### STATE OF NEW MEXICO

## ENERGY AND MINERALS DEPARTMENT

## OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE

TONEY ANAYA

1000 RIO BRAZOS ROAD AZTEC, NEW MEXICO 87410 (505) 334-6178

June 26, 1984

Tenneco Oil Co. P.O. Box 3249 Englewood, CO 80155

Re: Dawson Federal #1 D-26-27N-8W

Gentlemen:

Your request for emergency hardship classification for the referenced well is hereby approved until September 5, 1984.

If you have any questions, please contact this office.

Sincerely,

Frank T. Chavez
District Supervisor

xc: Joe D. Ramey

El Paso Natural Gas Co.

Well File

Dauk

## Tenneco Oil **Exploration and Production**

A Tenneco Company

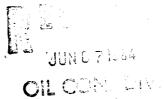
Western Rocky Mountain Division

6162 South Willow Drive P.O. Box 3249 Englewood, Colorado 80155 (303) 740-4800



May 30, 1984

New Hexico Oil Conservation Division P.O. Box 2088 Santa Fe. NM 87501



RE: Hardship Status - Dawson Fed #1 Section 26, T27N, R8W San Juan County, New Mexico

Gentlemen:

Tenneco Oil requests that the referenced well be classified as a hardship gas well. Underground waste will occur due to shut-in because of a build up in liquid in the wellbore requiring the well to be swabbed to return it to production. The build up of liquids in the wellbore also causes the water saturation of the pay zones near the wellbore to increase, there by lowering the relative permeability of gas in the wellbore. This low relative permeability, whether permanent or temporary, will restrict the flow of gas.

In order to rectify the water problem this well currently has an intermitter installed that unloads the produced liquids (water) to the low pressure side of the separator. This method has been successful in keeping the wellbore unloaded and flowing freely. The use of dewatering devices has been considered but rejected. These are:

- Plunger lift due to shut-in bottom hole pressure being very close to the line pressure.
- (2) Undersize tubing the minimum flow rates necessary to unload the produced water, as calculated by the methods proposed by Turner are listed below:

Since the well has a deliverability of approximately 100 MCFD none of the above tubing sizes would enable the well to unload its produced water. It would not be advisable to use smaller tubing than 1" at these depths.

When this well is shut-in for a period of time it has to be swabbed to return it to production. Normal swab time is usually two to three days, at a cost of approximately \$2,500.00, which is more than the gross monthly revenue generated by this well. If Tenneco ahandoned this well due to failure to obtain hardship gas well classification, the quantity of gas reserves which would be lost would be 308 MCF. This well is in a prorated pool which is currently under produced 3029 MCF as of May 1984 production book.

Hardship Status - Dawson #1 Page 2 May 30, 1984

If you have any questions concerning the application for hardship gas well status, please contact Mark Owens, Production Engineer at 303/740-4840.

