

CAMPBELL, BYRD & BLACK, P.A.

LAWYERS

JACK M. CAMPBELL
HARL D. BYRD
BRUCE D. BLACK
MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
J. SCOTT HALL
PETER N. IVES
RUTH S. MUSGRAVE
LOURDES A. MARTINEZ

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87501
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

July 31, 1984

Mr. Richard L. Stamets
New Mexico Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Case No. 8246: Application of Trans Pecos Resources,
Inc. for Enhanced Oil Recovery Gas Injection Project,
Guadalupe County, New Mexico.

Dear Mr. Stamets:

Enclosed for your consideration are two (2) proposed forms
for Orders to be entered in the above-referenced proceeding.

You may recall that at the hearing held on this Application
Trans Pecos requested that it be allowed to include additional
offset recovery wells in the project area by administrative
application (ordinary drilling permit requirements notwith-
standing). Correspondingly, the additional proposed order
submitted contains a provision allowing additional offset
recovery wells to be so covered by the scope of the order while
dispensing with the requirement for additional application and
hearing.

Please let me know if I can provide additional information
with respect to the subject application.

Very truly yours,



J. Scott Hall

JSH/cv
enclosures

EDA Instruments Inc.
4115 Silver Avenue SE
Albuquerque NM 87108

EDA

FROM:

EDA INSTRUMENTS INC.
4115 SILVER AVE.
ALBU, N.M. 87108

Customer Number, if any:

TO: Richard L. STAMPS -

At. Conservation Div.
P.O. Box 2088
Duffie W.V. 87501

* U.S.G.P.O. 1983-400-104 Label 11-B, Apr. 1983

EXPRESS MAIL

B52758517

ORIGIN:

Initials of Receiving Clerk: *EO*

P.O. ZIP Code: *87108*

Time in: *11:15 AM*

Return Receipt Service:

To Whom & Date Del:

To Whom, Date & Address of Del:

Weight: *9.35* LBS.

Postage & Fees: \$ *9.35*

DESTINATION: *Albuquerque*

Date: *7/17/84*

Initials of Emp: *[Signature]*

Signature of Addressee or Agent: *[Signature]*

DELIVERY WAS ATTEMPTED

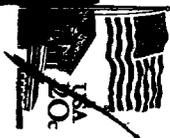
Date: _____ Time: _____

Notice Left By: _____

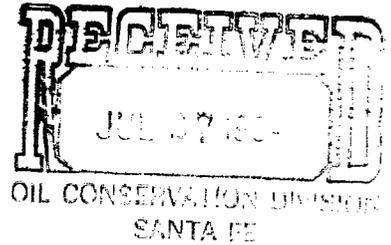
EXPRESS MAIL SERVICE

TO REMOVE PERMITS AND FEES

ALBUQUERQUE
JUL 17 1984
U.S. POSTAGE



Trans Pecos Resources, Inc.
P.O. Box 328
Santa Rosa, N.M. 88435



CLIENT NO.	LOG NO. 17297	CLIENT P.O. NO.	CONTACT PERSON	TELEPHONE	DATE REPORTED 7-26-84
7-16-84	COLLECTED	Jack	7-20-84	11:50 am	RECEIVED BY: Oliver
PRESERVATION WHEN RECEIVED NONE				TYPE OF CONTAINERS Glass	RECEIVED VIA: Per. Del.
ADDITIONAL PRESERVATION OR PREPARATION				PREPARED BY:	DATE PREPARED:

SAMPLE ID					
Well, NE $\frac{1}{4}$ Sec. 11, T9N, R23E Depth 52 ft., Flow Rate- 15 gallons a minute					
	mg/l	meq/l		mg/l	meq/l
Aluminum			Alkalinity (CaCO ₃)	313.8	
Arsenic			Bicarbonate	376.6	6.172
Barium			Boron		
Cadmium			Carbonate	<0.01	
Calcium	70.0	3.493	Chloride	74.8	2.110
Chromium			Cyanide		
Cobalt			Fluoride		
Copper			Hardness (CaCO ₃)	332.5	
Gold			Nitrate (N)		
Iron	<0.02		pH (no units)	7.71	
Lead			Phenols		
Lithium			Phosphate		
Magnesium	38.3	3.151	Silica		
Manganese	<0.01		Sulfate	354.	7.374
Mercury			Solids (Total Dissolved)	914.	
Molybdenum			Solids (Total Suspended)		
Nickel			Surfactants		
Potassium	1.19	0.030	Color (PCU)		
Silver			Conductance (ohm/cm)		
Selenium			Odor (T.O)		
Sodium	210.	9.135	Turbidity		
Zinc			Cations		



