CORONADO OIL COMPANY

164 IBLA 309 Decided January 31, 2005

<u>Editor's Note</u>: <u>petition for review</u> <u>filed</u>, Civ. No. 05-CV-111J (D. Wyo. April 2005); <u>aff'd</u> (Aug. 23, 2006); <u>appeal filed</u> No. 06-8083 (10th Cir.), <u>dismissed</u> (settled) (Sept. 14, 2007)

United States Department of the Interior
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Interior Board of Land Appeals
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CORONADO OIL COMPANY

IBLA 2000-360, 2001-8 Decided January 31, 2005

Appeals from two separate decisions of the Wyoming State Office, Bureau of Land Management, the first upholding on State Director Review an order of the Worland Field Office rescinding the approval of a request to shut-in gas wells until a market for the gas was found and requiring that the shut-in wells be placed into continuous production or that reworking or drilling operations to restore production in paying quantities be commenced on the leases, and the second declaring the leases terminated for cessation of production. SDR No. WY-00-17; WYW39695, WYW40507, WYW40953, WYW43204.

IBLA 2000-360 affirmed as modified in part and reversed in part; IBLA 2001-8 vacated.

1. Oil and Gas Leases: Extensions--Oil and Gas Leases: Termination--Oil and Gas Leases: Well Capable of Production

No oil and gas lease in its extended term by reason of production on which there is a well capable of producing oil or gas in paying quantities shall expire unless the lessee is allowed a reasonable time of not less than 60 days after receipt of notice to place the well in a producing status. This notice may be applied to a well that was found by BLM to be capable of production in paying quantities upon completion but that was shut in awaiting a market with the consent of BLM.

2. Oil and Gas Leases: Extensions--Oil and Gas Leases: Termination--Oil and Gas Leases: Well Capable of Production

In order to be considered capable of production in paying quantities, a well must be physically capable of producing a quantity of oil and/or gas sufficient to yield a profit after the payment of all the day-to-day costs incurred in operating the well and marketing the oil or gas. Actual production is not required if production can be obtained, but has not occurred because of a lack of pipelines, roads, or markets for the gas. A BLM decision finding wells not capable of production in paying quantities will be reversed where, although the gas from the wells has never been marketed, unrefuted evidence shows that the wells are capable of producing sufficient gas to yield the requisite profit.

3. Oil and Gas Leases: Extensions--Oil and Gas Leases: Termination--Oil and Gas Leases: Well Capable of Production

A BLM decision rescinding its approval to shut in wells capable of production in paying quantities until a market is found and granting the lessee 60 days to place the wells into production will be affirmed where over 15 years have passed since the approval was granted and the lessee has not presented any evidence documenting past or current attempts to obtain a market for the CO_2 gas from the wells or that potential future markets for the CO_2 are more than speculative.

APPEARANCES: Brent R. Kunz, Esq., and Ian D. Shaw, Esq., Cheyenne, Wyoming, for appellant; Lowell L. Madsen, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Lakewood, Colorado, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE GRANT

Coronado Oil Company (Coronado) has appealed two separate decisions of the Wyoming State Office, Bureau of Land Mangement (BLM). The first decision, issued on July 20, 2000, on State Director Review (SDR WY-00-17) upheld the March 3, 2000, order of the Worland Field Office (WFO), BLM, rescinding its July 27, 1984, approval to shut in wells on leases WYW39695, WYW40507, WYW40953, and WYW43204 and requiring Coronado to place those shut-in wells in continuous production or to commence reworking or drilling operations to restore production in paying quantities. The second decision, dated September 12, 2000, declared the four leases terminated by cessation of production, effective July 20, 2000. By order dated December 19, 2000, the Board consolidated the two appeals and granted Coronado's petition for a stay of the decisions pending review of the appeals. In its Answer, BLM concedes that the September 12, 2000, decision was premature and requests that the Board vacate that decision and address the July 20, 2000, decision. (Answer at 3.) Accordingly, we vacate the September 12, 2000, decision and proceed to review the July 20, 2000, decision on its merits.

BLM issued the leases, which embrace lands in Ts. 51 and 52 N., R. 101 W., 6th principal meridian, Park County, Wyoming, within the Horse Center Field, effective June 1, 1973 (WYW39695), August 1, 1973 (WYW40507), September 1, 1973 (WYW40953), and February 1, 1974 (WYW43204), for a term of 10 years and "so long thereafter as oil or gas is produced in paying quantities." (Lease Terms, sec. 1.) All four leases were assigned to Coronado effective April 1, 1974. The leases were committed to the Horse Center (Deep) Unit and, upon termination of the unit effective August 15, 1983, [1/] the term of the leases was extended until August 15, 1985, and for so long thereafter as oil or gas was produced in paying quantities. See Oct. 3, 1983, Wyoming State Office letter. Coronado completed wells deemed by BLM to be capable of production in paying quantities on each of the leases. See Worland District Office memoranda, received by the Wyoming State Office on Sept. 17, 1984, addressing first production on lease WYW39695 (date of completion Nov. 22, 1974), lease WYW40507 (date of completion Sept. 30, 1982), and lease WYW43204 (date of completion Sept. 30, 1982), and the Worland District Office memorandum, received by the State Office on Apr. 3, 1985, addressing first production for lease WYW40953 (date of completion Mar. 6, 1985).

