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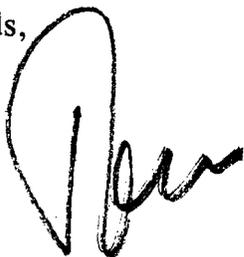
REF: NMOCD Case 12734
Richardson application to establish a
special "Infill Well Area"
Basin Fruitland Coal Gas Pool

Dear Jim:

Attached are copies of SJCC Exhibit 15 (Wommer) and Exhibit 16 (Bertoglio) which Richardson contends are not accurate summaries of their testimony at the Examiner hearing held on November 13-14.

I have indicated in the margin those items to which Richardson takes exception.

Regards,

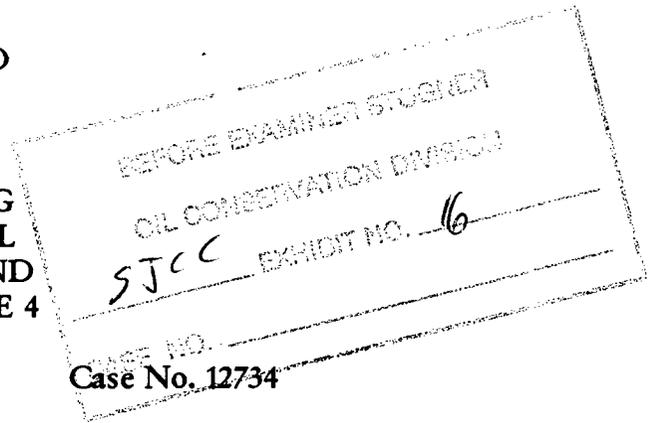


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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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

APPLICATION OF RICHARDSON OPERATING
COMPANY TO ESTABLISH A SPECIAL "INFILL
WELL" AREA WITHIN THE BASIN-FRUITLAND
COAL GAS POOL AS AN EXCEPTION TO RULE 4
OF THE SPECIAL RULES FOR THIS POOL,
SAN JUAN COUNTY, NEW MEXICO.



SUMMARY OF TESTIMONY OF PAUL C. BERTOGLIO

My name is Paul Bertoglio. I am a licensed professional engineer with training and experience in evaluating coal bed methane reserves. I graduated from Montana College of Mineral Science and Technology with a Bachelor of Science degree in Petroleum Engineering. Since that time I have developed expertise in many facets of petroleum engineering, include reservoir engineering. I have over twenty years of broad experience in the oil and gas industry, and approximately fifteen years of that experience has focused on the San Juan Basin. I have specific experience with evaluation of gas reserves in the San Juan Basin, including coal seam gas.

Starting in November 1996, on behalf of San Juan Coal Company, I began evaluating oil and gas interests in the area of San Juan Coal Company's underground mine. The interests I evaluated include those of Richardson Operating Company ("Richardson"). The evaluation is ongoing. I have evaluated well production histories, potentially economic producing formations, coal bed reservoir engineering, and BLM's February 2000 Maximum Economic Recovery Report, San Juan Mine Lease By Application - NM9914 ("BLM Report").

*No
Testimony*

Although oil and gas leases now held by Richardson on the lands of San Juan Coal Company's two underground coal leases were leased many years ago, they have produced relatively small amounts of gas. In the entire Deep Lease and Deep Lease Extension, approximately 2,614,200 mcf of gas and 76,400 barrels of oil as of July 1, 2001.

The BLM Report indicates recoverable gas reserves of 36,843,839 mcf on San Juan Coal Company's Deep Lease and Deep Lease Extension. (BLM Report, Appendix 4, Ex. 7). At an average price (used in BLM Report) of \$2.25 per mcf at the well, the royalty value of 1/8 of this production would be \$10,362,330.

The BLM Report's estimate of recoverable gas reserves overstates actual recoverable reserves. This overstatement in part results from the BLM Report's erroneous assumption (inherent in BLM's use of the Langmuir absorption isotherm) that the coal on San Juan Coal Company's two underground leases is saturated with gas. It is not. Core tests from coal in and near the San Juan Coal Company mine area shows that the coal there is undersaturated with gas. Also, the BLM's blanket use of an 80% recovery factor overstates the reserves.

Correction of erroneous assumptions in the BLM Report shows substantially less recoverable gas reserves. By correcting the assumptions in the BLM Report that coal is saturated and the recovery factor is 80%, the BLM Report's estimate of recoverable gas reserves would be reduced by approximately 60% to 90%, depending upon abandonment pressure. Of course, this reduction would create a corresponding reduction in the royalty stream.

The location of the mine leases and vicinity, is clearly outside of the higher producing gas zones in the San Juan Basin known as the "fairway". Production from these wells on average cannot be expected to be nearly what wells in the fairway would be. Not only is this area well outside of the fairway, based upon my review of existing data, I have significant doubt that the coal bed methane reserves in Sections 13, 14, 23, 24, 25, 26 and 35, Township 30 North Range 15 West NMPM of San Juan County Company's Deep Lease can be economically developed.

