COMMISSIONER'S OFFICE Phone (505) 827-5760 Fax (505) 827-5766

ADMINISTRATION Phone (505) 827-5700 Fax (505) 827-5853

GENERAL COUNSEL Phone (505) 827-5713 Fax (505) 827-4262

PUBLIC AFFAIRS Phone (505) 827-1245 Fax (505) 827-5766

August 23, 2002



#2456

New Mexico State Land Office Commissioner of Public Lands Ray Powell, M.S., D.V.M.

COMMERCIAL RESOURCES Phone (505) 827-5724 Fax (505) 827-6157

MINERAL RESOURCES Phone (505) 827-5744 Fax (505) 827-4739

ROYALTY MANAGEMENT Phone (505) 827-5772 Fax (505) 827-4739

SURFACE RESOURCES Phone (505) 827-5793 Fax (505) 827-5711

MAR Oil & Gas Corporation P.O. Box 5155 Santa Fe, New Mexico 87502

Attn: Mr. Leon A. Romero

Re: Resignation/Designation of Successor Unit Operator Malmar Unit Lea County, New Mexico

Dear Mr. Romero:

We are in receipt of your resignation/designation of successor unit operator, wherein of Tipton Oil & Gas Acquisitions has resigned as unit operator of the Malmar Unit and designated MAR Oil & Gas Corporation as the successor unit operator.

The Commissioner of Public Lands has this date approved the resignation of Tipton Oil & Gas Acquisitions and the designation of MAR Oil & Gas Corporation as the successor unit operator of this unit.

This change in operators is effective May 1, 2002. In accordance with this approval, MAR Oil & Gas Corporation is now responsible for all operations and the reporting of all production from the unit.

If you have any questions or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

RAY POWELL, M.S., D.V.M. COMMISSIONER OF PUBLIC LANDS

BY:

JAMI BAILEY, Director Oil/Gas and Minerals Division (505) 827-5744

RP/JB/cpm xc: Reader File Tipton Oil & Gas Acquisitions

OCD--Roy Johnson

TRD BLM COMMISSIONER'S OFFICE Phone (505) 827-5760 Fax (505) 827-5766

ADMINISTRATION Phone (505) 827-5700 Fax (505) 827-5853

GENERAL COUNSEL Phone (505) 827-5713 Fax (505) 827-4262

PUBLIC AFFAIRS Phone (505) 827-1245 Fax (505) 827-5766

July 25, 2002



New Mexico State Land Office Commissioner of Public Lands Ray Powell, M.S., D.V.M.

COMMERCIAL RESOURCES Phone (505) 827-5724 Fax (505) 827-6157

MINERAL RESOURCES Phone (505) 827-5744 Fax (505) 827-4739

ROYALTY MANAGEMENT Phone (505) 827-5772 Fax (505) 827-4739

SURFACE RESOURCES Phone (505) 827-5793 Fax (505) 827-5711

Tipton Oil & Gas Acquisitions P.O. Box 1234 Lovington, New Mexico 88260

Attn: Ms. Debbie McKelvey

Re: 2002 Plan of Development Malmar Unit Lea County, New Mexico

Dear Ms. McKelvey:

The Commissioner of Public Lands has, of this date, approved the above-captioned Plan of Development. Our approval is subject to like approval by all other appropriate agencies.

The possibility of drainage by wells outside of the unit area and the need for further development of the unit may exist. You may be contacted at a later date regarding these possibilities.

If you have any questions or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY POWELL, M.S., D.V.M. COMMISSIONER OF PUBLIC LANDS

ΒŸ

JAMI BAILEY, Director Oil, Gas and Minerals Division (505) 827-5744

RP/JB/cpm xc: Reader File

COMMISSIONER'S OFFICE Phone (505) 827-5760 Fax (505) 827-5766

ADMINISTRATION Phone (505) 827-5700 Fax (505) 827-5853

GENERAL COUNSEL Phone (505) 827-5713 Fax (505) 827-4262

PUBLIC AFFAIRS Phone (505) 827-1245 Fax (505) 827-5766

July 1, 2002

Tipton Oıl & Gas Acquisitions P.O. Box 1234 Lovington, New Mexico 88260

Attn: Ms. Debbie McKelvey

Re: Resignation/Designation of Successor Unit Operator Malmar Unit Lea County, New Mexico

Dear Ms. McKelvey:

We are in receipt of your resignation/designation of successor unit operator, wherein of Saga Petroleum Limited Liability Company has resigned as unit operator of the Malmar Unit and designated Tipton Oil & Gas Acquisitions as the successor unit operator.

The Commissioner of Public Lands has this date approved the resignation of Saga Petroleum Limited Liability Company and the designation of Tipton Oil & Gas Acquisitions as the successor unit operator of this unit.

This change in operators is effective August 1, 2001. In accordance with this approval, Tipton Oil & Gas Acquisitions is now responsible for all operations and the reporting of all production from the unit.

If you have any questions or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

RAY POWELL, M.S., D.V.M. COMMISSIONER OF PUBLIC LANDS

BY:

JAMI BAILEY, Director Oil/Gas and Minerals Division (505) 827-5744

RP/JB/cpm xc: Reader File

Saga Petroleum Limited Liability Company

OCD--Roy Johnson TRD BLM

COMMERCIAL RESOURCES Phone (505) 827-5724 Fax (505) 827-6157

MINERAL RESOURCES Phone (505) 827-5744 Fax (505) 827-4739

ROYALTY MANAGEMENT Phone (505) 827-5772 Fax (505) 827-4739

SURFACE RESOURCES Phone (505) 827-5793 Fax (505) 827-5711



New Mexico State Land Office

Commissioner of Public Lands

Ray Powell, M.S., D.V.M.

OL OF SEALING

02 JUL - 3 PH 2: 13

СОРҮ

March 21, 1962

Aile Unit Mare # 2012 6

Commissioner of Public Lands P. O. Box 791 Santa Fe, New Mexico

New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

> Re: Malmar Unit Lea County, New Mexico

Gentlemen:

Under Order R-2155, Case 2456, the Commission approved Great Western Drilling Company's Malmar Unit Area and Malmar Waterflood Project. Pursuant to paragraph (5) of the Order, we hand the Commission herewith one fully executed counterpart of the Unit Agreement and Unit Operating Agreement with all ratifications thereto, except as mentioned below.

There has previously been filed with the Commissioner an application for approval of the above Unit which we understand has been approved as to form and context. In order to obtain formal approval we hand to the Commissioner herewith two executed counterparts of the Unit Agreement and UASC Operating Agreements with all ratifications thereto, except as mentioned below.

The exceptions to joinder mentioned above are:

Tract 1	1:	Ruby 011 Company02734375 OR	R
Tract 2	2:	Ruby 011 Company	R
Tract 3	3:	Ruby 011 Company9.553353 W.	I.
Tract 4		Paul A. Mavis	Ϊ.

Page 2 - Commissioner of Public Lands New Mexico Oil Conservation Commission March 21, 1962

COPY

Under Section 13 of the Unit Agreement, we believe there has been sufficient compliance and commitment to effectuate the Unit, and under Section 23, the Unit will be effective following Commissioner approval and recording in Lea County; the recording will be made as soon as we have Commissioner approval, and one copy of the certification as to effective date will be delivered to each of you immediately thereafter.

Respectfully,

HERVEY, DOW & HINKLE 60

SBC:jy Encls.

cc: Great Western Drilling Company

2456



State of New Mexico

OFFICE OF THE

Commissioner of Public Lands

Santa Ne

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

JIM BACA COMMISSIONER

May 5, 1993

Penroc Oil Corporation P.O. Box 5970 Hobbs, New Mexico 88241

Attn: Mr. Mohammed Merchant

Re: Resignation of Successor Unit Operator Malmar Unit Lea County, New Mexico

Dear Mr. Merchant:

The New Mexico Oil Conservation Division records reflect that Penroc Oil Corporation has been designated as the successor unit operator of the Malmar Unit Area, Lea County, New Mexico.

Our records reflect that Southland Royalty Company is still the operator of record for this unit. Pursuant to the terms of the Malmar Unit Agreement, any change in unit operators must also be approved by the Commissioner of Public Lands.

In view of the above, please submit a resignation/designation of successor unit operator to this office for approval. If the change of operator has not been filed with and approved by this office, you are operating the Malmar Unit without authority.

Also, enclosed is an Instruction Sheet for filing a Surface Improvement Damage Bond. Our records reflect that Penroc Oil Corporation does not have a \$20,000 Multiple Surface Improvement Damage Bond on file. This change of unit operators will not be approved until the required bond has been filed with this office. Penroc Oil Corporation May 5, 1993 Page 2

Please submit the appropriate documents for designation of successor operator of the Malmar Unit within thirty (30) days from receipt of this letter. Failure to timely submit the requested documents may jeopardize the state leases committed to this unit agreement.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

OCD

1

JIM BACA COMMISSIONER OF PUBLIC LANDS BY: FLOYD O. PRANDO, Director Oil/Gas and Minerals Division (505) 827-5744 JB/FOP/pm encls. cc: Reader File Meridian/Mario Moreno State of New Mexico

OFFICE OF THE

Commissioner of Public Lands

EAY B. POWELL COMMISSIONER

Santa Ne

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

June 2, 1993

Penroc Oil Corporation P. O. Box 5970 Hobbs, New Mexico 88241-5970

Attn: Mr. Mohammed Yamin Merchant

Re: Resignation/Designation of Successor Unit Operator Malmar Unit Lea County, New Mexico

Dear Mr. Merchant:

This office is in receipt of a designation of successor unit operator, wherein Southland Royalty Company has resigned as unit operator of the Malmar Unit and designated Penroc Oil Corporation (Floos Inc.) as the successor unit operator.

The Commissioner of Public Lands has this date approved the resignation of Southland Royalty Company and the designation of Penroc Oil Corporation as the successor unit operator of this unit. This change in operators is effective August 1, 1990. In accordance with this approval, Penroc Oil Corporation is now responsible for all operations and the reporting of all production from the unit.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY B. POWELL COMMISSIONER OF PUBLIC LANDS BY: FLOYD O. PRANDO, Director Oil/Gas and Minerals Division (505) 827-5744 RBP/FOP/pm encls. cc: Reader File Meridian Oil - Attn: Mr. Mario Moreno



State of New Mexico

OFFICE OF THE

Commissioner of Public Lands

EAY B. POWELL COMMISSIONER

Santa Fe

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

June 2, 1993

Penroc Oil Corporation P. O. Box 5970 Hobbs, New Mexico 88241-5970

Attn: Mr. Mohammed Yamin Merchant

Re: Resignation/Designation of Successor Unit Operator Malmar Unit Lea County, New Mexico

Dear Mr. Merchant:

This office is in receipt of a designation of successor unit operator, wherein Southland Royalty Company has resigned as unit operator of the Malmar Unit and designated Penroc Oil Corporation (Floos Inc.) as the successor unit operator.

The Commissioner of Public Lands has this date approved the resignation of Southland Royalty Company and the designation of Penroc Oil Corporation as the successor unit operator of this unit. This change in operators is effective August 1, 1990. In accordance with this approval, Penroc Oil Corporation is now responsible for all operations and the reporting of all production from the unit.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY B. POWELL COMMISSIONER OF PUBLIC LANDS

BY: Iloyte Mund

FLOYD O. PRANDO, Director Oil/Gas and Minerals Division (505) 827-5744 RBP/FOP/pm encls. cc: Reader File Meridian Oil - Attn: Mr. Mario Moreno

State of New Mexico

#2456





W.R. HUMPHRIES COMMISSIONER

Commissioner of Public Lands

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

October 5, 1990

Meridian Oil Company 21 Desta Drive, Midland, TX 79705

Attn: Robert L. Bradshaw

Re: Malmar Unit Lea County, New Mexico 1990 Plan of Development

Dear Mr. Bradshaw:

The Commissioner of Public Lands this date approved the 1990 Plan of Development for the Malmar Unit. Our approval is subject to like approval by all other appropriate agencies. Please forward to this office current copies of both Exhibits A & B.

The possibility of drainage by wells outside of the Unit Area and the need for further development may exist. You will be contacted at a later date regarding these possibilities.

If we may be of further help, please do not hesitate to contact Clyde Langdale at (505) 827-5791.

Sincerely,

W. R. HUMPHRIES BY: Floyd O. Prando, Director

Oil, Gas & Minerals Division

cc: OCD Unit Corresp. Unit POD



ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

TONEY ANAYA

August 29, 1983

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-5800

Southland Royalty Company 21 Desta Drive Midland, Texas 79701

Attention: K. W. Harbin District Production Manager

> John R. Stark, Petroleum Engineer

> > Re: Malmar Unit Wells Nos. 1-1 and 3-15 NE Maljamar (GB-SA) Field Lea County, New Mexico

Gentlemen:

Your request for an increase in the maximum surface injection pressure for the subject wells has been reviewed. The step-rate test run on Well No. 3-15 is considered as acceptable data in determining a new pressure limit. Because of the proximity of the two subject wells, a common pressure limit will be applied to the wells. Based on the bottom hole fracture pressure measurement of 4420 psi and subtracting 1892 psi for waterhead pressure along with 50 psi as a standard safety factor, a maximum pressure limit of 2478 psi was determined.

Southland Royalty Company is therefore allowed a <u>new maximum surface</u> injection pressure of 2478 psi for the Malmar Unit Well Nos. 1-1 and 3-15 in the NE Maljamar (GB-SA) Field.

Should you have any questions concerning the new pressure limit on these two wells, please do not hesitate to contact me at (505) 827-5807.

Sincerely,

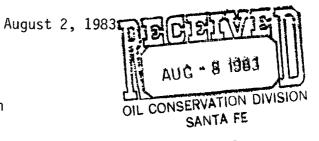
GILBERT P. QUINTÀNA Petroleum Engineer

GPQ/dp

cc: JOE D. RAMEY Hobbs District Office Case File -Order No. R-2155

Cone 2456





New Mexico Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501 Attention: Mr. Gilbert Quintana

> Re: Request Approval to Inject At Higher Pressures Malmar Unit Well Nos. 1-1 and 3-15 N. E. Maljamar (GB-SA) Field Lea County, New Mexico

Gentlemen:

Your approval is requested to increase the maximum allowable surface injection pressure for 2 wells in the Southland operated Malmar Unit, which produces from the N. E. Maljamar (GB-SA) Field, Lea County, New Mexico. This request is based on the results of a recent step rate test in one of the wells. Attached are 5 copies of the test data.

The subject wells were converted to injection during June 1982. Their locations are shown on the attached map. A step rate test was run in well No. 3-15 during July 1982. This test indicated a surface formation parting pressure of 1740 psi. The Commission approved a maximum surface injection pressure of 1700 psi for the subject wells.

During July 1982, a step rate test was also run in the Malmar Unit well No. 1-2, which was an old injector that had been restored to injection after 1 year of temporary abandonment. This test showed a surface parting pressure of 2415 psi and was assigned a maximum surface pressure of 2370 psi.

Injection volumes into the subject wells declined steadily as pressure increased to the maximum approved limit. These wells were then shut in when very small volumes of water could be injected at the approved pressure limit. During May 1983 both of the subject wells were checked for possible fill. No fill was found in either well and both were acidized to ensure that perforations were open. In spite of these efforts, very little water can still be injected under the current pressure limit. In July 1983 a step rate test was performed in well No. 3-15 which exhibited a surface and bottom hole (less water column pressure) parting pressures of 2485 and 2528 psi, respectively. As seen above, this value is very similar to that obtained in well No. 1-2. Therefore, it is requested that the maximum allowable injection pressure for this well be set just below the measured parting pressure. We also ask that the results of the step rate test ran on the Malmar Unit well No. 3-15 be applied, as before, to well No. 1-1.

If additional data is required, please advise.

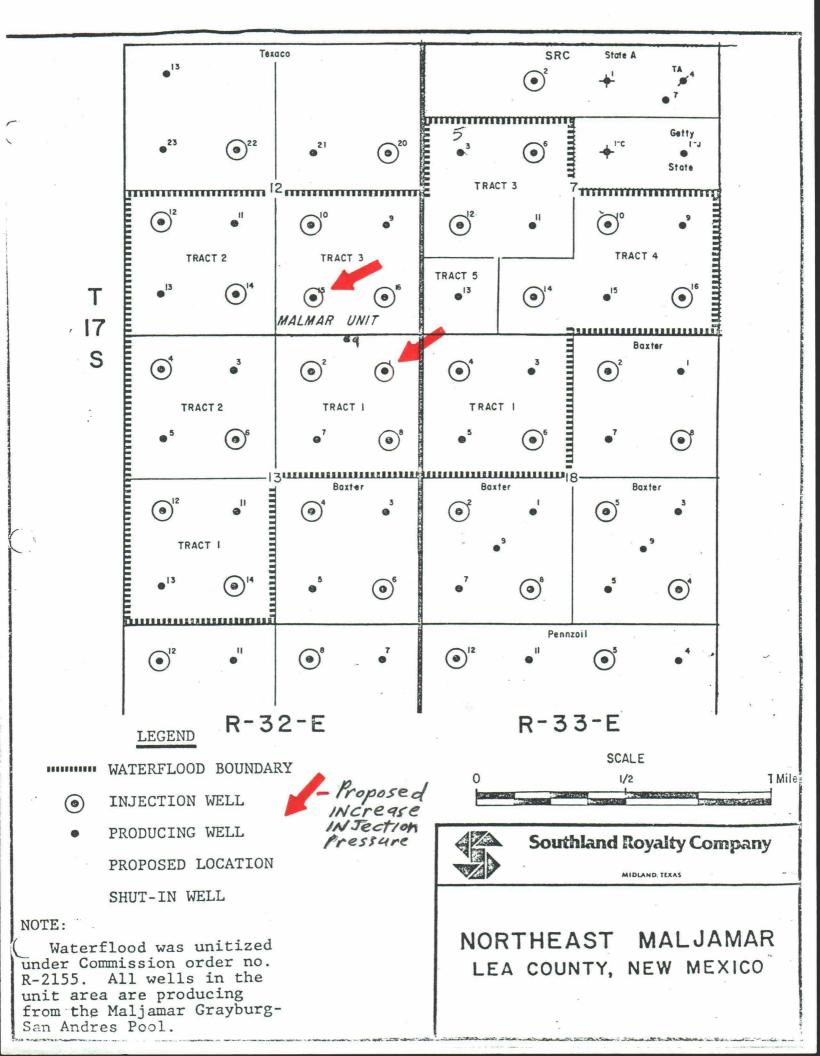
Very truly yours,

AnHarbin

K. W. Harbin District Production Manager

JRS/1ap

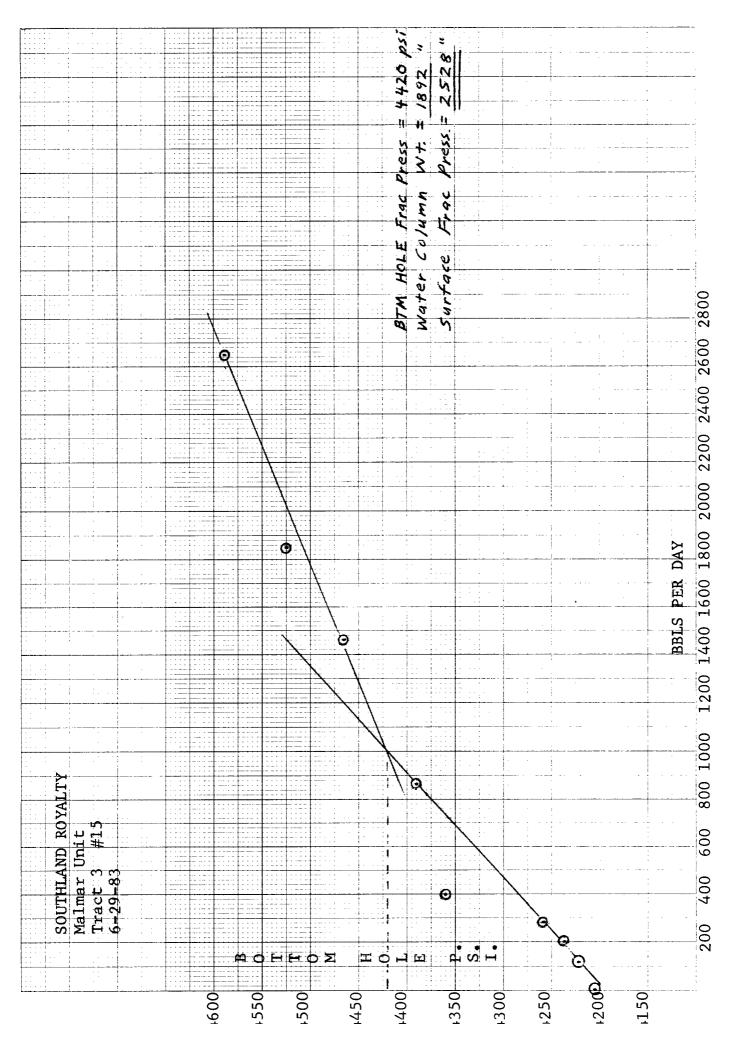
Attachments



DAUTC	CEDUTCES	TNC
DAVIS	SERVICES	TINC .

