



MURPHY OPERATING CORPORATION  
UNITED BANK PLAZA, SUITE 300  
400 NORTH PENNSYLVANIA AVENUE  
POST OFFICE BOX 2648  
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE  
505 623-7210

June 22, 1989

RECEIVED

RETURN RECEIPT REQUESTED

Mr. David Catanach, Engineer  
State of New Mexico  
Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87504-2088

JUN 26 1989

OIL CONSERVATION DIV.  
SANTA FE

Re: Request for Injection Pressure Increase  
Todd Lower San Andres Unit ("TLSAU")  
Well Numbers: #29-15 and #36-1

Dear David:

Enclosed please find step rate test information on the above-referenced wells. These step rate tests were recently performed by B & D Well Testers of Hobbs, New Mexico.

Murphy Operating Corporation respectfully requests that said injection pressure limits for these wells be increased to 50 psi less than the indicated fracture pressure. The well numbers, locations, pressure limits as previously approved, and indicated fracture pressure are listed below.

<u>Well Number/Location</u>	<u>Previously Approved Limits</u>	<u>Indicated Fracture Pressure</u>
Well #29-15 Unit O, Section 29 T7S-R36E	853 psig	1150 psig
Well #36-1 Unit A, Section 36 T7S-R35E	847 psig	1210 psig

Thank you for your cooperation in this regard. If you should have any questions concerning this request, please do not hesitate to contact me at the number listed above.

Sincerely,

MURPHY OPERATING CORPORATION

*Mark B. Murphy (Sons)*

Mark B. Murphy  
President and Chief Operating Officer

MBM/js

Enclosures: Tabulated step rate test information for Well(s) #29-15 and #36-1.  
Pressure versus Rate Graph(s) for Well(s) #29-15 and #36-1.

cc: Mr. Jerry Sexton, Supervisor  
Oil Conservation Division  
Post Office Box 1980  
Hobbs, New Mexico 88240

# B & D WELL TESTERS

## Step Rate Test

Phone (505) 397-3914

Hobbs, New Mexico 88240

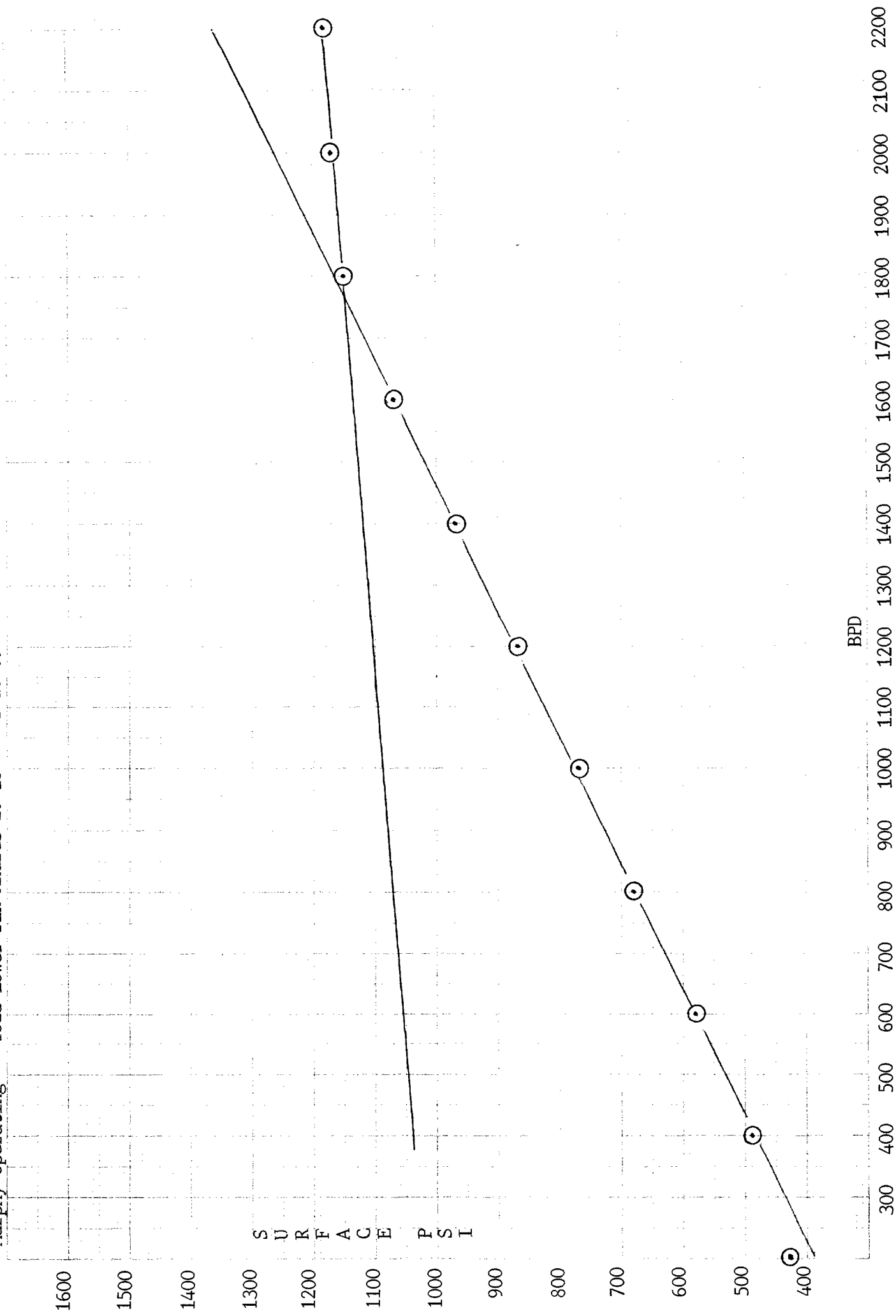
Company <b>Murphy Operating</b>						Test Date <b>5-13-89</b>		Unit
Total Depth						Plug Back TD		Elevation
Csg size						Wt	d	Set at
Tbg size						2 3/8	Wt	d
Perfs: From						To		Sec 29 Twp-Blk 7S Rge 36E
Perfs: From						To		County Roosevelt State New Mexico
Producing thru						Packer set at		Co. Rep
Time of Reading	Elap Time Hrs.	Well Information					Remarks	
		Rate BBLS Per Day	Total BBLS Per Rate	Surface PSIG	Surface PSI Cor for Friction	BHP		
4:40	Shut in			410				
4:45	Start							
4:50		200		430				
4:55		200		430				
5:00	:15	200		430				
5:05		400		480				
5:10		400		490				
5:15	:30	400		490				
5:20		600		550				
5:25		600		570				
5:30	:45	600		580				
5:35		800		650				
5:40		800		660				
5:45	1:00	800		680				
5:50		1000		740				
5:55		1000		760				
6:00	1:15	1000		770				
6:05		1200		830				
6:10		1200		850				
6:15	1:30	1200		870				
6:20		1400		910				
6:25		1400		940				
6:30	1:45	1400		970				
6:35		1600		1020				
6:40		1600		1050				
6:45	2:00	1600		1070			Parting PSI appears to be 1150	
6:50		1800		1120				
6:55		1800		1140				
7:00	2:15	1800		1150				

