

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

FILED

NOV 23 2009

SECRETARY, BOARD OF
OIL, GAS & MINING

IN THE MATTER OF THE REQUEST)
FOR AGENCY ACTION OF WHITING)
OIL AND GAS CORPORATION FOR)
AN ORDER ESTABLISHING A 960-)
ACRE DRILLING AND SPACING)
UNIT FOR A HORIZONTAL WELL IN)
THE CANE CREEK FORMATION AND)
THE PRODUCTION OF OIL, GAS,)
AND OTHER HYDROCARBONS)
FROM SAID FORMATION IN)
SECTIONS 7, 8, 17, AND 18,)
TOWNSHIP 29 SOUTH, RANGE 22)
EAST, S.L.M., SAN JUAN COUNTY,)
UTAH)

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

**Docket No. 2009-016
Cause No. 166-03**

This Cause came on regularly for hearing before the Utah Board of Oil, Gas, and Mining (the "Board") on Wednesday, October 28, 2009, at the hour of 9:00 a.m. in the Multipurpose Room, Uintah Basin Applied Technology College, 450 North 2000 West, Vernal, Utah. The following Board members were present and participated at the hearing: Douglas E. Johnson, Chairman, Ruland J. Gill, Jr., Kelly L. Payne, and James T. Jensen. John R. Baza, Director, was present for the Utah Division of Oil, Gas and Mining (the "Division"). The Board was represented by Michael S. Johnson, Assistant Attorney General.

The petitioner, Whiting Oil and Gas Corporation ("Whiting"), was represented by Thomas W. Clawson of Van Cott, Bagley, Cornwall & McCarthy, and Chris A. Potter, Regional Land Manager, Larry Rasmussen, Geologist, and Thomas Smith, Operations Manager and Petroleum Engineer, testified on behalf of Whiting.

The Division was represented by Steven F. Alder, Assistant Attorney General. The Division filed its Staff Memorandum to the Board on October 13, 2009. Gil Hunt, Associate Director—Oil and Gas, testified on behalf of the Division. The Division expressed its support for Whiting’s Amended Request for Agency Action filed in this Cause (the “Amended Request”) subject to the Division’s recommendation to the Board that, in the event those portions of subject Sections 7, 8, 17, and 18 which are not included within the proposed 960-acre drilling unit are excluded from the Threemile Unit, temporary drilling units for horizontal wells in the Spaced Interval (as defined herein) be established for such excluded lands.

Michael Coulthard, Petroleum Engineer—Utah State Office, attended the hearing on behalf of the United States Department of the Interior, Bureau of Land Management (“BLM”). The BLM also expressed its support for the Amended Request.

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

The Board, having fully considered the testimony adduced and the exhibits received into evidence at the October 28, 2009 hearing, being fully advised, and good cause appearing, hereby makes the following findings of fact, conclusions of law, and order:

FINDINGS OF FACT

1. Notices of the time, place, and purposes of the Board’s regularly scheduled October 28, 2009 hearing were mailed to all interested parties by first-class mail, postage prepaid, and were duly published in the Salt Lake Tribune, Deseret Morning News, and San Juan Record pursuant to the requirements of the Utah Administrative Code (“U.A.C.”) Rule 641-106-100. Copies of the Amended Request were mailed to all interested parties pursuant to U.A.C. Rule R641-104-135.

2. Whiting's Amended Request seeks an order establishing a 960-acre drilling and spacing unit for a horizontal well in, and the production of oil, gas, and other hydrocarbons from, the Cane Creek formation underlying the following described lands in San Juan County, Utah (the "Subject Lands"):

Township 29 South, Range 22 East, S.L.M.