HOBBS,

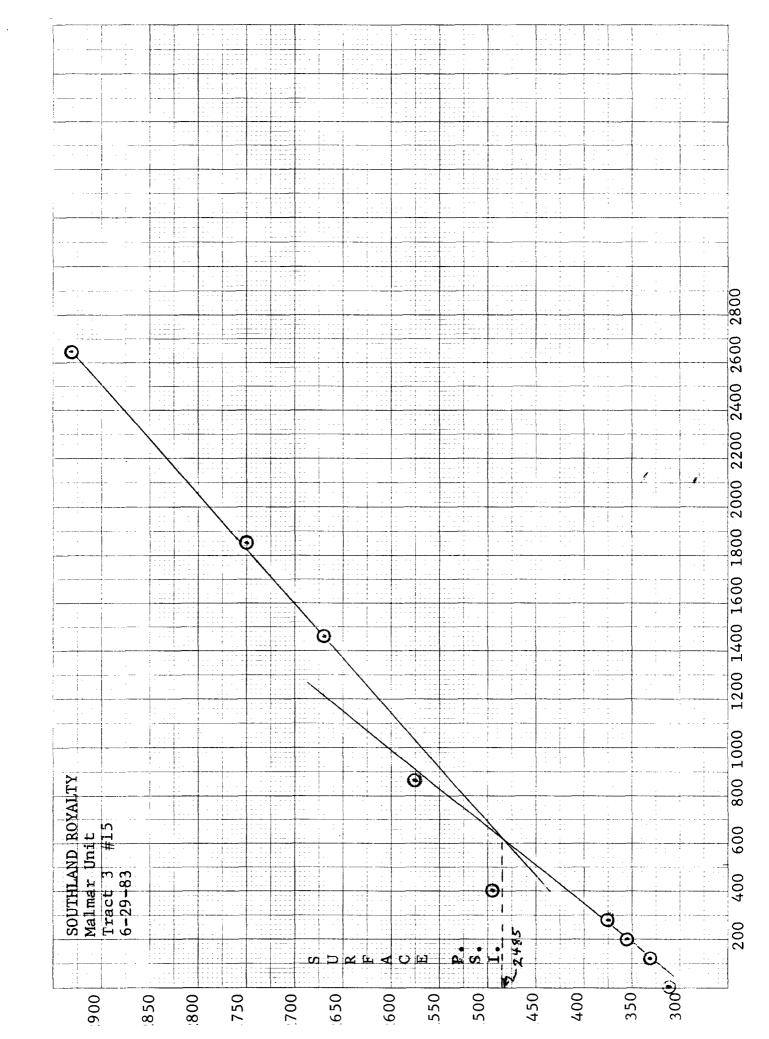
(305)	393-1	0119			<u>STE</u>	P RATE TEST		NEW MEXICO
			FIE	LD DAT	A SHEET	r		
ype Test:		[]] Initla] Amust	C] Special (5/ 29 /83	Lease No. or Serial No.
SC	outhla	and Roy	valty					Allon
** id				rivoli		Location		Unit
cmpletion	Dote	T	otal Depth		Plug Bock 1	1D Elevati	01	Malmar Unit
sg. Size	W	1.	d :	et At	Per	losations: Erom 4187	[*] • 4488	Tract 3 #15
bg. Size	W			Set At .	Per	loretions; From	T e	Sec. Trop-Bik Rge -
Producing T		scribe) ASTIC (Reserv	Coated		lean Ground	Temp, F Do	Packer Set At 4109	County of Porish Lea State N.M.
CO. RI	PRES	ENTATI	VF		- <u></u>			
DATE Time of	ELAP. TIME		imforma Surf.		surf. psi.cor	1900 0 1	remar	<u>ks</u> Include liquid production data: Type - AP1 Gravity - Amount)
Reading 2:50	Hes.		Psig N 2313	4205	friction			BOMB @ 4338
3:00 3:15	15	120	2313 2330	4223		START TEST		
3 <u>:15</u> 3:30	30	200	2355	4237				
3:30								
3:45	45	280	2375	4257				
3 <u>:45</u> 4:00	1	400	2495	4359	2454	LOST H20 SWI	TCH TO PI	MP TRUCK
4 <u>:00</u> 4 <u>:15</u>	15	864	2575	4390	2486			
4 <u>:15</u> 4 <u>:30</u>	30	1458	2670	4466	2561			
4 <u>:45</u> 5 <u>:00</u>	45	1853	2752	4524	2619		······································	
5:00 5:15	2	2650	2930	4588	2683	END TEST		
	-			<u> </u>				می دو دو با با با با این است به است به با
	+			<u> </u>	<u> </u>			
····								



Keuffel & ESSER CO MARK 102

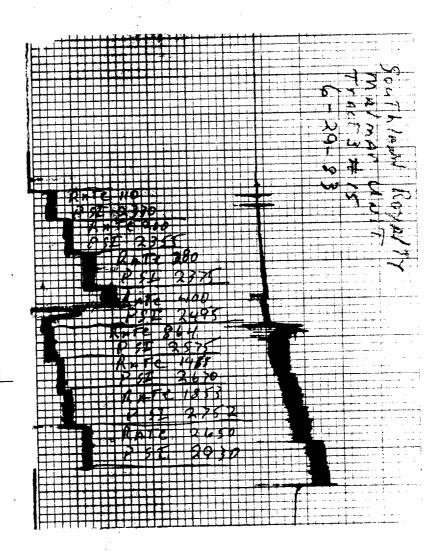
46 1320

-



46 1320

K+∑ 10 X 10 TO ¹, INCH 7 X 10 INCHES Keuffel & esser communica



SOUTHLAND ROYALTY MALMAR UNIT TRACT 3 # 15 6/29/83

BENNET - CATHEY

(505) 748-3354 / Artesia, New Mexico 88210

SUBSURFACE PRESSURE MEASUREMENTS

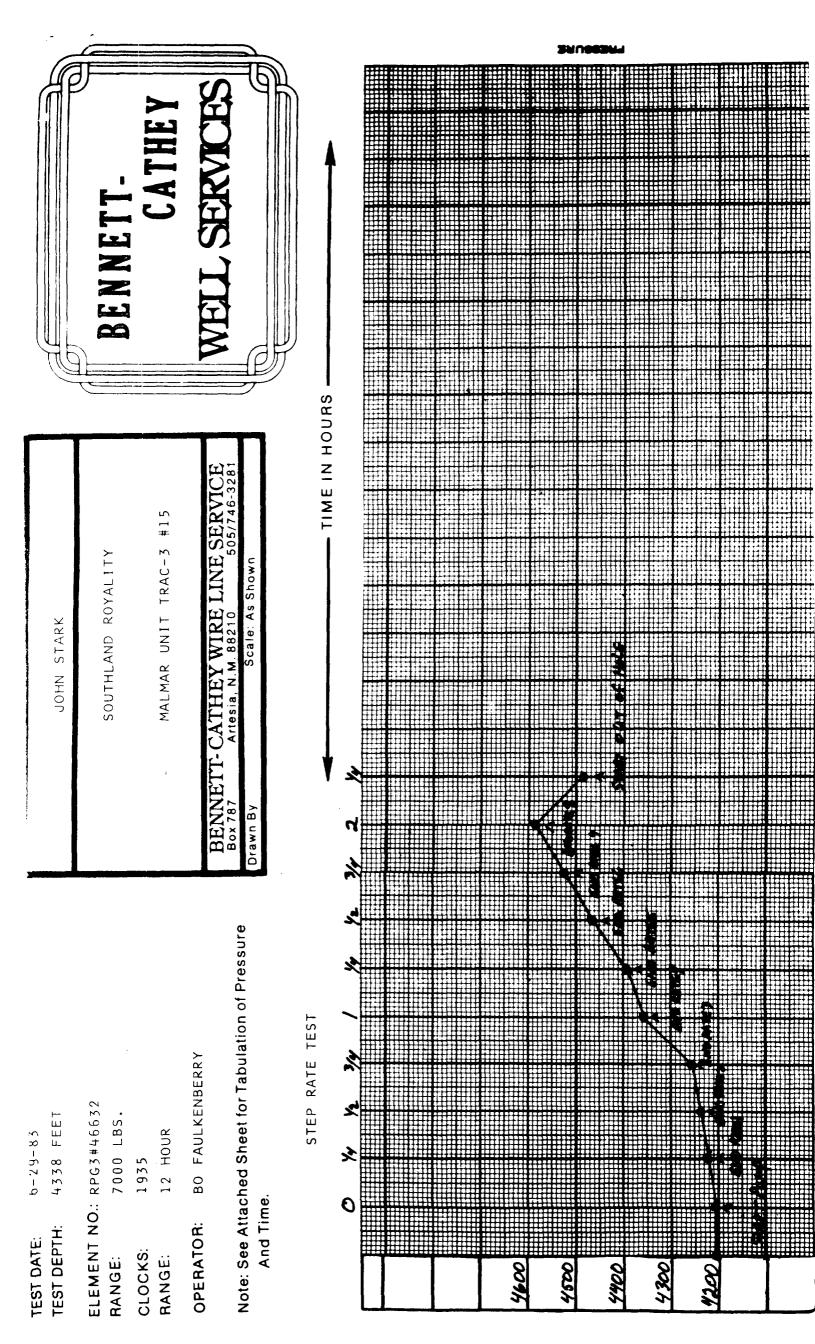
COMPANY	SOUTHLAND	ROYALITY	WELL NAME	MALMAR	UNIT	TRAC-3	#15
DATE OF TEST_	6-29-83	FOR	MATION			PAGE	1_0F_1_
	JOHN STAR			······································			

STEP RATE TEST

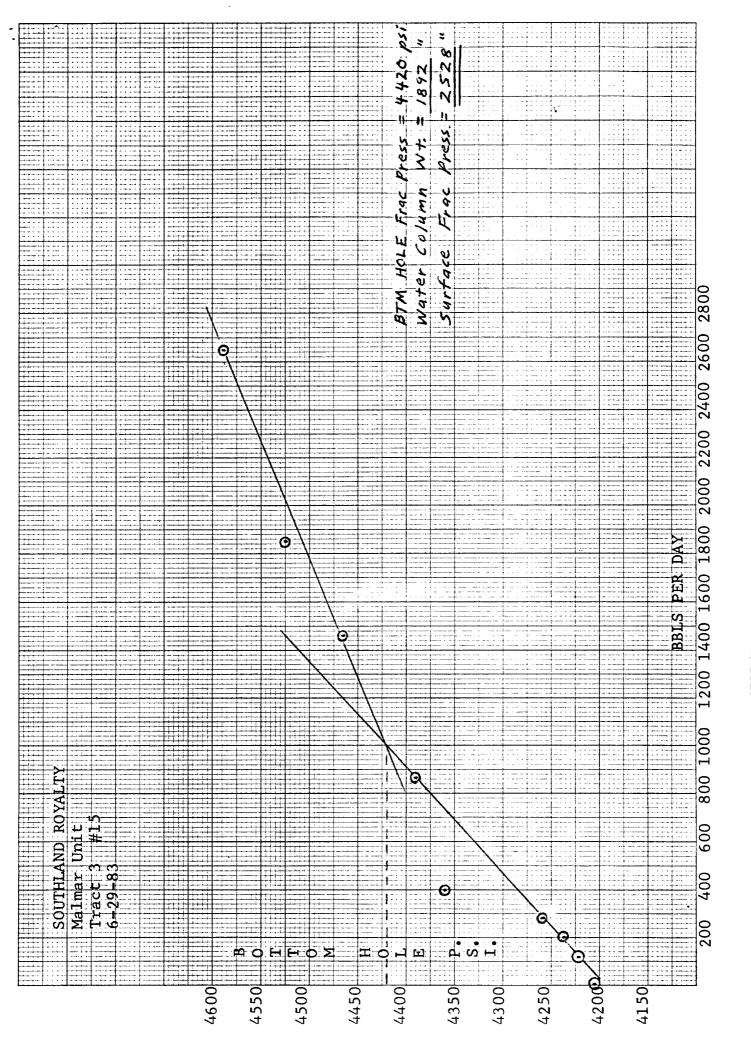
CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER	RANGE 7000 LBS.	
CLOCK NUMBER 1935	RANGE 12 HOUR	
TIME WELL SHUT IN N/A		
TIME CLOCK STARTED 1353 HOUR	6-29-83	
DEAD WEIGHT ELEMENT ON SURFACE	2326.2 PSIA	LBS.
TIME ELEMENT REACHED BOTTOM	1450 HOUR 6-29-83	
DEAD WEIGHT ELEMENT ON BOTTOM	2326.2 PSIA	LBS.
ELEMENT SET AT 4338		FEET.
TEMPERATURE4338	FT. <u>102</u>	°F.
DEAD WEIGHT AT THE END OF2	HOURS 1/4	MINUTES.

DATE	HOUR	TIME	DEFLECTION in/inches	CALCULATED PRESSURE psig	CORRECTION P ± PC psig	CORRECTED PRESSURE psia	PRESSURE AT MID-POINT OF PERFORATIONS psia
6-29-83	SIP	1450		4192	13.2		4205.2
0-29-05	511	1430		4192	12.2		4205.2
START PUMP	0	1500		4192	13.2	· · · · · · · · · · · · · · · · · · ·	4205.2
END 1ST RAT		1515		4210	13.2		4223.2
END 2ND RA	T	1530		4224	13.2		4237.2
END 3RD RA		1545		4244	13.2		4257.2
END 4TH RAT		1600	ļ	4346	13.2		4359.2
END 5TH RA		1615		4378	13.2		4391.2
END 6TH RA		1630	· · ····	4453	13.2		4466.2
END 7TH RA		1645		4511	13.2		4524.2
END 8TH RA		1700	················	4575	13.2		4588.2
START OUT O	PF HOLE	1715		4475	13.2		4488.2
· ··· · · · · · · · · · · · · · ·							
· · · · · · · · · · · · · · · · · · ·							
				· · · · · · · · · · · · · · · · · · ·			
···· ·································		·····					
				· · -	··· ·		
		· · · · · · · · · · · · · · · · · · ·					· ·····
	·						
)	· · ·				······································		



DAVIS	SERV	ICES I	NC.						HOBBS,
(505) 393-0119 STEP RATE TEST									NEW MEXICO
			FIE	LD DAI	A SHEET	r			
ype Test:	•	<u> </u>	· · · · · · · · · · · · · · · · · · ·				Test Dote		Lease No, or Serial No.
Southland Royalty								53	1 Allone
SC	outhl	and Roy	valty 800	ervols		Locatio			; Unit
							Elevation		•
completion			otal Depth		Plug Bock				Malmar Unit
Esg. Size	¥	1.	d :	Set At		4187	To	4488	Tract 3 #15
rbg. Size	¥			Set At	Per	lorations: From	Ť٠		Sec. Twp-Blk Rge
Type Compl 2 3/	8°P1	astic (Coated		,	······	Packe 4	1 Set A1	County of Porish Lea
Producing	The	Reserv	ole Temp. F	1	Hean Ground	Temp, F	Bero, Press.	- 6	State N.M.
			<u> </u>						T TA 01.10
	EPRES	ENTATI Well	ve imforma	tion	surf.		۲	emark	CS
Time of	TIME	Rate	Surf.		psi.cor	1000		11	nclude liquid production data:
Reading 2:50	Hrs.	BPD SHUT I	Psig N 2313	4205	friction	Name and Address of the Owner, which the Party of the Par	<u>um Wt.</u> M <u>2:50 pr</u>		Type - API Gravity - Amount
3:00		·	2313			START TE	ST	····	BOMB @ 4338
<u>3:15</u>	15	120	2330	4223					
3:15					· · · · · · · · · · · · · · · · · · ·				
3:30	30	200	2355	4237					
3:30	1						······		
3:45	45	280	2375	4257					
3:45									\$
4:00	1	400	2495	4359	2454	LOST H20	SWITCH 1	O_PUN	AP TRUCK
4:00					<u>}</u>				
4:15	15	864	2575	4390	2486				
4:15				<u> </u> -	<u>}</u>	·····			
4:30	30	1458	2670	4466	2561	· · · · · · · · · · · · · · · · · · ·	······································		
4:45		+		+					
5:00	45	1853	2752	4524	2619				
5:00				<u> </u>	· · · · ·			·	
5 <u>:00</u> 5:15	2	2650	2930	4588	2683	END TEST		·····	
•							**************************************	<u> </u>	
				+					
<u></u>		+				· · ·			
·····			•						
							······		
•				+					
•				<u> </u>			······································		· · · · · · · · · · · · · · · · · · ·
···				+	+				
	1			1		·			

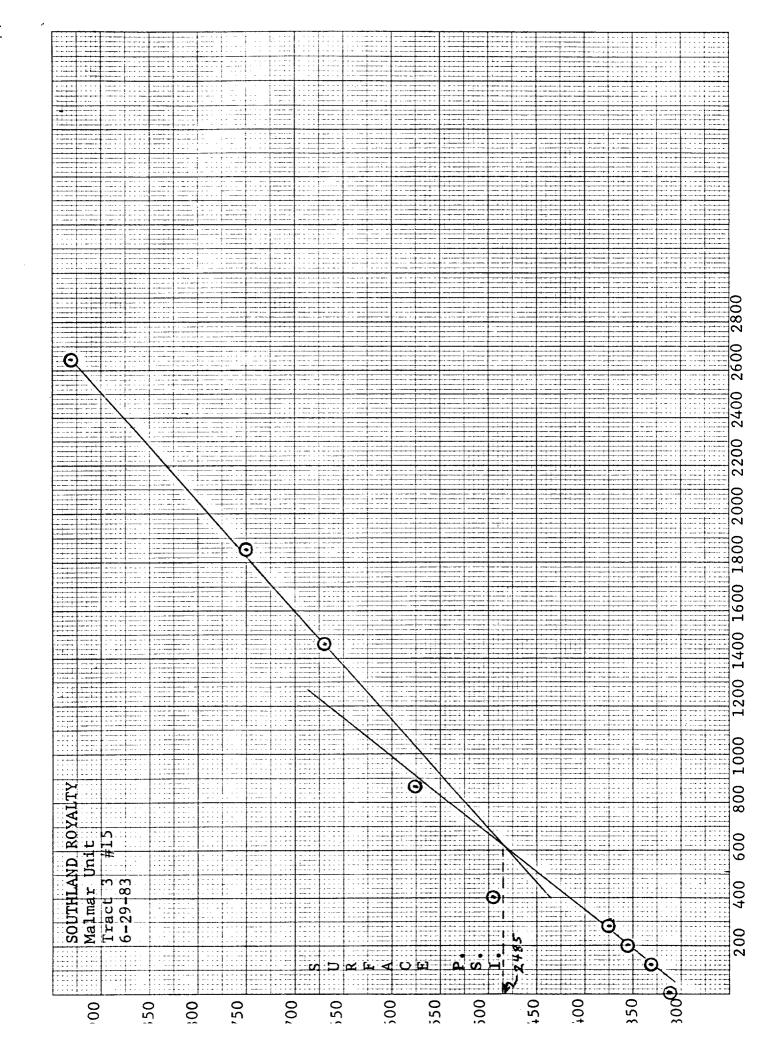


KEUFFEL & ESSER CO. MADE IN USA

46 1320

、)

