

FILED

OCT 05 2009

SECRETARY, BOARD OF
OIL, GAS & MINING

**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 KERR-MCGEE OIL & GAS ONSHORE LP FOR AN ORDER MODIFYING UTAH ADMIN. CODE RULES R649-3-2, R649-3-10 AND R649-3-11(1) AND (2) TO PROVIDE FOR THE DRILLING OF WELLS TO ACHIEVE THE EQUIVALENT OF AN APPROXIMATE 10-ACRE WELL DENSITY PATTERN FOR THE PRODUCTION OF GAS AND ASSOCIATED OIL AND HYDROCARBONS FROM THE WASATCH FORMATION AND MESAVERDE GROUP UPON THE UNCOMMITTED TRACTS OF THE NATURAL BUTTES FEDERAL UNIT COMPRISED OF PORTIONS OF SECTIONS 23-25 AND 36 OF TOWNSHIP 9 SOUTH, RANGE 20 EAST, SLM, PORTIONS OF SECTION 32 AND ALL OF SECTION 36, TOWNSHIP 9 SOUTH, RANGE 21 EAST, SLM, PORTIONS OF SECTIONS 23 AND 24, TOWNSHIP 10 SOUTH, RANGE 21 EAST, SLM, AND ALLOTMENT NO. 16 IN SECTIONS 2 AND 11 AND PORTIONS OF SECTION 15, TOWNSHIP 10 SOUTH, RANGE 22 EAST, SLM, UTAH COUNTY, UTAH

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

Docket No. 2009-012

Cause No. 173-24

This Cause came on for hearing before the Utah Board of Oil, Gas and Mining (the "Board") on Wednesday, September 23, 2009, at 9:00 a.m. in Room 210 of the East (Senate) Building of the Capitol Complex in Salt Lake City. Cause Nos. 173-23, 210-05, and 268-01 were called concurrently with this Cause in the interest of efficiency, but the presentation by the Petitioner and deliberation on the merits by the Board occurred separately for each Cause. The following Board members were present and participated at the hearing: Chairman Douglas E. Johnson, Samuel C. Quigley, Jean Semborski, James T.

Jensen, and Kelly L. Payne. Board Members Jake Y. Harouny and Ruland J. Gill, Jr. were unable to attend. The Board was represented by Michael S. Johnson, Esq., Assistant Attorney General.

Testifying on behalf of Petitioner Kerr-McGee Oil & Gas Onshore LP (“KMG”) were Jason K. Rayburn– Landman, Scott C. Mitchell – Geologist, and John L. Eisele – Reservoir Engineer, who were recognized as experts in petroleum land management, geology and reservoir engineering, respectively, for purposes of this Cause. Frederick M. MacDonald, Esq., of and for Beatty & Wozniak, P.C., appeared as attorney for KMG.

Testifying on behalf of the Division of Oil, Gas and Mining (the “Division”) was Gil Hunt – Associate Director – Oil & Gas. Steven F. Alder, Esq., Assistant Attorney General, appeared as attorney on behalf of the Division. The Division expressed its support for the granting of KMG’s Request for Agency Action filed July 13, 2009 in this Cause (the “Request”), at the conclusion of its presentation.

EOG Resources, Inc. (“EOG”), a working interest/operating rights owner within the area affected by the Request, filed a letter with the Board in support of the granting of the Request.

No other party filed a response to the Request and no other party appeared or participated at the hearing.

The Board, having considered the testimony presented and the exhibits received into evidence at the hearing, being fully advised, and for good cause, hereby makes the

following findings of fact, conclusions of law and order.

FINDINGS OF FACT

1. KMG is a Delaware limited partnership in good standing and authorized to conduct business in the State of Utah. It is duly bonded with all appropriate State of Utah and Federal agencies relevant to this cause.

