

Baruch-Foster Corporation

1160 ONE ENERGY SQUARE
4925 GREENVILLE AVENUE
DALLAS, TEXAS 75206
214/368-5886

January 30, 1987

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Case 9104

RE: Application for Classification as Hardship
Gas Well
Little Jewel Com. No. 1
South Carlsbad Field
Unit F, Section 31, T-22-S, R-27-E,
Eddy County, NM

Gentlemen:

Baruch-Foster Corporation, respectfully submits the subject application under Rule 409 and requests administrative approval per Rule 410. By copy of this letter and application to the Artesia District Office, a 90 day emergency hardship gas well classification is requested while our application is being processed.

Your favorable disposition of our application will prevent waste and loss of our natural gas resource.

Yours very truly,

BARUCH-FOSTER CORPORATION



J. F. Ellebracht
Vice President, Production

Attachments

JFE:kas

State of New Mexico
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cc: State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Drawer DD
Artesia, New Mexico 88210

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978
Attn: Mr. B. G. Lane

Cities Service Oil And Gas Corporation
P. O. Box 1919
Midland, Texas 79702
Attn: E. F. Motter

Grace Petroleum Corporation
731 W. Wadlay Ave.
Bldg. L, Suite 217
Midland, Texas 79701

Mobil Producing Texas And New Mexico, Inc.
Nine Greenway Plaza
Suite 2700
Houston, Texas 77046

AFFIDAVIT

I, J.F. Ellebracht, certify that all information submitted with our application for classification as a hardship gas well the Little Jewel Com. No. 1, Eddy County, New Mexico is true and correct to the best of my knowledge; A copy has been submitted to the Artesia office, the gas purchaser, El Paso Natural Gas Company, and the offset operators, Grace Petroleum Corporation , Cities Service Oil and Gas Corporation and Mobil Producing Texas and New Mexico, Inc.

BY: JF Ellebracht
J.F. Ellebracht

Vice President, Production

BARUCH-FOSTER CORPORATION

DATE: February 2, 1987

TABLE I
 PRODUCTION DATA
 LITTLE JEWEL COM. NO. 1
 UNIT F, SEC. 31, T-22-S, R-27-E,
 EDDY COUNTY, NEW MEXICO

<u>1986</u> <u>MONTH</u>	<u>GAS PRODUCTION</u> <u>MCF</u>	<u>DAYS PRODUCED</u>	<u>RATE - MCFPD</u>
January	25,406	31	820
February	13,028	17	766
March	-0-	0	0
April	17,624	30	587
May	12,555	23	546
June	18,599	29	641
July	17,711	27	655
August	-0-	0	0
September	984	2	492
October	886	2	443
November	-0-	0	0
December	8,403	24	350

Production is into a compressor at 100 PSI, water volumes are very small. In December, when the well was put in production after having been shut-in most of the previous four months, it would not flow. Soap sticks were dropped into the well. The well was vented to pit to dry out well bore to restore some of the permeability to allow the gas to flow. The rate was only about 50 percent of what it was before being shut-in. It is almost a certain fact that if the well is shut-in again it will not come back. This will result in the loss of the remaining gas reserves, and would be a permanent loss of these natural resources.

Case 9104

APPLICATION FOR CLASSIFICATION AS HARDSHIP GAS WELL

Operator BARUCH-FOSTER CORPORATION Contact Party J. F. ELLEBRACHT
Address 1160 ONE ENERGY SQUARE Phone No. (214) 368-5886
Dallas, Texas 75206
Lease Little Jewel Com. Well No. 1 UT F Sec. 31 TWP 22S RGE 27E
Pool Name S. Carlsbad MORROW/STRAWN Minimum Rate Requested 350 MCFPD
Transporter Name El Paso Natural Gas Company Purchaser (if different) Same
Are you seeking emergency "hardship" classification for this well? X yes no

Applicant must provide the following information to support his contention that the subject well qualifies as a hardship gas well.