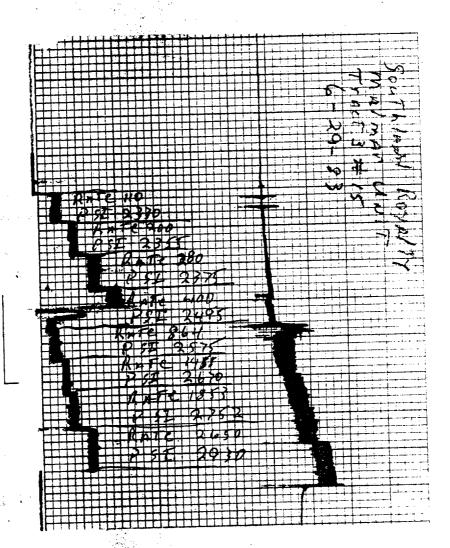
)



46 1320

H4€ 10 X 10 TO 3 INCH 7 X 10 INCHES KeUFFEL & ESSER CO. MADE IN USA





SOUTHLAND ROYALTY MALMAR UNIT TRACT 3 # 15 6/29/83

BENNET · CATHEY

(505) 748-3354 / Artesia, New Mexico 88210

SUBSURFACE PRESSURE MEASUREMENTS

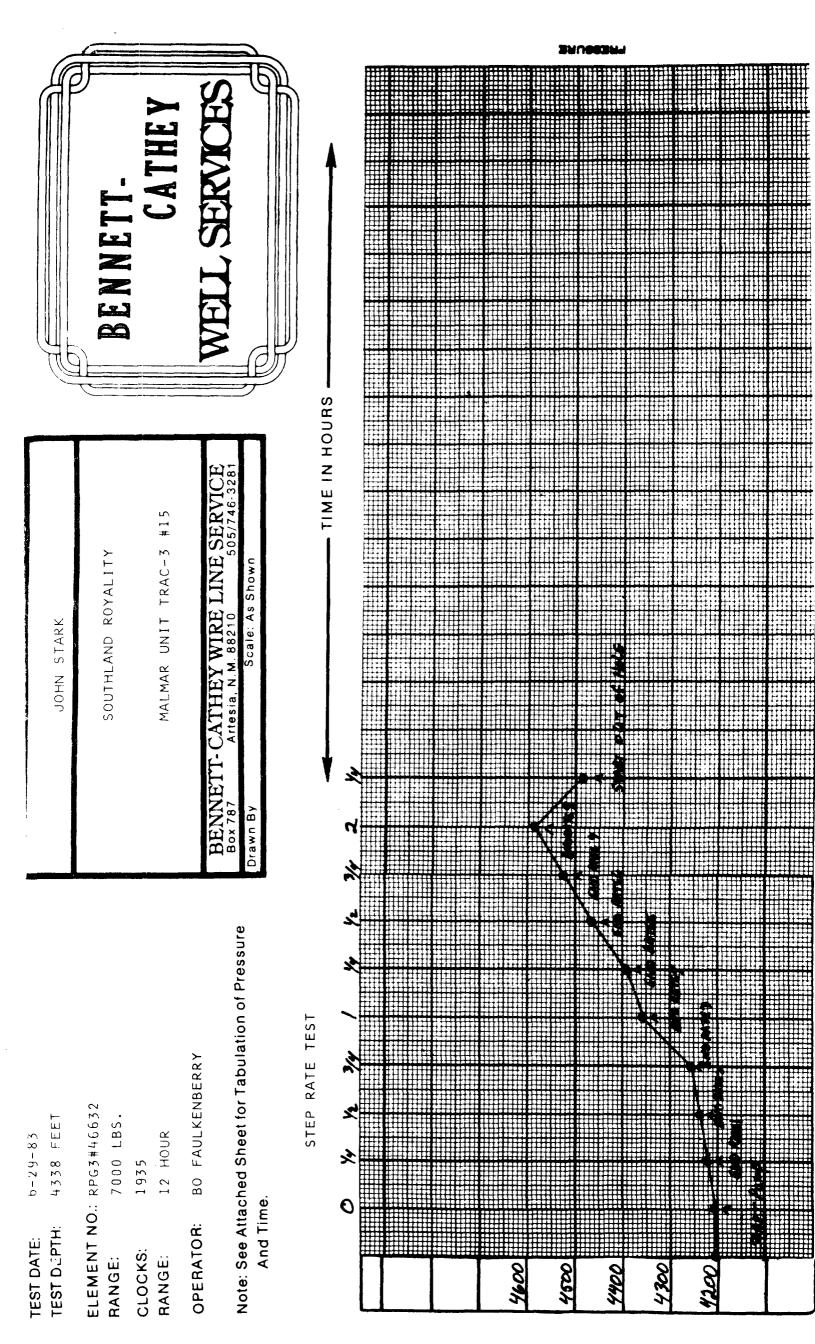
COMPANY	SOUTHLAND	ROYALITY	WELL NAME	MALMAR UNIT	TRAC-3 #15	
DATE OF TEST	5-29-83		FORMATION		PAGE 1 OF	1
	JOHN STARK					

STEP RATE TEST

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER <u>RPG3#46632</u> CLOCK NUMBER <u>1935</u> TIME WELL SHUT IN N/A	RANGE 7000 LBS. RANGE 12 HOUR	t
TIME CLOCK STARTED1353 HOUR	6-29-83	
DEAD WEIGHT ELEMENT ON SURFACE TIME ELEMENT REACHED BOTTOM	2326.2 PSIA 1450 HOUR 6-29-83	LBS.
DEAD WEIGHT ELEMENT ON BOTTOM ELEMENT SET AT4338		LBS. FFT
TEMPERATURE4338DEAD WEIGHT AT THE END OF2	FT102 HOURS/4MINU	°F,

DATE	HOUR	ТІМЕ	DEFLECTION in/inches	CALCULATED PRESSURE psig	CORRECTION P ± PC psig	CORRECTED PRESSURE psia	PRESSURE AT MID-POINT OF PERFORATIONS psia
6-29-83	SIP	1450		4192	13.2		4205.2
				1.1.0.0	17.0		
START PUMP	0	1500		4192	13.2		4205.2
END 1ST RA	! 1	1515		4210	13.2		4223.2
END 2ND RA	1 1	1530		4224	13.2	<u> </u>	4237.2
END 3RD RA		1545		4244	13.2		4257.2
END 4TH RA		1600		4346	13.2		4359.2
END 5TH RA		1615		4378	13.2		4391.2
END 6TH RA		1630		4453	13.2		4466.2
END 7TH RA	-	1645		4511	13.2		4524.2
END 8TH RA		1700		4 <u>5</u> 75 4475	1 <u>3.2</u> 13.2		4588.2
START OUT	PF HOLE	1715		44/2	13.2		4488.2
			+				
			·····				
		·····					
	·						
		· Instant A Street					
						.	
			ļ				
		··· ·· · · · · ·					
L			L		L	L	L

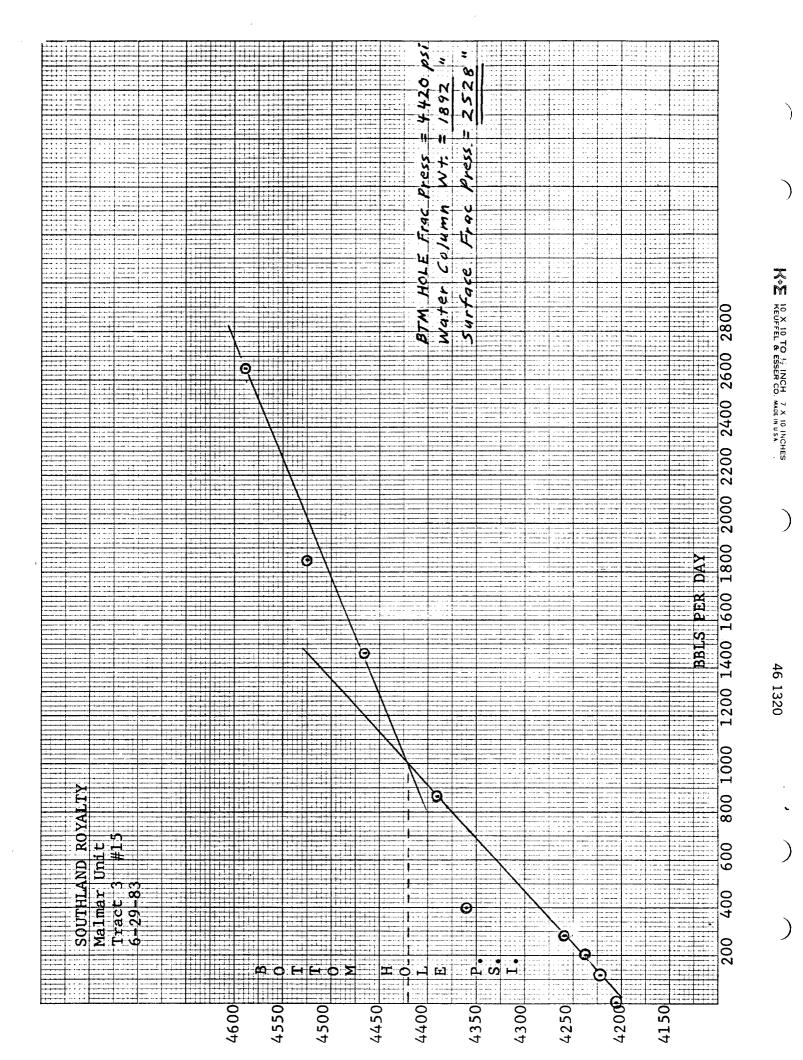


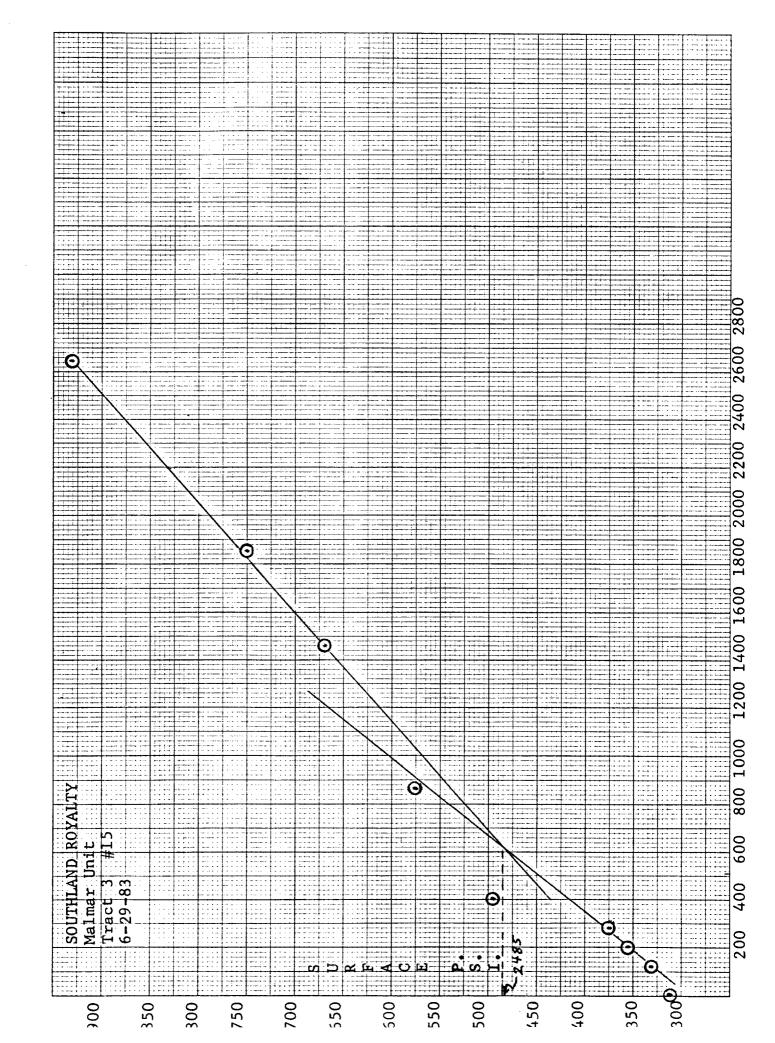
DAVIS SERVICES INC (505) 393-0119

SERVICES	INC.	•				
393-0119			STEP	RATE	TEST	

HOBBS,

(505)	393-	0119			STE	P RATE TEST			NEW MEXICO
			FIE	LD DAT	TA SHEET	ſ			
			-						
Type Test:				D Amuel] Special	6/29	/83	Lease No, or Serial No.
Compeny	outhl	and Roy	valtv		,				Allottee
Field			Res	etvols		Location			Unis
Completion	Date		otal Depth		Plug Back 1	ID Elev	ation		Form or Lease Name
Czg. Size	¥.	1.	6	Set At	Per	lorations: Erom 4187	To	4488	Malmar Unit
Tbg. Size	W	1.	4	Set At		lorations: From	Ť•	4400	Tract 3 #15
Type fom	alegion 19	astic C	Cated	·····				ker Sel Al	County or Parish
Producing			oir Temp. F		Hean Ground	Temp, F	Bero. Pres	4109 	Lea Store N.M.
CO. 8	EPRES	ENTATI			<u> </u>				
DATE	ELAP.	well t	Lmforma	tion	surf.			remark	< <u>s</u>
Time of	TIME	Rate BPD	Surf. Psig		psi.cor friction	1902 0-1	174	(!	nclude liquid production data: Type - API Gravity - Amount
Reading 2:50	Hrs.	SHUT I	N 2313	4205	A COLUMN TWO IS NOT THE OWNER.	1892 Colum ON BOTTOM			BOMB @ 4338
3:00	-	·	2313			START TEST			
3:15	15	120	2330	4223					
3:15									
3:30	30	200	2355	4237					
3:30		+			<u> </u>				
3:45	45	280	2375	4257					
3:45									
4:00	1	400	2495	4359	2454	LOST H20 SI	VITCH	TO PU	MP TRUCK
4:00		<u></u>						· · · ·	
4:15	15	864	2575	4390	2486				
4:15		<u> </u>							
4:30	30	1458	2670	4466	2561				
	-			ļ					
4 <u>:45</u> 5 <u>:00</u>	45	1853	2752	4524	2619				
5 <u>:00</u> 5 <u>:15</u>	2	2650	2930	1.500	2683				
<u></u>		20.50	2930	4,00	2005	END TEST		·	
							· · · · · · · · · · · · · · · · · · ·	······	
		+		<u> </u>	+	· · · · · · · · · · · · · · · · · · ·			
		1		1					
			1						
•			+	+				<u> </u>	
			1						
				+			<u> </u>		
			-	+		<u></u>		<i>.</i>	
		1		1	-	1			

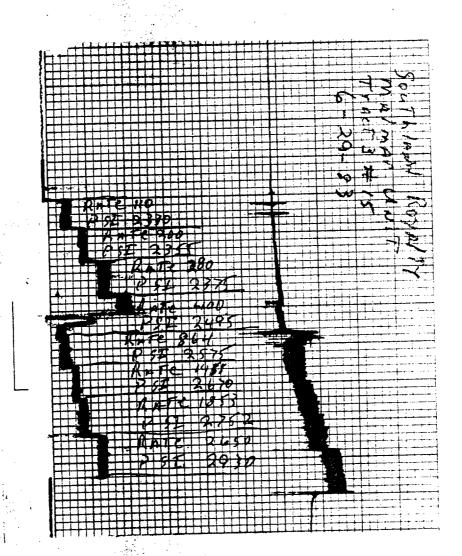




46 1320

K ⊕ E 10 X 10 TO ½ INCH 7 X 10 INCHES KEUFFEL & ESSER CO. MADE IN USA

DAVIS SERVICES, INC.



< 15 a

SOUTHLAND ROYALTY MALMAR UNIT TRACT 3 # 15 6/29/83

BENNET - CATHEY

(505) 748-3354 / Artesia, New Mexico 88210

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY	SOUTHLAND	ROYALITY		WELL NAME	MALMAR	UNIT	TRAC-3	#15
	6-29-83		FORMATION	l			PAGE	1_0F_1_
	LAUN CTADI					. <u>-</u>		

STEP RATE TEST

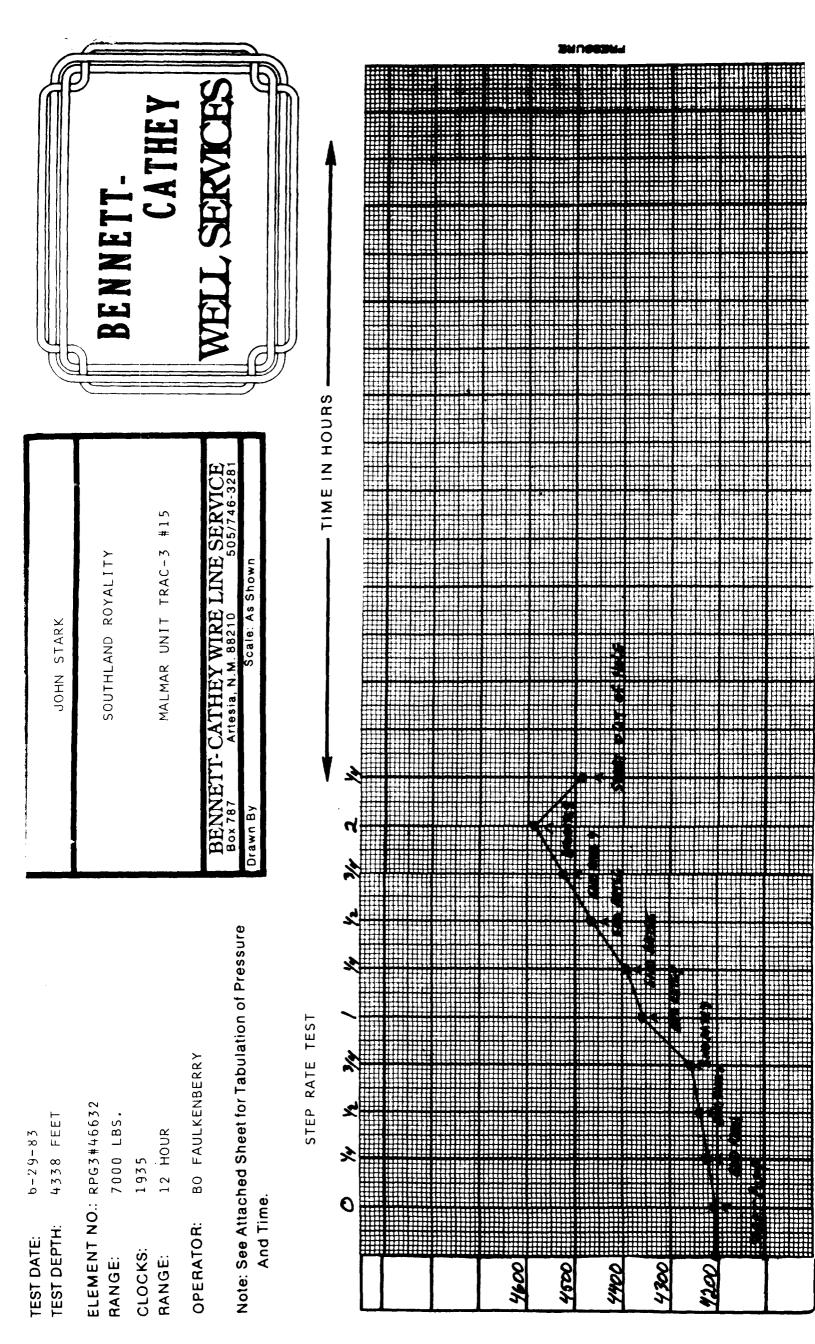
CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER	RANGE	
CLOCK NUMBER 1935	RANGE12_HOUR	
TIME WELL SHUT IN N/A		
TIME CLOCK STARTED1353 HOUR	6-29-83	
DEAD WEIGHT ELEMENT ON SURFACE	2326.2 PSIA	LBS.
TIME ELEMENT REACHED BOTTOM	1450 HOUR 6-29-83	
DEAD WEIGHT ELEMENT ON BOTTOM	2326.2 PSIA	LBS.
ELEMENT SET AT <u>4338</u>		FEET.
TEMPERATURE 4338	FT102	°F.
DEAD WEIGHT AT THE END OF2	HOURS 1/4	MINUTES.