July 19, 1984



Mr. Richard L. Stamets
Chief of Technical Services
State of New Mexico
Oil Conservation Division
P.O. Box 2088
Land Office Building
Santa Fe, New Mexico 87501

Re: Case #8246, Docket #25-84
Trans Pecos Resources, Latigo Ranch A#1

Dear Mr. Stamets:

With a view to satisfying your request for a summary of the computer data on the fracture gradient in the referenced well, Trans Pecos commissioned Dowdle, Fairchild and Ancell, who furnished the computer data, to prepare the enclosed summary.

In view of the experimental nature of this project we wish to proceed with all due caution, using the most conservative values we can generate from the limited data available. Consequently, as stated in the covering letter from Ken Ancell, we will adopt a new model using data from the Latigo Ranch B#2 rather than data from N₂ and CO₂ treatment on the Latigo Ranch A#1, which generated the values presented in my testimony at the hearing. If these projections are correct the maximum rates injected will be limited to 50SMCFD. We propose to commence with far lower rates, monitoring injection pressures, and limit final rates to remain below the fracture pressure.

If miscibility is achieved, and apparent permeability is increased, higher injection rates would be possible while maintaining injection pressure below the fracture gradient. Such data, as generated, will be forwarded to your office routinely.

I trust the enclosed data will satisfy your requirements, however if you need any further information please notify me.

Yours Sincerely,

Jack Gawron
Production Engineer

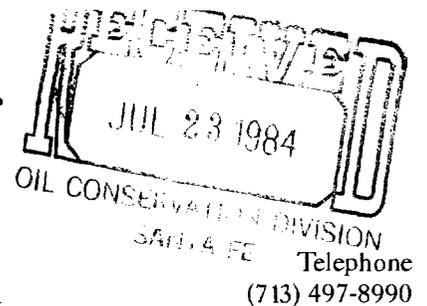
JG/ca

Attachments

Dowdle Fairchild & Ansell, Inc.

Petroleum Consultants

14811 St. Mary's Lane, Suite 140
Houston, Texas 77079



July 18, 1984

Mr. Robert McKinney
Trans Pecos Resources
800 Gessner
Suite 790
Houston, Texas 77024

Dear Bob:

Attached are two charts that deal with gas injection into the "E" Zone of the Latigo Ranch A-1. The first chart is the same plot we furnished you earlier which shows the surface pressure as a function of time for various injection rates and permeabilities. The second chart is similar except it shows the bottom hole pressure instead of surface pressure. Also shown is a fracture pressure line.

The fracture gradient was calculated from the adjacent Latigo Ranch B-2. This yields a fracture gradient of 0.78 psi/ft. This yields a pressure of 4760 psi at the "E" Zone level. The fracture pressures derived from treatments on the Latigo Ranch A-1 were complicated by the presence of Nitrogen and Carbon Dioxide which made the pressure response "mushy" and not very reliable for determining fracture gradients.

If you are restricted to pressures less than fracture pressure, 500 Mcfd is the maximum rate that you can inject if the permeability is in the 0.1 md range.

If we can help in any other way, please do not hesitate to call.