Section 7: E $\frac{1}{2}$
Section 8: W $\frac{1}{2}$ W $\frac{1}{2}$
Section 17: W $\frac{1}{2}$ W $\frac{1}{2}$
Section 18: E $\frac{1}{2}$

(containing 960.00 acres, more or less)

3. The formation to be utilized for drilling and spacing purposes is the Cane Creek formation described as follows (the "Spaced Interval"):

The Cane Creek "B" interval in the Cane Creek formation as identified by the neutron-density log in the vertical pilot hole of the Threemile #43-18H Well located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 18, Township 29 South, Range 22 East, San Juan County, Utah, with the top of the spaced interval being found at a measured depth of 7,591 feet (1,627 feet subsea) and the base of the spaced interval being found at a measured depth of 7,621 feet (1,657 feet subsea) or to the stratigraphic equivalent thereof.

4. Whiting is a Delaware corporation in good standing, having its principal place of business in Denver, Colorado. Whiting is qualified to and is doing business in Utah.

5. Whiting is an owner of working interests in the Subject Lands.

6. The minerals in the lands embraced within the Subject Lands are owned by the United States of America and are subject to United States Oil and Gas Lease Nos. UTU-76342, UTU-76349, UTU-76593, and UTU-84058 (collectively, the "Subject Leases"). The surface of the Subject Lands is owned by the United States of America. The BLM administers the federally-owned minerals and public lands.

7. All of the Subject Lands and Subject Leases have been committed to the Threemile Unit Agreement (UTU-84722X), a federal exploratory unit, which also is administered by the BLM. Because the Subject Lands are located within a federally supervised unit, the Subject Well (as defined herein) is exempt from the Board's rule providing for temporary 640-acre spacing for horizontal wells. See U.A.C. Rule R649-3-2(8). The Subject Lands also are not subject to any spacing order of the Board for the production of oil, gas, or other hydrocarbons from the Cane Creek formation.

8. The Spaced Interval beneath the Subject Lands is a stratigraphic trap which consists of three evaporite cycles within the Alkali Gulch production interval of the Paradox Formation. Each cycle contains an evaporite, siliclastic, and organic rich, black, laminated mudstone facies. The siliclastic reservoir facies is predominately a dolomitic siltstone. The seal for the reservoir is formed by the overlying evaporites and the source of the hydrocarbons is the organic mudstone facies.

9. The Spaced Interval underlies all or substantially all of the Subject Lands and constitutes a pool—a common source of supply—for oil, gas, and other hydrocarbons.

10. The Threemile #43-18H Well (the "Subject Well"), with a surface location in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of subject Section 18 and a bottom-hole location in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of subject Section 7, is a horizontal well that has been drilled and completed in the proposed 960-acre drilling and spacing unit. The Subject Well is operated by Whiting and produces hydrocarbons from the Spaced Interval beneath the Subject Lands.

11. Projected decline curve and economic analyses based on the best available data support the conclusion that the Subject Well will efficiently and economically drain 960 acres in pool within the Spaced Interval beneath the Subject Lands, which will prevent waste. 960 acres is

not smaller than the maximum area that can be efficiently and economically drained by a horizontal well completed and producing from the Spaced Interval.

12. The testimony and evidence submitted at the October 28, 2009 hearing supports Whiting's request that the drilling and spacing unit should comprise the Subject Lands. The evidence and testimony also support Whiting's requested set-off limitations, as stated in the Amended Request, that the producing interval for the designated well within the Spaced Interval shall not be closer than 1,320 feet from other wells completed and producing from the Spaced Interval and that it not be closer than 660 feet from the outer boundary of the 960-acre drilling and spacing unit.

13. The Board voted unanimously to approve the Amended Request, as modified based on the recommendation by the Division regarding the creation of temporary drilling and spacing units for horizontal wells in the lands in the subject Sections which are not included in the proposed 960-acre spacing and drilling unit, should such lands be excluded from the Threemile Unit.

CONCLUSIONS OF LAW

1. Due and regular notice of the time, place, and purposes of the Board's regularly scheduled October 28, 2009 hearing was given to all interested parties in the form and manner and within the time required by law and the rules and regulations of the Board. Due and regular notice of the filing of the Amended Request was given to all interested parties in the form and manner required by law and the rules and regulations of the Board.

