

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:

CASE NO. 9883
Order No. R-9147

APPLICATION OF BTA OIL PRODUCERS
FOR AN UNORTHODOX OIL WELL
LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 7, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 18th day of April, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, BTA Oil Producers, seeks approval to drill its Pardue "C" 8808 JV-P Well No. 1 at an unorthodox oil well location 176 feet from the South line and 1550 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East, NMPM, Undesignated East Loving-Delaware Oil Pool, Eddy County, New Mexico.

(3) The applicant proposes to dedicate the SE/4 SW/4 of said Section 11 to the above-described well forming a standard 40-acre oil spacing and proration unit for said pool.

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(4) Bird Creek Resources (Bird Creek), the affected offset operator to the south of the proposed location who currently operates the Teledyne Well No. 1 located 660 feet from the North line and 1980 feet from the West line (Unit C) of Section 14, Township 23 South, Range 28 East, NMPM, which is currently completed in and producing from the East Loving-Delaware Pool, appeared at the hearing in opposition to the application.

(5) The applicant presented evidence and testimony which adequately demonstrates that the proposed unorthodox location is necessitated by numerous topographic and surface obstructions within the SE/4 SW/4 of said Section 11, and that geologic considerations were not a factor in selecting the proposed location.

(6) The applicant proposed that no production penalty be assessed against the subject well based upon its contention that the wells in the subject pool will not drain a 40-acre area.

(7) There is no evidence currently available which would indicate that the subject well or wells within the East Loving-Delaware Pool will not drain 40 acres.

(8) The evidence indicates that in order to protect the correlative rights of Bird Creek, the subject well should be assessed a production penalty.

(9) Both parties are in agreement that 150,000 barrels of oil is a good approximation of recoverable reserves underlying the 40-acre drainage area for the subject well.

(10) Bird Creek proposed that a production penalty in the amount of approximately 32,800 barrels of oil (22% of estimated recoverable reserves) be assessed against the subject well, said penalty based upon the following equation:

$$\text{PENALTY} = (A - B) / 40 \text{ acres} \times 150,000 \text{ barrels of oil}$$

where A= The number of acres within the subject well's 40-acre radius drainage circle that lie on Bird Creek's lease in said Section 14; and

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B= The number of acres located on its lease that are not being affected due to the theoretical no flow boundary between the subject well and its Teledyne Well No. 1.

(11) The production penalty proposed by Bird Creek is excessive in that a well located at a standard location 330 feet from the South line of said Section 11 would be allowed to drain approximately 20,000 of the 32,800 barrels of oil from Bird Creek's lease, using Bird Creek methodology.

(12) A production penalty in the amount of 12,225 barrels of oil (8.15% of estimated recoverable reserves) should be assessed against the subject well, said penalty derived by the following equation:

$$\text{PENALTY} = (A - B) - (C - D) \times (150,000 \text{ barrels of oil} / 40 \text{ acres})$$

where A= The number of acres within the subject well's 40-acre radius drainage circle that lie on Bird Creek's lease in said Section 14 (approximately 14.0 acres);

B= The number of acres located on Bird Creek's lease that are not being affected due to the theoretical no flow boundary between the subject well and the Teledyne Well No. 1 (approximately 5.1 acres);

C= The number of acres within a standard well location's 40-acre radius drainage circle that lie on Bird Creek's lease in said Section 14 (approximately 9.1 acres);

D= The number of acres located on Bird Creek's lease that are not being affected due to the theoretical no flow boundary between a well located at a standard location and the Teledyne Well No. 1 (approximately 3.46 acres).

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(13) The subject well should be assigned a production limitation factor of 53%, said factor being the ratio that the proposed location bears to a standard location in the north/south direction or 176 feet/330 feet.

(14) The production limitation factor should be assigned to the subject well until such time as 12,225 barrels of oil have been accrued as underproduction, and should be enforced in the following manner:

- (a) During the period of time the subject well is capable of production in excess of top unit allowable (142 barrels of oil per day) for the East Loving-Delaware Pool, the subject well should be allowed to produce 53% of 142 barrels of oil per day, or 75 barrels of oil per day.
- (b) In the event the subject well is initially incapable of production in excess of top unit allowable, or during the period of time the subject well is subsequently incapable of production in excess of top unit allowable, the subject well should be allowed to produce 53% of that amount which it is capable of producing. The amount the subject well is capable of producing should be determined by quarterly well tests witnessed by a representative of the Division's Artesia district office.