2. KMG, is a lessee and owner of 100% of the operating rights/working interest in the formations for which the in-fill authorization relevant to this Cause is sought (*see* (5) below), in the following Uintah County, Utah lands:

Township 9 South, Range 20 East, SLM

Section 23: SE $\frac{1}{4}$
Section 24: S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$
Section 25: N $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$
Section 36: S $\frac{1}{2}$

Township 9 South, Range 21 East, SLM

Section 32: Lots 1 (45.92), 2 (46.78), 3 (47.62)
and 4 (48.48), N $\frac{1}{2}$ S $\frac{1}{2}$
Section 36: Lots 1 (39.95), 2 (39.85), 3 (39.75)
and 4 (39.65), N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$ [All]

Township 10 South, Range 21 East, SLM

Section 23: E $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$
Section 24: S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$

Township 10 South, Range 22 East, SLM

Sections 2 and 11: Allotment #16 (27.94-acre parcel designated as Unit Tract 110 in the NBU Agreement)

Section 15: N $\frac{1}{2}$ S $\frac{1}{2}$, S $\frac{1}{2}$ N $\frac{1}{2}$

(containing 2,735.94 acres, more or less)

(hereinafter the "Subject Lands"),

except for the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 24, Township 9 South, Range 20 East, SLM, which is partially owned by KMG, and Allotment No. 16 in Sections 2 and 11, Township 10 South, Range 22 East, SLM, which is unleased. The Subject Lands comprise the lands physically within the boundaries of the Natural Buttes Federal Exploratory Unit (the "NBU") but which are not committed thereto.

3. The working interests/operating rights in the Subject Formations (see (5) below) underlying the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 24, Township 9 South, Range 20 East, SLM, are owned by KMG (33.33%) and EOG (66.67%), and are subject to additional existing contractual obligations between those parties.

4. The gas and associated oil and hydrocarbons underlying the Subject Lands are primarily owned by the State of Utah (51%) and the United States (48%), with the balance under fee (private) ownership.

5. The NBU was approved effective January 5, 1968 and unitizes all oil and gas from the base of the Green River formation, defined in the governing Unit Agreement as follows:

[T]he stratigraphic equivalent of the correlation point established at the depth of 4,822 feet below K.B. (Kelly Bushing) in the Ute Trail # 10 Well drilled by DeKalb Petroleum Company in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 34 in Township 9 South, Range 21 East, SLM, Uintah County, Utah[,]

to the top of the Mancos formation, defined in the governing Unit Agreement as follows:

[T]he stratigraphic equivalent of the correlation point established at the depth of 9,732 feet below K.B. (Kelly Bushing) in the Chapita Wells Unit # 5 Well drilled by Belco Petroleum Corporation in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 22 in Township 9 South, Range 22 East, SLM, Uintah County, Utah[,]

(the "Subject Formations").

6. The Subject Lands are physically within the boundaries of the NBU but have not been committed thereto either due to lack of joinder to the governing Unit Agreement by either the lessor or the record title and/or operating rights/working interest owner(s) or due to previous contraction of, and resulting elimination from, the NBU. As a consequence, the Subject Lands have been and will continue to be independently developed on an individual lease basis.

7. As a consequence of this "non-committed" status to the NBU, the Subject Lands are not currently covered by a Board spacing order and are therefore subject to the general statewide well siting rule set forth in Utah Admin. Code R649-3-2 and the general directional drilling well rules set forth in Utah Admin. Code R649-3-10 and R649-3-11.

8. Under Utah Admin. Code R649-3-2, each well is to be located within a 400-foot "window" surrounding the center of each governmental quarter-quarter section, or a substantially equivalent lot or tract or combination of lots or tracts, and no well may be located closer than 920 feet from an existing well drilling to or capable of producing from

the same pool. The result of this location pattern is to allow a maximum of four (4) wells per quarter section and 16 wells per section, *i.e.* the equivalent of 40-acre density.

9. By Consolidated Order entered in Cause No. 173-14 on December 2, 1999, the Board ordered suspension of the Board's operating rules and orders (including what is now codified at Utah Admin. Code Rule R649-3-2) as to the NBU committed lands from the Unit's inception; provided, no well may be drilled closer than 460 feet from the Unit boundary line including interior boundary lines formed by uncommitted windows of lands within the NBU. The Subject Lands constitute those "windows."

10. KMG has since drilled several wells in the Subject Formations in the NBU and on nearby lands on equivalent 10-acre density, the data from which has evidenced and/or confirmed that:

- a) The sand bodies are numerous, small and discontinuous. Wells drilled even as close as 505 feet apart do not intersect all of the same sand bodies and therefore reflect great lateral variability in the productive sandstones of the Subject Formations. Surface outcrop studies indicate that the average apparent width of the sand bodies is 637 feet. Theoretically, wells on a 10-acre density pattern would be located 660 feet apart;
- b) The sand bodies contain complex internal structures, many of which are barriers to flow, and are tight with permeability in the micro-darcy range;
- c) Consistent fracture orientation in the area allows wells to be placed in a pattern so as to minimize potential interference; and

- d) Pressure measurement (DFIT) data detected minimal or no depletion in a majority of the wells where tests were designed to seek out intervals with the highest chance of seeing depletion

11. Volumetric estimations reflect a 55% recovery efficiency on a 10-acre density pattern for the Subject Formations underlying the Subject Lands.

