

**NOTE TO FILE - CASE NO. 10508**

**Order Paragraph No. (2) of Oil Conservation Commission Order No. R-6446-E dated August 27, 1992, provides for the reopening of Case No. 10508 during or before August, 1996, for a review of the operations of the Bravo Dome Unit. However, Order Paragraph No. (3) of Oil Conservation Commission Order No. R-10253 dated November 30, 1994, rescinds the requirement for periodic reviews. Therefore, Case No. 10508 will not be reopened.**



BRUCE KING  
GOVERNOR

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



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August 28, 1992

CAMBELL, CARR, BERGE  
& SHERIDAN  
Attorneys at Law  
P. O. Box 2208  
Santa Fe, New Mexico 87504

RE: CASE NO. 10508  
ORDER NO. R-6446-E

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

A handwritten signature in cursive script, reading "Florene".

Florene Davidson  
OC Staff Specialist

FD/sl

cc: BLM Farmington Office  
Dan Currans  
Roy Johnson

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 10508  
Order No. R-6446-E

IN THE MATTER OF CASE 10508 BEING CALLED BY THE OIL  
CONSERVATION COMMISSION ON ITS OWN MOTION PURSUANT TO  
THE PROVISIONS OF DIVISION ORDER NO. R-6446-B WHICH  
APPROVED THE BRAVO DOME CARBON DIOXIDE GAS UNIT AGREEMENT,  
TO PERMIT AMOCO PRODUCTION COMPANY, THE OPERATOR OF SAID  
UNIT, TO REVIEW OPERATIONS AND DEMONSTRATE TO THE  
COMMISSION THAT ITS OPERATIONS WITHIN THE UNIT ARE  
RESULTING IN THE PREVENTION OF WASTE AND THE PROTECTION  
OF CORRELATIVE RIGHTS ON A CONTINUING BASIS, HARDING, UNION  
AND QUAY COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 16, 1992, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 27th day of August, 1992, the Commission, a quorum being present, having considered the testimony, the record, and the exhibits, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) On January 23, 1981, the Commission entered Order No. R-6446-B which granted the application of Amoco Production Company, hereinafter referred to as "Amoco", for approval of the Bravo Dome Carbon Dioxide Gas Unit, hereinafter referred to as "the unit", located in Union, Harding and Quay Counties, New Mexico.

(3) Order R-6446-B provided, among other things:

- (a) "That the operator of said unit shall be required to periodically demonstrate to the Commission that its operations within the unit are resulting in the prevention of waste and the protection of correlative rights on a continuing basis."

- (b) "That such demonstration shall take place at a public hearing held at least every four years following the effective date of the unit or at such lesser intervals as the Commission may require."

(4) The unit became effective on November 1, 1980.

(5) Hearings were held on August 3, 1984 and on July 14, 1988, before the Commission pursuant to Order R-6446-B and the Commission entered Orders R-6446-C and R-6446-D finding that unit operations were preventing waste and protecting correlative rights, and further ordering that the case be reopened for additional evidence before or during August, 1992. The reopened case was originally docketed as Case No. 9428 but subsequent docketing under Case No. 10508 has fulfilled the reopening requirement under Order R-6446-B.

(6) Amoco presented exhibits and testimony which traced the geologic history of the Bravo Dome area, describing and defining rock units which comprise the carbon dioxide bearing reservoir units in the Tubb formation.

(7) The present productive plant capacity for the Bravo Dome Carbon Dioxide Gas Unit is 390 million cubic feet per day.

(8) The current total deliverability of all active wells connected to the Unit gathering system is approximately 325 million cubic feet per day and this deliverability has been sufficient to meet Amoco's market demand for CO<sub>2</sub> throughout the life of the unit.

(9) Production and sale of carbon dioxide have varied from an average 40 million cubic feet per day in the first year of operation being 1984, to a peak in 1988 of 366 million cubic feet per day average to a current average of 288 million cubic feet per day.

(10) Capital investment and operational expenditures over the past four years have totaled about \$93 million and have been targeted at operating efficiency and environmental controls.

(11) The current market for carbon dioxide from Bravo Dome is enhanced oil recovery projects in the Permian Basin which has been the historical market for this gas.

(12) Market demand for carbon dioxide has been sensitive to the price and anticipated future price of crude oil.

(13) Unit operations have resulted in efficient, orderly and economical exploration of the unit area and economical production, field gathering and treatment of carbon dioxide within the unit thereby preventing surface and underground waste of carbon dioxide.

