# **Burlington Compliance Process**

# **Resource Assessment Management (RAM Team)**

 Add step in inactive well process to look at existing plans to determine/verify recompletion opportunity; Have requested a link from the PROD database to PLAT (geographic information system) to aide in the project plan identification

# **Inventory Management (IM Team Land)**

- Will include unit letter of parent well on infill well releases
- Develop a report/process to identify project approvals where existing project release may already be in progress utilization of Asset Ownership (AO) data base approval date
- Utilize PLAT as a release resource utilizing AO data

# **Project Development Team (PDT Land)**

- Will verify 1st legal unit letter choice for all new projects
- When a survey location is changed in the field, PDT Land will verify that new location is legal
- Add check within release process (AO data base) to determine whether a recompletion in same formation exists or not

## **IM/PDT Land:**

 Will update AO to ensure that both surface and bottom hole locations are populated for all wells

### **Construction:**

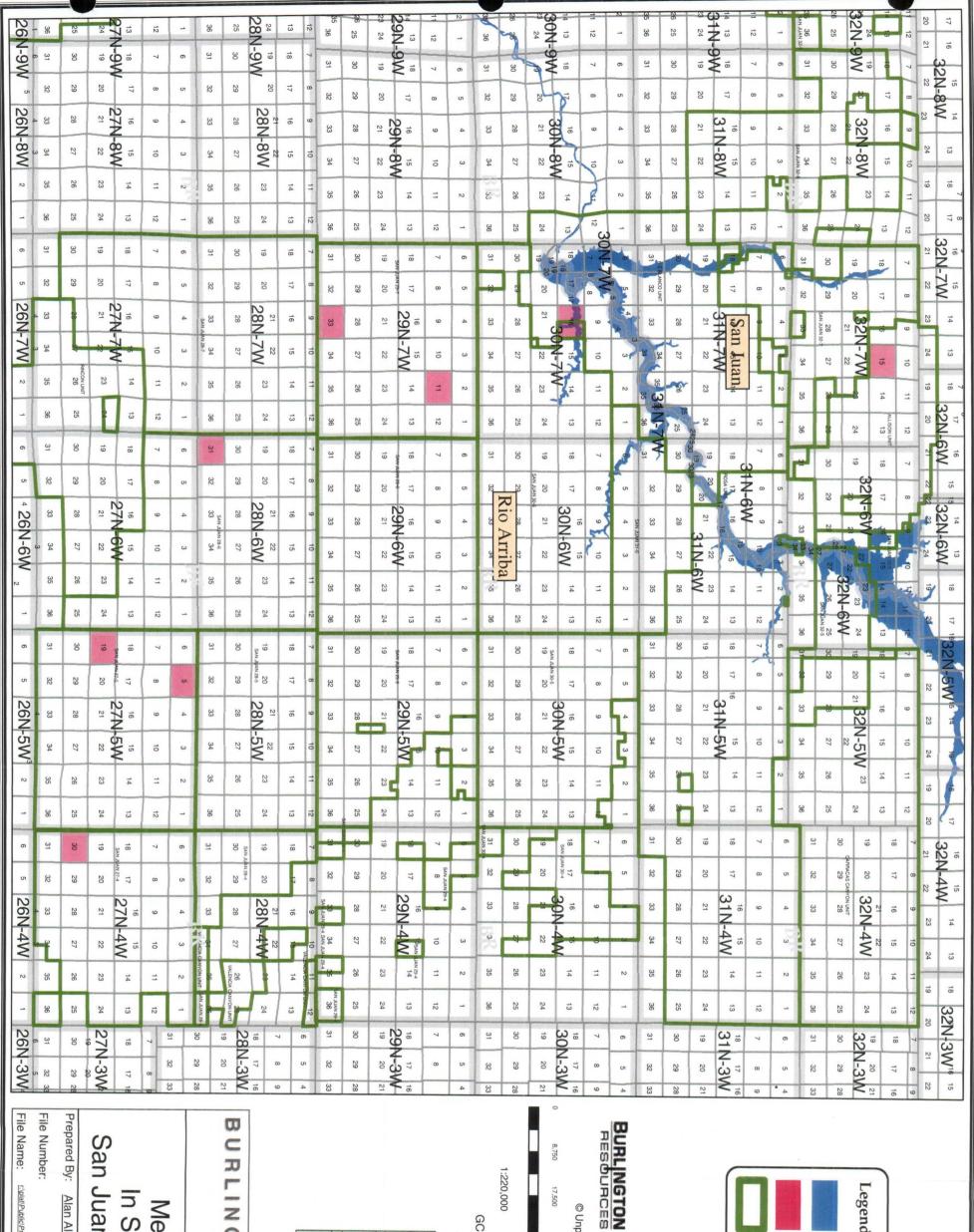
 Surveyors will be last line of defense for determining whether projects in same formation exist in current proposed quarter/quarter; Any change of location shall be communicated to PDT Land for new location legal review.