12. Economic Sensitivity to Reserve analysis reflects that drilling wells for production from the Subject Formations on a 10-acre density pattern for the Subject Lands is economic.

13. The Board has previously authorized 10-acre equivalent well density for Wasatch and Mesaverde production from the nearby Bonanza and Hatch areas in Cause Nos. 179-14 and 179-15, respectively.

14. There is a likelihood that, if development of the Subject Formations underlying the Subject Lands does not occur on an approximate 10-acre well density pattern as to the discontinuous sand bodies of the Subject Formations, valuable resources will not be recovered.

15. Drilling on a 10-acre density pattern will almost always prohibit locations within the allowed "window" under the general well siting rule (Utah Admin. Code Rule R649-3-2) and conversely almost always require an exception location approval (in accordance with Utah Admin. Code Rule R649-3-3). Furthermore, wells may be directionally drilled from existing pads to minimize surface disturbance and alleviate certain environmental concerns.

16. A copy of the Request was mailed, postage pre-paid, certified with return receipt requested, and properly addressed, to all working interest/operating rights owners and operators within the Subject Lands to their last addresses disclosed by the appropriate Federal, Indian, State and County realty records, and to the governmental agencies having jurisdiction over the minerals underlying said lands. Copies of the return receipts, evidencing receipt of all such mailings, were filed with the Board.

17. Notice of the filing of the Request and of the hearing thereon was duly published in the Salt Lake Tribune and Deseret Morning News on August 2, 2009, and in the Vernal Express on August 4, 2009, and the Uintah Basin Standard on August 5, 2009.

18. The vote of the Board members present in the hearing and participating in this Cause was unanimous (5-0) in favor of granting the Request.

CONCLUSIONS OF LAW

1. Due and regular notice of the time, place and purpose of the hearing was properly given to all parties whose legally protected interests are affected by the Request in the form and manner as required by law and the rules and regulations of the Board and Division.

2. The Board has jurisdiction over all matter covered by the Request and all interested parties therein, and has the power and authority to render the order herein set forth pursuant to Utah Code Ann. §§ 40-6-5(3)(b) and 40-6-6(6).

3. The modification of Utah

Admin Code Rule R649-3-2 to allow the drilling of additional wells on the Subject Lands to achieve the equivalent of an approximate 10-acre well density pattern for the production of gas and associated oil and hydrocarbons from the Subject Formations, with the proviso that the additional wells so authorized may be located no closer than 460 feet from the boundary of (1) each lease; (2) a committed tract of the NBU; or (3) the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 24, Township 9 South, Range 20 East, unless an exception is granted by the Division in accordance with Utah Admin. Code Rule R649-3-3 for topographical, geological, environmental, and archeological considerations and when “no surface occupancy” stipulations imposed by the lessors prohibit drilling at a legal location, is just and reasonable under the circumstances.

4. Utah Admin. Code Rules R649-3-10 and R649-3-11 govern directional drilling in the absence of a specific Board order otherwise addressing such directional drilling. The elimination of any offset limitations as between wells within each leasehold in the Subject Lands and the suspension of Utah Admin. Code Rules R649-3-10 and R649-3-11 (1) and (2), with the provisos that:

- (a) no well may be directionally drilled if any portion of a 460-foot radius along the projected wellbore intersects with a boundary of a lease, a committed tract of the NBU or the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 24, Township 9 South, Range 20 East, without approval of the Division or Board in accordance with Utah Admin. Code Rules R649-3-10 and R649-3-11(1) and (2); and
- (b) the operator provides to the Division a plat or sketch showing the distance from the boundary of a lease, a committed tract of the NBU or

the SE/4NW/4 of Section 24, Township 9 South, Range 20 East and the target location within the Subject Formations with any application for permit to drill filed for a well to be directionally drilled,

are just and reasonable under the circumstances.