(15) Approval of the proposed unorthodox well location subject to the production limitation factor and penalty as described above will afford the applicant the opportunity to produce its just and equitable share of the oil in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

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IT IS THEREFORE ORDERED THAT:

(1) The applicant, BTA Oil Producers, is hereby authorized to drill its Pardue "C" 8808 JV-P Well No. 1 at an unorthodox oil well location 176 feet from the South line and 1550 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East, NMPM, Undesignated East Loving-Delaware Oil Pool, Eddy County, New Mexico.

(2) The SE/4 SW/4 of said Section 11 shall be dedicated to the above-described well forming a standard 40-acre oil spacing and proration unit for said pool.

(3) A production penalty in the amount of 12,225 barrels of oil (8.15% of estimated recoverable reserves) is hereby assessed against the above-described well.

(4) A production limitation factor of 53% is hereby assigned to the subject well until such time as 12,225 barrels of oil have been accrued as underproduction, and shall be enforced in the following manner:

- (a) During the period of time the subject well is capable of production in excess of top unit allowable (142 barrels of oil per day) for the East Loving-Delaware Pool, the subject well shall be allowed to produce 53% of 142 barrels of oil per day, or 75 barrels of oil per day.
- (b) In the event the subject well is initially incapable of production in excess of top unit allowable, or during the period of time the subject well is subsequently incapable of production in excess of top unit allowable, the subject well shall be allowed to produce 53% of that amount which it is capable of producing. The amount the subject well is capable of producing shall be determined by quarterly well tests witnessed by a representative of the Division's Artesia district office.

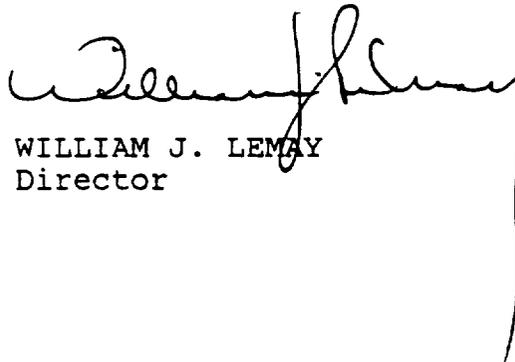
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(5) The applicant shall give advance notification to the supervisor of the Artesia district office of the Division of the date and time of the conductance of each quarterly well test in order that the same may be witnessed.

(6) Jurisdiction of this cause is 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read 'William J. Lemay', is written over the typed name. The signature is fluid and cursive, with a long vertical line extending downwards from the end of the name.

WILLIAM J. LEMAY
Director

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

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

CASE NO. 9883 (De Novo)
Order No. R-9147-A

APPLICATION OF BTA OIL PRODUCERS
FOR AN UNORTHODOX OIL WELL LOCATION,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on June 21, 1990, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission.

NOW, on this 3rd day of August, 1990, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, BTA Oil Producers ("BTA"), operates the SE/4 SW/4 of Section 11, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico on which it has drilled its Pardue "C" 8808 JV-P Well No. 1 ("Pardue No. 1") at a location 176 feet from the South line and 1550 feet from the West line (Unit N) of said Section 11 which is in the Undesignated East Loving-Delaware Pool.

(3) BTA sought administrative approval of this unorthodox location but an objection was filed by Bird Creek Resources Inc., (Bird Creek"), an off-set operator, and the matter was set for hearing before a Division Examiner on March 7, 1990. By Order No. R-9147, dated April 18, 1990, the Division approved the unorthodox location of the Pardue No. 1 and imposed a

Case No. 9883 (De Novo)
Order No. R-9147-A

production penalty on the well of 12,225 barrels which would be implemented by limiting the producing rate of said well to 53% of allowable until recovery of 12,225 barrels of oil.

(4) BTA drilled and produced this well at an unorthodox location under a valid Division order with full knowledge that the case would be taken to a De Novo hearing with the possibility of a different penalty assessed.

(5) Bird Creek, knowing that the Pardue No. 1 well was being drilled and produced by BTA in accordance with Division Order No. R-9147, did not seek a stay of said Division Order.

(6) BTA did not have an expiring lease which necessitated the drilling of the Pardue No. 1 prior to the scheduled De Novo hearing and issuance of a Commission order.

(7) At the time of the De Novo hearing, the Commission ruled to incorporate the full record of the Examiner hearing and not to accept testimony regarding the validity of BTA's reasons for choosing an unorthodox location over a standard location because of Finding Paragraphs Nos. (4) and (5) above.