2. Pursuant to Sections 40-6-5 and 40-6-6 of the Utah Code Annotated, the Board has jurisdiction over all of the interested parties and the subject matter of the Amended Request, and has the power and authority to make and issue the order herein set forth.

3. Good cause appears to grant the Amended Request regarding establishing a 960-acre drilling and spacing unit for the Spaced Interval beneath the Subject Lands.

4. Establishing a 960-acre drilling and spacing unit within the Subject Lands as provided in the Amended Request is just and reasonable and will allow for the orderly development of the Spaced Interval within the Subject Lands, prevent waste, adequately protect the correlative rights of all affected parties, promote the public interest, and increase the ultimate recovery of hydrocarbons from the Subject Lands.

5. Declaring the Threemile #43-18H Well as the authorized well for the drilling and spacing unit within the Subject Lands is just and reasonable under the circumstances.

6. The requested set-off limitations of 1,320 feet from a well completed and producing from the Spaced Interval and 660 feet from a drilling unit boundary are just and reasonable under the circumstances and will protect correlative rights.

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

ORDER

Based upon the Amended Request, the testimony and evidence submitted and entered at the October 28, 2009 hearing and the findings of fact and conclusions of law as stated above, it is therefore ordered that:

1. The Amended Request in this Cause is granted.
2. A 960-acre drilling and spacing unit for the production of oil, gas, and other hydrocarbons from the Spaced Interval defined as follows:

The Cane Creek "B" interval in the Cane Creek formation as identified by the neutron-density log in the vertical pilot hole of the Threemile #43-18H Well located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 18, Township 29 South, Range 22 East, San Juan County, Utah, with the top of the spaced interval being found

at a measured depth of 7,591 feet (1,627 feet subsea) and the base of the spaced interval being found at a measured depth of 7,621 feet (1,657 feet subsea) or to the stratigraphic equivalent thereof.

for the following described lands:

Township 29 South, Range 22 East, S.L.M.

Section 7: E $\frac{1}{2}$
Section 8: W $\frac{1}{2}$ W $\frac{1}{2}$
Section 17: W $\frac{1}{2}$ W $\frac{1}{2}$
Section 18: E $\frac{1}{2}$

is hereby established.

3. The drilling and spacing unit shall be comprised of the Subject Lands and the producing interval for the authorized well for such unit shall be located no closer than 1,320 feet from other wells completed in and producing from the Spaced Interval and no closer than 660 feet from the outer boundary of the 960-acre drilling and spacing unit, unless otherwise permitted by administrative action approved by the Division according to U.A.C. Rule R649-3-3.

4. The Threemile #43-18H Well is hereby designated as the authorized well for the drilling and spacing unit established herein.

5. In the event that those portions of subject Sections 7, 8, 17, and 18 which are not included in the 960-acre drilling and spacing unit as established herein are excluded from the Threemile Unit, temporary drilling and spacing units for horizontal wells in the Spaced Interval (as defined herein) shall be created as follows:

(a) A 640-acre temporary drilling and spacing unit comprising the following lands:

Township 29 South, Range 22 East, S.L.M.

Section 7: W $\frac{1}{2}$
Section 18: W $\frac{1}{2}$

(containing 640 acres, more or less); and

(b) A 960-acre temporary drilling and spacing unit comprising the following lands:

Township 29 South, Range 22 East, S.L.M.

Section 8: E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$

Section 17: E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$

(containing 960 acres, more or less)

shall be established. The Board's existing location and siting rule (U.A.C. Rule R649-3-2) shall govern the setbacks from other wells in the Spaced Interval and the siting of vertical wells within the temporary drilling and spacing units described herein.

6. Pursuant to U.A.C. Rule R641 and Utah Code Ann. §§ 63G-4-204 to -208, the Board has considered and decided this matter as a formal adjudication.

