

CAUSE NO. 197-6 / DOCKET NO. 94-007

IN THE MATTER OF THE
REQUEST FOR AGENCY ACTION
OF COASTAL OIL & GAS
CORPORATION FOR AN ORDER
AMENDING THE ORDER IN CAUSE
NO. 197-1 TO AUTHORIZE AN
EXCEPTION WELL LOCATION
FOR THE NE¼ OF SECTION 22,
TOWNSHIP 9 SOUTH, RANGE 20
EAST, S.L.M., IN THE GREEN
RIVER FORMATION OF THE
NATURAL BUTTES AREA OF
UINTAH COUNTY, UTAH

ORDER INDEX

<u>ORDER #</u>	<u>DATE SIGNED</u>	<u>DESCRIPTION</u>
#1	6/27/94	FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

August 2, 1994

BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH

IN THE MATTER OF THE)
REQUEST FOR AGENCY ACTION)
OF COASTAL OIL & GAS)
CORPORATION FOR AN ORDER)
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RIVER FORMATION OF THE)
NATURAL BUTTES AREA OF)
UINTAH COUNTY, UTAH)

To Lisa
8/2/94

**FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
ORDER**

Docket No. 94-007

Cause No. 197-6

This cause came on regularly for hearing before the Board of Oil, Gas and Mining (the "Board") on Wednesday, April 27, 1994, at 10:00 am., in the Hearing Room of the Division of Oil, Gas and Mining at 355 West North Temple, 3 Triad Center, Suite 520, Salt Lake City, Utah.

The following Board members present and participating in the hearing were: Chairman David D. Lauriski, Judith F. Lever, Jay L. Christensen, Kent G. Stringham, Raymond Murray, Thomas Faddies, and Elise L. Erler. Staff members of the Division of Oil, Gas and Mining (the "Division") present and participating in the hearing included James W. Carter, Director; Ronald J. Firth, Associate Director for Oil and Gas; Brad Hill, geologist; and Frank Matthews, petroleum engineer.

Phillip Wm. Lear, Esq., of Snell & Wilmer appeared on behalf of Coastal Oil & Gas Corporation ("Coastal"); and Donald H. Spicer, Wendell A. Cole, and David K. Dillon appeared as witnesses for Coastal.

Thomas A. Mitchell, Esq., Assistant Attorney General, represented the Board; and William R. Richards, Esq., Assistant Attorney General, represented the Division. No persons appeared in opposition.

Robert A. Henricks, Chief, Branch of Fluid Minerals (Utah State Office); Assad N. Raffoul, petroleum engineer (Utah State Office); and Edwin Forsgren, petroleum engineer (Vernal District Office) appeared for the United States Department of the Interior, Bureau of Land Management.

NOW THEREFORE, the Board, having fully considered the testimony adduced and the exhibits received at the hearing, and being fully advised in the premises, makes and enters its Findings of Fact, Conclusions of Law, and Order, as follows:

FINDINGS OF FACT

1. The Board mailed notice of the April 27, 1994 hearing to all interested parties by certified mail, return receipt requested on April 1, 1994, and caused notice to be published in the *Deseret News* and in the *Salt Lake Tribune* on April 4, 1994, and in the *Vernal Express* on April 6, 1994.

2. Coastal mailed photocopies of the Request for Agency Action to all owners.

3. Coastal is a Delaware Corporation in good standing, having its principal place of business in Houston, Texas. Coastal is licensed to do business in Utah.

4. The lands affected by the Request for Agency Action are public domain lands of the United States of America, administered by the Bureau of Land Management ("BLM").

5. By order in Cause No 197-1 dated April 29, 1982 (the "Order"), the Board established 160-acre drilling units for the production of gas and associated hydrocarbons from the Green River formation in the Natural Buttes Area, affecting the following described lands in ("Spaced Lands") Uintah County, Utah:

Township 9 South, Range 20 East, S.L.M.

Sections 12 through 15
Sections 21 through 28
Sections 33 through 36

Township 9 South, Range 21 East, S.L.M.

Sections 7 through 35

Township 10 South, Range 20 East, S.L.M.

Sections 1 and 12

Township 10 South, Range 21 East, S.L.M.