(8) Geologic testimony presented by both parties pertaining to a no-flow barrier between the Pardue No. 1 and wells to the south and drainage areas for these wells was not substantiated with precise measurements of permeability thickness, average reservoir pressure and production rates.

(9) Both parties agreed at the Examiner hearing that 150,000 barrels of oil was a good approximation of recoverable reserves underlying the 40 acres drainage area of the Pardue No. 1; however, at the Commission hearing Bird Creek presented calculations showing that 200,000 barrels of oil was the recoverable reserve estimate and that this oil would be produced from the completed interval only with additional oil reserves being present in separate sands immediately above the completed pay interval. These additional reserves were projected from log analysis and not confirmed by offsetting production.

(10) BTA disagreed with Bird Creek's conclusions but could not offer credible alternative calculations because of the absence of definite reservoir data.

(11) The evidence indicates that the Pardue No. 1 will drain additional oil reserves underlying Bird Creek's acreage by virtue of its unorthodox location and that in order to protect the correlative rights of Bird Creek, the Pardue No. 1 should be assessed a production penalty.

(12) The Pardue No. 1 well is currently capable of producing oil in excess of the top allowable oil rates.

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(13) Where reservoir data is insufficient to sustain reliable reserve and drainage calculations the Commission has established production penalties for encroaching wells based upon the ratio that the proposed location bears to a standard location.

(14) The production penalty assessed against the Pardue No. 1 should be: standard location footage - proposed location footage
standard location footage

or

$$\frac{330 - 176}{330} = 47\%$$

(15) This penalty should be assessed against the top allowable rate which is 142 barrels of oil per day.

(16) Approval of the unorthodox well location subject to a production limitation factor of 53% of the top allowable rate will afford the operator the opportunity to produce its just and equitable share of oil in the subject pool, will prevent waste, and will protect the correlative rights of offset operators.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, BTA Oil Producers, is hereby authorized to produce its Pardue No. 1 at an unorthodox oil well location 176 feet from the South line and 1550 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East, NMPM, Undesignated East Loving-Delaware Oil Pool, Eddy County, New Mexico.

(2) A production limitation factor of 53% of the top allowable rate of 142 barrels of oil per day, or 76 barrels of oil per day, is hereby assigned to the Pardue No. 1 as its maximum allowable rate.

(3) This order shall supersede Division Order No. R-9147, and be made effective retroactive to April 18, 1990.

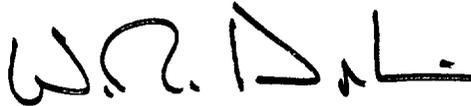
(4) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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Order No. R-9147-A

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



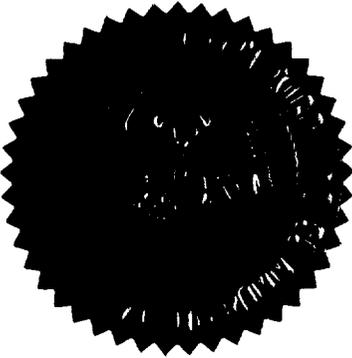
WILLIAM R. HUMPHRIES, Member



WILLIAM W. WEISS, Member



WILLIAM J. LEMAY, Chairman and
Secretary



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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:

CASE NO. 10177
ORDER NO. R-9147-B

**APPLICATION OF BTA OIL PRODUCERS
FOR AN UNORTHODOX OIL WELL LOCATION,
EDDY COUNTY, NEW MEXICO**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on December 19, 1990, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 11th day of February, 1991 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) By Division Order No. R-9147, issued in Case No. 9883 and dated April 18, 1990 an exception to the standard oil well location requirements, as promulgated by Division General Rule 104.F.I., was granted for the applicant, BTA Oil Producers, to drill its Pardue "C" 8808 JV-P Well No. 1 to test the Undesignated East Loving-Delaware Pool, at an unorthodox oil well location 176 feet from the South line and 1550 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) Based on the evidence presented in Case No. 9883, the necessity for said unorthodox oil well location was due to numerous topographic and surface obstructions within the SE/4 SW/4 of said Section 11.

(4) Although the Division in Case No. 9883 authorized BTA to crowd the lease line offsetting Bird Creek Resources, a penalty on production of 12,225 barrels would be implemented by limiting the production ratio of said Well No. 1 to 53% of allowable until such time as the 12,225 barrels of oil has been accrued as underproduction.