### Step Rate Test

Hobbs, New Mexico 88240

[illegible]

Murphy Operating      Todd Lower San Andres 29-15      5-13-89



# B & D WELL TESTERS

## Step Rate Test

Phone (505) 397-3914

Hobbs, New Mexico 88240

Company <b>Murphy Operating</b>						Test Date <b>5-13-89</b>		Unit
Total Depth						Plug Back TD		Elevation
Csg size						Wt	d	Set at
Tbg size <b>2 3/8</b>						Wt	d	Set at
Producing thru						Packer set at		Co. Rep
Well Information						Remarks		
Time of Reading	Elap Time Hrs.	Rate BBLs Per Day	Total BBLs Per Rate	Surface PSIG	Surface PSI Cor for Friction	BHP		
1:25	Shut in			480				
1:30	Start							
1:35		200		510				
1:40		200		520				
1:45	:15	200		530				
1:50		400		570				
1:55		400		580				
2:00	:30	400		600				
2:05		600		670				
2:10		600		700				
2:15	:45	600		730				
2:20		800		780				
2:25		800		800				
2:30	1:00	800		820				
2:35		1000		870				
2:40		1000		900				
2:45	1:15	1000		920				
2:50		1200		980				
2:55		1200		1000				
3:00	1:30	1200		1020				
3:05		1400		1090				
3:10		1400		1110				
3:15	1:45	1400		1120				
3:20		1600		1180				
3:25		1600		1200			Parting PSI apperars to be 1210	
3:30	2:00	1600		1210				
3:35		1800		1230				
3:40		1800		1200				
3:45	2:15	1800		1200				