Sections 2 through 9

6. The drilling units conform to a governmental survey quarter-section or its equivalent, and the Order provides for one well to produce from the Green River formation interval ("Spaced Interval"), the base of which is more particularly described as follows:

[T]he stratigraphic equivalent of the correlation point established at the depth of 4,822 feet below Kelly Bushing in the Ute Trail #10 Well drilled by DeKalb Petroleum Company in the NE¼SW¼ of Section 34, Township 9 South, Range 21 East, S.L.M., Uintah County, Utah.

7. The Order provides for a uniform spacing pattern in the Spaced Lands and Spaced Interval by authorizing the legal location for each permitted well to be not fewer than 1,000 feet from the exterior boundary line of each drilling unit.

8. Coastal owns or controls the entire working interest in the Spaced Interval in the drilling unit comprising the NE¼ of Section 22, Township 9 South, Range 20 East. Coastal also owns or controls the entire working interest in the off-setting drilling unit comprising the SW¼ of Section 14.

9. Enron Oil and Gas Company owns or controls the entire working interest in the off-setting drilling units comprising the S½ of Section 22, the W½ of Section 23, and the S½ of Section 15. The NW¼ of Section 22 is owned or controlled by The Northwestern Mutual Life Insurance Company (50%) and John Hancock, Inc. (50%).

10. Coastal provided to the Board written consents to the exception well location signed by Enron Oil and Gas Company and The Northwestern Mutual Life Insurance Company.

11. The Green River formation underlying the subject drilling units and its eight off-setting drilling units constitutes a pool as that term is defined in section 40-6-2(9) of the *Utah Code Annotated*, and is a highly complex series of isolated and discontinuous beds

of productive rock that are randomly distributed vertically over a several thousand foot-thick interval. Many of the beds are separate and distinct and not in communication with each other. They comprise continental deposits including channel sandstones, siltstones, and shales deposited by aggrading streams flowing northwesterly into the Uinta Basin. The lenticular channel sandstones form the common source of supply where the hydrocarbons are stratigraphically trapped in their updip pinchout.

12. The Green River formation contains two productive zones having sands in excess of five-feet thick and having porosities greater than 10% within the boundaries of the drilling unit for the NE $\frac{1}{4}$ of Section 22. A well drilled at the legal location would intersect no sands in the M-2 Zone, but would encounter seven feet of sands in the M-4 Zone. However, by moving the location to the proposed exception well location, the proposed COG #11-22-9-20GR Well would intersect the M-2 sands and would also intersect the same thickness (seven feet) of M-4 sands.

13. Moreover, the BLM will not authorize the drilling of the COG #11-22-9-20GR Well at the legal location for archeological reasons, but will allow the drilling at the exception well location.

14. Existing Green River formation wells in the off-setting drilling units include the following:

Enron #1-15 Well (Oil)	NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 15
Enron #6-15G Well (Oil)	NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 15
Enron #2-15G Well (Oil)	SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 15
Enron #5-15G Well (Oil)	SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 15

Enron #3-15G Well (Oil)	SW¼SE¼ Section 15
COG #2-22 Well (Gas)	NE¼NW¼ Section 22
Enron #38-22B Well (Gas)	SW¼SE¼ Section 22
Enron #12-23B Well (Gas)	SW¼NW¼ Section 23

The Enron #12-23B Well in the SW¼NW¼ of Section 23 is itself an exception well close to, and directly offsetting, the Coastal's proposed COG #11-22-9-20GR exception well.

15. Coastal's exception well is to be drilled at a location 1,522 feet from the north line and 565 feet from the east line in the SE¼NE¼ of the Section 22. The exception well exceeds by 435 feet the authorized tolerance of 1,000 feet from the exterior boundary of the drilling unit in the NE¼.

16. The proposed exception well and the off-setting Enron #12-23B Well will both produce from the M-4 Sands. Given the configuration of the M-4 sands, substantial production from the Enron #12-23B Well will have been drained from the drilling unit in the NE¼ of Section 22. The exception well will serve as an offset to the Enron #12-23 B Well to prevent drainage from the drilling unit in the NE¼ of Section 22.

17. Drilling the COG #11-22-9-20GR Well at the exception location will prevent drainage, will protect correlative rights, and will prevent waste of the resource by drilling a well at a location that will insect both sands.

18. Inasmuch as the lands are within a designated oil shale area, drilling the COG #11-22-9-20GR Well in the exception location will preserve the integrity of oil shale section by drilling one fewer wellbore through the Parachute Creek Member in the NE¼ of

Section 22 than if a well at the legal location and the exception well to prevent drainage were authorized.