7. This Findings of Fact, Conclusions of Law, and Order ("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 Utah Administrative Procedures Act, Utah Code Ann. § 63G-4-208 and U.A.C. Rule R641-109.

8. Notice re Right to Seek Judicial Review by the Utah Supreme Court or to Request Board Reconsideration: 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 is 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. The Utah Administrative Procedures Act provides:

(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 Administrative 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 that month.

Id. See Utah Administrative Code 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 Administrative Code 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.

9. 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.

10. 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 23 day of November, 2009.

STATE OF UTAH
BOARD OF OIL, GAS AND 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. 2009-16, Cause No. 166-03 to be mailed with postage prepaid, this 24th day of November, to the following:

Thomas W. Clawson
Vancott, Bagley, Cornwall & McCarthy
Attorneys for Petitioner
36 South State Street, Suite 1900
Salt Lake City, Utah 84111
[Via Email]

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]

Steven F. Alder
Fred Donaldson
Assistant Attorneys General
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 300
Salt Lake City, UT 84116
(Via Email)

Whiting Oil and Gas Corporation
Chris A. Potter
1700 Broadway, Suite 2300
Denver, CO 80290-2300

Equity Oil Company
Attn: David M. Seery
1700 Broadway, Suite 2300
Denver, CO 80290

Ramshorn Investments, Inc.
Attn: Beatrice Pierson
515 W. Greens Road, Suite 6000
Houston, TX 77067-4625

Halliburton Energy Services, Inc.
Attn: John Fallon
P O Box 42806
Houston, TX 77242

Pamco Investments Corp
Attn: Al Powell
7112 W. Jefferson Avenue, Suite 105
Denver, CO 80235

Headington Oil Company, LLC
Attn: Daniel T. Brewer
7557 Rambler Road, Suite 1100
Dallas, TX 75231

Evertson Energy Partners, LLC
Attn: Candy Bussinger
P O Box 397
Kimball, NE 69145

Hugh E. Harvey, Jr.
700 17th Street, Suite 1700
Denver, CO 80202
[UNDELIVERABLE 10/19/09]

Fairway Asset Management LLC
475 17th Street, Suite 1390
Denver, CO 80202

Robert P. Jornayvaz, III
700 17th Street, Suite 1700
Denver, CO 80202

Kyle R. Miller
475 17th Street, Suite 1200
Denver, CO 80202

Intrepid Oil & Gas, LLC
700 17th Street, Suite 1700
Denver, CO 80202

John E. Dyer
475 17th Street, Suite 1200
Denver, CO 80202

Aspect Resources, LLC
1775 Sherman Street, Suite 2400
Denver, CO 80203

Canyon Energy, LLC
c/o Frontier Enterprises, LLC
302 Merchants Walk, Suite 250
Tuscaloosa, AL 35406

Bureau of Land Management
Attn: Becky J. Hammond
440 West 200 South, Suite 500
Salt Lake City, UT 84101

Bureau of Land Management
Moab Field Office
Attn: Lynn Jackson
82 East Dogwood
Moab, UT 84532


Maurice B. Budge

FILED

SEP 23 2009

BEFORE THE BOARD OF OIL, GAS AND MINING

SECRETARY, BOARD OF
OIL, GAS & MINING

DEPARTMENT OF NATURAL RESOURCES

STATE OF UTAH

IN THE MATTER OF THE REQUEST)
 FOR AGENCY ACTION OF WHITING)
 OIL AND GAS CORPORATION FOR)
 AN ORDER ESTABLISHING A 960-)
 ACRE DRILLING AND SPACING)
 UNIT FOR A HORIZONTAL WELL IN)
 THE CANE CREEK FORMATION AND)
 THE PRODUCTION OF OIL, GAS,)
 AND OTHER HYDROCARBONS)
 FROM SAID FORMATION IN)
 SECTIONS 7, 8, 17, AND 18,)
 TOWNSHIP 29 SOUTH, RANGE 22)
 EAST, S.L.M., SAN JUAN COUNTY,)
 UTAH)