- 1) Provide a statement of the problem that leads the applicant to believe that "underground waste" will occur if the subject well is shut-in or is curtailed below its ability to produce. (The definition of underground waste is shown on the reverse side of this form) When these partially depleted low pressure reservoirs are shut in allowing water to set in well bore, the clay in the sand swells restricting permeability causing a loss of production
- 2) Document that you as applicant have done all you reasonably and economically can do to eliminate or prevent the problem(s) leading to this application.
 - a) Well history. Explain fully all attempts made to rectify the problem. If no attempts have been made, explain reasons for failure to do so.
Formation Damage to partially depleted reservoir sand cannot be removed
 - b) Mechanical condition of the well (provide wellbore sketch). Explain fully mechanical attempts to rectify the problem, including but not limited to:
ATTACHED
i) the use of "smallbore" tubing; ii) other de-watering devices, such as plunger lift, rod pumping units, etc. It is not a mechanical problem, it is formation damage that occurs when a low pressure reservoir is shut in allowing water to set in well.
- 3) Present historical data which demonstrates conditions that can lead to waste. Such data should include:
 - a) Permanent loss of productivity after shut-in periods (i.e., formation damage).
Production declined from 655 MCFPD to 350 MCF due to formation damage
 - b) Frequency of swabbing required after the well is shut-in or curtailed.
Swabbing is ineffective in removing water due to small volume.
 - c) Length of time swabbing is required to return well to production after being shut-in.
In December, 1986, used soap sticks to restore well to production as swabbing had been
 - d) Actual cost figures showing inability to continue operations without special relief unsuccessful.
Well may not produce again if it has to be shut in.
- 4) If failure to obtain a hardship gas well classification would result in premature abandonment, calculate the quantity of gas reserves which would be lost
736 MMCF
- 5) Show the minimum sustainable producing rate of the subject well. This rate can be determined by: 350 MCFPD
 - a) Minimum flow or "log off" test; and/or
 - b) Documentation of well production history (producing rates and pressures, as well as gas/water ratio, both before and after shut-in periods due to the well dying, and other appropriate production data).ATTACHED TABLE I
- 6) Attach a plat and/or map showing the proration unit dedicated to the well and the ownership of all offsetting acreage.
ATTACHED
- 7) Submit any other appropriate data which will support the need for a hardship classification.
- 8) If the well is in a prorated pool, please show its current under- or over-produced status. N/A
- 9) Attach a signed statement certifying that all information submitted with this application is true and correct to the best of your knowledge; that one copy of the application has been submitted to the appropriate Division district office (give the name) and that notice of the application has been given to the transporter/purchaser and all offset operators.

GENERAL INFORMATION APPLICABLE TO HARDSHIP GAS WELL CLASSIFICATION

1) Definition of Underground Waste.

"Underground Waste as those words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing, of any well or wells in a manner to reduce or tend to reduce the total quantity of crude petroleum oil or natural gas ultimately recovered from any pool, and the use of inefficient underground storage of natural gas."

2) The only acceptable basis for obtaining a "hardship" classification is prevention of waste with the burden of proof solely on the applicant. The applicant must not only prove waste will occur without the "hardship" classification, but also that he has acted in a responsible and prudent manner to minimize or eliminate the problem prior to requesting this special consideration. If the subject well is classified as a "hardship" well, it will be permitted to produce at a specified minimum sustainable rate without being subject to shut-in by the purchaser due to low demand. The Division can rescind approval at any time without notice and require the operator to show cause why the classification should not be permanently rescinded if abuse of this special classification becomes apparent.

3) The minimum rate will be the minimum sustainable rate at which the well will flow. If data from historical production is insufficient to support this rate (in the opinion of the Director), or if an offset operator or purchaser objects to the requested rate, a minimum flow ("log off") test may be required. The operator may, if he desires, conduct the minimum flow test, and submit this information with his application.4) If a minimum flow test is to be run, either at the operator's option or at the request of the Division, the offset operators, any protesting party, the purchaser and OCD will be notified of the date of the test and given the opportunity to witness, if they so desire.

5) Any interested party may review the data submitted at either the Santa Fe office or the appropriate OCD District Office.

6) The Director can approve uncontested applications administratively if, in his opinion, sufficient justification is furnished. Notice shall be given of intent to approve by attaching such notice to the regular examiner's hearing docket. Within 20 days following the date of such hearing, the affected parties will be permitted to file an objection. If no objection has been filed, the application may be approved.7) Should a protest be filed in writing, the applicant will be permitted to either withdraw the application, or request it to be set for hearing.

8) An emergency approval, on a temporary basis for a period not to exceed 90 days, may be granted by the District Supervisor, pending filing of formal application and final action of the OCD Director. This temporary approval may be granted only if the District Supervisor is convinced waste will occur without immediate relief. If granted, the District Supervisor will notify the purchaser.

9) After a well receives a "hardship" classification, it will be retained for a period of one year unless rescinded sooner by the Division. The applicant will be required to certify annually that conditions have not changed substantially in order to continue to retain this classification.

10) Nothing here withstanding, the Division may, on its own motion, require any and all operators to show cause why approval(s) should not be rescinded if abuse is suspected or market conditions substantially change in the State of New Mexico.

11) A well classified as a "hardship well" will continue to accumulate over and under production (prorated pools). Should allowables exceed the hardship allowable assigned, the well will be permitted to produce at the higher rate, if capable of doing so, and would be treated as any other non-hardship well. Any cumulative overproduction accrued either before or after being classified "hardship" must, however, be balanced before the well can be allowed to produce at the higher rate.

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GRACE ENERGY

CITIES SERVICE

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GRACE ENERGY

Central Facility

MOBIL OIL

BFC
Jewel
Joel

BFC
Allen

CARLSBAD FIELD

EDDY COUNTY, NEW MEXICO

SCALE

0 1000 2000 3000 4000 5000

FEET

BARUCH FOSTER CORP DALLAS, TEXAS
Prepared by: JAE,dd
June 1985