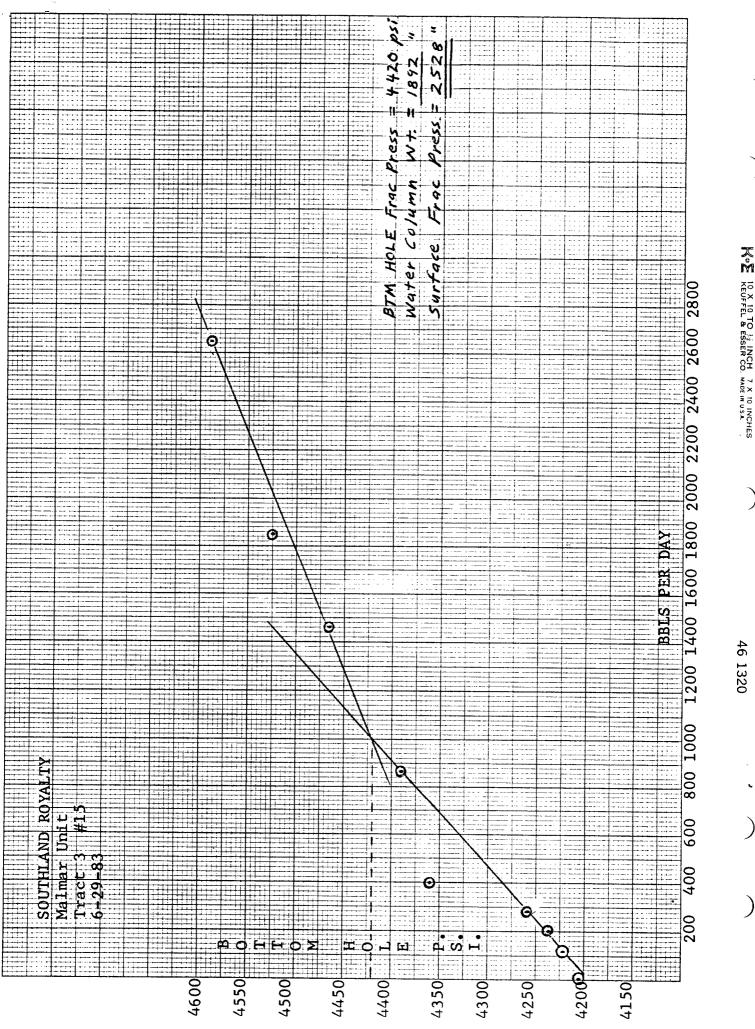
DATE	HOUR	TIME	DEFLECTION	CALCULATED PRESSURE	CORRECTION P ± PC	CORRECTED PRESSURE	PRESSURE AT MID-POINT OF PERFORATIONS
			in/inches	psig	psig	psia	psia
6-29-83	SIP	1450		4192	13.2		4205.2
START PUMP	0	1500		4192	13.2		4205.2
END 1ST RAT		1515		4210	13.2		4223.2
END 2ND RAT		1530		4224	13.2		4237.2
END 3RD RAT		1545		4244	13.2		4257.2
END 4TH RAT		1600		4346	13.2		4359.2
END 5TH RAT		1615		4378	13.2		4391.2
END 6TH RAT		1630		4453	13.2		4466.2
END 7TH RAT		1645	· · · · · · · · · · · · · · · · · · ·	4511	13.2		4524.2
END 8TH RAT		1700		4575	13.2		4588.2
START OUT	OF HOLE	1715		4475	13.2		4488.2
····- ·							
				· · · · · · · · · · · · · · · · · · ·			
	_ 1						
	·						
· · · · · · · · · · · · · · · · · · ·							

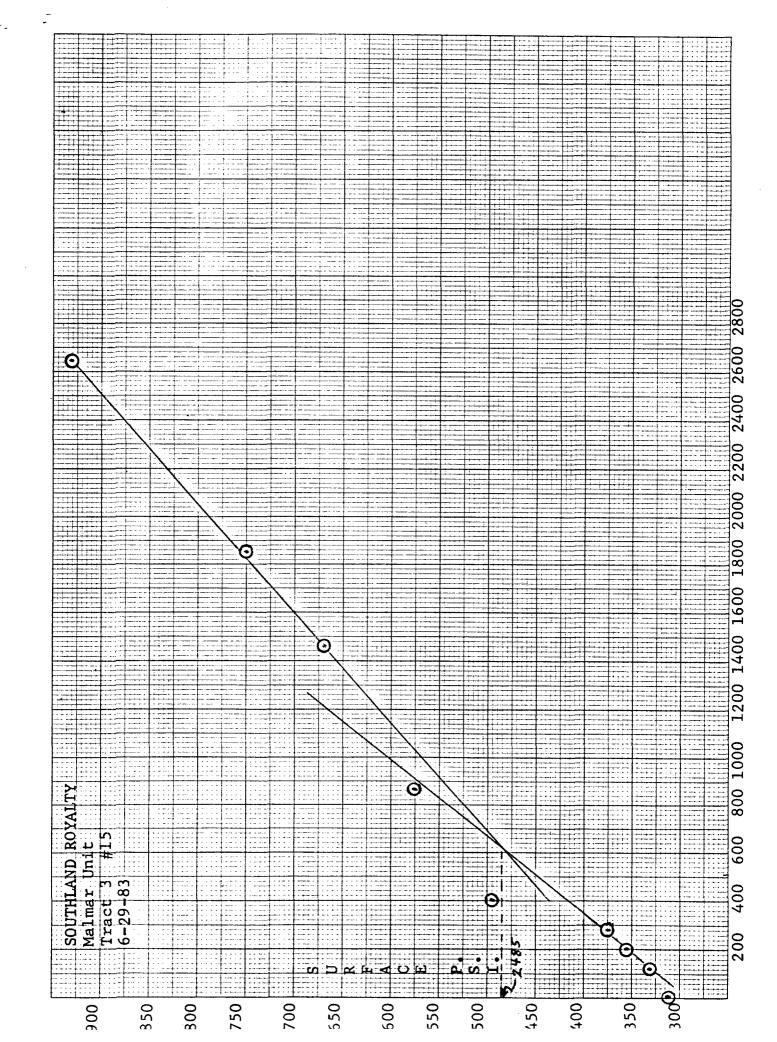
De la Dratais é Oritzania las

-.



Initial Annual Special 6/29/83 Company Southland Royalty Allottee Field Reservals Location Completion Date Total Depth Plug Back TO Elevation Form or Lease None Malmar Unit Carge Size Vi. Set At Perforation:: Form 4187 Ya	DAVIS	SERV	ICES I	NC.					HOBBS,	
FIELD DATA SHEET Total Depth Initial Annual Special Specion Special Special Special Special Special S	(505)							NEW MEXICO		
Type Text: Disitial Annual Special 6/29/83 Learning of the properties of the propertis of the properties of the propertis of the properties				FIE		A SHEE	ſ			
Comparison Southland Royalty Allow: field Reservelr Lection Unit field Totel Depth Ploy Back TO Election Image: Second										
Comparison Southland Royalty Allow: field Reservelr Lection Unit field Totel Depth Ploy Back TO Election Image: Second	Type Test:	•						Test Dote 6/29/83	Leose No. or Seriel No.	
Artistration Leastion Unit Completion Date Tatal Depth Plug Back TD Elevation Form of Least Non Malmar Unit Cas, Size Vi. 4 Set At Performing Elevation Form of Least Non Malmar Unit Tract 3: size Vi. 4 Set At Performing Elevation: From Te 4488 Tract 3: #15 Tract 2: size Vi. 4 Set At Performing Elevation: From Set Converted 2: #15 Tract 2: size Vi. 4 Set At Performing Elevation: From Set Converted 2: #15 Producting Trace Main Elevation Form of Least Non Converted Peritit Least Non CO. REPRESENTATIVE Main Elevation Set Fill Set Converted Peritit Least Non Date of the K Suff. Fellowith Tract Converted Peritit Form of Least Non Non CO. REPRESENTATIVE Suff. Fellowith Non Non Non 2010 2313 BPD Psig B.H.P. fricticion 1892 Colum Wit Tract A: At	Company							0/20/05	Allottee	
Completion Dore Total Depth Plog Datk 10 Elevation Form w Lear Non- Malmar Unit Crg. Sire Ni. 4 Set Ar Performation 213 from Total Mark 101 Crg. Sire Ni. 4 Set Ar Performation 213 from Total Adds Performation 2 The Strike Vi. 4 Set Ar Performation 2 Set Ar Performation 2 The Compution Querce(ba) 4 Set Ar Performation 2 Set Ar Total Depth Lear Producting Thee Rescript Terp. F Hear Grand Terp. F Berg. Pirst P Set Ar N.M. CO. REPERSENTATIVE Surf. remark Kate Surf. Strike N.M. Co. REPRESENTATIVE Surf. psi.cor Itel Add Input Surf Grand Terp. F Berg. Pirst P Strike Ters API Gravity - Amount Date Etc. Surf. remark Surf. Itel Add Input Surf Gravity - Amount 2150 SHUT IN 2313 4205 ON BOTTOM 2:50 pm BONB @ 4338 3:15 15 120	5 Field	outhi	and Ro	yalty Rev	ervals		Location		: Unit	
City Vi. d Set At Performing from To 4488 Tract 3 #15 Tig. Site Vi. d Set At Performing from To 4488 Tract 3 #15 Tig. Site Vi. d Set At Performing from To 4488 Tract 3 #15 Time of main (Cutority) Performing from Form Set At Set At Performing from Set At Tract 3 #15 Producting Thm Reservelt Temp. F Mean Ground Temp. F Date Performance County or Poritich Lea Date EttAP. Well 1 (Imformation performance) Set Fried County Set At Set At </td <td colspan="8"></td> <td></td>										
The Site VI. d Stick I Performation From Ten Stick Ten = Dik Rg: Type forgeting (frictible) 2 3/8 Plastic Coated 4109 Lea Lea Producting The Reserve in Ten Reserve in Ten Baro, Pirst,P Lea Producting The Reserve in Ten Reserve in Ten, F Baro, Pirst,P Lea Date ELAP, bypell imformation surf. remain forgeting production date: Time of the Reserve in Ten BRD Psig B.H.P. friction 1892 Colum Wt. (Include liquid production date:) 2:50 SHUT IN 2313 4205 ON BOTTOM 2:50 pm BOMB @ 4338 3:10 2313 4205 ON BOTTOM 2:50 pm BOMB @ 4338 3:15 15 120 2330 4223 START TEST 3:15 3:30 30 200 2355 4237 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 45 2670 4466 2561 4:00 400 2495 4359 2454 4:15 4:30 30 1458 2670 4466 4:30 30 1458 2670 <t< td=""><td></td><td colspan="7"></td><td>Malmar Unit</td></t<>									Malmar Unit	
Tay. Size Wit. A Set A1 Performation: From To Set. Two public (prescrib) 2/3/87 Plastic Conted Producting The production (prescrib) Producting The prescription (prescrib) Contry or Parith Lea Producting The production The production The production The production (prescription (presc	Czg. Size	X.	1.	4 9	Set At	Perlorations: Erom To 4488			Tract 3 #15	
Producing The Reservels Term, F Mean Ground Terms, F Dere, Print, -P Sister CO. REPRESENTATIVE Surf. psi.cor remarks Date ELAP. Wall (mformation surf. psi.cor remarks Reading Hm. BPD Psig B.H.P. friction 1892 Colum Wt. [Include liquid production date:] 2:50 SHUT IN 2313 4205 ON BOTTOM 2:50 pm BOMB @ 4338 3:00 2313 START TEST 3 3 3:15 15 120 2330 4223 3:15 15 200 2355 4237 3:30 30 200 2355 4237 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 45 280 2375 4257 4:00 4 4 4 4 4 4:15 15 864 2575 4390 2486	Tbg. Size	W	1.	d :	Set At					
Producing The Reservels Term, F Mean Ground Terms, F Dere, Print, -P Sister CO. REPRESENTATIVE Surf. psi.cor remarks Date ELAP. Wall (mformation surf. psi.cor remarks Reading Hm. BPD Psig B.H.P. friction 1892 Colum Wt. [Include liquid production date:] 2:50 SHUT IN 2313 4205 ON BOTTOM 2:50 pm BOMB @ 4338 3:00 2313 START TEST 3 3 3:15 15 120 2330 4223 3:15 15 200 2355 4237 3:30 30 200 2355 4237 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 45 280 2375 4257 4:00 4 4 4 4 4 4:15 15 864 2575 4390 2486	Type Comp	/8 PI	astic	Coated	· ·	-				
CO. REPRESENTATIVE Date ELAP. Well imformation surf. remarks Time of Redman data: Market Rate Surf. pei.cor Redman data: Market Rate Surf. pei.cor BHUT IN 2313 4205 ON BOTTOM 2:50 pm BOMB @ 4338 START TEST 3:15 120 2330 4223 3:15 120 2330 4223 3:15 120 2330 4223 3:15 120 2330 4223 3:15 120 2355 4237 3:30 30 200 2375 4257 3:45 4 4:00 1 400 4:00 4 4:15 6 4:15 4:257 4:2670 <td c<="" td=""><td></td><td></td><td></td><td></td><td>i</td><td>Hean Ground</td><td>Temp, F</td><td>Bero. Press P</td><td>State</td></td>	<td></td> <td></td> <td></td> <td></td> <td>i</td> <td>Hean Ground</td> <td>Temp, F</td> <td>Bero. Press P</td> <td>State</td>					i	Hean Ground	Temp, F	Bero. Press P	State
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						<u></u>		, , , , , , , , , , , , , , , , , , , 	N•M•	
Time el Reading Time el Htn. Ratc BPD Suff. Psig B.H.P. friction 1892 Colum Wt. Include liquid production date: Tree - API Genetity - Amount) 2:50 SHUT IN 2313 4205 ON BOTTOM 2:50 pm BOMB @ 4338 3:00 2313 START TEST 3:15 15 120 2330 4223 3:15 30 200 2355 4237 3:30 30 200 2355 4237 3:45 - - - 4:00 1 400 2495 4359 2454 4:15 15 864 2575 4390 2486 4:15 - - - - - 4:15 15 864 2575 4390 2486 4:15 - - - - - 4:15 - - - - - 5:00 453 2670 4466 2561 - - 5:00 453 2752 4524 2619 - -					tion	surf.		romark	<pre>//s</pre>	
Reading Hun. BPD Psig B.H.P.frictiod 1892 Colum Wt. (Type - API Geelly - Amauni) 2:50 SHUT IN 2313 4205 ON BOTTOM 2:50 pm. BOMB @ 4338 3:00 2313 START TEST 3:15 15 120 2330 4223 3:15 15 120 2330 4223 3:15 - - - 3:30 30 200 2355 4237 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 - - - - 4:00 1 400 2495 4359 2454 LOST H20 SWITCH TO PUMP TRUCK 4:00 - - - - - - 4:15 15 864 2575 4390 2486 - 4:15 - - - - - - 4:30 30 1458 2670			Rate	Surf.		psi.cor	· · · · · · · · · · · · · · · · · · ·	11	nclude liquid production data:)	
3:00 2313 START TEST 3:15 15 120 2330 4223 3:15 3:30 30 200 2355 4237 3:30 30 200 2355 4237 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 45 280 2375 4257 3:45 45 280 2375 4257 4:00 1 400 2495 4359 2454 LOST H20 SWITCH TO PUMP TRUCK 4:00 4:15 4:30 30 1458 2670 4466 2561 4:15 4:30 30 1458 2670 4466 2561 4:45 5:00 45 1853 2752 4524 2619 5:00 45 1853 2752 4		Hrs.				the second s	1892 Colu	m Wt.	ype - API Gravlig - Amount	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			SHUI		4205				BOMB @ 4338	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	- I A A A A A A A A A A A A A A A A A A	15	120	the second s	4223			*·····		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3.15									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		30	200	2355	4237					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3:30									
4:00 1 400 2495 4359 2454 LOST H20 SWITCH TO PUMP TRUCK 4:00	3:45	45	280	2375	4257					
4:00 1 400 2495 4359 2454 LOST H20 SWITCH TO PUMP TRUCK 4:00	3 . / 5									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1	400	2495	4359	2454	LOST H20	SWITCH TO PUR		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4.00									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		15	864	2575	4390	2486				
4:30 30 1458 2670 4466 2561 4:45										
4:45 5:00 45 1853 2752 4524 2619 5:00		30	1458	2670	4466	2561				
5:00 45 1853 2752 4524 2619 5:00					++00	2301				
5:00		4.5	1.853	2752	4524	2610			· · · · · · · · · · · · · · · · · · ·	
5:00 5:15 2 2650 2930 4588 2683 END TEST			10.75		4524					
	5:00		2650	1	7.599	2692	END TROT			
	······································		2.0.70	2/30	4,700	2005	END LEST			
			1			+				
					<u> </u>	+	 			
	•	_								
	<u></u>								,	
	·				+	-	}			
						-				



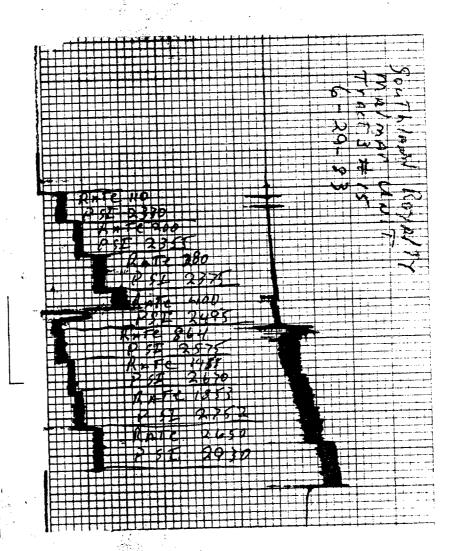


46 1320

K+ 10 X 10 TO ½ INCH 7 X 10 INCHES K+ KEUFFEL & ESSER CO. MADE IN USA

(

DAVIS SERVICES, INC.