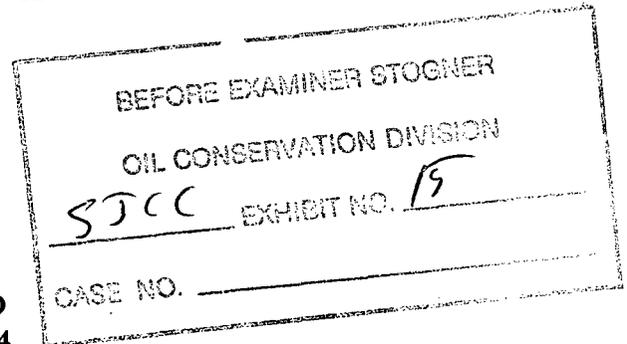
It is unnecessary to accelerate the development of production of gas from many of Richardson's wells in order to deplete the natural gas resources before mining operations reach them. Particularly in portions of the Deep Lease Extension and areas outside the Deep Lease Extension to the east, most of the natural gas resource that would be affected by the mining operations would already be produced. The area of Richardson's application is therefore overbroad. The application is premature.

Richardson is likely already producing on a 160 acre spacing basis with certain Pictured Cliffs wells. His Pictured Cliffs wells are likely fracing the coal bed. He is effectively taking coal bed methane gas from the pictured cliff wells.

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**APPLICATION OF RICHARDSON OPERATING
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SAN JUAN COUNTY, NEW MEXICO.**



Case No. 12734

SUMMARY OF TESTIMONY OF LYNN WOOMER

I am Lynn Woomer, technical services coordinator for San Juan Coal Company. For many years I have worked in the mining industry with particular expertise and experience in coal mine reclamation and environmental permitting. I have a Bachelor of Science degree in Forestry and a Master of Science degree in Forestry with an emphasis in soil science and mine reclamation. For thirteen years I worked in state government with much of my time during that period devoted to coal mine reclamation and environmental permitting. I have been employed by BHP (now BHP Billiton) for six years. During that time, I worked on obtaining the permit from the New Mexico Energy, Minerals and Natural Resources Department for the San Juan pilot underground mine project, and I have been involved with permitting and development of the San Juan underground mine. I have general familiarity with development of the underground mine and the conflict between development of the underground coal reserve and gas wells in the vicinity.

Since the early 1980's, San Juan Coal Company has operated a mine to mouth coal mine to supply to the San Juan Generating Station, a power plant operated by Public Service Company of New Mexico. Operations are about sixteen miles east of Farmington, New Mexico. A long term contract between SJCC and owners of the San Juan Generating Station provides for annual purchases of coal. The contract for coal from the underground mine extends to 2017. The San Juan Generating Station is the second largest power plant in New Mexico, and it is the essential source of much electricity distributed in New Mexico, Arizona and elsewhere. Until now, San Juan Mine has operated a surface coal mine and, in recent times, has mined approximately 3 to 4 million tons per year or more to supply San Juan Generating Station. In addition, San Juan Coal Company has been mining coal from surface operations at La Plata mine north of San Juan mine to supply to San Juan Generating Station for an average total of 6.5 million tons per year. A substantial payroll, royalties, and taxes, in addition to those at San Juan Mine, are generated by San Juan Coal Company's operations at La Plata Mine.

In 1980, shortly before San Juan Coal Company began mining the surface deposit at San Juan Mine, known as the "Deep Lease" underground lease was acquired by Western Coal Company; the Deep Lease adjoins the eastern boundary of San Juan Coal Company's surface mine. Later in 2001, San Juan Coal Company acquired the Deep Lease Extension.

In about 1997, San Juan Coal Company began to explore for coal to the east of the Deep Lease to learn more about the coal deposits within the Deep Lease Extension. Concluding that there were good coal reserves to the east of the Deep Lease, San Juan Coal Company set out to investigate the development of an underground mine that would include the Deep Lease and acquisition of the lands within the Deep Lease Extension.

In the late 1990s, San Juan Coal Company began development of an underground mine to replace surface operations at San Juan and La Plata Mines as the source of coal supply to San Juan Generating Station. Shallow reserves at San Juan and La Plata Mines were dwindling and the coal deposit at San Juan Mine was becoming too deep to economically mine with a surface operation. Development of an underground mine by long wall mining method was chosen by San Juan Coal Company to replace existing surface mines to supply coal to the San Juan Generating Station. San Juan Coal Company received its permit revision 99-01 formalizing approval of the new underground mine from New Mexico Energy, Minerals and Natural Resources Department, Mining and Minerals Division on October 22, 1999. In 1997, San Juan Coal Company began development of a pilot underground mine. It was located near the southwest corner of the Deep Lease and was developed to investigate the feasibility of a broader underground mine there. The results of the pilot project were positive, and San Juan Coal Company decided to proceed to develop an underground mine.