By letter dated April 12, 1984, BLM notified Coronado that there had been "no activity" on six wells on five leases, including WYW39695, WYW40507, and WYW43204, and requested that the company submit plans to either plug and abandon the wells or resume diligent operations. Coronado responded by letter dated April 27, 1984, noting that the wells on the two leases not at issue in this case had been in regular production and proposing to test the flow capacities of the wells on leases WYW39695, WYW40507, and WYW43204. With respect to the latter leases, Coronado requested that they be classified as "shut-in gas and awaiting a market." After receiving permission from BLM, Coronado tested wells on the three leases. On July 27, 1984, BLM granted approval to classify the gas wells on leases WYW39695, WYW40507, and WYW43204 as "shut-in, awaiting market, subject to

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[1/] While information in the case files regarding this unit is limited, it appears that a wildcat oil well was drilled to a deeper formation than the one intercepted by the shut-in wells and completed as a dry hole. See BLM Memorandum of Aug. 31, 1983, in case file WYW396965.

the following stipulation[]: 1. Shut-in approval will be in effect until a market is found for the gas." (July 27, 1984, approval letter at 1.) [2]

By order dated May 10, 1999, [3] WFO recounted that on July 27, 1984, it had granted Coronado permission to keep the wells on the four leases shut in awaiting a market and a pipeline for the carbon dioxide (CO_2) produced from the leases. [4] BLM explained that, at the time of the approval, it had considered a market for the CO_2 gas for enhanced oil recovery to be possible, but that since that time oil companies in the Big Horn Basin had tried CO_2 enhanced recovery without success. BLM also noted that no pipelines for transporting CO_2 gas to other potential markets were planned near the Horse Center Field where the leases were located. Therefore, BLM rescinded the shut-in well approval granted July 27, 1984, "on the basis that there is no market in the Big Horn Basin for the low pressure CO_2 gas from the Horse Center wells and the wells cannot economically support a dedicated pipeline to transport the CO_2 gas to a market outside the Big Horn Basin. This office does not consider these leases to have a well capable of production in paying quantities while completed as CO_2 gas wells." (May 10, 1999, order at 1.)

Citing the regulation at 43 CFR 3107.2-2, BLM granted Coronado 60 days from receipt of the order to begin reworking or drilling operations to restore production in paying quantities on the leases, adding that the leases would not terminate so long as they contained wells producing continuously in paying quantities or approved operations began within the 60-day period and continued with reasonable diligence until paying production was restored. BLM warned that the leases would automatically terminate if the leases were not producing continuously, a reworking/drilling operation proposal was not submitted and operations started, or a justification that the leases contained wells capable of production in paying quantities was not submitted within the 60-day period.

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[2] Although the July 27, 1984, letter did not address lease WYW40953, the Apr. 2, 1985, memorandum addressing first production on that lease indicated that the well completed Mar. 6, 1985, was capable of production in paying quantities and described the current status of the well on the lease as "Shut-In Awaiting Market."
[3] This order and the subsequent Mar. 3, 2000, order were issued in the form of letters.
[4] Although CO_2 is a nonhydrocarbon gas and is noncombustible, it is embraced within the scope of an oil and gas lease. Robert D. Lanier, 90 IBLA 293, 307-09, 93 I.D. 66, 74-75 (1986), aff'd sub nom. Aulston v. United States, 915 F.2d 584 (10th Cir. 1990), cert. denied, 500 U.S. 916 (1991).

Coronado sought review of WFO's May 10, 1999, order by the Wyoming State Office pursuant to 43 CFR 3165.3(b). Coronado contended that the leases were an integral part of its business plan for the Horse Center Field; that it had spent or caused to be spent over $2.5 million on the leases; that the CO_2 on the leases was valuable for use in a thermal tertiary recovery technique that would enable the production of viscous oil found on the leases and others in the Horse Center and other fields; that there was a market for CO_2 gas in the Big Horn Basin for industrial, medical, and food processing uses; that the market for its CO_2 gas would most likely be local and limited to its own steam drive projects in the area as well as at other low gravity oil wells; and that the compressed gaseous CO_2 would be transported by flow line to the Horse Center producing wells and by truck-trailer to the Red Springs steam drive projects and other wells. See June 8, 1999, request for SDR at 1-4, attached to Coronado's Statement of Reasons (SOR) as Ex. H. Coronado added that it was in the second year of a 3-year review and planning program on both the Horse Center and the Red Springs heavy oil fields and that, upon completion of the review and planning process, it would have all the information necessary to acquire an industry partner for the development of the Horse Center Field heavy oil steam drive project using CO_2 as an adjunct to the steam flooding process to fully develop the primary, secondary, and tertiary oil in place. Id. at 5. Because it needed good title to the leases to accomplish its goals, Coronado requested that the shut-in status of the wells be continued. Id.

Coronado supplemented its initial SDR submission with additional information and arguments, reiterating that it needed clear title to the leases to obtain industry partners to jointly develop the oil and gas resources on the leases using CO_2 for enhanced oil recovery. See SOR Exs. D, I, J, K, L, and M. Coronado asserted that, once development of its Big Horn Basin heavy oil reserves began, the market for its CO_2 would begin, but that it needed to hold the leases based on the continuation of the shut-in status of the wells until that time. (Aug. 16, 1999, letter, SOR Ex. D, at 1-3.) Coronado further maintained that the May 10, 1999, order relied on two faulty premises: First, contrary to BLM's conclusion, the CO_2 enhanced recovery tests concluded in 1997 were designed to gather information and did not disprove the feasibility of using CO_2 for enhanced oil recovery; and second, rather than relying on pipelines to transport the CO_2 as BLM assumed, the Horse Center Field gas would be transported by truck and sold and used within the Big Horn Basin, which fact negated concerns regarding low well pressure. (Aug. 19, 1999, letter, SOR Ex. I, at 1-2.) Coronado maintained that the leases contained CO_2 wells capable of production in paying quantities whenever the market demand dictated and that BLM's order created economic waste of the resource by terminating the leases and requiring plugging the wells. Id. at 2. Coronado also made an oral presentation to the State Director on August 20, 1999, and provided written supplemental responses to questions asked during that presentation. See Aug. 30, 1999, letter, SOR Ex. N.

