



## Cross Timbers Operating Company

August 09, 2001

Mr. David Catanach  
New Mexico Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

RE: Administrative Approval to Surface Commingle Gas Production  
Abrams J #1, Abrams Gas Com D #1 & Keys Gas Com D #1E  
Sec 29, T29N, R10W  
San Juan County, NM



Dear Mr. Catanach,

Cross Timbers Operating Company (CTOC) requests administrative approval to surface commingle gas production from the Abrams J #1, Abrams Gas Com D #1 and the Keys Gas Com D #1E. CTOC plans to set a compressor at the Abrams J #1 battery and produce the commingled gas through this compressor. Connecting the three wells to a compressor will help them overcome sales line pressure, maximizing their gas rates. Sharing a compressor will result in a lower operating cost and less fuel gas usage versus setting three compressors and independently compressing each well's gas. Thus, surface commingling and sharing a compressor will increase the ultimate recoveries of the wells by extending their economic lives.

Each well will have its own gas allocation meter measuring its gas before commingling. The commingled gas will be sold through a central distribution point (CDP) meter at the compressor discharge. An individual well's gas production will be determined by ratio using the allocation meters volumes and the total sales volume from the CDP sales meter. Each well's oil and water production will be kept separate and not surface commingled.

Notification of the proposed surface commingle was sent to all working and royalty interest owners. No objections were received within the 20 day waiting period.

The following are enclosed for your review of the proposed surface commingling.

1. Well information table.
2. Gas production allocation formula sheet.
3. Battery schematic of proposed installation.
4. Well location plat.

If you need additional information or have any questions, I can be contacted at (505) 324-1090.

Sincerely,

Ray Martin  
Operations Engineer

cc: Oil Conservation Division Aztec  
FW Land Dept.  
Well Files

### WELL INFORMATION

|             | <b>Abrams J #1</b>                           | <b>Abrams Gas Com D #1</b>                      | <b>Keys Gas Com D #1E</b>                     |
|-------------|----------------------------------------------|-------------------------------------------------|-----------------------------------------------|
| Location    | 1,615' FSL & 1,115' FEL<br>Sec 29, T29, R10W | 1,650' FSL & 990' FEL<br>Sec 29, T29N, R10W     | 1,810' FSL & 1,030' FEL<br>Sec 29, T29N, R10W |
| API #       | 30-045-25521                                 | 30-045-07822                                    | 30-045-23729                                  |
| Pool        | Otero Chacra / Armenta<br>Gallup             | Aztec Pictured Cliffs / Aztec<br>Fruitland Sand | Basin Dakota                                  |
| Pool Code   | 82329 / 02290                                | 71280 / 71200                                   | 71599                                         |
| Gas Gravity | 0.71                                         | 0.63                                            | 0.70                                          |
| Gas Rate    | 145 MCFD                                     | 10 MCFD                                         | 30 MCFD                                       |

## **Abrams J #1, Abrams Gas Com D #1 & Keys Gas Com D #1E Gas Allocation Formula**

The Abrams J #1's existing gas sales meter will be used as the central distribution point (CDP) gas sales meter for the three wells. A new gas sales meter will be set on the Abrams J #1 to be used as its allocation meter. The existing gas sales meters on the Abrams Gas Com D #1 and the Keys Gas Com D #1E will be used as allocation meters. See the attached proposed gas surface commingle installation diagram. The three allocation meters will separately measure each well's gas production. Each well's gas sales will be determined by ratio using the allocation meters volumes and the total sales volume from the CDP sales meter. El Paso Field Service is the gas transporter for these leases.

Abrams J #1 gas production will be calculated as follows:

$$\text{Gas Prod.} = [(J \#1's \text{ allocation meter vol.} \div \text{the sum of all 3 allocation meter vols.}) \times \text{CDP sales meter vol.}] + \text{Allocated compressor \& separator fuel gas vol.}$$

Abrams Gas Com D #1 gas production will be calculated as follows:

$$\text{Gas Prod.} = [(D \#1's \text{ allocation meter vol.} \div \text{the sum of all 3 allocation meter vols.}) \times \text{CDP sales meter vol.}] + \text{Allocated compressor \& separator fuel gas vol.}$$

Keys Gas Com D #1E gas production will be calculated as follows:

$$\text{Gas Prod.} = [(D \#1E's \text{ allocation meter vol.} \div \text{the sum of all 3 allocation meter vols.}) \times \text{CDP sales meter vol.}] + \text{Allocated compressor \& separator fuel gas vol.}$$

The total fuel gas usage is estimated to be 9 MCFD for the compressor. The compressor's fuel usage will be divided equally between the three wells. During the winter if a separator's water bath is heated, the fuel gas usage is estimated to be 1 MCFD for that well.

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# Cross Timbers Operating Company Keys Gas Com D #1E, Abrams J #1 & Abrams Gas Com D #1 Proposed Gas Surface Commingling Installation