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Case No. 10508

Order No. R-6446-E

(14) Amoco is carrying out their duties as unit operator of the Bravo Dome Carbon Dioxide Gas Unit and their actions within the unit area are resulting in the protection of the correlative rights of interest owners within the unit.

(15) In accordance with ordering paragraphs (4) and (5) of said Order No. R-6446-B this case should be reopened for additional testimony at a hearing during or before August, 1996.

IT IS THEREFORE ORDERED THAT:

(1) The operations of Amoco Production Company, as unit operator of the Bravo Dome Carbon Dioxide Gas Unit located in Harding, Union and Quay Counties, New Mexico, are hereby found to be resulting in the prevention of waste of carbon dioxide gas and the protection of correlative rights of interest owners within the unit.

(2) This case shall be reopened for additional testimony at a hearing during or before August, 1996.

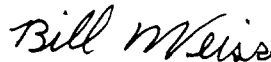
(3) Jurisdiction of this case is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

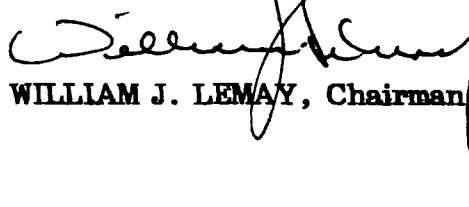
STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



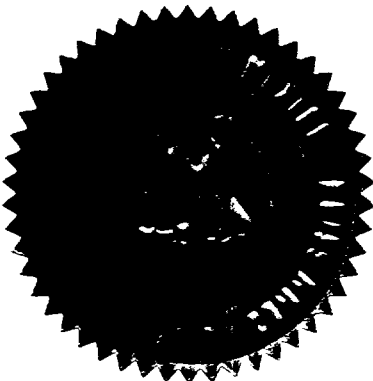
GARY CARLSON, Member



WILLIAM W. WEISS, Member



WILLIAM J. LEMAY, Chairman



S E A L

dr/

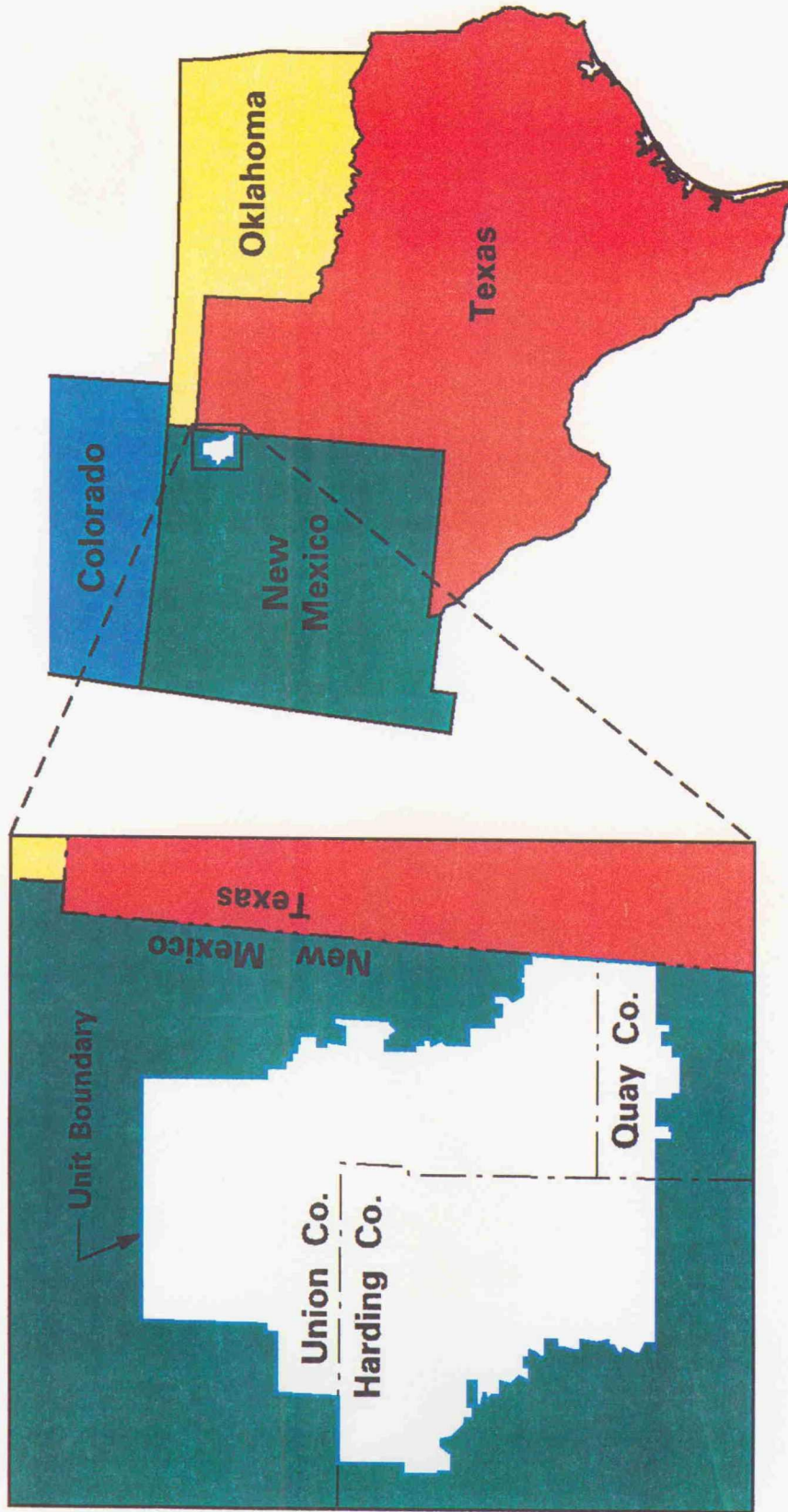
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# **BRAVO DOME CARBON DIOXIDE GAS UNIT**