By decision dated September 17, 1999, the BLM Deputy State Director, Minerals and Lands, affirmed WFO's May 10, 1999, order as modified. He noted that Coronado, at its oral presentation, had presented an affidavit stating that the wells could be economically produced if the CO_2 was compressed and trucked to Thermopolis, Wyoming, and that it had also furnished documents "indicating the potential for heavy oil recovery and the potential for reserves lying deeper in the sub-structure." (Sept. 17, 1999, SDR decision at 2.) Observing that Coronado had not submitted any evidence of actual production from either the heavy oil or deeper strata and finding that the Mineral Leasing Act requires a well that is actually capable of production to hold a lease, he dismissed the latter argument as insufficient to show a lease well capable of actual production. Regarding the CO_2 gas wells on the leases, he concluded that, even though the wells had been tested in the past, it was not unreasonable for WFO to question the wells' productivity in light of the corrosive nature of CO_2 gas and the extended time the leases had been shut in. Id. at 2. [5/]

Accordingly, the Deputy State Director affirmed WFO's May 10, 1999, order subject to the following modifications:

> Coronado shall test the wells on the leases in question with a methodology approved and witnessed by [WFO] to certify their capability of sustained production in paying quantities assuming the compression and trucking scenario is employed to market the CO_2. This shall be accomplished within 45 days of receipt of this decision, since 15 days of the original 60 day period directed in the May 10, 1999, order had elapsed before the request for [SDR] was received. Further, if the wells are determined to be capable of production in paying quantities, reasonable diligence (to the satisfaction of [WFO]) shall be shown by Coronado in bringing these leases into actual production, the practicality of which was disclosed in the affidavit furnished by Coronado.

Id. at 2. Thus, assuming the wells were determined to be capable of production in paying quantities upon testing, Coronado was required to exercise reasonable diligence to bring the leases into actual production.

[5/] He further found that allowing the leases to be held indefinitely by wells purportedly capable of production contravened both the public interest and the Mineral Leasing Act, especially given Coronado's lack of diligence in bringing the leases into production and BLM's obligation to require the prompt plugging and abandonment of wells which had never and probably never would produce. Id. at 2.

Coronado conducted the required tests on November 8-11, 1999. See SOR at 11-12; see also Oct. 28, 1999, BLM letter establishing testing parameters. By order dated March 3, 2000, WFO again concluded that the leases had no wells capable of production in paying quantities. According to BLM, the well retesting allowed by the SDR indicated that the wells were producing approximately the same amount of gas as before at a flow pressure of between 40 and 75 psi and that hydrogen sulfide (H_2S) gas in concentration of over 130 ppm had been detected during each flow test which added to the costs of making the CO_2 gas marketable. (Mar. 3, 2000, order at 1.) BLM addressed two possible scenarios for the CO_2 gas based on Coronado's request for SDR:

> Scenario 1 has the CO_2 valued at $.40/mcf at the wellhead for royalty purposes. At the low pressure of the gas, 70 psi, it is not marketable until compressed. Your estimate was $.80/mcf for compression charges. This gives a net loss of $.40/mcf; therefore, scenario 1 is not economic.
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> Scenario 2 has the gas being sold at Thermopolis, Wyoming at $3.40/mcf for royalty purposes. This scenario allows Coronado Oil to deduct compression and trucking charges of $7,427 for a net profit of $4,813. This scenario is viable as long as it is continuous and not just for a period of 10 days.

(Mar. 3, 2000, order at 1-2.)

Still holding to its conclusion that the leases did not have wells capable of production in paying quantities, WFO directed Coronado to begin reworking or drilling operations to restore production in paying quantities on the leases by May 1, 2000. BLM added that the leases would not terminate so long as they contained a well producing continuously in paying quantities or approved operations were commenced within the 60-day period and continued with reasonable diligence until paying production was restored. If the leases were not producing continuously or a reworking/drilling proposal was not submitted and operations begun, BLM stated that the leases would automatically terminate. (Mar. 3, 2000, order at 2.)

By letter dated March 29, 2000 (SOR Ex. V), Coronado sought SDR of the March 3, 2000, order. In addition to incorporating all the arguments and supporting documentation it had provided in the SDR of the May 10, 1999, order, Coronado provided additional arguments and corroborating material. In a letter dated May 23, 2000 (SOR Ex. P), Coronado outlined the positive developments occurring subsequent to the 1999 SDR, including flow testing of the wells indicating an increase in the yield of each of the wells and the feasibility of greatly increasing the producing intervals and productivity of the wells to meet market demands (Ex. P at 1-4); definitive testing of the content of the CO_2 gas showing small quantities of H_2S that would neither require treatment nor interfere with the planned future market for the CO_2 gas, id. at 4-5; and corroboration of the predictions of an enormous coming market for the CO_2 gas including pipeline development, field studies, improved crude prices, and contract talks that could stimulate market demand for CO_2 gas that Horse Center CO_2 wells could be utilized to fulfill. Id. at 5-6. Coronado contended that these factors demonstrated that the wells were capable of production in paying quantities.

