



Universal Resources Corporation

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BEFORE THE  
OIL CONSERVATION DIVISION  
Case No. 112120 Exhibit No. — 8  
Submitted By:  
Universal Resources  
Hearing Date: April 15, 1999  
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September 25, 1998

Mr. Lee Otteni, District Manager  
USDI - Bureau of Land Management  
1235 La Plata Highway  
Farmington, NM 87401

Mr. Ray Powell, Commissioner  
New Mexico State Land Office  
P. O. Box 1148  
Santa Fe, NM 87504-1148

Ms. Lori Wrotenbery, Director  
New Mexico Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, NM 87505

Re: Request for Continuance of Variance Approval  
Onshore Oil & Gas Order #5, Measurement of Gas  
South Lybrook Gas Gathering System

Dear Ms. Wrotenbery, Mr. Powell and Mr. Otteni:

Since April 17, 1990, certain wells in Rio Arriba, San Juan and Sandoval Counties, New Mexico, have been operated by BCO, Inc. and, subsequently, Universal Resources Corporation (URC) under an approved variance from Onshore Order No. 5. URC requested a continuance of this variance in August 1996, however, the BLM returned the application in June 1998 with a request for more information. URC herewith submits the requested information and requests approval to continue operating the wells in our South Lybrook Gathering System as previously approved, and as provided for in NTL 92-5 New Mexico, Standards for Meters Measuring Low Gas Volumes and Rule 403 of the Rules and Regulations of the Oil Conservation Division of New Mexico (as amended), to include approval of surface commingling and off-lease measurement and sale of natural gas production.

URC operates 38 wells producing casinghead gas and oil through the South Lybrook Gathering System. These wells are located on 6 federal leases and 2 State of New Mexico leases. Four of the wells are located on the state leases. All wells on the gathering system are operated by URC. Exhibit A lists each well, its location and lease number, the average monthly oil and gas production and average monthly gas sales. Also included is average fuel gas usage which is calculated based on the equipment at each well or battery and compressor use:

Separators and pumpjacks	1 mcf/d
South Lybrook Compressor	27.7 mcf/d

During 1997, the wells on the South Lybrook gathering system produced a total of 27,052

barrels of oil and condensate plus 304.7 mmcf of gas from the Alamito Gallup and Lybrook Gallup pools in Township 22 North, Range 8 West, and Township 23 North, Range 7 West.

There are 16 meters recording gas flow at individual wellsites and tank batteries. URC operates the majority of the wells with a gas lift (plunger) system set to operate with a pressure or timed intermitter. Utilization of a plunger lift system maximizes recovery through a more cost-effective operation, thus extending the economic life of the well. The 2 wells currently operating on a pumpjack do not produce enough gas to efficiently operate on a plunger.

The surge of gas that is produced on each trip during plunger operations makes it difficult to integrate the charts of conventional gas flow measurement equipment and to obtain accurate gas volumes. The differential pen often appears to go straight up and down, which an automatic integrator can record as no flow. Exhibit B is a history of volumes from these chart integrations for selected months in 1994 through 1998. You'll note the inconsistency of the volumes caused by the difficulty in integrating the charts. The integration of these charts each month is not only meaningless, but would place a burden on these marginal wells, making them uneconomical to operate and perhaps forcing them to be shut in. Operating these wells as cost-efficiently as possible becomes even more critical when current oil prices are considered.

Because of the unreliability of the chart volumes and the additional cost monthly chart integrations would impose on these marginal wells, an alternative method of measuring gas production for each well was developed as required under our leases for royalty accountability. Exhibit C is the June 1998 calculation of estimated daily produced gas volumes for each well using this alternative method. The formula uses the cubic feet in the tubing, the tubing pressure at the start of each trip, the number of trips per day, and the length of afterflow in minutes to arrive at an estimated daily gas volume.

$$\frac{\text{Tubing volume} \times \text{tubing pressure psig}}{(\text{Cu. Ft.}) + 15.025 \text{ psia}} \div 15.025 \text{ psia} = \text{mcf per trip}$$

$$\text{Mcf per trip} \times \text{number of trips per day} = \text{volume per day}$$

$$\text{Volume per day} \times (\text{minutes of afterflow} / \text{minutes per trip}) = \text{Total daily volume}$$

Since originally approved in 1990, this method has proven a reliable estimation of production from each well and a good check against the gas El Paso Natural Gas Company (EPNG) reports at the gas sales meters.