**4-YEAR REVIEW OF OPERATIONS**

**NMOCC CASE 10508  
JULY 16, 1992**

# Bravo Dome Carbon Dioxide Gas Unit



Miles  
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BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Case No.: 10508 Exhibit No.: W-1  
Submitted By: Amoco Production Company  
Hearing Date: July 16, 1992

SIERRA GRANDE UPLIFT

GRABEN AREA

BRAVO DOME AREA

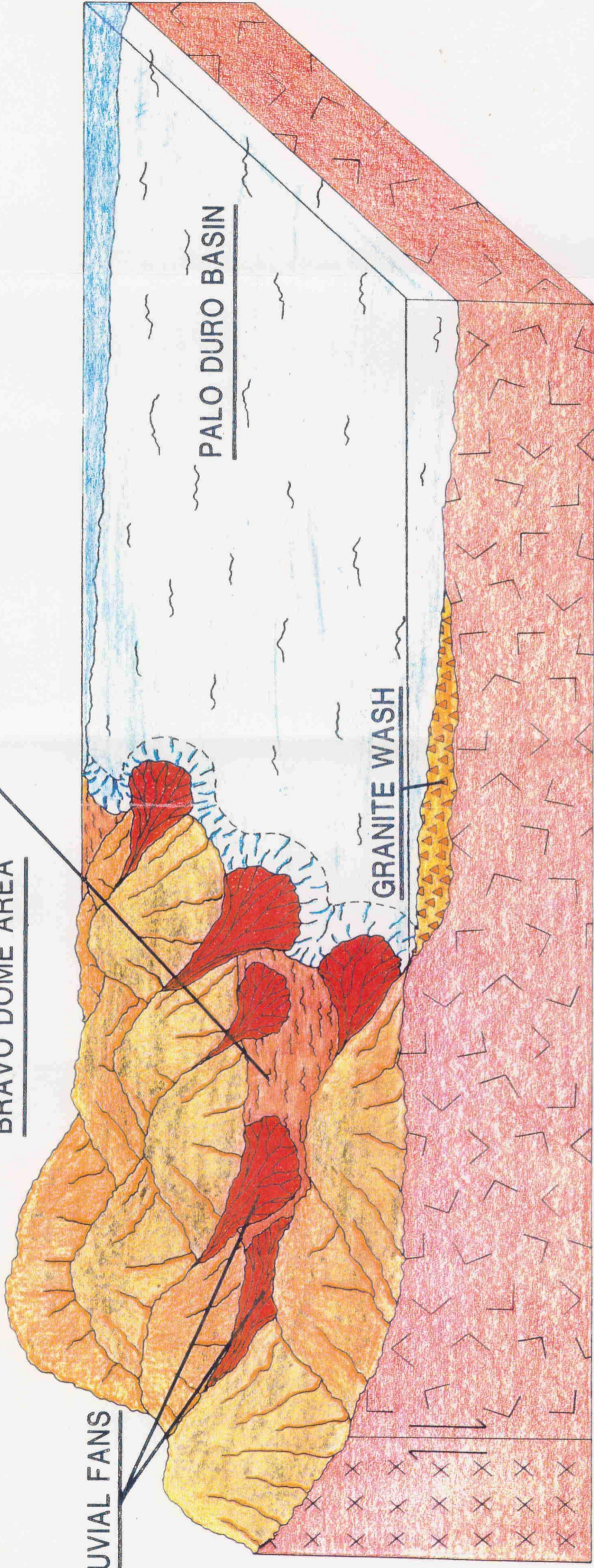
ALLUVIAL FANS