In a June 23, 2000, letter, Coronado asserted that there had been no change in the capability of the wells or in its readiness to produce them since the July 27, 1984, approval of "shut-in, awaiting market" status for the wells, but that a market change was occurring that would result in the economic viability of the wells. (SOR Ex. E, at 1.) Coronado contended that it had invested over $3 million in the leases and had extensively tested the Horse Center CO_2 gas reservoirs and was ready to shift to the producing phase with market demand. Id. at 1-2. Coronado averred that it was the only company to see the potential commercial value of CO_2 gas and to have completed CO_2 gas wells capable of production in paying quantities awaiting a market; that the looming market for CO_2 gas had been confirmed by the CO_2 pipeline being laid into the Powder River Basin and by signed delivery contracts for the gas; and that enthusiasm for use of CO_2 gas in operations would increase as contracts for pipeline laterals into the Wind River and Big Horn basins were developed. Id. at 3.

By letter dated June 24, 2000 (SOR Ex. W), Coronado specifically addressed the substance of the March 3, 2000, order. After asserting that it had fully satisfied the conditions of the September 17, 1999, SDR decision and had shown that the wells were capable of production in paying quantities, Coronado responded to the two conclusions reached in the March 3, 2000, order. First, it asserted that BLM was only partly correct in concluding that the wells produced the same amount of gas as before, pointing out that the new flow tests actually showed an overall 59% increase over the original testing due to the longer, more rigorous blowdown, build up, and test period that allowed the wells to continue to clean up. Second, Coronado disagreed with BLM's conclusion about the high H_2S concentrations in the gas, noting that, as discussed in its May 23, 2000, letter, definitive testing of the gas for H_2S had shown low concentrations that would not affect the market use of the gas. (SOR Ex. W, at 2-3.)

Coronado also disputed BLM's analysis of the possible scenarios, asserting that, since the operator was paid at the lease for the gas produced, the costs of compression, liquification, transport, or refining of the CO_2 gas would be borne by the purchaser and marketer and would not render the gas uneconomic under scenario 1. As to scenario 2, the selling of the CO_2 gas in the Thermopolis, Wyoming, market, Coronado noted that the 10-day period alluded to by BLM was simply an economic example rather than a limitation on the production capability and marketability of the gas. Id. at 3. Coronado asserted that its documentation conclusively demonstrated that the wells were capable of sustained production in paying quantities and that the wells should therefore be allowed to remain shut in, awaiting a market. Id. at 4-5.

After orally presenting its arguments to the State Director on June 28, 2000, Coronado submitted a final letter dated July 10, 2000 (SOR Ex. B), in support of its SDR request. In addition to summarizing the evidence it had previously presented, Coronado averred that a Big Horn Basin oil company executive had contacted it on June 29, 2000, and, after a discussion about the Horse Center Field CO_2 wells, had expressed an intent to have his engineering staff design a CO_2 pilot using Horse Center CO_2 gas. Coronado contended that if that sale occurred, its market predictions would be vindicated, but that even if the plan fell through, the fact that companies were beginning to think about and prepare for CO_2 gas use even before a pipeline arrived demonstrated that a market for the CO_2 gas was close. Coronado added that, as the only CO_2 gas field in the Big Horn Basin, the Horse Center Field would have a cost advantage over other sources of CO_2 gas, a fact purportedly reinforced by the potential CO_2 gas purchaser. Id. at 6. Coronado concluded that maintaining "the current status of the wells as 'S.I. [shut-in], awaiting a market' is still the proper and correct designation and should be maintained." Id. at 7.

The Deputy State Director issued his decision on July 20, 2000, affirming WFO's March 3, 2000, order. He agreed with WFO's determination that no viable market existed for the Horse Center CO_2 gas and that the wells were therefore uneconomic. He observed that it had been over 25 years since the wells had been drilled and that, despite the widespread use of CO_2 in oil and gas operations and recovery for many years, Coronado had never sold any CO_2, nor provided any documentation that it had ever attempted to find a market for the CO_2 gas from the Horse Center Field. He discounted Coronado's claim in its July 10, 2000, letter that a Big Horn Basin oil company executive was interested in obtaining Horse Center CO_2 gas for a pilot project because Coronado had not furnished any corroboration substantiating that claim. (July 20, 2000, SDR decision at 2.) The Deputy State Director noted that the Mineral Leasing Act did not intend that leases could be held for long and indefinite periods by wells capable of production in paying quantities while awaiting a market that might never exist, pointing out that a market was necessary to complete the definition of a well capable of production in paying quantities. He further stated that the terms of Coronado's leases required it to exercise reasonable diligence in developing and producing leased resources and that there was no evidence that Coronado had exercised any diligence in obtaining a market and producing the leased resources. He therefore affirmed WFO's March 3, 2000, order. Id.

On appeal, Coronado argues that the July 20, 2000, SDR decision is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. Coronado contends that its wells are capable of producing CO_2 in paying quantities, which it defines as production of sufficient value to exceed direct operating and lease rental or minimum royalty costs. (SOR at 11.) According to Coronado, the four-point flow and pressure build-up tests performed on all four of its wells in November 1999 showed an increase in flow since the last tests and conclusively demonstrated that the wells were and continue to be capable of prolonged production of CO_2 in paying quantities, with net monthly yields from $1,450 at the lowest daily flow rate to $5,063 at the highest daily flow rate. Id. at 11-12. Coronado avers that the tests, coupled with the sworn affidavit of John J. Wanner (SOR Ex. J) stating that the produced CO_2 could be economically transported to Thermopolis, Wyoming, leave little doubt that the wells are capable of production in paying quantities and that BLM's decision to the contrary improperly ignores this unrefuted evidence. Id. at 12-14.

