PLEASE REPLACE IN POCKET
IN BACK OF BOUND VOLUME

(200)
T67Rm
no. 974

U.S. GEOLOGICAL SURVEY
DENVER
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DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

This map concerns work done on behalf of the Division
of Raw Materials of the U.S. Atomic Energy Commission

TRACE ELEMENTS
MEMORANDUM REPORT 974

EXPLANATION

Upper Cretaceous — CRETACEOUS

Kd

Dakota sandstone

Light-red and brown conglomeratic sandstone with interbedded carbonaceous gray shale.

UNCONFORMITY

Lower Cretaceous — CRETACEOUS

Kbc

Burro Canyon formation

White, gray, and red sandstone and conglomerate with interbedded red and green mudst ne and minor amounts of dense gray cherty limestone.

Upper Jurassic — JURASSIC

Jmb / **Jms**

Morrison formation

Variegated mudstone and shale; grayish-yellow, very pale orange, and white sandstone, local thin limestone beds. Jmb, Brushy Basin member, consisting of bentonitic mudstone and shale, but including some sandstone and conglomerate lenses. Jms, Salt Wash member, consisting of interbedded sandstone and red and green mudstone.

Js

Summerville formation

Thin-bedded red, green, and brown sandy and silty shales and mudstones.

pJs

Pre-Summerville formations
(Jurassic and older)

Contact

(Dashed where approximately located)

U D

Fault

(Dashed where approximately located; U, upthrown side; D, downthrown side)

Fault

Subsurface trace of fault at the base of the Summerville formation.

Syncline

(Showing trace of axial plane and bearing and plunge of axis; dashed where approximately located)

5400

Structure contours

Drawn at the base of the Summerville formation or at the base of the Burro Canyon formation and projected to the base of the Summerville formation. Average vertical separation 650 feet; short dashes indicate projection above surface. Contour interval 100 feet. Datum is mean sea level.

Strike and dip of beds

Adit

Prospect

Mine

Vertical shaft

Inclined shaft

Mine index number

MINE INDEX

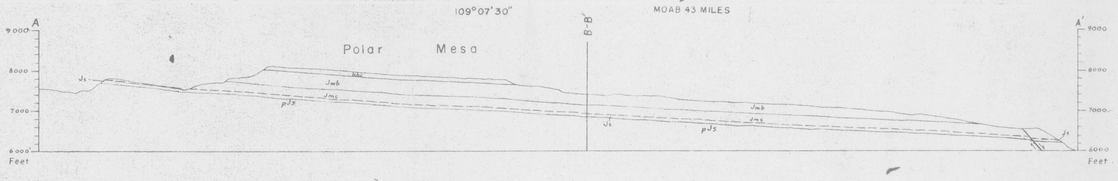
Beaver Mesa

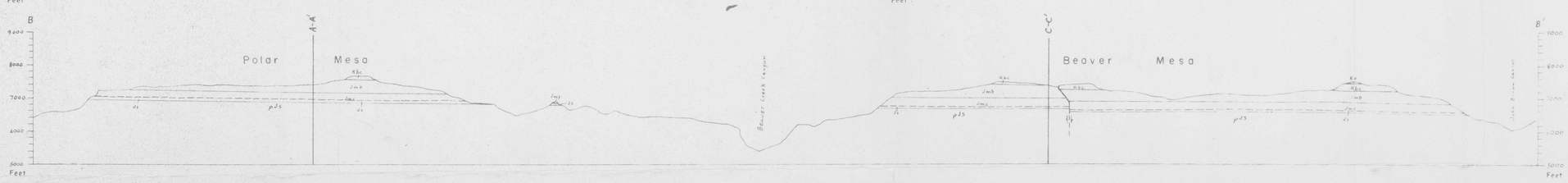
1. Ajax
2. Alta
3. Austin No. 8
4. Big Louie
5. Bonanza Nos. 1 and 2
6. Canyon No. 1
7. Canyon No. 4
8. Captain Jinks
9. Cedar Point No. 2
10. Doctor Jr.
11. Grandco No. 2
12. J. W. L. Fraction No. 1 and La Sal No. 5
13. La Salle
14. La Sal No. 1
15. La Sal No. 2 (Ukele)
16. La Sal No. 2 (Gilmore)
17. Lode mine
18. Lone Pine No. 2
19. Lost Indian No. 1
20. Lucky Pine No. 2
21. Lumsden No. 1
22. Lumsden No. 2
23. Lumsden No. 3
24. Pack Rat No. 1
25. Prospect No. 2
26. Prospect No. 4
27. Prospect No. 7
28. Prospect No. 9
29. Rae Marie No. 3
30. Rae Marie Nos. 4 and 5
31. Rae Marie No. 6
32. Yellowbird No. 2

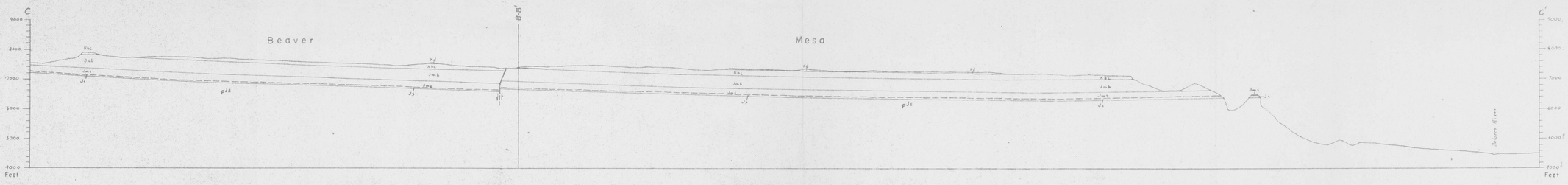
Polar Mesa

1. Avis
2. Black Jack
3. Captain Jack
4. Dotsy
5. Earl
6. Effie F.
7. Elva M.
8. Elva M. No. 2
9. Elva M. No. 2 (East mine)
10. Emma
11. Foster
12. Freeport
13. F. W. No. 3
14. Helen F.
15. Jumbo
16. Louis A.
17. Louis A. No. 2
18. Mary No. 3
19. Mineral Polar No. 22
20. New Armstrong
21. Perry
22. Petrified Tree
23. Petrified Tree (Lower adit)
24. Petrified Tree No. 8
25. Petrified Tree No. 9
26. P.F.G.E.
27. Pinto Jack
28. Pittsburg
29. Polar King
30. Polar No. 2
31. Polar No. 3
32. Polar No. 7 ("Jap" shaft)
33. Rim Rock
34. Skyrocket Fraction
35. Thompson C.
36. Thomas B.
37. Vivian
38. Yellow Jacket

Geology mapped by L. J. Eicher,
D. C. Hedlund, and G. A. Miller
1954-55







Mapped by the Geological Survey 1954

Topography by multiplex methods from aerial photographs taken 1953

Dashed land lines indicate approximate locations

Symbols and other detail herein drawn for 1:62 500 scale publication

15°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1954

SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

PRELIMINARY GEOLOGIC MAP AND SECTIONS OF THE WESTERN PART OF THE GATEWAY DISTRICT, MESA COUNTY, COLORADO AND GRAND COUNTY, UTAH