SOUTHLAND ROYALTY MALMAR UNIT TRACT 3 # 15 6/29/83

BENNET · CATHEY

(505) 748-3354 / Artesia, New Mexico 88210

SUBSURFACE PRESSURE MEASUREMENTS

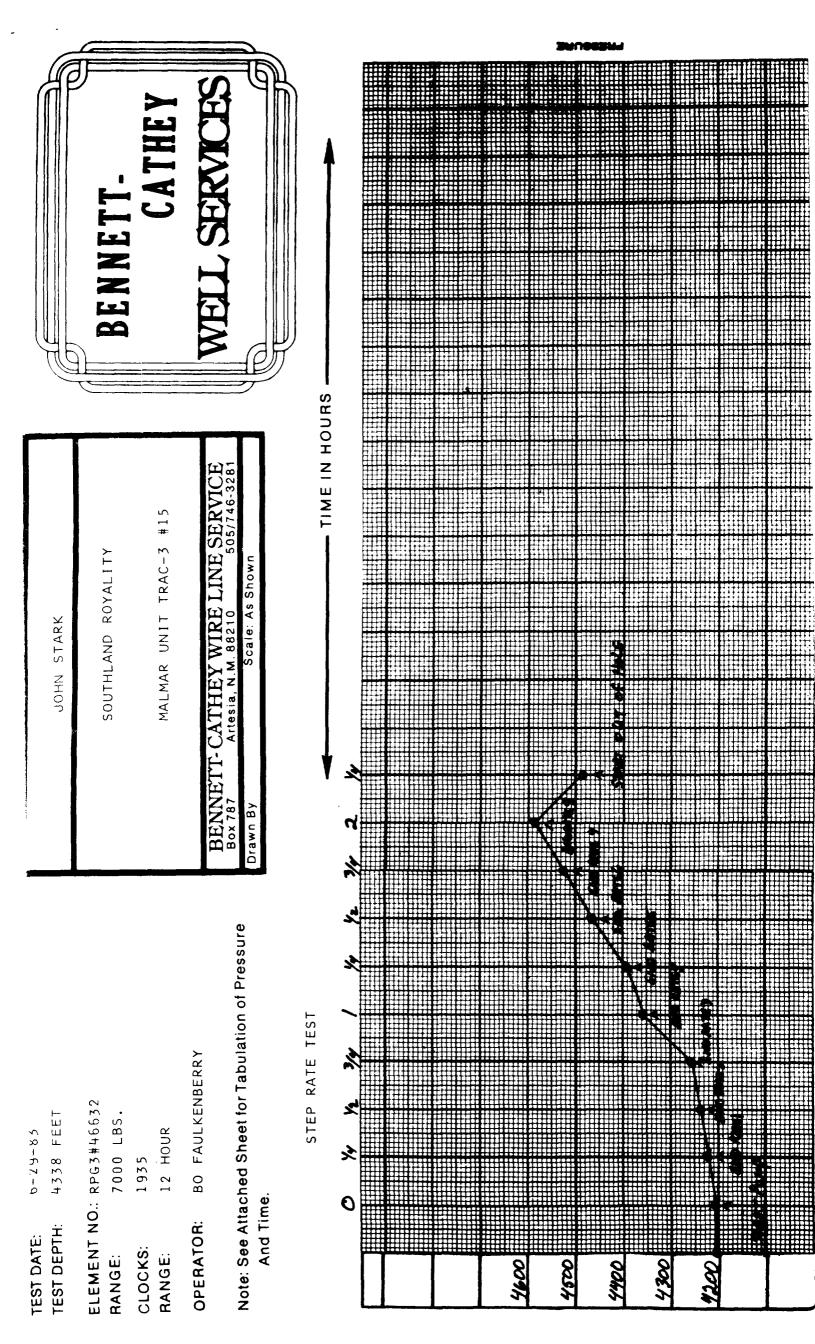
COMPANY	SOUTHLAND	ROYALITY	WELL N	IAMEMALN	1AR	UNIT	TRAC-3	#15	
DATE OF TEST_	6-29-83		FORMATION				PAGE	1_0F_1_	
COMPANY MAN	JOHN STAR	<							

STEP RATE TEST

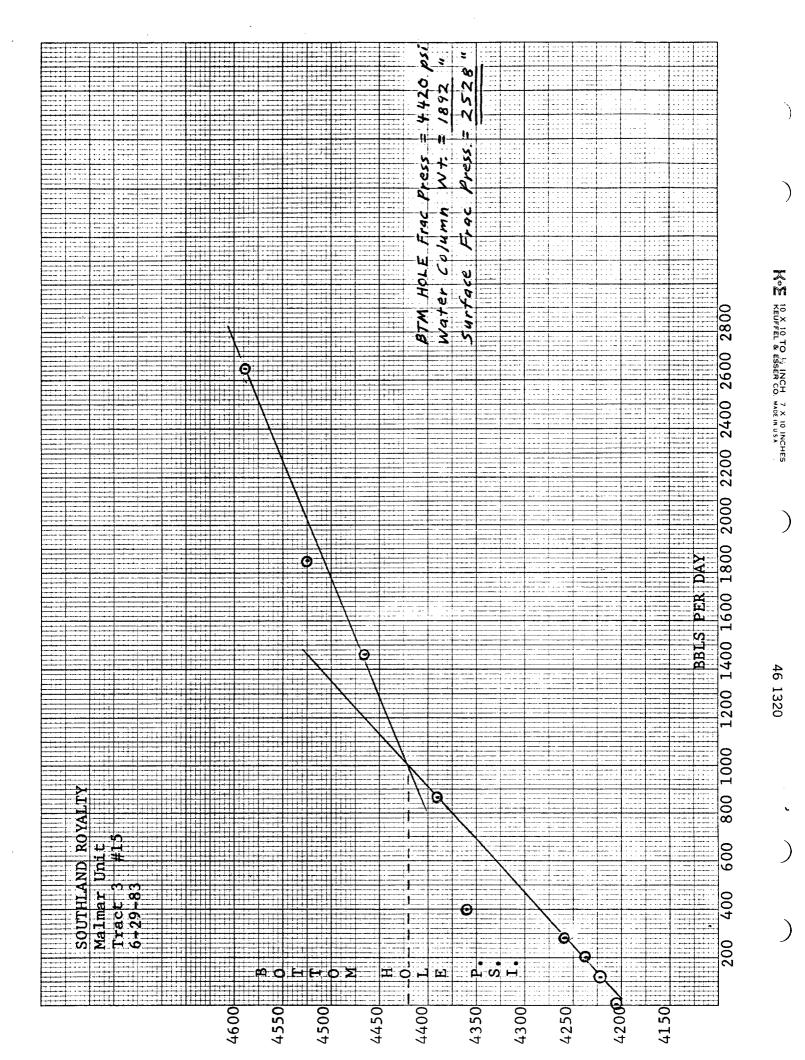
CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

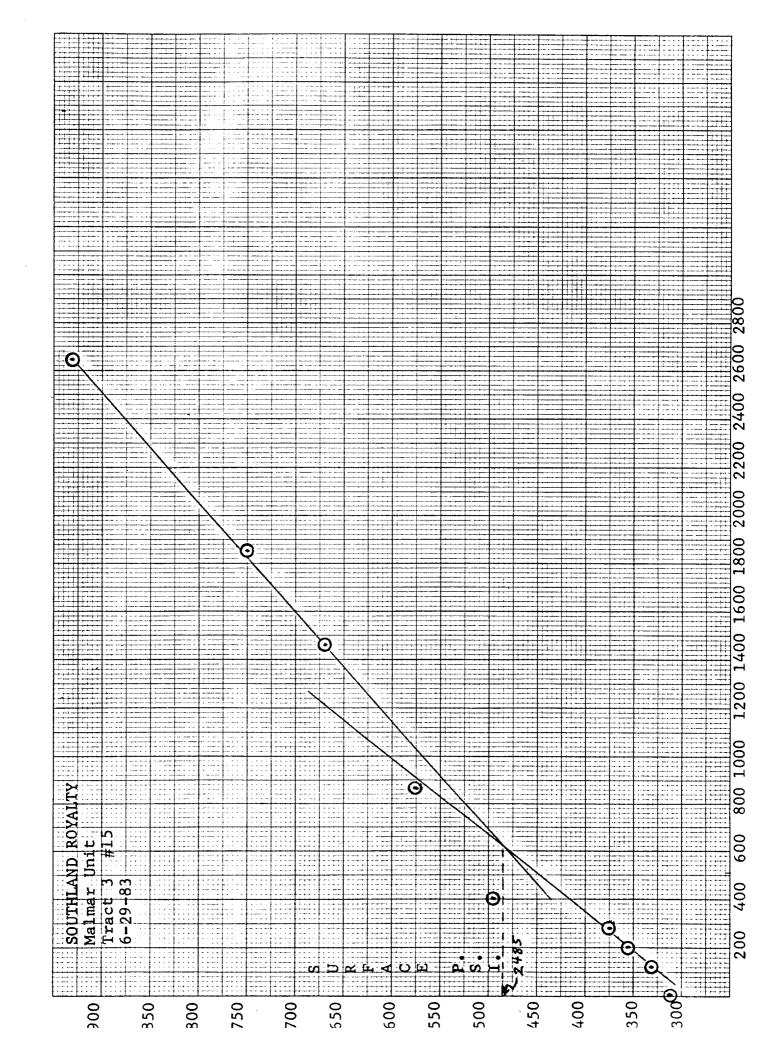
ELEMENT NUMBER	RANGE 7000 LBS	•
CLOCK NUMBER 1935	RANGE 12 HOUR	
TIME WELL SHUT IN N/A		
TIME CLOCK STARTED 1353 HOUR	6-29-83	
DEAD WEIGHT ELEMENT ON SURFACE	2326.2 PSIA	LBS.
TIME ELEMENT REACHED BOTTOM	1450 HOUR 6-29-83	
DEAD WEIGHT ELEMENT ON BOTTOM	2326.2 PSIA	LBS.
ELEMENT SET AT 4338		FEET.
TEMPERATURE4338	FT. <u>102</u>	°F.
DEAD WEIGHT AT THE END OF2	HOURS1/4	MINUTES.

	1	······	[PRESSURE AT
DATE	ноия	TIME	DEFLECTION in/inches	CALCULATED PRESSURE psig	CORRECTION P ± PC psig	CORRECTED PRESSURE psia	MID-POINT OF PERFORATIONS psia
6-29-83	SIP	1450		4192	13.2		4205.2
6-29-05	<u> </u>	1450		4192	13.2		4205.2
START PUMP	0	1500		4192	13.2		4205.2
END 1ST RA	TE 15 MIN	1515		4210	13.2		4223.2
END 2ND RA		1530		4224	13.2		4237.2
END 3RD RA		1545		4244	13.2		4257.2
END_4TH_RA		1600		4346	13.2		4359.2
END 5TH RA		1615		4378	13.2		4391.2
END 6TH RA	TE 1H 30M	1630		4453	13.2		4466.2
END 7TH RA	TE 1H 45M	1645		4511	13.2		4524.2
END 8TH RA		1700		4575	13.2		4588.2
START OUT	¢F H <u>OLE</u> _	1715		4475	13.2		4488.2
		· · · · · · · · · · · · · · · · · · ·					
		·····					
							·
,, _,, _	·····	····· • ••••					
			•	·			



(505)		ICES I 0119			STE	P RATE TE	ST		HOBBS, NEW MEXICO
		<u> </u>	FIE	LD DAT	TA SHEET		<u> </u>		
						• <u></u>			
ype Test:	•			Amuel	C	Special	1.11 Doile 6/29	/83	Lease No. or Serial No.
Compony S(outh1	and Ro	yalty		<u></u>				Allottee
Field			Res	ervols		Locati)n		Unit
Completion	Date		Total Depth		Plug Bock 1	D	Elevation		Form of Lease Nome Malmar Unit
3g. Size	¥	1,	4	Set Al	Per	4187	To	4488	Tract 3 #15
Bg. Size	W			Set At	Per	lorations; From	Ţ.		Sec. Twp-Bik Rgv -
		astic	Coated	· · · · ·				4109	County or Porish Lea
Producing	[h~	Reser	vols Temp. F		Hean Ground	Temp. F	Baro, Pre	11 P	State N.M.
CO. R	EPRES	ENTATI	VE			··· · · · · · · · · · · · · · · · · ·			
DATE	ELAP. TIME	Well Rate	imforma Surf.	tion_	surf.	·		remark	
Time of Reading	Hes.	BPD	Psig		psi.cor friction	1892 Col	um Wt.	(1	nclude liquid production data; Type - API Gravity - Amount)
2:50		SHUT	IN 2313 2313	4205		ON BOTTO	M 2:50	pm	BOMB @ 4338
3:15	15	1.20	2313	4223		START TE	<u></u>	·····	
3:15					ļ	· · · · · · · · · · · · · · · · · · ·			
3:30	30	200	2355	4237				· · · · · · · · · · · · · · ·	
3:30									
3:45	45	280	2375	4257					
3:45				(050	0/5/				
4:00	1	400	2495	4359	2454	LOST H2C	SWITCH	<u>TO PU</u>	MP_TRUCK
4:00 4:15	15	864	2575	4200	2486				
		004	2575	4390	2400				
4 <u>:15</u> 4 <u>:30</u>	30	1458	2670	4466	2561		······································	·	
					2.501				
4 <u>:45</u> 5 <u>:00</u>	45	1853	2752	4524	2619	·			
5:00		-			<u> </u>				
5:15	2	2650	2930	4588	2683	END TEST	· · · · · · · · · · · · · · · · · · ·		
·••							•	·	
					1		· · · · · · · · · · · · · · · · · · ·		
					1				
•	-			<u>+</u>				· · · · · · · · · · · · · · · · · · ·	
				+	+	<u> </u>		مىمىيى	
•				1		ļ			
····									

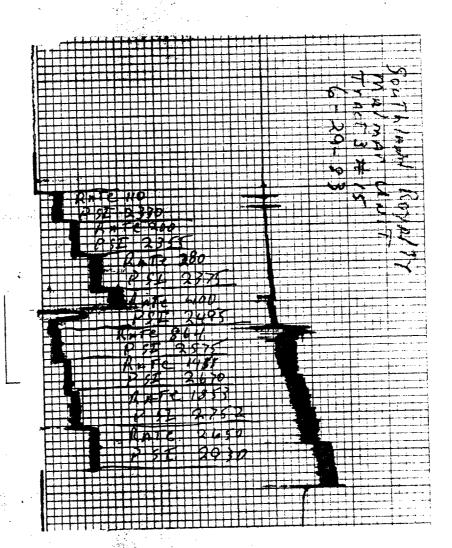




46 1320

H+E 10 X 10 TO ½ INCH 7 X 10 INCHES KEUFFEL & ESSER CO. MADE IN USA.





SOUTHLAND ROYALTY MALMAR UNIT TRACT 3 # 15 6/29/83

BENNET · CATHEY

(505) 748-3354 / Artesia, New Mexico 88210

SUBSURFACE PRESSURE MEASUREMENTS

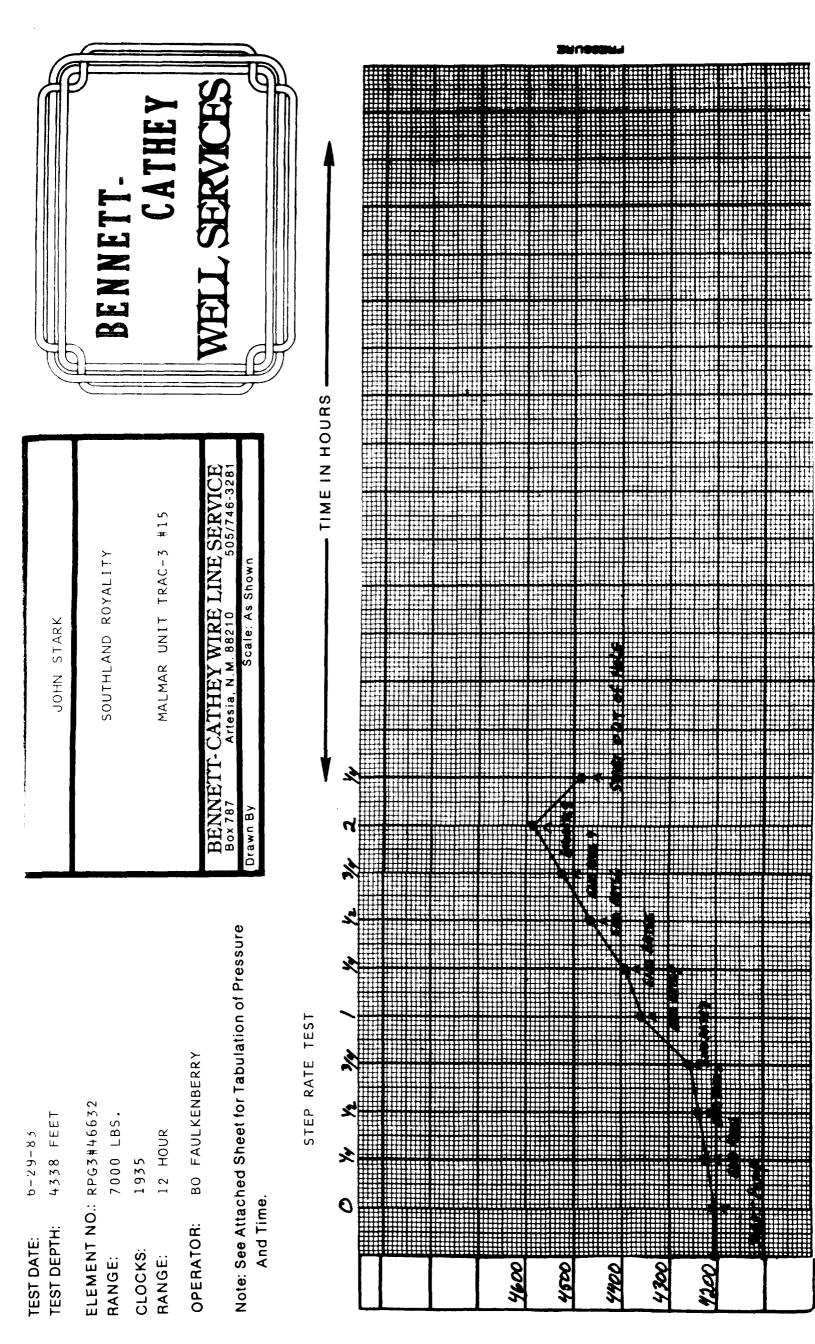
COMPANY	SOUTHLAND	ROYALITY		WELL NAME	MALMAR	UNIT	TRAC-3	#15
DATE OF TEST	6-29-83		FORMATION				PAGE_	1_0F_1_
COMPANY MAN	JOHN STARK	Ś						

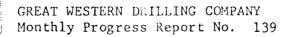
STEP RATE TEST

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER RPG3#46632	RANGE 7000 LBS	•
CLOCK NUMBER 1935	RANGE 12 HOUR	
TIME WELL SHUT IN N/A		
TIME CLOCK STARTED 1353 HOUR	6-29-83	·····
DEAD WEIGHT ELEMENT ON SURFACE	2326.2 PSIA	LBS.
TIME ELEMENT REACHED BOTTOM	1450 HOUR 6-29-83	
DEAD WEIGHT ELEMENT ON BOTTOM	2326.2 PSIA	LBS.
ELEMENT SET AT 4338		FEET.
TEMPERATURE 4338	FT102	°F.
DEAD WEIGHT AT THE END OF2	HOURS1/4	MINUTES.

				CALCULATED	CORRECTION	CORRECTO	PRESSURE AT
DATE	HOUR	τιμε	DEFLECTION in/inches	PRESSURE	P ± PC psig	CORRECTED PRESSURE psia	MID-POINT OF PERFORATIONS psia
6-29-83	SIP	1450		4192	13.2		4205.2
START PUMP	0	1500		4192	13.2		4205.2
END 1ST RAT	TE 15 MIN	1515		4210	13.2		4223.2
END 2ND RAT	TE 30 MIN	1530		4224	13.2		4237.2
END 3RD RA		1545		4244	13.2		4257.2
END 4TH RA		1600		4346	13.2		4359.2
END 5TH RA		1615		4378	13.2		4391.2
END 6TH RA		1630		4453	13.2		4466.2
END 7TH RA		1645		4511	13.2		4524.2
END 8TH RA		<u>1700</u> 1715		4575 4475	13.2 13.2	·	<u>4588.2</u> 4488.2
START UUT C	UF NULE	1/12		4472	1).2		4400.2
/							
		···· ···· · · · · · · · · · ·					
· · · · · · · · · · · · · · · · · · ·							
h							
		·····					
		······					
			• • • • • • • • • • • • • • • • • • • •				





FINAL REPORT

	Constant G
Project:	MALMAR UNIT
Location:	LEA COUNTY, NEW MEXICO
Field:	MALJAMAR GRAYBURG-SAN ANDRES
Unitizati	on Date: 4-1-62

a Gin COMM

Month: (OCTOBEI	R, 1973	
Number of Ac	res:	1,360	
Formation:	SAN	ANDRES	
Flood No.:	750)-50	

 \bigcirc

STATISTICAL SUMMARY

	This Month	Last Month
Monthly Oil Production - barrels	2,875	2,846
Monthly Oil Sales - barrels	3,156	3,329
Monthly Cas Sales - MCF		
Monthly Water Production - barrels	11,780	11,400
Monthly Injection - barrels	85,097	80,336
Daily Average Oil Production - barrels	93	95
Daily Average Water Production - barrels	380	380
Daily Average Injection - barrels	2,745	2,678
		Barrels
Cumulative Oil Production to Unitization		522,250
Cumulative Oil Production Since Unitization		708,230
Cumulative Project Oil Recovery		1,230,480
Cumulative Water Production Since Unitization		1,274,242
Cumulative Injection		9,872,026
WELL STATUS		
Active Shut in	Abandoned	Total
Due that a 17	,	17

	ACLIVE	DILUC III	Abandoneu	IULAI
Producing	17			17
Injection	17			17
Supply				
TOTAL	34			34

MONTHLY ACTIVITY

Date

٩.

Well No.