Coronado argues that "shut-in, awaiting market" remains the proper designation for the wells and that BLM's removal of the wells from that classification was arbitrary and capricious. Coronado maintains that BLM's termination of the leases for lack of a market conflicts with the plain and unambiguous language of the July 27, 1984, BLM order allowing the wells to be shut in until a market was found for the gas. Not only should the wells remain shut in under the 1984 order, but, Coronado submits, the rules and policies guiding suspensions of production also support the continuation of the shut-in status of the wells. Coronado cites 30 U.S.C. § 226(i) (2000), which refers to oil and gas leases having a well capable of production in paying quantities on which production has been suspended with the consent of the Secretary. Coronado also cites 30 U.S.C. § 209 (2000), which authorizes the suspension of operations and production on leases in the interest of conservation of natural resources and to encourage the greatest ultimate recovery of oil and gas. Coronado then points to section 2, paragraph j of its leases, which obligates the lessee to exercise reasonable diligence to preserve and conserve the property for future productive uses, as well as Board precedent approving the granting of suspensions when the failure to do so would lead to the loss of valuable reserves and future royalty income or to the premature abandonment of a lease and the concomitant loss of recoverable oil and gas reserves. (SOR at 14-16.)

Coronado contends that, contrary to the policy considerations outlined above, BLM's decision would force the premature abandonment of the leases, which contain valuable oil and gas reserves, are currently capable of producing in paying quantities, and will gain substantial economic potential if allowed to remain in a shut-in status for a short while longer. Coronado further avers that the decision would be disastrous to the Government's interest in obtaining royalties, as well as to Coronado and its more than $3 million investment in the Horse Center leases, an investment which clearly demonstrates its belief that the leases contain oil and gas reserves capable of being produced at a substantial profit with significant royalties. (SOR at 16-18.) Given its considerable commitment to the leases and the lack of any discernable disadvantage to the Government or BLM from allowing the leases to remain shut in until the coming market develops, Coronado maintains that BLM's decision is arbitrary and capricious and contrary to law. It cites Board precedent recognizing that the legislative history evinced a concern for lessees who have expended money to develop a well capable of production and holding that a well incapable of ever recovering the total expenditures associated with it should not necessarily be terminated and abandoned because doing so would run counter to the goals of generating revenue and maximizing domestic production. (SOR at 18-19.)

Coronado also argues that a market for its Horse Center CO_2 is quickly approaching and that, if the wells are allowed to remain "shut-in, awaiting market," they will not be dormant for much longer. Although Coronado states that the evidence shows that its CO_2 can be economically trucked to Thermopolis, Wyoming, it avers that a much more lucrative market for its CO_2 is emerging with the plans for a CO_2 pipeline into the Powder River Basin and its likely extension into the Big Horn Basin where the Horse Center Field is located. Coronado submits that, even before the arrival of the pipeline, the demand for its CO_2 will increase in all the Big Horn Basin due to the huge future market for CO_2 for use in enhanced oil recovery and other oil field requirements and for use in coalbed methane recovery in the Basin, citing John Wanner's August 19, 1999, and June 26, 2000, affidavits (SOR Exs. K and X, respectively). Coronado contends that it will have a significant advantage in these developing markets because it is the only CO_2 producer in the Big Horn Basin, citing Michael A. Megee's report and affidavit, attached to the SOR as Ex. J. (SOR at 20-21.)

Coronado identifies other potentially strong upcoming uses for its CO_2, including to reduce the steam-oil ratio in the late stages of a steam flood, to snuff out underground coal mine fires, to control losses in grain silos caused by bugs, rodents, and spontaneous combustion, and to keep meat temperatures low when passing through grinders. Id. at 21 and Ex. N, at 3-4. Coronado further posits that a realistic market for its CO_2 exists internally in its planned production of heavy oil reserves from its wells in the Horse Center Field, which plan involves treatment of the producing wells with CO_2 as a vital and important part of the oil recovery. (SOR at 21-22, citing Ex. D, at 3 and Ex. H, at 3-4.) In light of the various options for the development of a strong market for the CO_2 in the very near future, Coronado argues that its leases should be allowed to remain shut in until the rapidly approaching market develops so that it, the Federal Government, and the State of Wyoming can all realize the benefits of Coronado's many years of work and substantial investment in the Horse Center Field. Id. at 22.

In its answer, BLM frames the issue on appeal as whether BLM acted properly in 2000 when it vacated the 1984 order classifying certain wells capable of producing CO_2 in paying quantities as "shut-in, awaiting market," a categorization which, it notes, differs from a lease suspension. BLM alleges that the lack of production of CO_2 from the leases and the natural revegetation of the disturbed surface areas with grass and sagebrush obscuring the well sites indicate that, other than making minimum royalty payments, Coronado has done little to maintain the leases since the 1984 shut-in order. (Answer at 1.) Since, it argues, 25 years was more than a reasonable amount of time to develop a market for the CO_2 from the leases, BLM contends that it properly rescinded the July 17, 1984, shut-in well approval. (Answer at 1.)

BLM refutes each of the three arguments raised in Coronado's appeal. Coronado's claim that the wells on the leases are capable of producing CO_2 in paying quantities fails, BLM submits, because, although the wells can produce CO_2 in sufficient quantities, Coronado has been unable to find a market for any of the CO_2 for over 25 years, and a well cannot be considered capable of producing gas in paying quantities if no one is willing to pay for it. (Answer at 3.) In response to Coronado's argument that the proper classification of its wells remains "shut-in, awaiting market," BLM avers that it has waited long enough especially since, despite the widespread use of CO_2 in oil and gas operations and recovery for many years, Coronado has neither sold any CO_2 nor documented any attempts to secure a market for its gas. BLM reiterates that the Mineral Leasing Act was not intended to allow leases to be held indefinitely by wells capable of production in paying quantities while awaiting a market that might never exist. BLM argues that a market is necessary for a well to be considered capable of production in paying quantities. (Answer at 3.)