5. Declaring that all existing wells located on the Subject Lands and producing gas and associated oil and hydrocarbons from the Subject Formations are authorized and deemed to be at lawful locations, notwithstanding the relief granted hereby, is necessary to avoid inconsistency with prior Board Orders and is just and reasonable under the circumstances.

6. The relief granted hereby will result in the orderly development and greatest recovery of gas and associated oil and hydrocarbons from the Subject Formations underlying the Subject Lands, prevent waste and adequately protect the correlative rights of all affected parties.

7. KMG has sustained its burden of proof, demonstrated good cause, and satisfied all legal requirements for the granting of the Request.

ORDER

Based upon the Request, testimony and evidence submitted, and the findings of fact and conclusions of law stated above, the Board hereby orders:

1. The Request in this cause is granted.
2. Utah Admin. Code Rule R649-3-2 is hereby modified as applicable to the Subject Formations underlying the Subject Lands to allow the drilling of wells on said lands

to achieve the equivalent of an approximate 10-acre well density pattern for the production of gas and associated oil and hydrocarbons from said formations.

3. Except as addressed in (5), below, the wells so authorized may be located no closer than 460 feet from the exterior boundary of any lease within the said lands, nor within 460 feet of any exterior boundary of a committed tract of the NBU; provided, however, that approval by the Division may be granted in accordance with Utah Admin. Code Rule R649-3-3 for exception well locations for topographical, geological, environmental, and archaeological considerations and when “no surface occupancy” stipulations imposed by the lessors prohibit drilling at a legal location, without the necessity of a full hearing before the Board.

4. Any inter-well offset limitation as between wells upon the same leasehold within the said lands is hereby eliminated and Utah Admin. Code Rules R649-3-10 and R649-3-11(1) and (2) as applicable to each leasehold within the said lands is hereby suspended; provided, however, that no well may be directionally drilled if any portion of the 460-foot radius along the projected wellbore intersects with the boundary of a lease or a committed tract of the NBU without approval of the Division or Board in accordance with Utah Admin. Code Rules R649-3-3 and R649-3-11(1) and (2), and further provided that KMG or the Operator provides to the Division a plat or sketch showing the distance to the lease boundary and the target location within the Subject Formations with any application for permit to drill filed for a well to be directionally drilled;

5. Notwithstanding the relief granted under Paragraphs 3 and 4 above, no vertical well may be drilled closer than 460 feet to, and no portion of the 460-foot radius of a directionally drilled wellbore may intersect any portion of, the boundary of the SE¼NW¼ of Section 24, Township 9 South, Range 20 East, without the approval of the Division or Board in accordance with Utah Admin. Code Rules R649-3-3 and/or R649-3-11 as applicable.

6. All existing wells located on the Subject Lands and producing gas and associated oil and hydrocarbons from the Subject Formations are hereby declared to be authorized and located at lawful locations, notwithstanding the consequences of the relief granted hereby.

7. Pursuant to Utah Admin. Code Rules R641 and Utah Code Ann. § 63G-4-204 to 208, the Board has considered and decided this matter as a formal adjudication.

8. This Order is based exclusively on evidence of record in the adjudicative proceeding or on facts officially noted, and constitutes the signed written order stating the Board's decision and the reasons for the decision, all as required by the Administrative Procedures Act, Utah Code Ann. § 63G-4-208 and Utah Administrative Code Rule R641-109.

9. Notice re: Right to Seek Judicial Review by the Utah Supreme Court or to Request Board Reconsideration: As required by Utah Code Ann. § 63G-4-208(e) - (g), the Board hereby notifies all parties in interest that they have the right to seek judicial review of

this final Board Order in this formal adjudication by filing a timely appeal with the Utah Supreme Court within 30 days after the date that this Order issued. Utah Code Ann. §§ 63G-4-401(3)(a) and 403. As an alternative to seeking immediate judicial review, and not as a prerequisite to seeking judicial review, the Board also hereby notifies parties that they may elect to request that the Board reconsider this Order, which constitutes a final agency action of the Board. Utah Code Ann. § 63G-4-302, entitled, “Agency Review - Reconsideration,” states:

(1)(a) Within 20 days after the date that an order is issued for which review by the agency or by a superior agency under Section 63G-4-301 is unavailable, and if the order would otherwise constitute final agency action, any party may file a written request for reconsideration with the agency, stating the specific grounds upon which relief is requested.

(b) Unless otherwise provided by statute, the filing of the request is not a prerequisite for seeking judicial review of the order.