Very truly yours,

Scott McKinney

Senior Regulatory Analyst

SMc:gj
Attachment

cc: Mark Owen

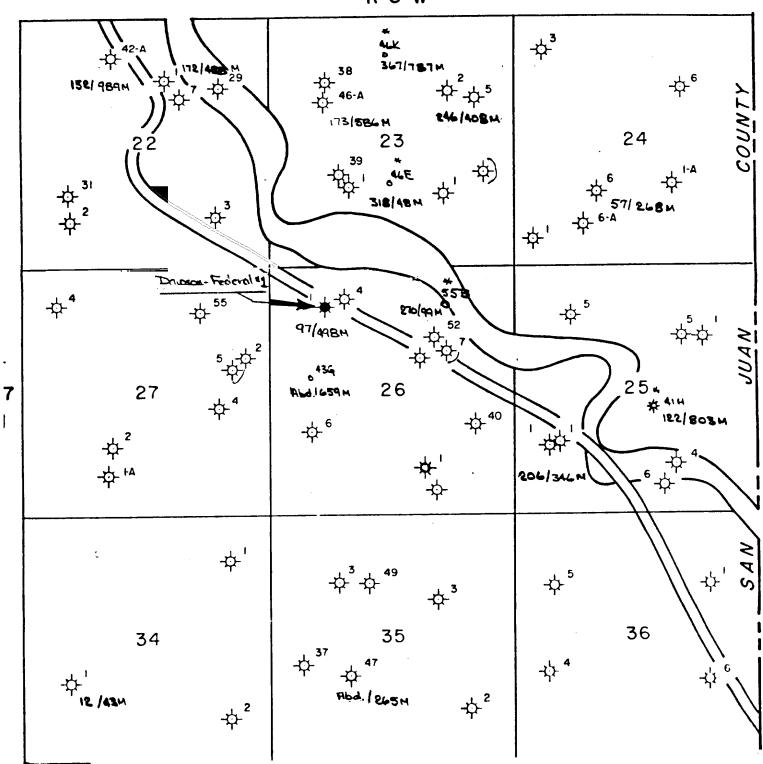
### APPLICATION FOR CLASSIFICATION AS HARDSHIP GAS WELL

APPLICATION TON CLASSIFICATION AS AMADEMA
Operator Tenneco Oil Company Contact Party Scott McKinney
Address P.O. Box 3249, Englewood, CO 80155 Phone No. 303/740-4800
Lease Dawson Fed Well No. #1 UT D Sec. 26 TWP 27N RGE - 8W
Pool Name Blanco Mesaverde Minimum Rate Requested
Transpo . Hime El Paso Natural Gas Purchaser (if different)
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 will qualifies as a hardship gas well.
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)
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.
b) Mechanical condition of the well(provide wellbore sketch). Explain fully mechanical attempts to rectify the problem, including but not limited to:
i) the use of "smallbore" tubing; ii) other de-watering devices, such as plunger lift, rod pumping units, etc.
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).
b) Frequency of swabbing required after the well is shut-in or curtailed.
c) Length of time swabbing is required to return well to production after being shut-in.
d) Actual cost figures showing inability to continue operations without special relie
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
5) Show the minimum sustainable producing rate of the subject well. This rate can be determined by:
a) Minimum flow or "log off" test; and/or
b) Documentation of well production history (producing rates and pressures, as well a gas/water ratio, both before and after shut-in periods due to the well dying, and other appropriate production data).
6) Attach a plat and/or map showing the proration unit dedicated to the well and the ownership of all offsetting acreage.
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.
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 ar all offset operators.

CASE NO. 8077

EXHIBIT "B"