BLM maintains that its rescission of the 16-year old shut-in order granting temporary relief was not arbitrary or capricious but rather demonstrated that it had acted in a restrained and reasonable manner by giving Coronado 16 years in which to show that a market existed for any of the CO_2 wells on its leases. (Answer at 3-4.) Coronado's reliance on the rules and policies guiding suspensions of production on oil and gas leases do not undermine the SDR decision, BLM submits, because, not only have the leases not been suspended, but Coronado has not shown that continuing the shut-in order or granting a suspension would serve the interest of conservation, since the surface of the lands can be reclaimed and the CO_2 resources can remain available for leasing, production, and use if a market arises in the future.

BLM adds that the Board precedent cited by Coronado is inapposite because the CO_2 from the leases cannot be profitably produced since no market for that gas exists now or did in the past. Id. at 4.

BLM also discounts Coronado's speculation that a market for the CO_2 from the leases is rapidly approaching. BLM avers that, in light of the 25 years Coronado has had to develop a market for the gas, such speculation is not a substitute for signed contracts or other hard evidence that a market exists for the CO_2 from the leases. (Answer at 4.) BLM concludes that it acted in a reasonable and restrained manner and has given Coronado more than ample time to develop a market for the CO_2, which Coronado has been unable to do, and that, therefore, the July 20, 2000, SDR decision should be affirmed. Id.

BLM has also provided a January 11, 2001, report prepared by WFO, rebutting some of the allegations and arguments in Coronado's SOR. Specifically, WFO asserts that Coronado admitted at the SDR oral presentation that it had not tried to find a market for the gas; that the intent of the 1984 letter was not to let Coronado keep the wells shut in and never look for a market; that Coronado appears to be trying to hold oil leases on the pretense that they are gas leases awaiting a market; that the cost of compression necessary to put the gas in a marketable condition should be considered in determining if a well is capable of production in paying quantities, and that those costs render Coronado's gas uneconomical; that the different uses and markets for CO_2 gas Coronado identifies are irrelevant given its stated opinion that the market for its gas is strictly local and most likely limited to its own use; that Coronado's projections of deep and heavy oil and reserves are based solely on seismic data and geologic structure and thus are speculative at best; and that Coronado unrealistically wants to know the average oil price for the next 20 to 40 years before starting to produce CO_2. (Jan. 11, 2001, report at 1-2.)

This appeal raises two basic issues. The first is whether the wells at issue are capable of production in paying quantities. Assuming that question is answered in the affirmative, the issue remains whether BLM properly rescinded its 1984 approval of shut-in well status and afforded Coronado 60 days to place the wells into production to avoid expiration of the leases.

[1] Under the Mineral Leasing Act, oil and gas leases are issued for a primary term of 10 years and so long after the end of that term as oil or gas is produced in paying quantities. 30 U.S.C. § 226(e) (2000). As a general rule, oil and gas leases in their extended term by reason of production terminate by operation of law when paying production ceases on the lease. 30 U.S.C. § 226(e) (2000); 43 CFR 3107.2-1; Great Western Petroleum & Refining Co., 124 IBLA 16, 24 (1992); Universal

Resources Corp., 31 IBLA 61, 65 (1977). The Mineral Leasing Act, however, provides certain exceptions to this automatic termination:

> No lease issued under this section which is subject to termination because of cessation of production shall be terminated for this cause so long as reworking or drilling operations which were commenced on the land prior to or within sixty days after cessation of production are conducted thereon with reasonable diligence, or so long as oil or gas is produced in paying quantities as a result of such operations. No lease issued under this section shall expire because operations or production is suspended under any order, or with the consent, of the Secretary. No lease issued under this section covering lands on which there is a well capable of producing oil or gas in paying quantities shall expire because the lessee fails to produce the same unless the lessee is allowed a reasonable time, which shall not be less than sixty days after notice by registered or certified mail, within which to place such well in producing status or unless, after such status is established, production is discontinued on the lease premises without permission granted by the Secretary under the provisions of this chapter.

30 U.S.C. § 226(i) (2000) (emphasis supplied). [6]

Both the statute and the case law differentiate between a lease without a well capable of production in paying quantities and one containing a well capable of production in paying quantities. When the term of an oil and gas lease has been extended by production and there is no well capable of production in paying quantities when production ceases, the lessee has 60 days to commence reworking or drilling operations and must continue the reworking or drilling operations with reasonable diligence to avoid lease termination; if such operations are not timely initiated and diligently pursued, the lease terminates automatically upon cessation of production. Coronado Oil Co., 164 IBLA 107, 115 (2004). Notice is not required in this situation. Id.; see Stove Creek Oil Inc., 162 IBLA 97, 104-105 (2004), citing Merit Productions, 144 IBLA 156, 160-61 (1998) (Burski, A.J., concurring); International Metals & Petroleum Corp., 158 IBLA 15, 20-21, n.6 (2002). When the term of an oil and gas lease has been extended by production and the lease does contain a well capable of production in paying quantities, however, BLM must notify

[6] The subsection was given its current form in 1960. Compare Pub. L. No. 555, 68 Stat. 583 (1954), with Pub. L. No. 86-705, 74 Stat. 781, 782 (1960). Prior to 1954, a lease extended by production did not terminate if "diligent drilling operations" were undertaken during a period of nonproduction. Pub. L. No. 696, 60 Stat. 950, 951 (1946).