On February 6, 2001 San Juan Coal Company acquired the coal lease from the United States Bureau of Land Management the Deep Lease Extension, affective March 1, 2001. The Deep Lease Extension was acquired to compliment the Deep Lease and allow for mining well into the future. Two State Sections - one in the Deep Lease and one in the Deep Lease Extension - are also in the mine plan.

The San Juan Coal Company mine plan is designed so that mining occurs in a sequence that begins in the west of the mine permit area and proceeds to the east. Underground mining on the Deep Lease has commenced, but estimates of mining plans indicate that it will not be until 2005 that mining on the Deep Lease reaches its eastern boundary, and the Deep Lease Extension mining will begin. The mine will develop one coal seam, the Number 8 seam, but one other seam exists above and below.

San Juan Coal Company is in the process of securing a license from the BLM to explore for coal to the east of the Deep Lease Extension. On August 31, 2001 it filed with the BLM an application for a coal exploration license. The license is expected to be issued in December 2001.

The size of the proposed underground mine is very substantial, with related great benefit to state and local economies. The mine plan for San Juan Coal Company's

underground operations estimates a 114 million ton coal reserve. Development of the underground mine involves initial capital investment of approximately \$146 million, with additional capital requirements over time. San Juan Coal Company has already commenced construction of the underground mine and has invested over \$130 million in the mine. It plans to employ over 300 people in the underground mine in associated surface operations when in full production.

The underground mine will provide tremendous benefits to the State of New Mexico in its royalty stream. San Juan Mine promises to be one of the largest underground coal mines in the west. Approximately 100 million tons will be mined during the current contract with the owners of San Juan Generating Station through 2017. I estimate that these tons will yield approximately \$250 million in royalty based upon an 8% royalty rate for underground operations described in SJCC's two Federal Coal Leases. One half of this \$250 million is earmarked for the State of New Mexico. The long term coal contract with San Juan Generating Station gives greater assurance to the State of New Mexico for a long term royalty stream beyond 2017.

I have been involved in coordination with BLM and oil gas operators to try to resolve problems arising from the existence of gas wells and the coal lease. There are numerous existing wells on the Deep Lease and the Deep Lease Extension that San Juan Coal Company will be mining for coal. Until recently - - this summer - - SJCC thought that a good solution to a conflict between coal development and coal bed methane development was for the coal bed methane development to occur first, in advance of mining. The San Juan Coal Company's mine plan was such that it would not be mining much of the underground areas until many years hence. It appeared to San Juan Coal Company that there was ample time for mining to proceed in advance and coal could follow mining.

In the late summer of this year, San Juan Coal Company's views about the feasibility of mining occurring after gas development changed. Jacques Abrahamse, a ventilation engineer with substantial experience in evaluation of explosivity potential and preventing spontaneous combustion in other underground mines joined San Juan Coal Company staff this summer. When he evaluated the mine plan, he concluded that gas development well in advance of coal mining would pose significant safety risk to underground miners and risk to the viability of the coal mine itself. I advised Mr. Richardson of this view well in advance of his September 11 filing. I stated these concerns in my August 31 letter to BLM. As explained in greater detail in Mr. Abrahamse's testimony, hydraulic fracturing of the coal seam by coal bed methane wells in advance of coal mining significantly increases the risk of spontaneous combustion and mine fires. Spontaneous combustion events must be avoided because they can cause death and injury to miners. Also, they can cause closure of large parts of or the entire mine. The San Juan Generating Station is depending upon this mine as the source of its coal.

Another problem posed by coal bed methane development is the existence of well casings the coal seam. When wells exist in the coal seam, and are not abandoned with their casings milled out in advance of mining operations, those mining operations must either avoid the wells and large segments of the coal seam around each well. Even if existing wells

are reentered and no new casing is put into the coal seam, the fracturing associated with coal bed methane development of the reentered wells can require mining operations to bypass or take significant mitigative measures to stabilize the fractured areas due to instability problems. The more wells that are drilled, the greater the problem for the coal mine, especially if the location of the wells is in the wrong place in the mine plan. Fracing in the passageways can be particularly dangerous because fractures can cause roof cave ins. Even without cave ins, the cracks can prevent obtaining an adequate seal in the efforts to avoid spontaneous combustion, as described in greater detail by the testimony of Jacques Abrahamse.

These problems and risks posed by fracing in the coal seam put at risk large parts of the coal mine. They may cause large amounts of coal to be bypassed and wasted with the associated loss of royalty to the State of New Mexico. For example, when encountering an existing well bore, San Juan Coal Company could be forced to bypass a rectangular section of coal at least 600 feet long and about 1,000 feet wide. Generally, most mine panels in the mine plan are about 10,000 long, 1,000 wide and 13 feet high or deep. Roughly, this would require 330,000 tons of coal be bypassed per well, and the lost royalty per well would be at an 8% royalty rate would total about \$800,000.

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