Comments



BRUCE KING GOVERNOR

December 2, 1982

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Southland Royalty Company 21 Desta Drive Midland, Texas 79701

Attention: John Stark

Re: Case No. 2456 Orders Nos. R-2155 and WFX-142 Injection Pressure Increase

Dear Mr. Harbin:

Based on our telephone conversation today and test data submitted by your letter of August 7, 1982, the maximum authorized wellhead pressure for the described well is hereby increased to 2370 psi:

Malmar Unit Tr. 1 No. 2, Unit B, 13-T17S-R32E

Yours very truly,

JOE D. RAMEY Director

JDR/RJ/fd

cc: Jerry Sexton Sarah Archuleta ✓Case File

Southland Royalty Company Malmar Unit Tr. #1 Well No. 2 Step-Rate Test Tabulation of Pressure & Time

•

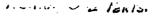
Test Date:	July 15, 1982
Test Depth:	4298 Feet
Clock:	0-12 Hour
Element:	0-6500 P.S.I.
Operator:	Don Tyson & Leroy Thompson

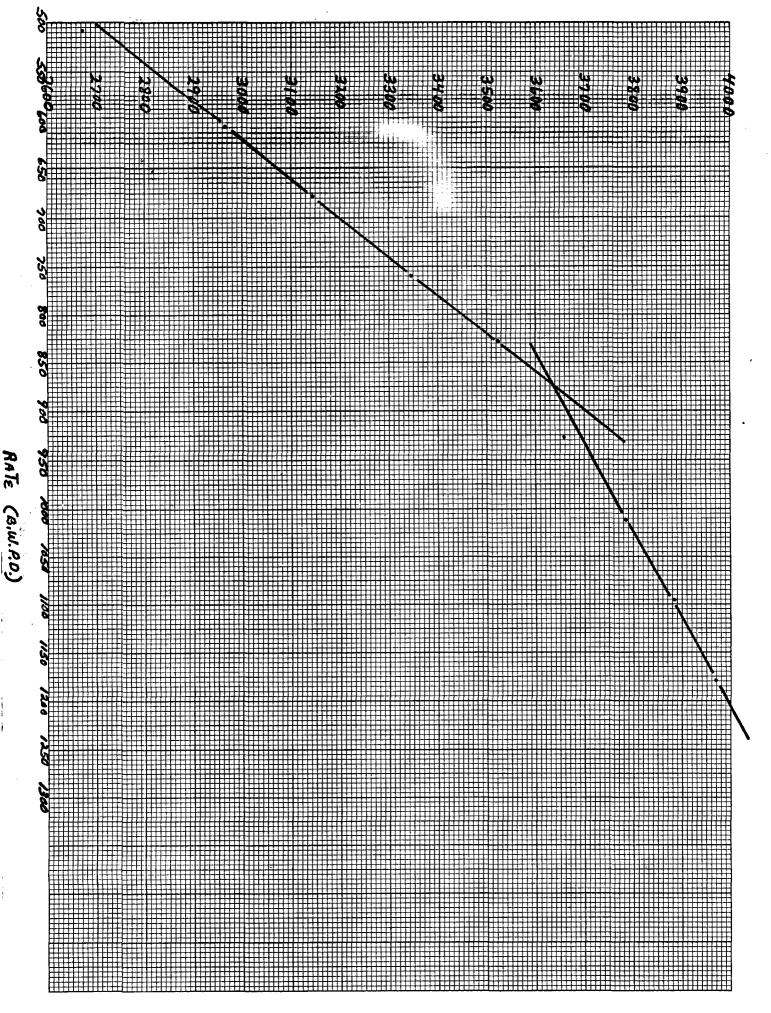
Test Conducted By: D. & R. Well Testing

,

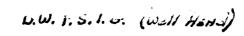
				Gradient .454
Cum. Hr	<u>s. & Min.</u>	W.H.D.W. Pres.	Rate B.W.P.D.	P.S.I.G. Center Perfs.
00 Hrs.	000 Min.	2207	S.I.	4133 Gauge @ 3898'
00	15	2207	S.I.	4133 Start Pump
00	20	2320	78	4231 Rate 1
00	25	2339	60	4254
00	30	2360	56	4270 End Rate 1
00	35	2375	97	4280 Rate 2
00	40	2390	99	4289
00	45	2399	99	4303 End Rate 2
00	50	2413	138	4312 Rate 3
00	55	2421	119	4325
01	00	2433	160	4335 End Rate 3
01	05	2437	229	4342 Rate 4
01	10	2448	250	4348
01	15	2449	239	4351 End Rate 4
01	20	2460	320	4361 Rate 5
01	25	2462	325	4371
01	30	2467	327	4374 End Rate 5
01	35	2474	390	4381
01	40	2479	383	4381
01	45	2485	410	4384 End Rate 5
				End Test.

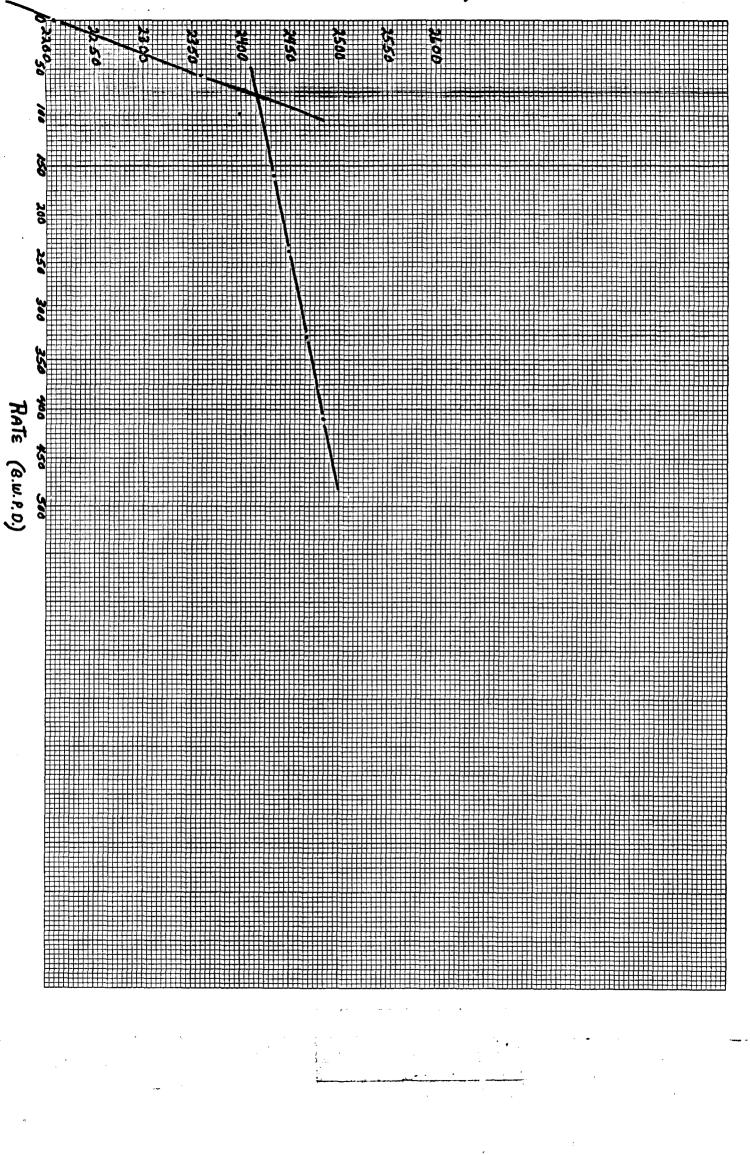
and the second sec





KON 10 X 10 TO 14 INCH 7 X 10 INCHES KEUFFEL & ESSER CO. MADE IN U.S.A.







September 14, 1982

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Southland Royalty Company 21 Desta Drive Midland, Texas 79701

Attention: Mr. K. W. Harbin

Re: Case No. 2456, R-2155 and WFX's-495 and 142 Injection Pressure Increase

Dear Mr. Harbin:

Based on information and test data submitted by your letter of August 7, 1982, the maximum authorized wellhead pressure for the following described wells is hereby increased to 1700 psi:

Malmar Unit Tr. 3 No. 15, Unit O, 12-T17S-R32E Malmar Unit Tr. 1 No. 2, Unit B, 13-T17S-R32E

Yours very truly,

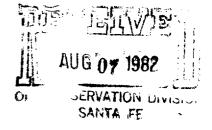
JOE D. RAMEY Director

JDR/RJ/fd

cc: Jerry Sexton R. L. Stamets Case File



July 26, 1982



New Mexico Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. Roy Johnson

Re: Request Approval to Inject at Higher Pressures N. E. Maljamar (GB-SA) Field Lea County, New Mexico

Gentlemen:

Your approval is requested to increase the maximum allowable surface injection pressure for 3 wells in the Southland operated Malmar Unit, which produces from the N. E. Maljamar (GB-SA) Field, Lea County, New Mexico. This request is based on results from step rate tests performed on 2 of these wells.

The relative locations of the 3 wells that this request is made are shown on the attached map. The Malmar Unit Tr. 3 No. 15 was approved on January 22, 1982 to be converted to a water injector. A maximum injection pressure of 2800 psi was requested but a pressure of 840 psi was approved. Similarly, the Malmar Unit Tr. 1 No. 2 was approved on November 19, 1981 to be restored to injection but at a maximum pressure of 830 psi instead of the requested 2800 psi. The work on both of these wells was completed during June 1982. Step rate tests were then run on each well on July 15, 1982, in which the data and graphs are attached. In summary, these tests indicated formation parting pressures recorded at the surface of 1740 psi and 2415 psi, respectively, for the Malmar Unit Tr. 3 No. 15 and Tr. 1 No. 2. Both of these tests were witnessed by Mr. A. A. Plattsmier of 1740 PSI the NMOCD, Hobbs Office. Therefore, it is requested that the maximum allowable injection pressure for these 2 wells be set just below each Cas, 2456 wells measured parting pressure.

We, also, ask that the results of the step rate test ran on the Malmar Unit Tr. 3 No. 15 be applied to the recently submitted request to convert the Malmar Unit Tr. 1 No. 1 to injection. As seen on the attached map, this well is located in the same area of the unit as the Tr. 3 No. 15. 1740 rsi

If there is any question on Southland's intent or the step rate tests, please contact me or Mr. John Stark at our Midland Office.

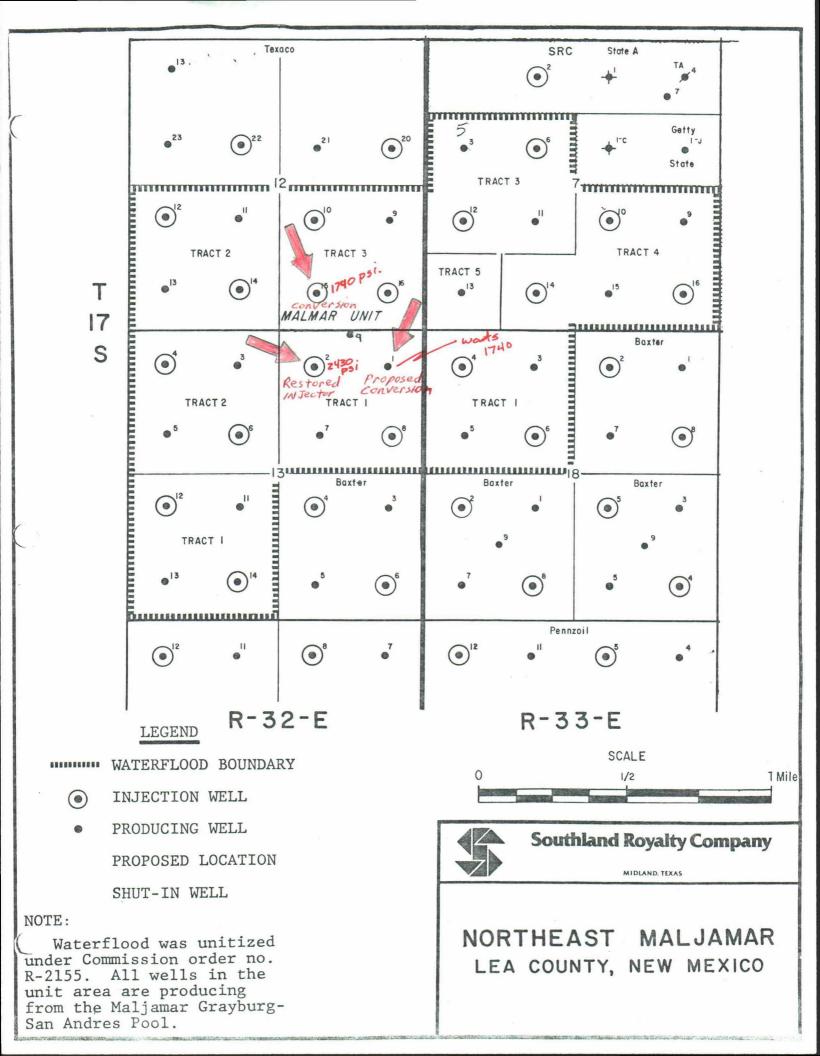
Very truly yours,

K. W. Harbin District Production Manager

JRS/slh

Attachments

OIL CONSERV DIVISION SANTA FE



Southland Royalty Company Malmar Unit Tr.#3 Well No. 15 Step-Rate Test Tabulation of Pressure & Time

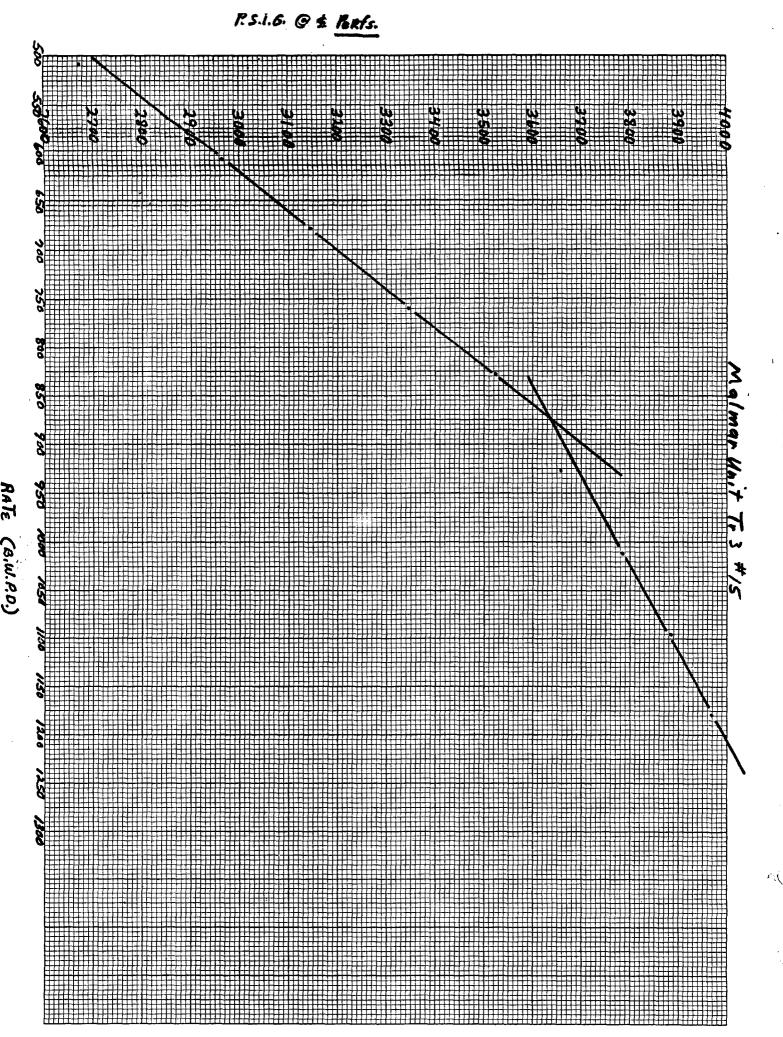
Test Conducted By:

D. & R. Well Testing Company

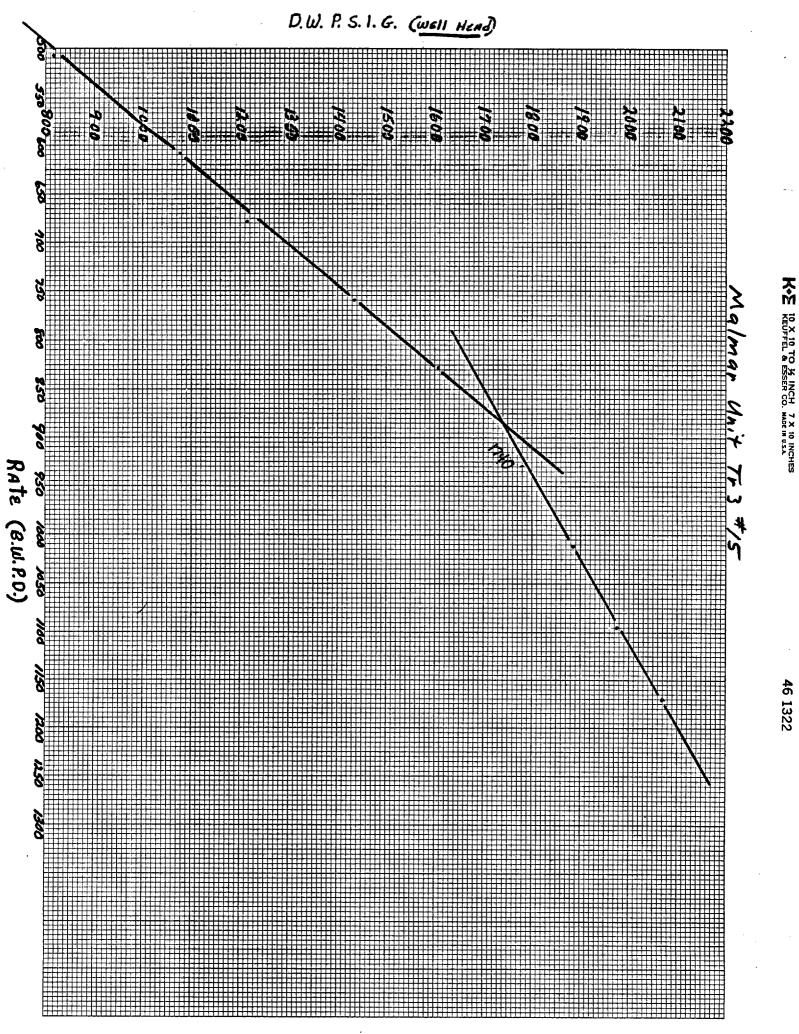
Test Date:July 15,1982Test Depth:4337 FeetClock:0-12 HourElement:0-6500 P.S.I.Operator:Don Tyson & Leroy Thompson

Gradient .454

Cum. Hrs.	& Min. (W.H.D.W. Pres.	Rate B.W.P.D.	P.S.I.G. Center Perfs.
00 Hrs	. 00 Min.	474 .	S.I.	2283 Guage @ 39 37'
00	20	474	S.I.	2283 Start Pump
00	25	665	514	2472 Rate 1
00	30	735	512	2586
00	35	815	508	2671 End Rate 1
00	40	919	604	2788 Rate 2
00	45	999	608	2866
00	50	1077	609	2965 End Rate 2
00	55	11 30	678	3016 Rate 3
01	00	1165	679	3081
01	05	1215	678	3146 End Rate 3
01	10	1318	760	3221 Rate 4
01	15	1365	759	3290
01	20	1433	760	3349 End Rate 4
01	25	1510	840	3421 Rate 5
01	30	1560	829	3476
01	35	1609	828	3522 End Rate 5
01	40	1665	909	3561 Rate 6
01	45	1723	924	3620
01	50	1760	926	3659 End Rate 6
01	55	1812	1011	3698 Rate 7
02	00	1847	1010	3747
02	05	1885	1012	3783 End Rate 7
02	10	1925	1096	. 3829 Rate 8
02	15	1944	1093	3862
02	20	1975	1095	3885 End Rate 8
02	25	2020	1179	3917 Rate 9
02	30	2050	1175	3947
02	35	2070	1180	3970 End Rate 9
				Ind Toot



KE 10 X 10 TO K INCH 7 X 10 INCHES KEUFFEL & ESSER CO. MAR IN USA



Southländ Royalty Company Malmar Unit Tr. #1 Well No. 2 Step-Rate Test Tabulation of Pressure & Time