the lessee and allow a reasonable time of at least 60 days from receipt of the notice to place the well into production to avoid having BLM declare the lease expired by operation of law for lack of production. International Metals & Petroleum Corp., 158 IBLA at 21; Merit Productions, 144 IBLA at 161, 163-64; Great Western Petroleum & Refining Co., 124 IBLA at 24. The different treatment afforded leases with wells capable of production in paying quantities reflects Congress' concern both that a lease in its secondary term not be automatically terminated for lack of production where a lessee has in good faith expended money to develop a well capable of production, but where production has been deferred because of lack of pipelines, roads, or markets for the gas, and that such lessees are afforded a reasonable period in which to place the well in producing status. See American Resources Management Corp., 40 IBLA 195, 200-201 (1979), citing H.R. Rep. No. 2238, 83d Cong., 2nd Sess. (1954), reprinted in 1954 U.S.C.C.A.N. 2695, at 2700. This is the notice provided in the regulations at 43 CFR 3107.2-3. The Department has recognized that this notice provision is applicable to a well capable of production in paying quantities that was shut in for reasons such as lack of a pipeline or market for the oil or gas. Robert W. Willingham, 164 IBLA 64, 68 (2004); Merit Productions, 144 IBLA at 161 n.5; Steelco Drilling Corp., 64 I.D. 214, 219 n.3 (1957). [7/]

[2] In defining a well capable of production in paying quantities, the Department has required evidence of the present capability of the well to produce:

> The phrase "well capable of producing" means a "well which is actually in a condition to produce at the particular time in question." United Manufacturing Co., 65 I.D. 206 (1958). In the absence of perforation of the well casing, a well has been held to be physically incapable of production and, hence, not capable of production in paying quantities. Arlyne Lansdale, 16 IBLA 42 (1974); United Manufacturing Co., supra. A well has been held not capable of production in paying quantities where substantial pumping of water from the well is required before oil could be produced in paying quantities. The Polumbus Corp., 22 IBLA 270 (1975). Further, a well has been held not capable of production in paying quantities where sandfracing operations were unsuccessful and the record indicated further efforts were needed to restore production, including hot oil treatment and swabbing the well. Steelco Drilling Corp., 64 I.D. 214 (1957).

[7/] There is no cessation of production when a completed well is found to be a well capable of production in paying quantities and is shut in with the consent of BLM awaiting a market.

Amoco Production Co., 101 IBLA 215, 221 (1988) (footnotes omitted). In addition, in order to be considered capable of production in paying quantities, a well must be "physically capable of producing a sufficient quantity of oil and/or gas to yield a reasonable profit after the payment of all the day-to-day costs incurred after the initial drilling and equipping of the well, including the costs of operating the well, rendering the oil or gas marketable, and transporting and marketing that product." International Metals & Petroleum Corp., 158 IBLA at 22; see Stove Creek Oil Inc., 162 IBLA at 105-106; Amoco Production Co., 101 IBLA at 221-22. Actual production is not required to qualify a well as capable of production in paying quantities as long as production can clearly be obtained but has not been because of a lack of pipelines, roads, or markets for the gas. John G. Swanson, 66 IBLA 200, 202 (1982); American Resources Management Corp., 40 IBLA at 201; see also C & K Petroleum Inc., 70 IBLA 354, 356 (1983); Burton/Hawks, Inc., 47 IBLA 125, 127 (1980).

In this case, BLM initially determined in 1984 that the wells were capable of production in paying quantities based on showings of productive capacity, [8] but that no market existed at that time for the CO_2 from the wells. This was the basis for BLM approval of the shut-in status of the wells pending development of a market for the gas. (July 27, 1984, approval letter at 1.) BLM revisited that determination in its May 1999 order and concluded that the failure of oil companies in the Big Horn Basin to successfully use CO_2 for enhanced oil recovery and the lack of plans for a pipeline to transport the gas to other markets negated its 1984 determination that a market for the gas was possible. Hence, BLM concluded that the lack of a market for the low pressure CO_2 gas belied any possibility that gas from the wells could earn a reasonable profit over and above the cost of operating the wells and marketing the gas, mandating rescission of the shut-in well approval and reversal of the determination that the wells were capable of production in paying quantities. Citing the regulation at 43 CFR 3107.2-2, [9] BLM granted Coronado 60 days from receipt of

[8] See Worland District Office memoranda, received by the Wyoming State Office on Sept. 17, 1984.

[9] The regulation at 43 CFR 3107.2-2 is entitled "cessation of production" and addresses the termination of leases in their extended term by reason of production on which production ceases because there is no longer a well capable of production in paying quantities. When the term of an oil and gas lease has been extended by production and there is no well capable of production in paying quantities when production ceases, 30 U.S.C. § 226(i) (2000) requires the lessee to initiate reworking or drilling operations within 60 days and continue the reworking or drilling operations with reasonable diligence to avoid termination. Coronado Oil Co., 164 IBLA at 115.

the order to begin reworking or drilling operations to restore production in paying quantities on the leases. [10] (May 10, 1999, order at 1.)

Both Coronado and BLM agree that the wells on the affected leases are physically capable of producing CO_2. They disagree, however, as to whether the wells are capable of production in "paying quantities," i.e., whether the CO_2 from the wells is sufficient to yield a reasonable profit over and above the cost of operating the wells and marketing the gas. See International Metals & Petroleum Corp., 158 IBLA at 22.

The March 3, 2000, WFO order is the only BLM decision specifically addressing the profitability issue. That order analyzed two scenarios raised in Coronado's first request for SDR, the second of which involved the gas being trucked to Thermopolis, Wyoming, and sold at $3.40/mcf for royalty purposes, which, after allowing Coronado to deduct compression and trucking charges of $7,427, would result in a net profit on $4,813. WFO concluded that "[t]his scenario is viable as long as it is continuous and not just for a period of 10 days." (Mar. 3, 2000, order at 2.) Despite this conclusion, BLM nevertheless found that the wells were not capable of production in paying quantities. Id.