ORDER NO. R-7453

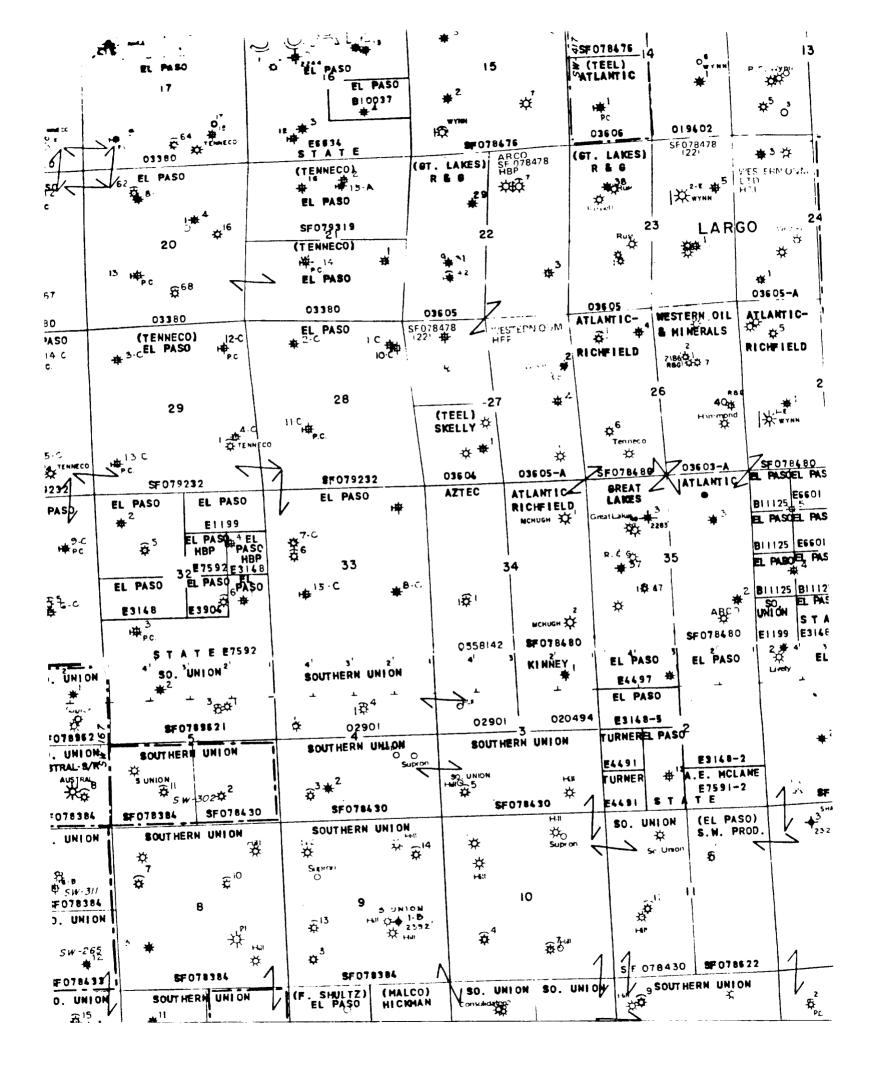


## SAN JUAN BASIN

SAN JUAN COUNTY, NEW MEXICO OFFSET OPERATORS

Western Oil & Minerals P.O. Drawer 1228 Farmington, NM 87499 AAA Operating Co, Inc.
Interfirst 11, Suite 3345
Dallas Tx 75270

R&G DrillingCo P.O. Drawer 419 Farmington, NM 87499

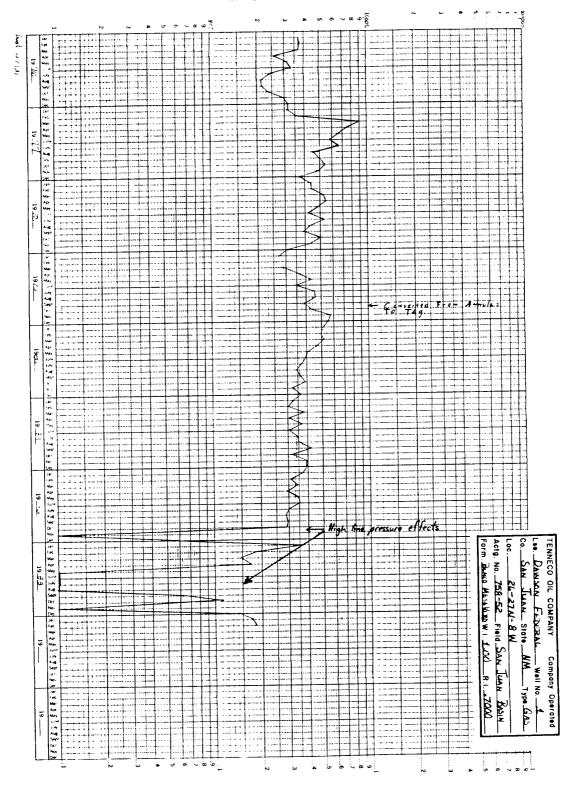


2859W

LEASE Dawson Federal
WELL NO1
8-5/8 "OD, 20 & 24 LB, J-55 CSG.W/ 250 SX
TOC @surface
4-1/2 "00, 10.5 LB, J-55 CSG.W/150/135/210 SX
DV'S @ 3180' & 4652'
2-3/8 "OD. 4.7 LB, J-55 tbg.W/ Model 'D'
<b>@</b> 6501'

410'	
Tbg profid 4450, 55, 60, 85. 90, 95	4446' Mesaverde 4546'
Junk and sand fill in the @ 6431'	
Blanking plug in The pring in The e 6488	6532 DAKOTA 6676'

MCF OF GAS FRODUCED



# Tenneco Oil Exploration and Production

A Tenneco Company

6162 South Willow Drive PO. Box 3249 Englewood, Colorado 80155 (303) 740-4800



Western Rocky Mountain Division

AMENDED COPY

May 30, 1984

New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, NM 87401 Marco 7,034 By. Dist. 9