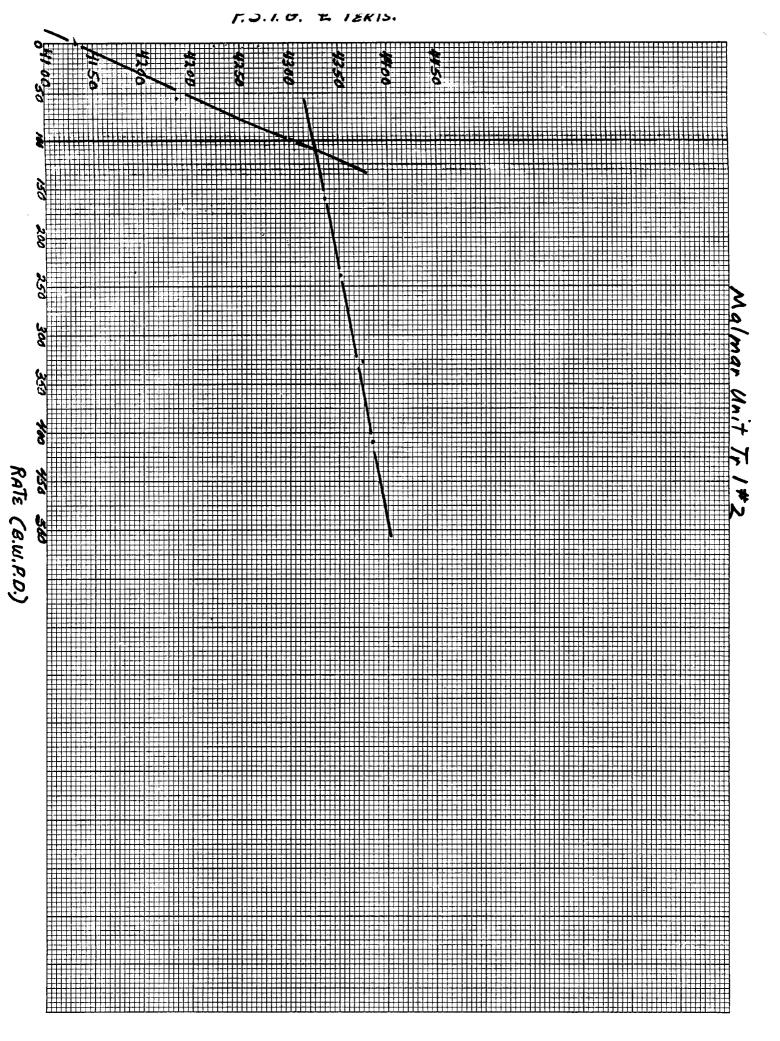
- . ·

Test Date:	July 15, 1982
Test Depth:	4298 Feet
Clock:	0-12 Hour
Element:	0-6500 P.S.I.
Operator:	Don Tyson & Leroy Thompson

Test Conducted By: D. & R. Well Testing

Gradient .454

Cum. Hr	s. & Min.	W.H.D.W. Pres.	Rate B.W.P.D.	P.S.I.G. Center Perfs.
00 Hrs.	00 Min.	2207	S.I.	4133 Gauge @ 3898'
00	15	2207	S.I.	4133 Start Pump
00	20	2320	78	4231 Rate 1
00	25	2339	60	4254
00	30	2360	56	4270 End Rate 1
00	35	2375	97	4280 Rate 2
00	40	2390	99	4289
00	45	2399	99	4303 End Rate 2
00	50	2413	138	4312 Rate 3
00	55	2421	119	4325
01	00	2433	160	4335 End Rate 3
01	05	2437	229	4 3 42 Rate 4
01	10	2448	250	4348
01	15	2449	239	4351 End Rate 4
01	20	2460	320	4361 Rate 5
01	25	2462	325	4371
01	30	2467	327	4374 End Rate 5
01	35	2474	390	4381
01	40	2479	383	4381
01	45	2485	410	4384 End Rate 5
				End Test.

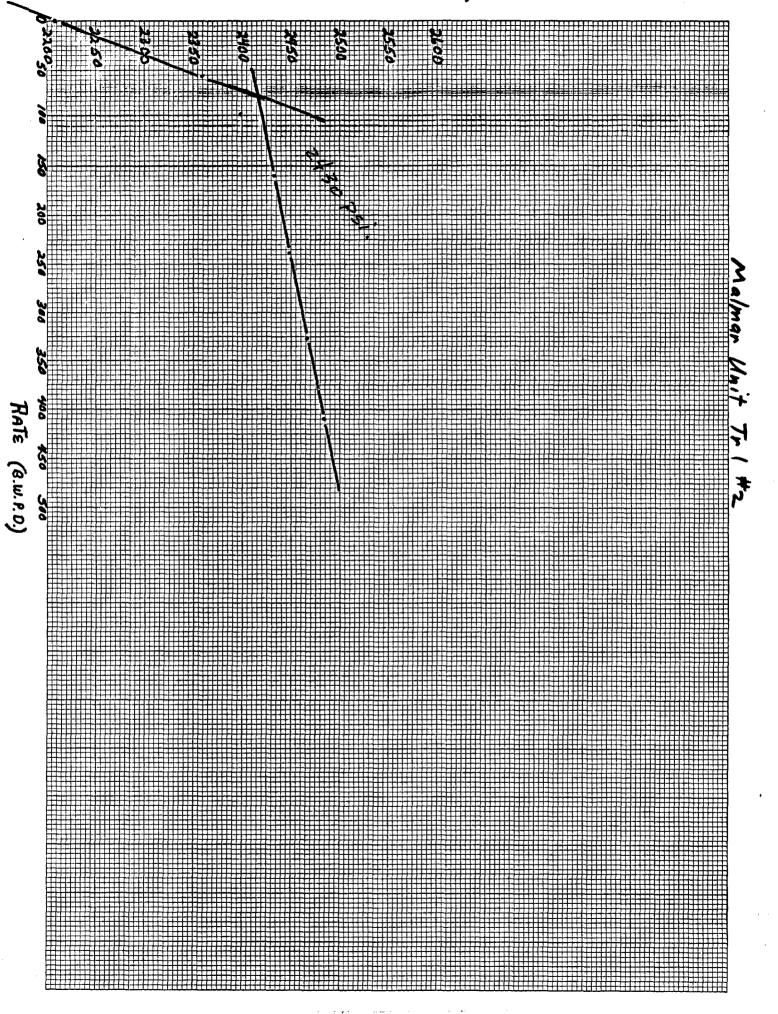


1. 16.14

1.

KOE 10 X 10 TO 1/ INCH 7 X 10 INCHES KEUFFEL & ESSER CO. MADE IN U.S.A.

D.W. P.S.I.G. (well HERd)



KOX 10 TO K INCH 7 X 10 INCHES KEUFFEL & ESSER CO. MADE IN U.S.A.





P. O. BOX 1148 SANTA FE, NEW MEXICO 87501



PHIL R. LUCERO COMMISSIONER

September 25, 1975

Jennings, Christy & Copple 1012 Security National Bank Building P. O. Box 1180 Roswell, New Mexico 88201

> Re: Malmar Unit RESIGNATION & DESIGNATION OF UNIT OPERATOR Les County, New Maxico

ATTENTION: Mr. S. B. Christy IV

Gentlemen:

Your letter of September 19, 1975 has been received together with two copies of a Resignation and Designation of Unit Operator for the Malmar Unit.

The Commissioner of Public Lands has this date approved the resignation of Great Western Drilling Company, and has accepted Shenandoah Oil Corporation as the successor Unit Operator, for the Malmar Unit. The affective date of Resignation and Designation to be as of January 1, 1974.

Enclosed is one (1) approved copy of the instrument.

Very truly yours,

FHIL R. LUCERO COMMISSIONER OF PUBLIC LANDS

BY: RAY D. GRAHAM, Director Oil and Gas Division

PRL/RDG/s encl. cc: OCC-Santa Fa, New Mexico



BRUCE KING GOVERNOR LARRY KEHOE SECRETARY

November 19, 1981

Southern Union Refining Company P. O. Box 980 Hobbs, New Mexico 88240

Attention: Mr. K. W. Harbin

Re: Malmar Unit Tract 1 Well No. 13-2B

POST OFFICE BOX 2088

STATE LAND OFFICE BUILDING

SANTA FE, NEW MEXICO 87501

(505) 827-2434

Dear Sir:

Pursuant to Southland Royalty Company's letter of November 4, 1981, Southland Royalty Refining Company is hereby authorized to resume water injection into its Malmar Unit Tract 1 #13-2B well through plastic-lined tubing set in a packer at approximately 4000 feet in the following described well for purposes of secondary recovery.

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

That the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure to a maximum of 830 pounds per square inch; provided however that the Division Director may administratively authorize a pressure limitation in excess of the above upon the operator's establishing that such higher pressure will not result in fracturing of the confining strata.

That the operator shall notify the supervisor of the Division's Hobbs District Office before injection is commenced through said well.

That the operator shall immediately notify the Supervisor of the Division's Hobbs District Office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely or necessary to correct such

failure or leakage.

That the subject well shall be governed by all provisions of Division Order No. R-2155 and WFX No.-142 not inconsistent herewith.

Very truly yours,

JOE D. RAMEY Direstor

JDR/OS/og



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR

LARRY KEHOE SECRETARY

March 24, 1982

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434 1 20 e - 240 te

Southland Royalty Company 1100 Wall Towers West Midland, Texas 79701

ATTENTION: Frey N. Rad

RE: Exceptions to Rule 705-A for 20 Injection Wells and Application to Inject Malmar Unit, Tr. 1 #13-2 Well

Dear Sir:

Pursuant to Southland Royalty Company's request for exception of twenty (20) injection wells, as listed on TABLE I, from Rule 705-A, the Oil Conservation Division (OCD) hereby denies your request.

Review of your application and history thereof by the Santa Fe and Hobbs District Office concludes that you have not demonstrated good cause to be entitled to exception to Rule 705-A.

The OCD requests that Southland Royalty Company take appropriate actions as outlined in the OCD Memorandum of September 30, 1981. (See Attachment)

In response to your request for application to inject fresh water in the Malmar Unit Tr. 1 #13-2 well, the OCD granted your request as per our letter of November 19, 1981. (See attached copy)

If you have any questions regarding this matter, please do not hesitate to call or contact Oscar Simpson at (505) 827-2534.

Sincerely,

Joe D. Ramey Division Director

JDR/OS/dp

Enc.

TABLE I

NAME OF WELL	LETTER SENT	APPROVAL DATE	REMARKS
Parke B Tr. B #1	11-5-81	None	Exception to Rule 705A
Robinson Unit Tr. 3 #31-13	11-6-81	None	n
Tr. 4 #31-12	11-6-81	y None	0
Tr. 4 #31-16	11-6-81 4	/ None	n ×
State "A" #2	11-6-81	None	n
#6	11-6-81	None	
Monterey St. #5	11-5-81	7 None	н
Monterey "B" #4	11-5-81	None	11
New Mexico Y St. #1	11-5-81	None	и. И
Shugart "A" #8	11-5-81 //	e None	n
Shugart "B" #5	11-5-81 /	/ None	H
Shugart (APCO) A #2	11-5-81	None	n
Shugart "B" #1	11-5-81	y None	u
Malmar Ut. Tr. 1 #13-2	11-4-81 a	W None	Application to inject Fresh Water.
Malmar Ut. Tr. 1 #13-12	11-5-81 /	/ None	Exception to Rule 705A
#13-14	11-5-81	5 None	10
Tr. 2 #13-4	11-5-81	ð None	11
#13-6	11-5-81 ,	y None	11
#12-12	11-5-81	× None	и
#12-14	11-5-81	i None	
Tr. 3 #12-10	11-5-81	v None	u



BRUCE KING GOVERNOR

NOTICE 705-A

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 8750 (505) 827-2434

MEMORANDUM

				INJECTION			TORS
FROM:	JOE	D.R/	AMEY, [DIRECTOR	OR		
SUBJECT:	TEMP	ORAR		DONMENT OF	INJEC	TION	WELLS

Division Rule 705A provides in part that "no injection well may be temporarily abandoned for more than six months unless the injection interval has been isolated by use of cement or a bridge plug." The Division Director may delay the cement or bridge plug requirement upon a request by the operator and a showing that such well is mechanically sound, that there is a continuing need for the well, and that the well constitutes no threat to underground sources of drinking water.

Division survey programs have found several hundred injection wells which have not been used for at least six months and which do not have the requisite plugs. Based upon these surveys the Division will be moving to enforce Rule 705A in the near future.

Operators should review the status of their injection wells and within the next six months take one of the following actions relative to injection wells which have been shut in for six months or longer:

- (1) Return the well to active operation.
- (2) Plug and abandon the well or place a cement or bridge plug above the injection interval.
- (3) File a workover or plugging plan and schedule with the appropriate Division district office.
- (4) File a request for exception to Rule 705A with the Division Director in Santa Fe.

September 30, 1981 fd/



BRUCE KING GOVERNOR LARRY KEHDE SECRETARY

November 19, 1981

done

POST OFFICE BOX 2088

(505) 827-2434

STATE LAND OFFICE BUILDI

SANTA FE, NEW MEXICO 875

Southland Royalty Company 1100 Wall Towers West Midland, Texas 79701

Attention: Mr. K. W. Harbin

Re: Malmar Unit Tract 1 Well No. 13-2B

Dear Sir:

Pursuant to Southland Royalty Company's letter of November 4, 1981, Southland Royalty Company is hereby authorized to resume water injection into its Malmar Unit Tract 1 #13-2B well through plastic-lined tubing set in a packer at approximately 4000 feet in the following described well for purposes of secondary recovery.

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

That the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure to a maximum of 830 pounds per square inch; provided however that the Division Director may administratively authorize a pressure limitation in excess of the above upon the operator's establishing that such higher pressure will not result in fracturing of the confining strata.

That the operator shall notify the supervisor of the Division's Hobbs District Office before injection is commenced through said well.

That the operator shall immediately notify the Supervisor of the Division's Hobbs District Office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely or necessary to correct such

Lone

failure or leakage.

That the subject well shall be governed by all provisions of Division Order No. R-2155 and WFX No. 142 not inconsistent herewith.

Very truly yours, JOE D. RAMEY Division Director

JDR/OS/og





February 11, 1982

New Mexico Oil Conservation Division Energy & Minerals Division P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey Director

> RE: Exceptions to Rule 705A and Application to Inject Fresh Water

Gentlemen:

Attached please find a table listing twenty (20) Exception to Rule 705A packages. These packages were sent to the NMOCC between November 5, 1981 and November 6, 1981. We have received no response to these and would appreciate assistance in finding out the status of each.

On November 4, 1981, we sent in an Application to Inject Fresh Water on the Malmar Unit Tr. 1 #13-2 well and have received no response to this f package either. Any assistance you could give us would be greatly appreciated.

Yours very truly,

Frey N. Rad District Operations Engineer

CN:sf

Attachment

			· .
NAME OF WELL	LETTER SENT	APPROVAL DATE	REMARKS
Parke B Tr. B #1	11-5-81	None	Exception to Rule 705A
Robinson Unit Tr. 3 #31-13	11-6-81	<u>)</u> None	
Tr. 4 #31-12	11-6-81	3 None	п
Tr. 4 #31-16	11-6-81	4 None	11
State "A" #2	11-6-81	None	n
#6	11-6-81	(None	11
Monterey St. #5	11-5-81	7 None	11
Monterey "B" #4	11-5-81	% None	"
New Mexico Y St. #1	11-5-81	4 None	H
Shugart "A" #8	11-5-81	¢€ None	11
Shugart "B" #5	11-5-81	// None	11
Shugart (APCO) A #2	11-5-81	None	11
Shugart "B" #1	11-5-81	None	
Malmar Ut. Tr. 1 #13-2	11-4-81	& None	Application to inject Fresh Water.
Malmar Ut. Tr. 1 #13-12	11-5-81	14 None	Exception to Rule 705A
#13-14	11-5-81	5 None	11
Tr. 2 #13-4	11-5-81	🥳 None	
#13-6	11-5-81	, ? None	11
#12-12	11-5-81	None	11
#12-14	11-5-81	79 None	11
Tr. 3 #12-10	11-5-81	20 None	"



BRUCE KING

GOVERNOR

LARRY KEHOE SECRETARY STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

February 25, 1982

P.O. BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

MEMO TO: Oscar Simpson

FROM: Jerry Sexton

SUBJECT: Southland Royalty TA'd Injection wells in MalMar Waterflood and their Request for a New Injection Well in this Project

We recommend that permission not be granted for Southland Royalty to convert another well in their MalMar Unit to injection until they have put this flood in shape by setting CIBP above the injection intervals in the temporarily abandoned injection wells.

At the present time there are 4 TA'd injection wells in the section the proposed new injector is in.

1107 0 1 1982 OIL CONSERVATION LIVISION SANTA FE

rate where are the original file front to Hobbs office



February 8, 1982

P.O. BOX 1980 HOBBS, NEW MEXICO 88240 (505) 393-6161

GOVERNOR LARRY KEHOE SECRETARY

BRUCE KING

Southland Royalty Company 1100 Wall Towers West Midland, TX 79701

Gentlemen:

The Oil Conservation Division witnessed bradenhead tests on all your wells in the Maljamar Area in December 1981.

Your Malmar Unit Tr. 2 Well #6-F in 13-17-32 has a wellhead leak that needs to be repaired. This should be completed by April 1, 1982.

Also, we are enclosing a copy of a Memorandum from Joe D. Ramey, dated September 30, 1981, concerning temporary abandonment of injection wells. According to the information we have you have 11 TA'd injection wells in the Maljamar Area. We trust that you are making plans to take one of the four courses of action outlined in the memo.

Very truly yours,

OIL CONSERVATION DIVISION

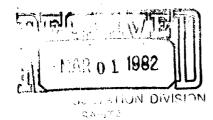
ons Jerry Sexton

Supervisor, District I

ed

File cc: R.L. Stamets

Openn - This is a capy goin letter to Son Roy





February 16, 1982

New Mexico Oil Conservation Division Energy & Minerals Division P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey, Director

RE: Exceptions to Rule 705A

Gentlemen:

- - Elichyn

In reference to your letter dated 2-8-82, this is to advise that in late 1981 Southland filed proper regulatory forms requesting Exception to Rule 705A on numerous inactive injectors, a list of which is shown on the attached table. This list shows the eleven (11) TA'd injection wells referenced in your letter. By a letter dated February 11, 1982, we inquired to NMOCC as to the status of those applications (Copy attached).

Yours very truly,

Frey N. Rad District Operations Engineer

Attachments

C. Nokes/

OIL CONSCREATION DIVISION SANTA FE



February 11, 1982

New Mexico Oil Conservation Division Energy & Minerals Division P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey Director

> RE: Exceptions to Rule 705A and Application to Inject Fresh Water

Gentlemen:

Attached please find a table listing twenty (20) Exception to Rule 705A packages. These packages were sent to the NMOCC between November 5, 1981 and November 6, 1981. We have received no response to these and would appreciate assistance in finding out the status of each.

On November 4, 1981, we sent in an Application to Inject Fresh Water on the Malmar Unit Tr. 1 #13-2 well and have received no response to this package either. Any assistance you could give us would be greatly appreciated.