Although Coronado challenged this conclusion on SDR, as it has on appeal, pointing out that the flow tests conducted in November 1999 pursuant to the September 17, 1999, SDR decision showed an increase in flow and that the 10-day period was simply an economic example rather than a limitation on the production capability and marketability of the gas, the Deputy State Director's July 20, 2000, decision did not address this issue. That decision focused instead on Coronado's failure to obtain a market for the gas, a focus BLM has perpetuated in its arguments on appeal in support of the reasonableness of its rescission of the shut-in well approval order, rather than the capability of the wells to produce in paying quantities. See discussion infra. BLM has not provided the Board with any explanation of the apparently contradictory conclusions in the March 3, 2000, order, nor has it presented any evidence refuting Coronado's interpretation of the flow test and profitability data. [11] Under these circumstances, we find that the record does

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[10] In this case, although BLM considered the wells not capable of production in paying quantities, it effectively provided Coronado with the same notice and 60-day period to place the wells in continuous production in paying quantities required under 30 U.S.C. § 226(i) (2000) and 43 CFR 3107.2-3 for leases with wells capable of production in paying quantities.

[11] We note that the Board has consistently held that when BLM determines that production on an oil and gas lease in its extended term by reason of production has (continued...)

not support BLM's conclusion that the wells are not capable of production in paying quantities and reverse the State Director's July 20, 2000, decision to the extent it affirmed WFO's determination that the wells were not capable of production in paying quantities.

[3] We now turn to the question of whether BLM erred in rescinding the 1984 shut-in well approval and ordering Coronado to place the wells into production. The Mineral Leasing Act clearly authorizes BLM to require a lessee whose lease is in its extended term by reason of having a well capable of production in paying quantities to place the well into a producing status within a reasonable time of not less than 60 days from receipt of notice to do so. 30 U.S.C. § 226(i) (2000); 43 CFR 3107.2-3. Coronado nevertheless contends that the wells should be allowed to remain shut in awaiting a market because the anticipated market for the gas is rapidly approaching and retention of the wells' shut-in status conforms to the rules and policies guiding suspensions of production. BLM denies that there is now, or will soon be, a viable market for Coronado's CO_2 gas and alleges that Coronado's failure to exercise reasonable diligence to develop a market for the gas during the past 25 years clearly justifies rescinding the shut-in order and directing Coronado to place the wells into production. We find the record provides ample support for BLM's exercise of discretion to rescind the approval of shut-in status.

With respect to appellant's argument that shut-in status supports conservation of natural resources and encourages the greatest ultimate recovery of the CO_2, BLM points out that the well sites can be reclaimed and that the CO_2 resources will remain available for leasing and production should the leases expire. In any event, there is no indication that Coronado has sought formal suspension of the leases in the interest of conservation of natural resources under the provisions of 30 U.S.C. § 209 (2000), and 43 CFR 3103.4-4. See, e.g., River Gas Corp., 149 IBLA 229, 244-45 (1999). Therefore, the rules and policies underlying suspensions do not undermine BLM's rescission of the shut-in well approval and order to produce.

11/ (...continued)
ceased because the well on the lease is no longer capable of production in paying quantities, the lessee of record and lease operator are entitled to notice and an opportunity to request a hearing on the issue of the productive capacity of the well if they have presented evidence raising an issue of fact regarding the status of the well. See, e.g. International Metals & Petroleum Corp., 158 IBLA at 24; Merit Productions, 144 IBLA at 167; Daymon D. Gililland, 108 IBLA 144, 148 (1989); C & K Petroleum, Inc., 70 IBLA at 356; Universal Resources Corp., 31 IBLA at 67. No hearing is needed here, however, because the record before us does not sustain BLM's conclusion that the wells are not capable of production in paying quantities.

Coronado maintains that the stipulation in the 1984 shut-in order, providing that the approval would be in effect until a market was found for the gas precludes BLM from revisiting that issue. We do not agree with that interpretation, which would unduly restrict BLM's authority to manage oil and gas resources and operations on Federal lands. Circumstances change and information gathered at one time may be superseded by later contrary data. See Universal Resources Corp., 31 IBLA at 68. In this case, given the significant passage of time since the issuance of the 1984 shut-in well approval, the lack of corroborating evidence documenting any past or current attempts by Coronado to obtain a market for the CO_2 gas from the wells, and the speculative nature of the potential future markets for the CO_2, we find no error in BLM's decision to rescind the 1984 shut-in well approval and order Coronado to place the wells into production. Events occurring during the interim period between issuance of the July 20, 2000, SDR decision and resolution of this appeal should provide some indication as to whether Coronado's predictions of future markets have been realized; if they have, then Coronado should be able to bring its wells into paying production within the time period allowed by BLM, a time period which has been stayed during the pendency of this appeal. [12/]

To the extent not specifically addressed herein, other issues raised on appeal have been considered and rejected.

[12/] Although the Mar. 3, 2000, WFO decision affirmed by the July 20, 2000, SDR decision directed Coronado to either place the wells into continuous production or conduct reworking or drilling operations to restore production, the provisions of both 30 U.S.C. § 226(i) (2000) and 43 CFR 3107.2-3 addressing leases which contain wells capable of production in paying quantities only recognize the placement of the wells into producing status as sufficient to prevent expiration of the leases. We therefore modify the appealed decision both to reflect that the applicable regulation is 43 CFR 3107.2-3 rather than 43 CFR 3107.2-2 and to conform to the statutory and regulatory requirement that Coronado place the wells in producing status by the end of the reasonable time period granted by BLM.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision in IBLA 2000-360 is affirmed as modified in part and reversed in part, and the decision in IBLA 2001-8 is vacated.

C. Randall Grant, Jr.
Administrative Judge

I concur:

David L. Hughes
Administrative Judge