RE: Hardship Status - Dawson Fed #1 Section 26, T27N, R8W San Juan County, New Mexico

### Gentlemen:

Tenneco Oil requests that the referenced well be classified as a hardship gas well. Underground waste will occur due to shut-in because of a build up of liquids in the wellbore requiring the well to be swabbed to return it to production. The build up of liquids in the wellbore also causes the water saturation of the pay zones near the wellbore to increase, there by lowering the relative permeability to gas. This low relative permeability, whether permanent or temporary, will restrict the flow of gas.

In order to rectify the water problem this well currently has an intermitter installed that unloads the produced liquids (water) to the low pressure side of the separator. This method has been successful in keeping the wellbore unloaded and flowing freely. The use of other dewatering devices has been considered but rejected. These are:

- (1) Plunger lift due to shut-in bottom hole pressure being very close to the line pressure.
- (2) Undersize tubing the minimum flow rates necessary to unload the produced water, as calculated by the methods proposed by Turner are listed below:

2-3/8" (1.995" ID) - 697 MCFD 1-1/4" (1.380" ID) - 333 MCFD 1" (1.049" ID) - 193 MCFD

Since the well has a deliverability of approximately 100 MCFD none of the above tubing sizes would enable the well to unload its produced water. It would not be advisable to use smaller tubing than 1" at these depths.

When this well is shut-in for a period of time it has to be swabbed to return it to production. Normal swab time is usually two to three days, at a cost of approximately \$2,500.00, which is more than the gross monthly revenue generated by this well. If Tenneco abandoned this well due to failure to obtain hardship gas well classification, the quantity of gas reserves which would be lost would be 308 MMCF. This well is in a prorated pool which is currently under produced 3029 MCF as of May 1984 production book.

Hardship Status - Dawson #1 Page 2 May 30, 1984

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Very truly yours,

Scott McKinney

Senior Regulatory Analyst

SMc:gj
Attachment

cc: Mark Owen

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A Tenneco Company

6162 South Willow Drive PO. Box 3249 Englewood, Colorado 80155 (303) 740-4800



Western Rocky Mountain Division

May 30, 1984

New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, NM 87401 O'L CON. DIV.

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SMc:gj Attachment

cc: Mark Owen

### APPLICATION FOR CLASSIFICATION AS HARDSHIP GAS WELL

Operator Tenneco Oil Company	Contact Party Scott McKinney
Address P.O. Box 3249, Englewood, CO 80155	Phone No. 303/740-4800
Lease Dawson Fed Well No. #1 UT	
Pool Name Blanco Mesaverde	Minimum Rate Requested
Transpo . Mime El Paso Natural Gas	Purchaser (if different)
Are you seeking emergency "hardship" classifica	ition for this well? $\underline{\hspace{0.1cm}}$ yes $\underline{\hspace{0.1cm}}$ no
Applicant must provide the following informational qualifies as a hardship gas well.	on to support his contention that the subject

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)

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  - 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.
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- 4) 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.

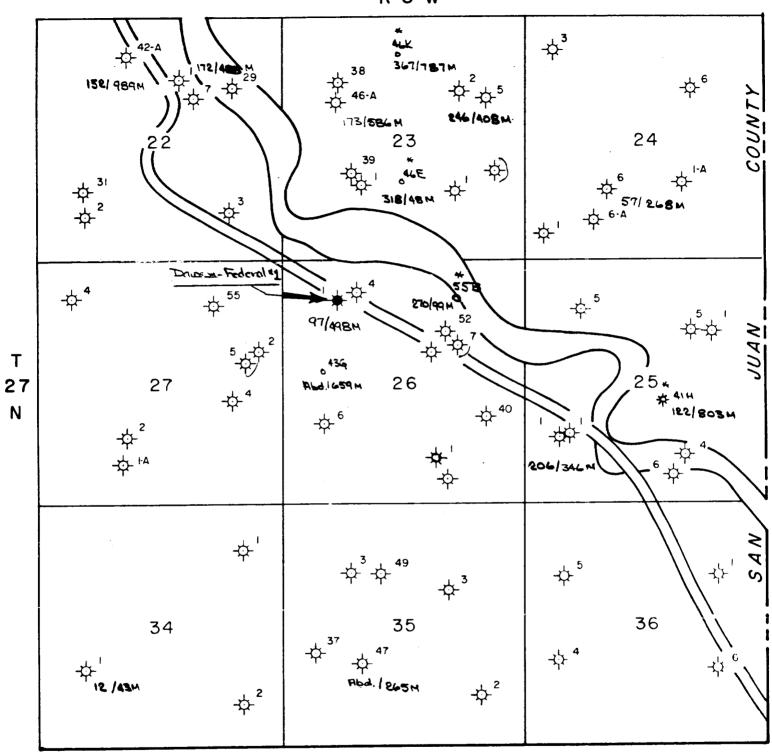
EXHIBIT "B" **CASE NO. 8077** ORDER NO. R-7453