Sincerely,

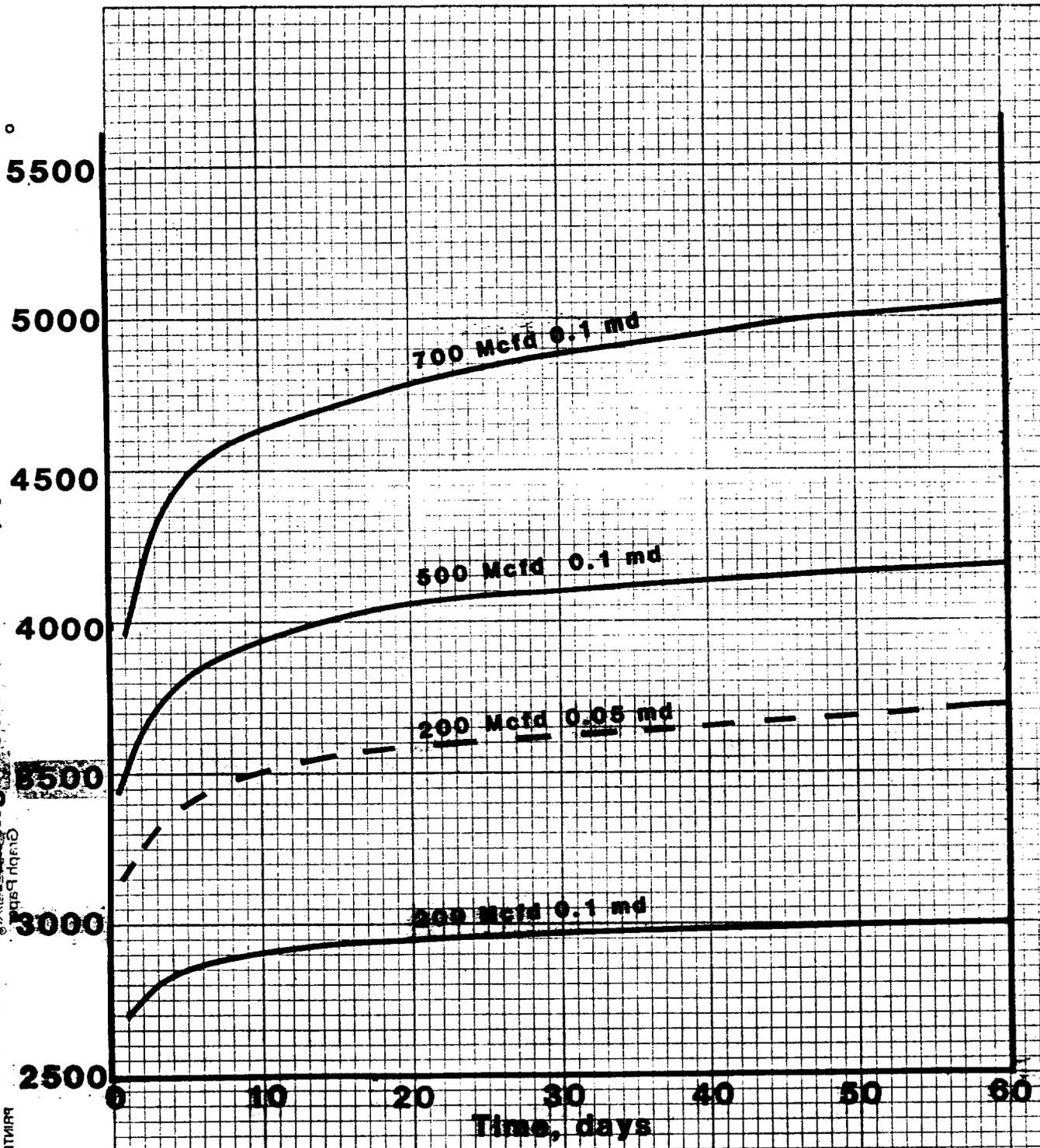
DOWDLE FAIRCHILD & ANCELL, INC.