# Regulatory:

 Cursory review of existing formations during the nine section map (required for APD) creation to look for existing formations in same quarter/quarter or quarter section; Will utilize AO versus P2000 (Petroleum Information/Dwights data base) data in map creation

# Status Of Search Efforts For Additional Wells In Same Quarter Quarter

- Mesaverde formation wells search has been completed using visual and manual efforts.
- Dakota formation well search has not been completed as of March 16, 2006.
- Burlington is currently developing a GIS (geographic information system) based search program to identify potential wells that are not in compliance with the special pool rules that have quarter quarter density limitations. This program should allow "on demand" searches at any time in the future. Testing on this program should be completed by April 15, 2006.





U.S. Water Bodies (SJD)

San Juan Federal Units Sections\_Multiple\_MV\_Wells





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35,000

Feet

GCS North American 1927

1 " equals 18,333 '



# URLINGTON RESOURCES

San Juan

San Juan and Rio Arriba Co. In Same QTR QTR Mesaverde Wells

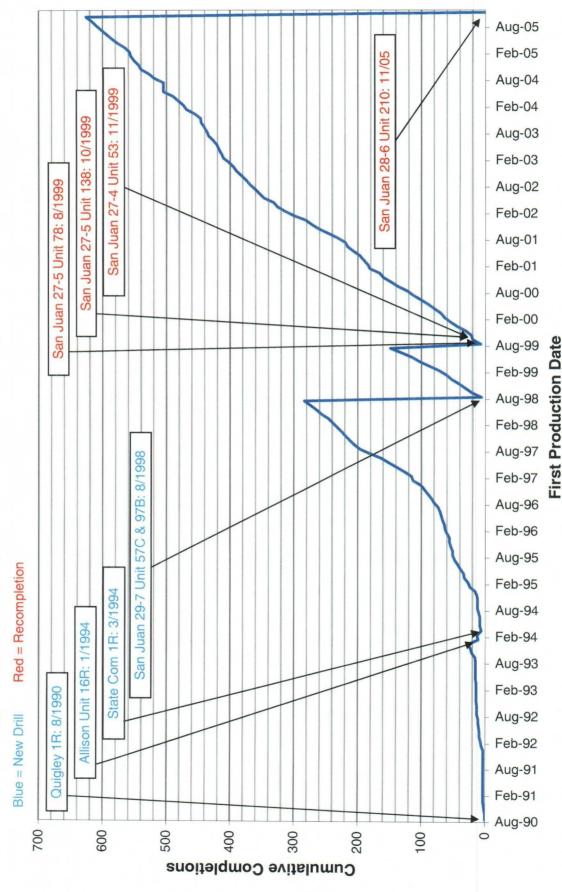
Prepared By: Alan Alexander Revised Date: 3/9/2006 3/9/2006

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# MV Wells In Same QTR QTR

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Burlington Resources-Operated Mesaverde Completions Between Offenses



# The Criteria Adopted By The Division In The BP America's Case No. 13483, Order No. R-12385

- (1) the wells in the same 40-acre tract are at "standard" locations in relations to the outer boundaries of the 320-acre GPU and do not encroached upon any surrounding spacing units,
- (2) both wells were classified as "low-productivity" wells and were not capable of producing more than 150 mcfpd at the existing line pressures.
- (3) The two wells did not appear to interfere with each other based upon decline curve analysis.
- (4) The two wells appeared to produce "unique" reserves.
- (5) BP had no plans to produced more and the maximum of four (4) Mesaverde gas wells in its GPU
- (6) There were no objections or opposition to allowing BP to continue producing both wells in the same quarter quarter.

# ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

**CASE NO. 13483 ORDER NO. R-12385** 

APPLICATION OF BP AMERICA, INC. FOR AN EXCEPTION TO THE WELL DENSITY REQUIREMENTS FOR THE BLANCO-MESAVERDE GAS POOL, SAN JUAN COUNTY, NEW MEXICO.

# **ORDER OF THE DIVISION**

# **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on May 19, 2005, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 8<sup>th</sup> day of July, 2005, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

# **FINDS THAT:**

- (1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, BP America, Inc. ("BP"), seeks an exception to the well density provisions of the Special Rules and Regulations of the Blanco-Mesaverde Prorated Gas Pool and approval for the following two gas wells to simultaneously produce in the same quarter-quarter (SE/4 NE/4 or Unit H) within an existing standard 320-acre spacing and proration unit consisting of the E/2 of Section 28, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico, for production from the Mesaverde formation, Blanco-Mesaverde Prorated Gas Pool (72319):
  - (a) Holmberg Gas Com Well No. 1R (API No. 30-045-29299) located at a surface location 990 feet from the North line and 1,710 feet from the East line (Unit B) and drilled as a high angle well to a bottom hole location 1,847 feet from the North line, and 823 feet from the East line, Unit H of Section 28; and the
  - (b) Holmberg Gas Com Well No. 1B (API No. 30-045-30270) located 2,200 from the North line, and 1,220 from the East line, Unit H of Section 28.