URC's pumpers check the charts daily to ensure each well is running the proper number of trips, and that it is running efficient trips. If a well begins to load up, a trip will end either prematurely or late. Observing this situation on the chart allows the pumper to take corrective

action before the well requires a swab unit. Our goal is to minimize the increase in gas/oil ratio through careful plunger operation so that the gas energy is used to raise as much oil as possible.

URC tracks the gas production from each well on the South Lybrook Gathering System monthly and integrates all charts twice a year as a check on our estimates. Meters which record >100 mcf/d of gas flow are calibrated quarterly. All meters are calibrated every six months.

URC bases mmbtu for pricing purposes on a full compositional analysis performed by EPNG at least semi-annually on gas delivered to the South Lybrook central delivery point sales meter. URC believes the EPNG analysis represents an accurate average that doesn't affect the value of the gas to any owner's detriment. The cost of having each well's gas tested and the cost of the increased complexity of gas pricing would be burdensome, especially considering the marginal economic character of the wells.

URC also maintains a gathering system drip tank at the South Lybrook compressor. Sales of drip condensate from this drip tank were 318 bbls in 1997. URC requests approval for the off-lease storage and sale of this drip condensate, and its allocation back to wells on the gathering system based on each well's gas sales volume.

URC is confident its method of allocating gas production is equitable and economically beneficial to the leases. The reduction in meter servicing charges, chart integration fees and gas analysis costs will extend the economic life of the leases and will prevent premature abandonment of these low volume wells due to excessive operating costs. This method maximizes federal and state royalties and does not result in improper allocation of federal and state production and sales.

URC requests the following variances from Onshore Oil & Gas Order No. 5, as previously granted, be continued:

1. Allow URC to continue using the estimated produced gas computation (Exhibit C) as the basis for gas volumes produced at wellhead. Individual wellhead and battery meter charts will not be integrated monthly, but will be integrated twice a year as a check on our allocations. All charts will be available for inspection as required.
2. URC will calibrate gas meters through which <100 mcf/d of gas flows every six months rather than quarterly.
3. Testing of btu content of gas at wellhead will not be required. Allow URC to base mmbtu for pricing purposes on a full compositional analysis performed by EPNG at least semi-annually on gas delivered to the South Lybrook central delivery point sales meter. The BLM is notified when a settlement test or calibration is

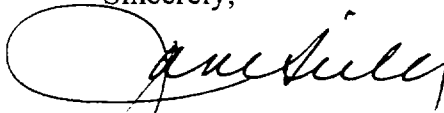
scheduled by EPNG.

4. Wells through which <200 mcf of gas passes daily shall not be required to have a temperature recorder.
5. Sales of drip condensate collected in the drip tank at the South Lybrook compressor site shall be allocated to the wells on the gathering system based on allocated gas sales.

In support of continuing the variance approval, URC submits the following additional information as required by the Guidelines for Surface Commingling and/or Off-Lease Sales, Storage, Usage and Measurement issued by the Farmington Bureau of Land Management on June 30, 1995:

1. Exhibit D. Lease outlines and numbers and the location of all wells.
2. Exhibit E. Location of all wells, flowlines, the South Lybrook gas gathering line and compressor and the EPNG central delivery point and sales meter.
3. Exhibit F. Schematic of the South Lybrook Gathering System and of a typical tank battery for an individual well and for multiple wells.
4. Exhibit G. List of wells in the South Lybrook Gas Gathering System grouped into tank batteries. Equipment at each wellsite and tank battery is also given.
5. Exhibit H. Current gas analysis of gas delivered to the EPNG sales meter.

Sincerely,



Jane Seiler  
Administrative Supervisor

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