## Step Rate Test

Hobbs, New Mexico 88240

Company Murphy Operating

Test Date 5-13-89

Unit

Lease Todd Lower San Andres

Total Depth

Plug Back TD

Elevation

Well # 36-1

### Csg size

Wt

d

Set at

Perfs: From

To

Sec 36

Twp-Blk 7S

Rge 35E

**Tbg size**

2 3/8 wt

d

Set at \_\_\_\_\_

Perfs: From

To

County Roosevelt State New Mexico

### Producing thru

Packer set at

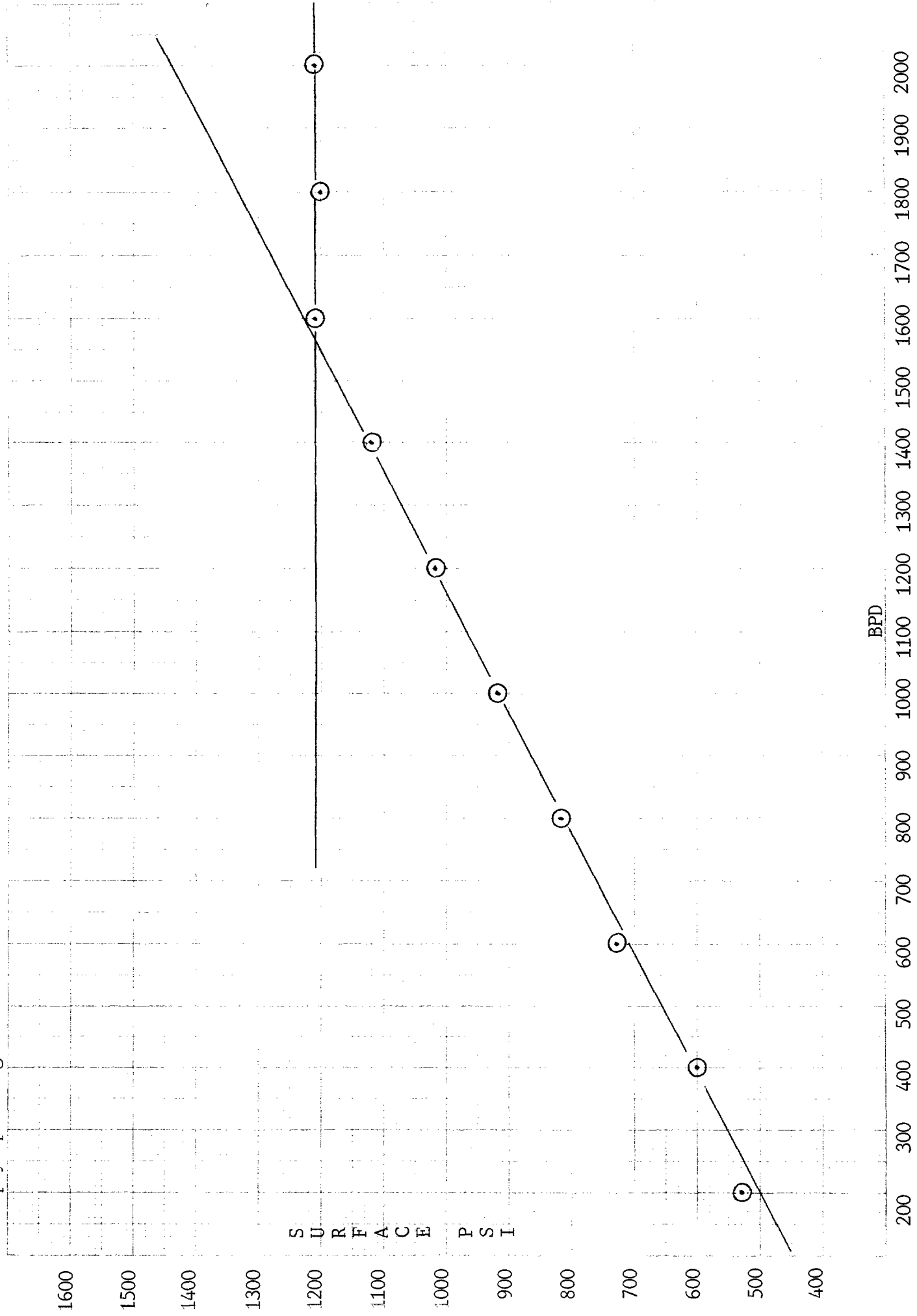
Co. Rep

[illegible]

Murphy Operating 5-13-89 Todd Lower San Andres 36-1

S U R F A C E P S I

BPD





STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE  
June 26, 1989

GARREY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88240  
(505) 393-6161

OIL CONSERVATION DIVISION  
P.O. BOX 2088  
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Murphy Operating Corp.	Todd Lower SA Unit #29-15-0	29-7-36
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton  
Supervisor, District I

/bp





STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

June 26, 1989

GARREY CARRUTHERS  
GOVERNOR

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HOBBS, NEW MEXICO 88240  
(505) 393-6161

OIL CONSERVATION DIVISION  
P.O. BOX 2088  
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Murphy Operating Corp.	Todd Lower SA Unit	#36-1-A	36-7-35
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

*OK*

Very truly yours

Jerry Sexton  
Supervisor, District I

/bp

RECEIVED  
JULY 19 1989  
OIL CONSERVATION DIV.  
SANTA FE