(3) Spacing and location of wells within the Blanco-Mesaverde Prorated Gas Pool, are governed by the Special Rules and Regulations as detailed in Division Order No. R-10987-A(1) effective December 2, 2002, which read in part as follows:

# /. ACREAGE AND WELL LOCATION REQUIREMENTS

A. Standard GPU (Gas Proration Unit): A standard GPU in the Blanco-Mesaverde Pool shall be 320 acres, more or less, comprising any two contiguous quarter sections of a single section that is a legal subdivision of the U. S. Public Land Surveys.

# B. Well density:

- (1) Up to four (4) wells may be drilled on a standard GPU, as follows:
  - (a) the FIRST OPTIONAL INFILL WELL drilled on a GPU shall be located in the quarter section not containing the INITIAL Mesaverde well;
  - (b) the SECOND OPTIONAL INFILL WELL drilled on a GPU shall be located in a quarter-quarter section not containing a Mesaverde well and within a quarter section not containing more than one (1) Mesaverde well;
  - (c) the THIRD OPTIONAL INFILL WELL drilled on a GPU shall be located in a quarter-quarter section not containing a Mesaverde well and within a quarter section not containing more than one (1) Mesaverde well;
  - (d) at the discretion of the operator, the second or third optional infill well may be drilled prior to the drilling of the first optional infill well;
  - (e) no more than two wells shall be located within either quarter section in a GPU; and
  - (f) any deviation from the above-described well density requirements shall be authorized only after hearing.

- (4) The applicant presented testimony at the hearing from a petroleum engineer as follows:
  - (a) The first well drilled inside this spacing unit was the Holmberg Gas Com Well No. 1 which was drilled in Unit B and has since been abandoned.
  - (b) The first infill well was the Holmberg South Gas Com Well No. 1A drilled in Unit P.
  - (c) The Holmberg Gas Com Well No. 1R with a surface location in Unit B was drilled by Amoco in 1995 as a high angle S-shaped wellbore in order to encounter fractures or otherwise encounter better quality reservoir. After drilling, the surveys show that the producing bottom hole location is actually in Unit H.
  - (d) In 2001, BP drilled the Holmberg Gas Com Well No. 1B as a vertical well within Unit H, without realizing that the actual bottom hole location for the No. 1R well was also within Unit H.
  - (e) In early 2005, after realizing that two wells were producing from Unit H, the No. 1B well was shut-in and remains shut-in pending the outcome of this application for an exception to the density rules.
  - (f) These well locations are "standard" and do not encroach on any surrounding spacing unit.
  - (g) Notice was provided to all working interest owners within surrounding BP operated spacing units as well as to Burlington who operates a spacing unit to the Northwest.
  - (h) Both wells producing from Unit H are marginal, low productivity wells and both are capable of producing no more than 150 Mcfpd at the existing line pressures.
- (i) The two Unit H wells do not appear to be interfering with one another.
  - (j) BP has no plans to produce more than the maximum of four Mesaverde wells in this spacing and proration unit.

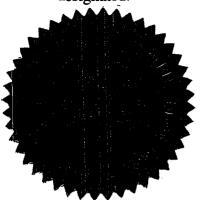
- (5) No other party entered an appearance in this case or otherwise opposed this application.
- (6) Allowing both of these two marginal wells as located within the same quarter-quarter section to simultaneously produce will prevent waste and protect correlative rights.
  - (7) This application should be approved.

# IT IS THEREFORE ORDERED THAT:

- (1) The applicant, BP America, Inc. ("BP"), is hereby granted an exception to the well density provisions of the Special Rules and Regulations of the Blanco-Mesaverde Prorated Gas Pool (72319) as promulgated by Division Order No. R-10987-A(1) and allowed to produce two wells within the same quarter-quarter section. The following two gas wells are approved to simultaneously produce from the Mesaverde within an existing standard 320-acre spacing and proration unit consisting of the E/2 of Section 28, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico:
  - (a) Holmberg Gas Com Well No. 1R (API No. 30-045-29299) located at a bottom hole location (within Unit H), 1,847 feet from the North line, and 823 feet from the East line of Section 28; and the
  - (b) Holmberg Gas Com Well No. 1B (API No. 30-045-30270) located (within Unit H), 2,200 from the North line, and 1,220 from the East line of Section 28.
- (2) Jurisdiction is hereby retained for the entry of such further orders, as the Division may deem necessary.

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

designated.



SEAL

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.

Director

# **Evaluation Criteria**

- Are all non-complying wells located at standard locations within the spacing units?
- Are more than four (4) wells currently producing in the spacing unit?
- Have offset operators/working interest been notified and were any objections received?
- Are additional wells planned to be drilled in the spacing units that could exceed the maximum allowed four (4) wells per spacing unit?
- Is there any discernable interference between the wells that are in non-compliance and will incremental reserves be obtained if both wells continue to produce?
- Will the no-flow boundary between non-complying wells and offset wells extend beyond areas of common interest?