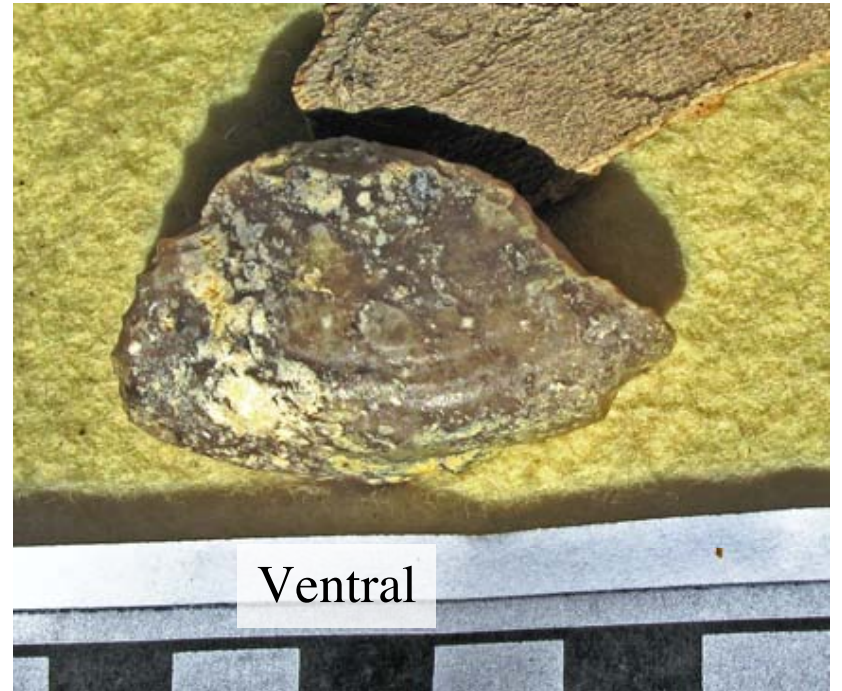
L=8cm 166g

Core: "ringed" flakes scars



Dorsal

#1695
K-10 254"
L=4.2cm 13g



Ventral

Rings and a Hinge



Hinge



Bulb Scar - a flake within a flake?

#1696

M-8 192-198"

L=7.4cm 24g





bulb scar

#1583

P-23 185-188"

L=5cm 17g



#15817

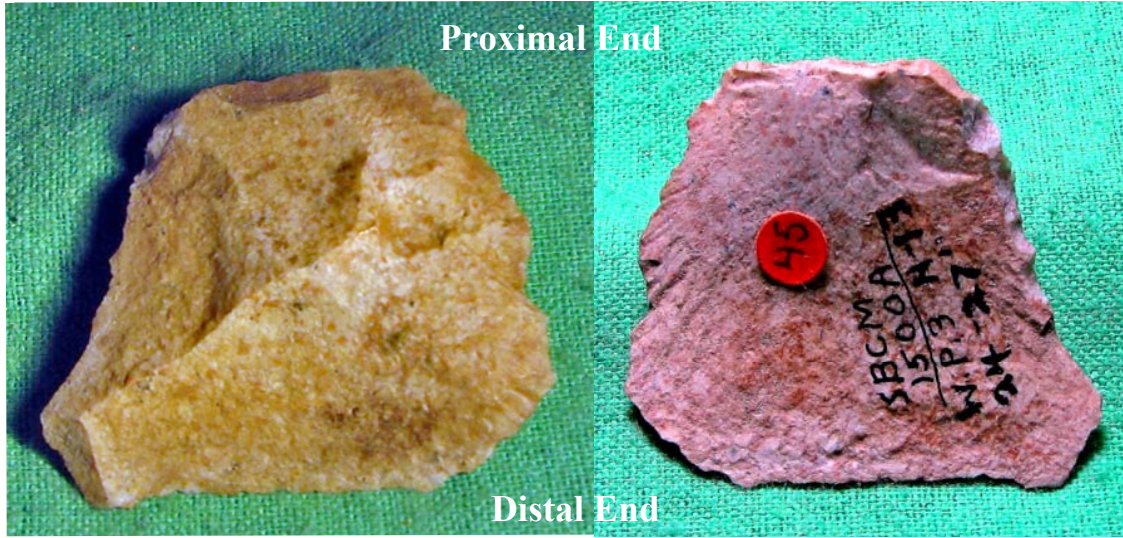
H-13 274"

L=5.4cm 14.2g

Lipped Platform
"Soft-hammer" flake?