(2) The request for reconsideration shall be filed with the agency and one copy shall be sent by mail to each party by the person making the request.

(3)(a) The agency head, or a person designated for that purpose, shall issue a written order granting the request or denying the request.

(b) If the agency head or the person designated for that purpose does not issue an order within 20 days after the filing of the request, the request for reconsideration shall be considered to be denied.

Id. The Board also hereby notifies the parties that Utah Admin. Code Rule R641-110-100, which is part of a group of Board rules entitled, “Rehearing and Modification of Existing Orders,” states:

Any person affected by a final order or decision of the Board may file a petition for rehearing. Unless otherwise provided, a petition for rehearing must be filed no later than the 10th day of the month following the date of signing of the final order or decision for which the rehearing is sought. A copy of such petition will be served on each other party to the proceeding no later than the 15th day of the month.

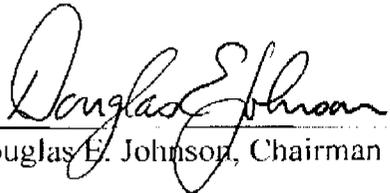
Id. See Utah Admin. Code Rule R641-110-200 for the required contents of a petition for Rehearing. If there is any conflict between the deadline in Utah Code Ann. § 63G-4-302 and the deadline in Utah Admin. Code Rule R641-110-100 for moving to rehear this matter, the Board hereby rules that the later of the two deadlines shall be available to any party moving to rehear this matter. If the Board later denies a timely petition for rehearing, the party may still seek judicial review of the Order by perfecting a timely appeal with the Utah Supreme Court within 30 days thereafter.

10. The Board retains continuing jurisdiction over all the parties and over the subject matter of this cause, except to the extent said jurisdiction may be divested by the filing of a timely appeal to seek judicial review of this order by the Utah Supreme Court.

11. For all purposes, the Chairman's signature on a faxed copy of this Order shall be deemed the equivalent of a signed original.

DATED this 5 day of OCT, 2009.

**STATE OF UTAH
BOARD OF OIL, GAS & MINING**

By: 
Douglas E. Johnson, Chairman

CERTIFICATE OF SERVICE

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. 2009-012, Cause No. 173-24 to be mailed with postage prepaid, this 6th day of October, 2009, to the following:

FREDERICK M MACDONALD
JUSTIN C RAMMELL
BEATTY & WOZNIAK PC
6925 UNION PARK CENTER SUITE 525
COTTONWOOD HEIGHTS UT 84047-6003

JASON RAYBURN LANDMAN
KERR-MCGEE OIL & GAS ONSHORE
LP
PO BOX 173779
DENVER CO 80217-3779

MICHAEL S JOHNSON
STEPHEN SCHWENDIMAN
ASSISTANT ATTORNEYS GENERAL
UTAH BOARD OF OIL GAS & MINING
1594 WEST NORTH TEMPLE SUITE 300
SALT LAKE CITY UT 84116
[VIA EMAIL]

EOG RESOURCES INC
ATTN MS TONI MILLER
600 17TH ST SUITE 1000 N
DENVER CO 80202

STEVEN F ALDER
KEVIN BOLANDER
ASSISTANT ATTORNEYS GENERAL
UTAH DIVISION OF OIL GAS & MINING
1594 WEST NORTH TEMPLE STE 300
SALT LAKE CITY UT 84116
[VIA EMAIL]

STATE OF UTAH
TRUST LANDS ADMINISTRATION
ATTN LAVONNE GARRISON
ASSISTANT DIRECTOR OIL AND GAS
675 EAST 500 SOUTH SUITE 500
SALT LAKE CITY UT 84102

UNITED STATES OF AMERICA
BUREAU OF LAND MANAGEMENT
UTAH STATE OFFICE
ATTN BECKY HAMMOND
CHIEF-BRANCH OF FLUID MINERALS
P O BOX 45155
SALT LAKE CITY UT 84145-0155

BIA UTE INDIAN TRIBE
P O BOX 190
FT DUCHESNE UT 84026

UNITED STATES OF AMERICA
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 SOUTH 500 EAST
VERNAL UT 84078

UTE DISTRIBUTION CORPORATION
P O BOX 696
ROOSEVELT UT 84066

BIA UINTAH & OURAY
AGENCY ALLOTTED
P O BOX 130
FT DUCHESNE UT 84026