Kenneth L. Ansell

KLA/tb

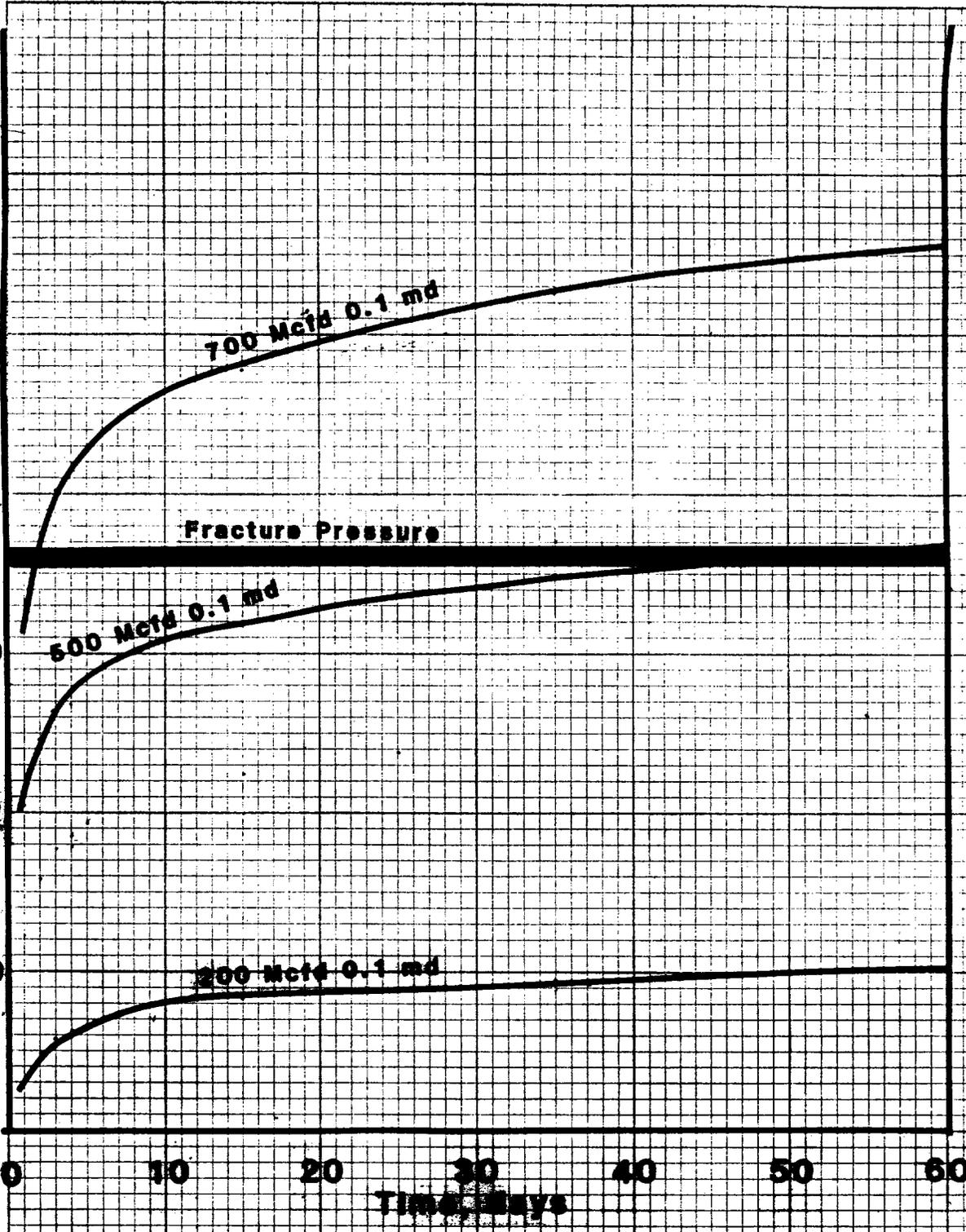
Attachments

10 DIVISIONS PER INCH BOTH VAYS
Tubing Head Pressure, psia
Quincy Leath
DIRECT FROM CODEX BOOK CO., HOUSTON, TEXAS 55085
PRINTED IN U.S.A.



**Trans Pecos Resources
Latigo Ranch A-1
Injection Project**

10 DIVISIONS PER INCH ALWAYS
Bottomhole Flowing Pressure, psia
Gulph Paper
DIRECT FROM CODEX BOOK CO. KIRKWOOD, MISS. 39095
PRINTED IN U.S.A.



Trans Pecos Resources
Latigo Ranch A-1
Injection Project

BEFORE THE
OIL CONSERVATION DIVISION
NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

RECEIVED

JUL 6 1984

OIL CONSERVATION DIVISION

Case 8246

IN THE MATTER OF THE APPLICATION
OF TRANS PECOS RESOURCES, INC. FOR
AUTHORITY TO INJECT PRODUCED GAS
FOR AN ENHANCED OIL RECOVERY PILOT
PROJECT, GUADALUPE COUNTY, NEW
MEXICO.

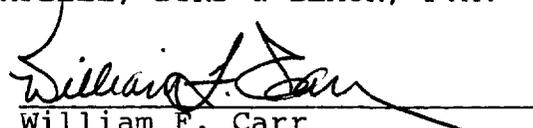
ENTRY OF APPEARANCE

Comes now, CAMPBELL, BYRD & BLACK, P.A., and hereby enters
its appearance in the above-referenced cause for Trans Pecos
Resources, Inc.

Respectfully submitted,

CAMPBELL, BYRD & BLACK, P.A.

By


William F. Carr
Post Office Box 2208
Santa Fe, New Mexico 87501
(505) 988-4421

ATTORNEYS FOR TRANS PECOS
RESOURCES, INC.