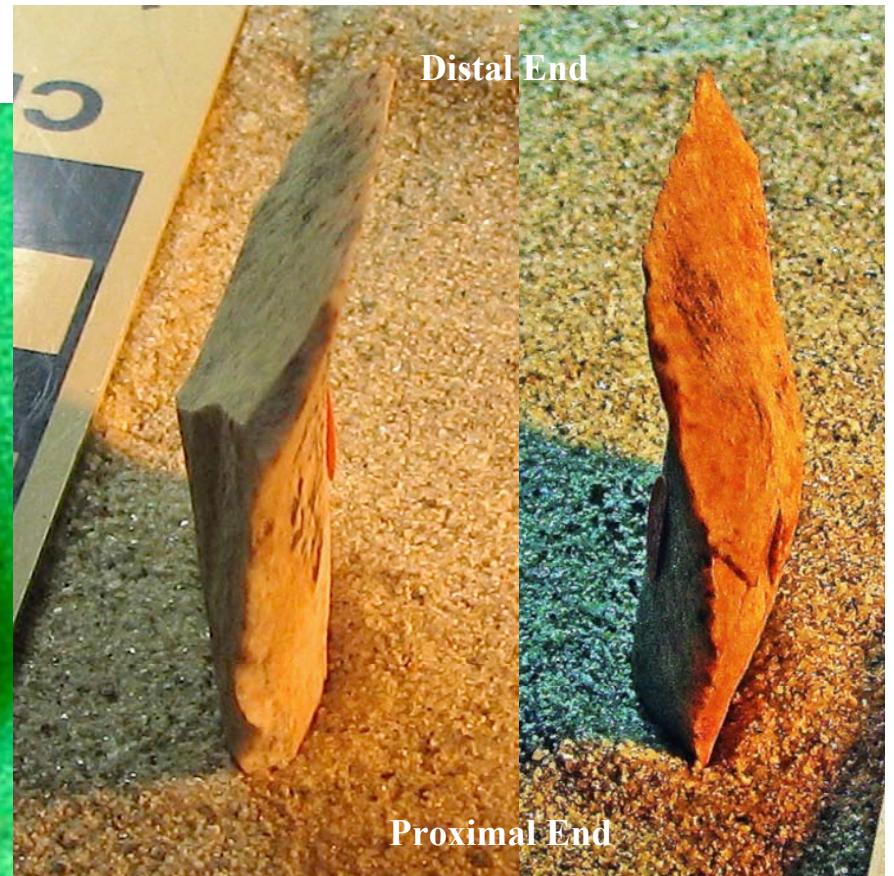
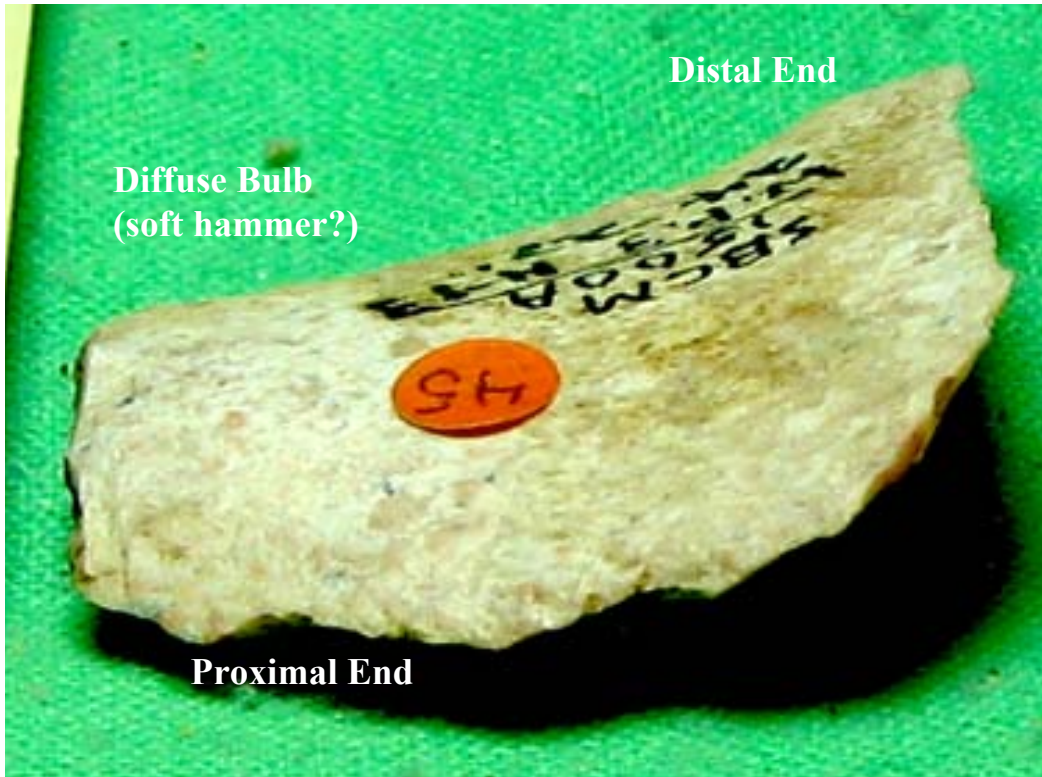


Facetted
Dorsal
Face



#15355
H-13 24-27"
L=4.2cm 11.7g

Bifacial thinning flake
w/ classical curvature?





Concavo-Convex
Platform
("gullwing")



#1191

P-19 45-48"

4.1cm 18g

(compare to "Whitie")

#4794

T-20 54-57"

3.9cm 7g



Calicodig website



Excellent Concavo-Convex Platform
w/ central dorsal channel
aka "Whitie": Snapped blade candidate.