PALO DURO BASIN

GRANITE WASH

BASEMENT FAULTS

MIDDLE PENNSYLVANIAN



SIERRA GRANDE UPLIFT

GRABEN AREA

BRAVO DOME AREA

PALO DURO BASIN

ALLUVIAL FAN

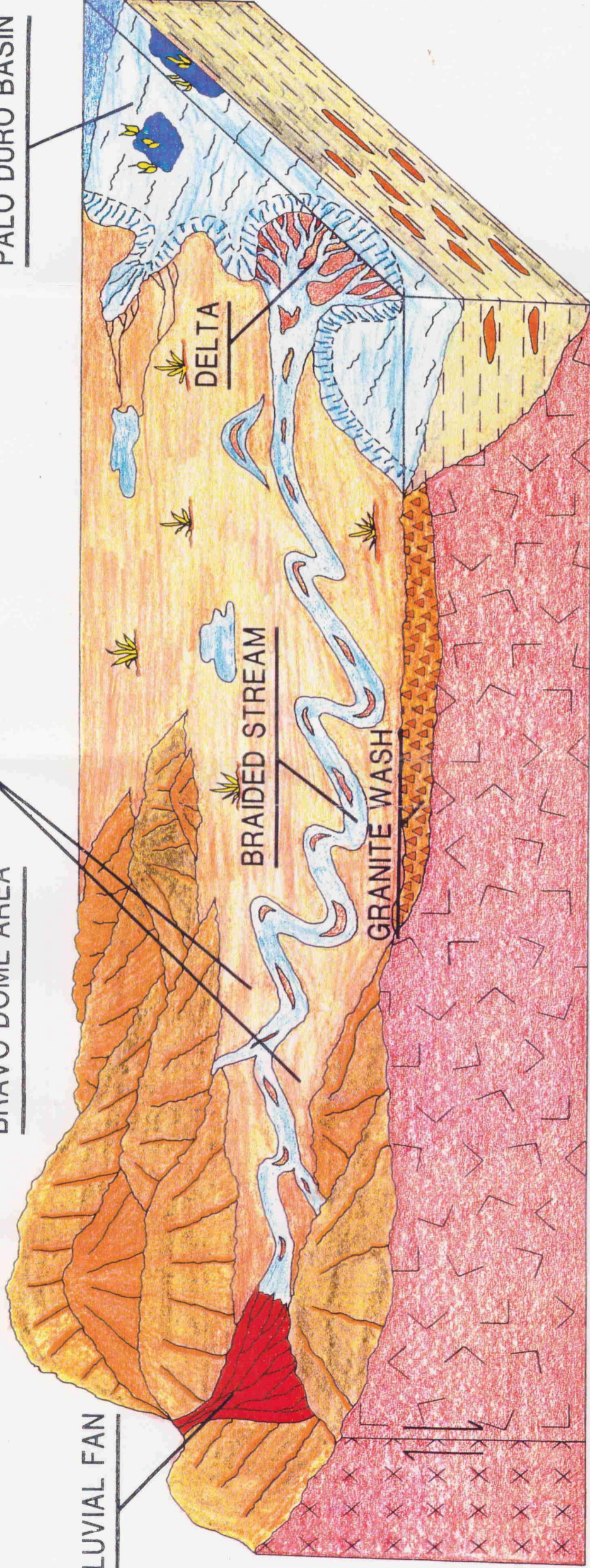
DELTA

BRAIDED STREAM

GRANITE WASH

BASEMENT FAULTS

LATE PENNSYLVANIAN



SIERRA GRANDE UPLIFT

BRAVO DOME AREA

MUD FLAT AREA

ANHYDRITE

SALT

EPHEMERAL STREAM

GRANITE WASH

FINE GRAIN SANDS

PALO DURO BASIN

BASEMENT FAULTS

EARLY PERMIAN