### 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."

- 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 escind 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.
- 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.

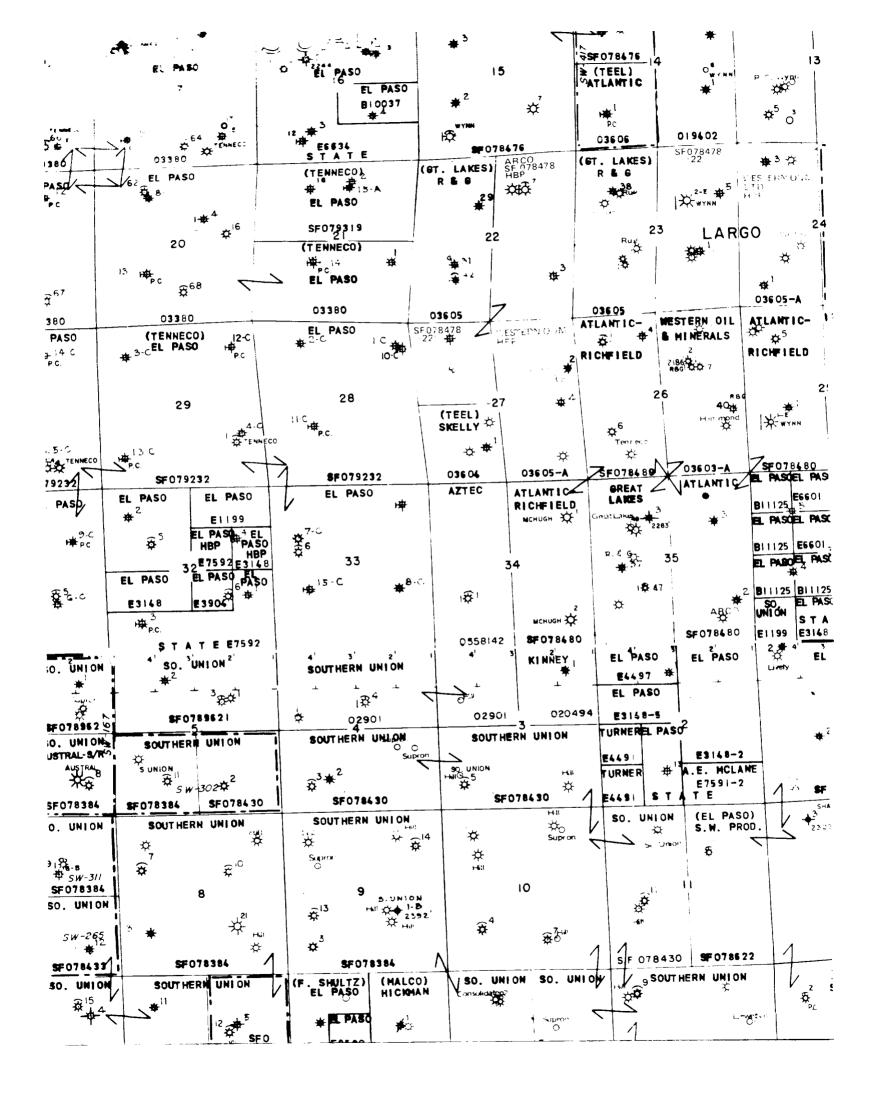


### SAN JUAN BASIN

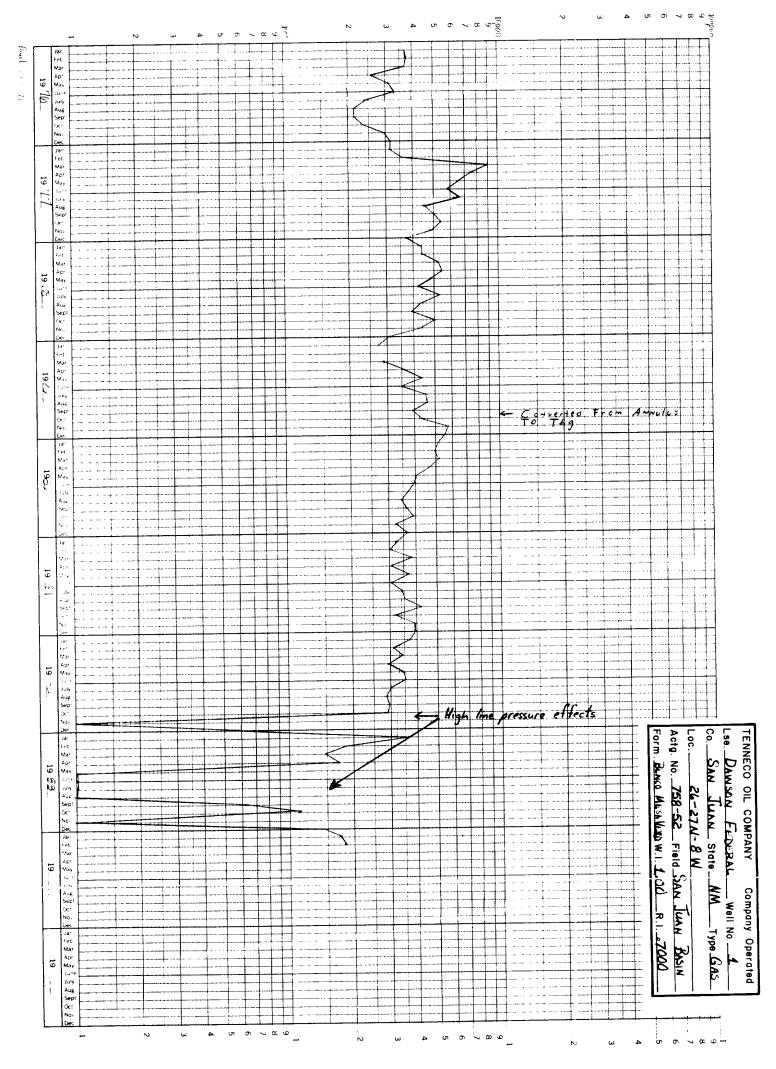
SAN JUAN COUNTY, NEW MEXICO

Western Oil & Minerals P.O. Drawer 1228 Farmington, NM 87499 AAA Operating Co, Inc.
Interfirst 11, Suite 3345
Dallas Tx 75270

R&G DrillingCo P.O. Drawer 419 Farmington, NM 87499



## MCF OF GAL PRODUCED



### 2859W

LEASE Dawson Federal						
	WELL NO.		1			
<u>8-5/8</u> "OD, <u>20 &amp;</u>	<u>24</u> LB,_	J-55	_CSG.W/_	250	_sx	
TOC @surface	·					
<u>4-1/2</u> "OD, <u>10.5</u>	_LB, <u>J-55</u>	csg.	W/ <u>150/13</u>	35/210	_sx	
DV'S @ 3180' & 46	52'					
<u>2-3/8</u> "OD. <u>4.7</u>	LB,_	J-55	_tbg.W/	Model	'D'	
@ 6501'						

Thy perfid 4450, 55, 60, 85, 90, 95

410'

4446' MESAVERDE 4546'

Junk and sand fill in the @ 6431'

Blanking plug in saling nipple @ 6488

6532' DAKOTA 6676'

6739'