**ORDER GRANTING
 MOTION TO FILE AMENDED
 REQUEST FOR
 AGENCY ACTION**

Docket No. 2009-016
 Cause No. 166-03

The Utah Board of Oil, Gas and Mining, having fully considered Whiting Oil and Gas Corporation's Motion to File Amended Request for Agency Action (the "Motion"), and the grounds and reasons provided therefore, and good cause appearing, hereby enters its Order granting the Motion and allowing the filing of the Amended Request for Agency Action.

Issued this 23 day of September, 2009.

STATE OF UTAH
 BOARD OF OIL, GAS AND MINING

By: Douglas E. Johnson
 Douglas E. Johnson, Chairman

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing ORDER GRANTING AMENDED REQUEST FOR AGENCY ACTION for Docket No. 2009-16, Cause No. 166-03 to be mailed with postage prepaid, this 24th day of September, to the following:

Thomas W. Clawson
Vancott, Bagley, Cornwall & McCarthy
Attorneys for Petitioner
36 South State Street, Suite 1900
Salt Lake City, Utah 84111
[Via Email]

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]

Steven F. Alder
Fred Donaldson
Assistant Attorneys General
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 300
Salt Lake City, UT 84116
(Via Email)

Whiting Oil and Gas Corporation
Chris A. Potter
1700 Broadway, Suite 2300
Denver, CO 80290-2300

Equity Oil Company
Attn: David M. Seery
1700 Broadway, Suite 2300
Denver, CO 80290

Ramshorn Investments, Inc.
Attn: Beatrice Pierson
515 W. Greens Road, Suite 6000
Houston, TX 77067-4625

Halliburton Energy Services, Inc.
Attn: John Fallon
P O Box 42806
Houston, TX 77242

Pamco Investments Corp
Attn: Al Powell
7112 W. Jefferson Avenue, Suite 105
Denver, CO 80235

Headington Oil Company, LLC
Attn: Daniel T. Brewer
7557 Rambler Road, Suite 1100
Dallas, TX 75231

Evertson Energy Partners, LLC
Attn: Candy Bussinger
P O Box 397
Kimball, NE 69145

Hugh E. Harvey, Jr.
700 17th Street, Suite 1700
Denver, CO 80202

Fairway Asset Management LLC
475 17th Street, Suite 1390
Denver, CO 80202

Robert P. Jornayvaz, III
700 17th Street, Suite 1700
Denver, CO 80202

Kyle R. Miller
475 17th Street, Suite 1200
Denver, CO 80202

Intrepid Oil & Gas, LLC
700 17th Street, Suite 1700
Denver, CO 80202

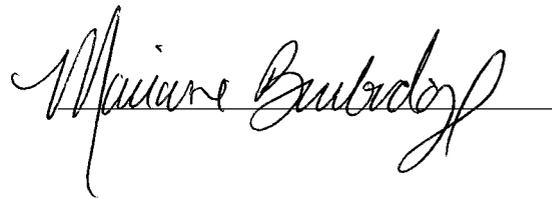
John E. Dyer
475 17th Street, Suite 1200
Denver, CO 80202

Aspect Resources, LLC
1775 Sherman Street, Suite 2400
Denver, CO 80203

Canyon Energy, LLC
c/o Frontier Enterprises, LLC
302 Merchants Walk, Suite 250
Tuscaloosa, AL 35406

Bureau of Land Management
Attn: Becky J. Hammond
440 West 200 South, Suite 500
Salt Lake City, UT 84101

Bureau of Land Management
Moab Field Office
Attn: Lynn Jackson
82 East Dogwood
Moab, UT 84532

A handwritten signature in cursive script, reading "Marianne Buttrick", is written over a horizontal line.