(5) Subsequent to the issuance of Order No. R-9147, BTA drilled and completed its Well No. 1 in the East-Loving Delaware Pool.

(6) By Division Order R-9147-A, issued in DeNovo Case No. 9883 and dated August 3, 1990, the New Mexico Oil Conservation Commission superseded Order R-9147 and further placed a permanent production limitation factor of 53% of the top allowable for the Well No. 1. Also at the DeNovo hearing, the Commission overruled any attempt of Bird Creek Resources to include testimony of the placement of the well only 176 feet from its lease line based on the previous evidence by the applicant showing that no other locations further from the South line of said Section 11 was feasible.

(7) At this time, BTA Oil Producers, seeks approval of an unorthodox oil well location for its Pardue "C" 8808 JV-P Well No. 1-Y to be drilled 611 feet from the South line and 1504 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East, NMPM, East Loving-Delaware Pool, Eddy County, New Mexico.

(8) It is the applicant's intent to drill the No. 1-Y well as a replacement well for the original Well No. 1 on the 40-acre spacing and proration unit comprising the SE/4 SW/4 of said Section 11.

(9) Further, it is the applicant's intent to cease producing Delaware oil from the Well No. 1, place the well on temporarily abandoned status and possibly utilize it as an injection well in the future.

(10) The testimony by the applicant at this time still shows that there are no drillable locations within the standard drilling windows for a 40-acre oil spacing unit (no closer than 330 feet to the outer boundary of a 40-acre tract) due to numerous topographic and surface features; however, the proposed location is suitable and accessible for the drilling of a well to the Delaware formation.

(11) The surface location for the replacement well, although still unorthodox, is 611 feet from Bird Creek Resources' lease and is crowding the offset acreage to the west which is also within the applicant's Pardue "C" 8808 JV-P Lease.

(12) Such intention of BTA to cease production of the Pardue "C" 8808 JV-P

Well No. 1 and replace it with a well that is not crowding neighboring acreage is prudent at this time, is of sound conservation practice and will otherwise prevent waste and protect correlative rights.

(13) The unorthodox oil well location for the proposed Pardue "C" 8808 JV-P Well No. 1-Y should be approved with no production limitation on its allowable.

(14) Production from the Pardue "C" 8808 JV-P Well No. 1 should cease **immediately** and any other authorization for this well to either produce from or inject into any formation and/or pool should be only after proper notice and hearing.

(15) No testimony was offered by the applicant which would show that the proposed location it seeks at this time was not available to them when original Case No. 9883 was heard.

(16) Had BTA originally drilled at this location, the need for two Division hearings and a DeNovo Commission hearing would probably have been unnecessary.

(17) Such conflicting evidence could also serve to weaken BTA's standing as a prudent operator in the state.

(18) Until further notice from the Director of the Division, any and all applications which are subject to administrative review by the Division shall only be considered after proper notice and hearing.

IT IS THEREFORE ORDERED THAT:

(1) The application of BTA Oil Producers for an unorthodox oil well location for the East Loving-Delaware Pool is hereby approved for its Pardue "C" 8808 JV-P Well No. 1-Y to be located at a point 611 feet from the South line and 1504 feet from the West line (Unit N) of Section 11, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico.

(2) The SE/4 SW/4 of said Section 11 shall be dedicated to the above-described well forming a 40-acre oil spacing and proration unit for said pool.

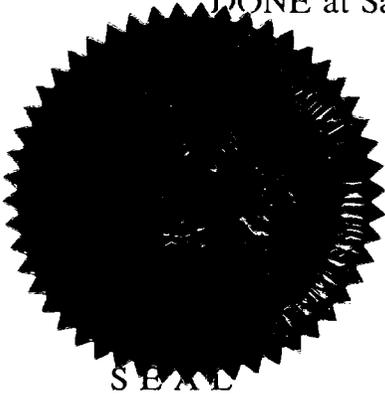
(3) The existing Pardue "C" 8808 JV-P Well No. 1 located at an unorthodox oil well location 176 feet from the South line and 1550 feet from the West line (Unit N) of said Section 11 shall cease producing hydrocarbons **immediately**.

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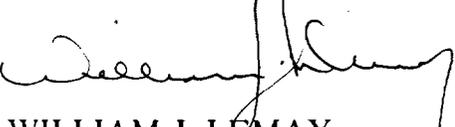
(4) Further, authorization for this well to either produce hydrocarbons from or inject water into any formation and/or pool shall be only after proper notice and hearing.

(5) Jurisdiction of this cause is 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.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director