19. Correlative rights of owners in the directly and diagonally offsetting drilling units will not be affected adversely by drilling at the exception location, with the possible exception of the drilling unit for the NW¼ of Section 23. As to that drilling, Coastal's exception well location would constitute a protection well to prevent drainage.

20. An order authorizing the exception location for the COG #11-22-9-20GR requested will promote the public interest, increase ultimate recovery, prevent waste, and protect correlative rights of all owners.

CONCLUSIONS OF LAW

1. The Board has jurisdiction of the parties and of the subject matter of Coastal's Request for Agency Action, pursuant to Chapter 6 of Title 40 of the *Utah Code Annotated* and pursuant to the Order; and has the authority to make and promulgate the order hereinafter set forth.

2. The Board has authority to modify its previous orders to grant exceptions to authorized locations pursuant to section 40-6-6(6) of the *Utah Code Annotated* and to R649-3-3.1.3 of the *Utah Administrative Code*.

3. The Division gave due and regular notice of the time, place, and purpose of the hearing to all interested parties as required by law and by the rules and regulations of the Board.

4. Coastal's petition poses an appropriate request for modification of the existing Order to authorize an exception well location.

5. Coastal is entitled to drill an off-set well to protect itself from drainage from the Enron #12-23B Well in the NW¼ of Section 23.

6. Drilling the COG #11-22-9-20GR well at the proposed exception location will promote the development, production, and utilization of oil and gas within the Spaced Interval in such a manner as to achieve the greatest ultimate recovery.

ORDER

IT IS THEREFORE ORDERED that in order to prevent waste of the oil, gas, and associated hydrocarbons, to increase the ultimate recovery of the resource, to prevent physical and economic waste:

A. Coastal's Request for Agency Action is granted.

B. Drilling the COG #11-22-9-20GR well at the proposed exception location is authorized for archeological, geological, and engineering reasons, to be administered and supervised by the Division.

C. The Board retains exclusive and continuing jurisdiction of all matters covered by this order and of all parties affected thereby; and specifically, the Board retains and reserves exclusive and continuing jurisdiction to make further orders as appropriate and authorized by statute and applicable regulations.

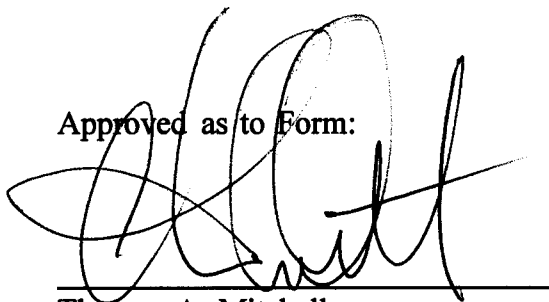
ENTERED this 27th day of June, 1994.

STATE OF UTAH
BOARD OF OIL, GAS AND MINING

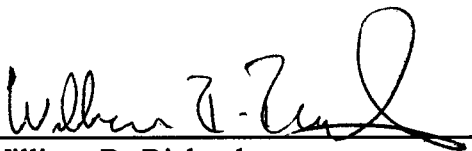


David D. Lauriski
Chairman

Approved as to Form:



Thomas A. Mitchell
Assistant Attorney General
Board of Oil, Gas and Mining



William R. Richards
Assistant Attorney General
Division of Oil, Gas and Mining

CERTIFICATE OF MAILING

I hereby certify that I caused a true and correct copy of the foregoing **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER** for Docket No. 94-007, Cause No. 197-6 to be mailed by certified mail, postage prepaid, on the 2nd day of August 1994, to the following:

Phillip Wm. Lear, Esq.
Jeffrey T. Sivertsen, Esq.
Snell & Wilmer
111 East Broadway, Suite 900
Salt Lake City, Utah 84111

Coastal Oil and Gas Corporation
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P.O. Box 749
Denver, Colorado 80201-0749

Sent by first class mail to the following:

John Hancock Mutual Life Ins. Co.
John Hancock Place
P.O. Box 111
Boston, Massachusetts 02117

Attn: Jerome Baier
The Northwestern Mutual Life Ins. Co.
720 East Wisconsin Avenue
Milwaukee, Wisconsin 53202

Enron Oil & Gas Company
1625 Broadway, Suite 1300
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Carneal Burns