Yours very truly,

Frey N. Rad District Operations Engineer

CN:sf

Attachment

INACTIVE INJECTION WELLS SOUTHLAND HAS APPLIED TO NMOCC FOR EXCEPTION TO RULE 705A

SOUTHLAND ROYALTY COMPANY 1100 WALL TOWERS WEST MIDLAND, TEXAS 79701

		MIDLAND, IEXAS /9/01		DATE REQUEST
NAME OF	COLINITY	Door	CURRENT	MADE
WELL	COUNTY	POOL	STATUS	TO NMOCC
Parke B Tr. B #1	Eddy	Grayburg-Jackson (SR-Q-G-SA)	SI	11-5-81
Robinson Ut. Tr. 3				
#31-13	Lea	Maljamar (Grayburg-San Andres)	ТА	11-6-81
Tr. 4 #31-12	Lea	Maljamar (Grayburg-San Andres)	TA	11-6-81
Tr. 4 #31-16	Lea	Maljamar (Grayburg-San Andres)	ТА	11-6-81
State "A" #2	Lea	Maljamar (Grayburg-San Andres)	ТА	11-6-81
State "A" #6	Lea	Maljamar (Grayburg-San Andres)	SI	11-6-81
Monterey St. #5	Eddy	Shugart (Y-SR-Q-GB)	TA	11- 5-81
Monterey "B" #4	Eddy	Shugart (Y-SR-Q-GB)	TA	11-5-81
New Mexico Y St. #1	Eddy	Shugart (Y-SR-Q-GB)	ТА	11-5-81
Shugart "A" #8	Eddy	Shugart (Y-SR-Q-GB)	ТА	11-5-81
Shugart "B" #5	Eddy	Shugart (Y-SR-Q-GB)	TA	11-5-81
Shugart (APCO) A #2	Eddy	Shugart (Y-SR-Q-GB)	TA	11-5-81
Shugart "E" #1	Eddy	Shugart (Y-SR-Q-GB)	TA	11-5-81
Malmar Ut. Tr. 1 #13-12	Lea	Maljamar (Grayburg-San Andres)	TA	11-5-81
Malmar Ut. Tr. 1 #13-14	Lea	Maljamar (Grayburg-San Andres)	ТА	11-5-81
Malmar Ut. Tr. 2 #13-4	Lea	Maljamar (Grayburg-San Andres)	ТА	11-5-81
Malmar Ut. Tr. 2 #13-6	Lea	Maljamar (Grayburg-San Andres)	ТА	11-5-81
Malmar Ut. Tr. 2 #12-12	Lea	Maljamar (Grayburg-San Andres)	ТА	11-5-81
Malmar Ut. Tr. 2 #12-14	Lea	Maljamar (Grayburg-San Andres)	ТА	11-5-81
Malmar Ut. Tr. 3 #12-10	Lea	Maljamar (Grayburg-San Andres)	ТА	11-5-81

Prepared By: C. Nokes 2-16-82 Engineering Assistant Midland District

· · · ·

2456

PROGRESS REPORT NO. 3

MALMAR UNIT Lea County, New Mexico

FLOOD NO. 750-50

June, 1962

PH 1 19 Production for June was 8,375 barrels of oil for an average of 279 barrels per day. Gas Sales were 42,803 MCF. Produced water was 300 barrels. Oil Sales were 9,050 barrels. Several electrical storms damaged power facilities during the month, causing down time of pumping units. A storm June 4th resulted in a twelve (12) hour loss to thirteen (13) wells. On June 8th, four (4) wells were off twelve (12) hours. On June 12th seven (7) wells lost seven (7) hours, June 13th, the same seven (7) lost eight and a half (8-1/2) hours. On June 15th, two (2) wells lost four (4) hours and on June 26th eight (8) wells lost six (6) hours.

Well No. 12-14 was acidized with 1,000 gal. on June 8th. Several tests failed to indicate an increase in production. There was no other remedial work.

The injection plant work is now waiting on pumps and motors. The building will be erected over this equipment after installation. The water supply tanks have been plasticoated and supply lines have been installed by the water supply company. The filters have been set, connected and the building erected. The warehouse building has been erected, the injection lines welded and coated to the five (5) injection wells as planned. These lines will be tested early in July. The gas supply lines are 50% completed.

MONTHLY AND CUMULATIVE PRODUCTION

Well No	Avg. Daily	Avg. Daily	Monthly	Monthly	Cumulative	Cumulative
<u>No.</u>	Prod. 0il	Prod. Water	<u> 0i1 </u>	Water	0i1	<u>Water</u>
7-5	6		185		764	
7-6	14		420		983	
7-9	5		150		516	
7-10	6		180		546	
7-11	6		180		728	
7-12	8	8	240	240	758	758
7-13	5		153		473	
7-14	7		210		576	
7-15	6		180		576	
7-16	6		173		600	
12-9	6		185		733	
12-10	9		270		818	
12-11	5		150		577	
12-12	5		161		649	
12-13	5		160		587	
12-14	6		190		625	
12-15	9		275		823	
12-16	12		361		909	
13-1	14		440		1,325	
13-2	10	1	315	30	1,718	152
13-3	6		180		607	
13-4	7		210		698	

MALMAR UNIT Lea County, New Mexico

FLOOD NO. 750-50

PROGRESS REPORT NO. 3 Page 2

MONTHLY AND CUMULATIVE PRODUCTION (Cont'd.)

Well <u>No.</u>	Avg. Daily Prod. Oil	Avg. Daily Prod. Water	Monthly 011	Monthly Water	Cumulative Oil	Cumulative Water
13-5	12		370		858	
13-6	11		330		818	
13-7	8		250		708	
13-8	6 5		180		455	
13-11	5	1	155	30	826	91
13-12	7		210		546	
13-13	8		240		667	
13-14	6		185		795	
18-3	6		185		856	
18-4	17		520		1,130	
18-5	17		510		937	
18-6	9		272		420	
		Totals	8,375	300	25,605	1,001
Stock	6-1-62	2,861				

Stock 6-1-62	2,861
Unit Production	8,375
Unit Sales	9,050
Stock 7-1-62	2,186

WELL STATUS

UNIT EMPLOYEE

.

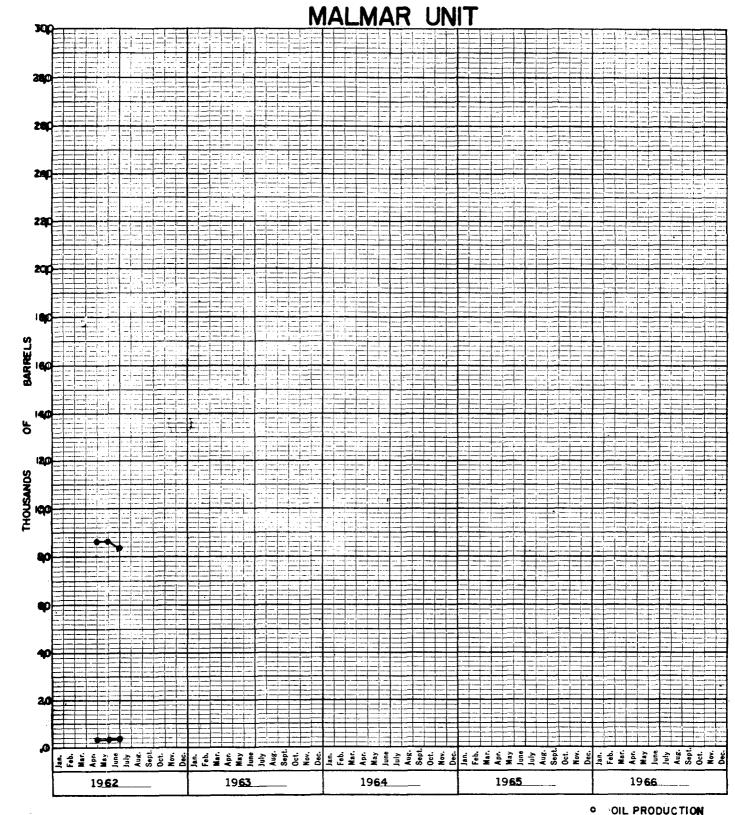
34 Producing Wells

1 Pumper

GREAT WESTERN DRILLING COMPANY

By Othanna O. H. Crews

OHC:tr 7-13-62



OIL PRODUCTION

× WATER INJECTION

PRODUCED WATER

GREAT WESTERN DRILLING CO. MIDLAND, TEXAS

 $\frac{1}{\frac{1}{2}} \frac{1}{\frac{1}{2}} \frac{1}{\frac{1}{2}}$

June 25, 1962

Re: Malmar Unit Lea County, New Mexico

Commissioner of Public Lands State of New Mexico P.O. Box 791 Santa Fe, New Mexico

Attention: Mrs. Marian M. Rhea

Gentlemen:

Enclosed herewith are Ratifications to the Malmar Unit executed by Paul A. Mavis.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

H. An

S. H. Snoddy Land Manager

SHS:mc Encl.

cc/encl. New Mexico Oil Conservation Commission P.O. Box 871 Santa Fe, New Mexico

cc/encl. Mr. S. B. Christy, IV Hervey, Dow & Hinkle P.O. Box 10 Roswell, New Mexico

The undersigned Working Interest Owner in the said Unit Agreement and Unit Operating Agreement, which embraces certain lands in Township 17 South, Ranges 32 and 33 East, N.M.P.M., for valuable consideration paid, ratifies, confirms and joins in the execution of said Unit Agreement and said Unit Operating Agreement (each of which is incorporated herein by a reference) to the same extent and effect as if the undersigned had executed the original of said Unit Agreement and said Unit Operating Agreement, or respective counterparts thereof. The undersigned does further commit all of the undersigned's right, title and interest in and to the Unitized Substances to the terms, provisions and agreements in said Unit Agreement and said Unit Operating Agreement.

The undersigned acknowledges the receipt of a copy of said Unit Agreement and said Unit Operating Agreement, and further acknowledges that this instrument has been signed and unconditionally delivered at the date shown hereon.

WORKING INTEREST	OWNER
	778
Can 1	10 au

ATTEST:

7101 E. Slauson Avenue

Address: Los Angeles 22, California

Date: _______ 1962

(Individual)

STATE OF California

COUNTY OF LOS Angeles

The foregoing instrument was acknowledged before me this <u>21st</u> day of Decomposition by <u>Paul A. Mavis</u> June, 1962

Jancachenol Xannek W2/84K deins 11

My Commission Expires Jan.28, 1966

(Corporate)

L. R. ADKINS, Notary **Notary Public** State of California - Principal Office, Los Angeles County My Commission Expires Jan. 28. 1966 7101 East Slauson Ave., Los Angeles 22. Calif,

STATE OF _____

COUNTY OF

The	foregoing	instrument was	acknowledged	before me	e this	day	of
December,	1961, by			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			of

corporation on behalf of said corporation.

GREAT WESTERN DRILLING CO. MIDLAND, TEXAS

12273 No M 8 15 2420

April 9, 1962

Re: Malmar Unit Lea County, New Mexico

Commissioner of Public Lands State of New Mexico P.O. Box 791 Santa Fe, New Mexico

Attention; Mrs. Marian M. Rhea

Gentlemen:

١

We are enclosing Ratifications executed by Brady Corporation, Katie Corporation, and Ruby Oil Company, together with revised Exhibits "B" and "C".

Yours very truly,

GREAT WESTERN DRILLING COMPANY

N. Sardd

S. H. Snoddy Land Manager

SHS:mc Encl.

- Lcc/encl. New Mexico Oil Conservation Commission P.O. Box 871 Santa Fe, New Mexico
 - cc/encl. Nr. S. B. Christy, IV Hervey, Dow & Hinkle P.O. Box 10 Roswell, New Mexico

EFFECTIVE April 1, 1962

EXHIBIT "C"

ه و م

MALMAR UNIT

UNIT PARTICIPATION

WORKING INTEREST . OWNERS	TOTAL UNIT PARTICIPATION
F.C. and C.H. Bishop	3.5730538
Brady Corporation	.0796392
Durham Drilling Company	2.4983254
Granger Bros.	.1918097
Carl A. Gray	.4684360
Great Western Drilling Company	58,0977971
Donald M. Hine	.5310980
J. Edgar Hoover	1.4163961
Estate of John W. House	2.9963116
Katie Corporation	.0796392
Dr. E.W. King	. 3068954
Edward W. LeBaron, Jr.	1.0761572
Maljamar, Inc.	1.9180965
Paul A. Mavis	.6371136
Leo McCarey	2.1223532
Len G. McCormick	.6371136
Thos. Meloy	2.5176946
Robert W. Paulin	1.0903197
Ruby Oil Company	1.4320431
Santana Petroleum Company	.0167954
Santiago Oil & Gas Company	13.4142206
S.D. Steed	.4795241
Mrs. C.J. Tippett	1.0621960
Clyde Tolson	1.4163961
Bernard Van Ingen	. 2120023
Patricia Van Ingen	.1352785
Waddell Ranch Company	1.0621960
James E. West, Jr.	.5310980

100.0000000

		PER CENT PARTICIPATION F TRACT IN UNIT	44.8384127	20.4596958
		PA	8001 ■ 11	 .9375000 1.5000000 Jr. 4.6875000 2.3437500 9.3750000 9.3750000 2.3437500
		WORKING INTEREST OWNER AND AMOUNT	Great Western	Granger Bros Dr. E.W. King - Edward W.LeBaron, - J.Edgar Hoover - Maljamar, Inc Thos. Meloy - Thos. Meloy - Clyde Tolson - Clyde Tolson - Bernard VanIngen - Patricia VanIngen - Robert W.Paulin - Great Western -
MALMAR UNIT	WELL INFORMATION	OVERRIDING ROYALTY OWNER AND AMOUNT	<pre>Phillips Pet05468750 Ruby Oil Co02734375 Westex Charitable Corporation</pre>	<pre>Phillips Pet05468750 Ruby Oil Co02734375 Mid-Cont.Supply03616703 0/P Creat Western05425058 0/P</pre>
W	MELL	LESSEE OF RECORD	Phillips Pet.	Phillips Pet.
		BASIC ROYALTY	12.5 %	12.5%
		LEASE AND/OR ASSIGNMENT NO.	B-2148 B-2229	B-2229 iago's interest.
		NUMBER OF ACRES	483.54	320 y to Sant
EFFECTIVE April 1, 1962		DESCRIPTION	Lots 1,2, EłNWł Sec.18, T-17-S, R-33-E; NEł, SWł Sec.13, T-17-S, R-32-E	<pre>SWt Sec.12 and 320 B-2229 NWt Sec.13, T-17-S, R-32-E * 0/P applies only to Santiago's interest.</pre>
EFFECT		TRACT NO.	T	6

EXHIBIT "B"

	PER CENT PARTICIPATION F TRACT IN UNIT	19.9866035															13.5917589		
	TEREST PA	C.H.Bishop- 9.3750000	rlg12.500000	Gray - 2.3437500	Est.John W.House - 3.3033530	Hoover - 4.6875000	W.LeBaron, Jr. 5859375	.Paulin - 4.6875000	Meloy - 3.000000	Co 7.16501475	lson - 4.68750000	Pet.Co0840330	-25.9453125	Bernard VanIngen29296875	Patricia VanIngen29296875	Western -21.04916175	rey -15.6150000	Est.John W.House -17.1875000	ed)
	WORKING IN OWNER AND	F.C. & C	Durham Drlg.	Carl A.	Est. John	J. Edgar	Edward W	Robert W.Paulin	Thos. Me	Ruby Oil	Clyde Tolson	Santana Pet.Co.	Santiago	Bernard	Patricia	Great We	Leo McCarey	Est.John	(continued)
	LN	.0546875	.03076170 0/P	.04614255 0/P													.0546875		
	OVERRIDING ROYALTY OWNER AND AMOUNT	Phillips Pet	* Mid+Cont.Supply-	* Great Western -													Phillips Pet		
	LESSEE OF RECORD	Phillips Pet.	Ŧ	Ŧ													Phillips Pet.		
	BASIC ROYALTY	12.5%				:											12.5%		
	LEASE AND/OR ASSIGNMENT NO.	B-2229			0/D antias ruly to Cantiacole interest	11020 0 THILLEO											B-2229		
mation	NUMBER OF ACRES	322.96			lu to Sen	TÀ CO OUN											200		
Exhibit "B" Malmar Unit - Well Information Page #2 Effective April 1, 1962	DESCRIPTION	Lots 2,3, SEANWA,	NE2SW2 Sec./, T-17-S, R-33-E;	SE& Sec.12, T-17-S, R-32-E	t O/D annliae on												SEŁ, SEŁSWŁ	Sec./, T-17-S, R-33-E	
Exhib Malma Page Effec	TRACT NO.	່ຕ		,,													4		

	PER CENT PARTICIPATION OF TRACT IN UNIT	•										1.1235291
		F.C. & C.H.Bishop-12.5025000	ne - 3.9075000	James E.West, Jr 3.9075000	Mrs. C.J.Tippett - 7.8150000	Waddell Ranch Co 7.8150000	mick - 4.6875000	s - 4.6875000	5859375	5859375	rn -20.7031250	rn - 100%
	WORKING INTEREST OWNER AND AMOUNT	F.C. & C.H.	Donald M.Hine	James E.Wes	Mrs. C.J.Ti	Waddell Ran	Len G.McCormick	Paul A.Mavis	Katie Corp.	Brady Corp.	Great Western	Great Western
	OVERRIDING ROYALTY OWNER AND AMOUNT											None
	LESSEE OF RECORD											Great Western
	BASIC ROYALTY											12.5%
	LEASE AND/OR ASSIGNMENT NO.											B-2516-18
mation	NUMBER OF ACRES											41.63
Exhibit "B" Malmar Unit - Well Information Page #3 Effective April 1, 1962	DESCRIPTION							-				Lot 4 Sec.7, T-17-S, R-33-E
Exhibit Malmar Page #3 Effecti	TRACT NO.			,								

;

4

The undersigned Working Interest Owner in the said Unit Agreement and Unit Operating Agreement, which embraces certain lands in Township 17 South, Ranges 32 and 33 East, N.M.P.M., for valuable consideration paid, ratifies, confirms and joins in the execution of said Unit Agreement and said Unit Operating Agreement (each of which is incorporated herein by a reference) to the same extent and effect as if the undersigned had executed the original of said Unit Agreement and said Unit Operating Agreement, or respective counterparts thereof. The undersigned does further commit all of the undersigned's right, title and interest in and to the Unitized Substances to the terms, provisions and agreements in said Unit Agreement and said Unit Operating Agreement.

The undersigned acknowledges the receipt of a copy of said Unit Agreement and said Unit Operating Agreement, and further acknowledges that this instrument has been signed and unconditionally delivered at the date shown hereon.

WORKING INTEREST OWNER

ATTEST:	KATIE CORPORATION
Janues Backlains	By Dudymider President
	Address:
Date: March 30, 1962	
(1	ndividual)
STATE OF	
COUNTY OF	
December, 1961, by	acknowledged before me this day of
	, husband and wife.
My Commission Expires	Notary Public
(C	orporate)
STATE OF	
COUNTY OF MIDLAND	
KATIE CORPORATION	acknowledged before me this <u>30</u> day of enridge, President of , a <i>Zextan</i>
corporation on behalf of said corpo	oration.
My Commission Expires 6-1-63	Sam H. Snothy
My Commission Expires	Notary Public

The undersigned Working Interest Owner in the said Unit Agreement and Unit Operating Agreement, which embraces certain lands in Township 17 South, Ranges 32 and 33 East, N.M.P.M., for valuable consideration paid, ratifies, confirms and joins in the execution of said Unit Agreement and said Unit Operating Agreement (each of which is incorporated herein by a reference) to the same extent and effect as if the undersigned had executed the original of said Unit Agreement and said Unit Operating Agreement, or respective counterparts thereof. The undersigned does further commit all of the undersigned's right, title and interest in and to the Unitized Substances to the terms, provisions and agreements in said Unit Agreement and said Unit Operating Agreement.

The undersigned acknowledges the receipt of a copy of said Unit Agreement and said Unit Operating Agreement, and further acknowledges that this instrument has been signed and unconditionally delivered at the date shown hereon.

WORKING INTEREST OWNER

Notary Public

ATTEST:		BRADY CORPORATION	
James	Kellar Secretar	i Byi III	Prestdept
		Address:	
Date: <u>Ma</u>	rch 30, 1962		
		(Individual)	
STATE OF			
COUNTY OF			
	961, by	nt was acknowledged before me this, husband and wife.	day of
My Commissio	on Expires		Notary Public
		(Corporate)	
STATE OF	TEXAS		
COUNTY OF	MIDLAND		
December, 19 BRADY C	egoing instrumer 61, by F. G. CRFORATION on behalf of sai	nt was acknowledged before me this Breckenridge, President, a	<u>20</u> day of of
corporation	on Denall OI Sal	La corporación.	lly

My Commission Expires 6-1-63

The undersigned Working Interest Owner in the said Unit Agreement and Unit Operating Agreement, which embraces certain lands in Township 17 South, Ranges 32 and 33 East, N.M.P.M., for valuable consideration paid, ratifies, confirms and joins in the execution of said Unit Agreement and said Unit Operating Agreement (each of which is incorporated herein by a reference) to the same extent and effect as if the undersigned had executed the original of said Unit Agreement and said Unit Operating Agreement, or respective counterparts thereof. The undersigned does further commit all of the undersigned's right, title and interest in and to the Unitized Substances to the terms, provisions and agreements in said Unit Agreement and said Unit Operating Agreement.

The undersigned acknowledges the receipt of a copy of said Unit Agreement and said Unit Operating Agreement, and further acknowledges that this instrument has been signed and unconditionally delivered at the date shown hereon.

WORKING INTEREST OWNER

ATTEST:	RUBY OIL COMPANY		
Secretary	By: By: Bruchinger		
	Address:		
Date: <u>March 30, 1962</u>			
	(Individual)		
STATE OF TEXAS			
COUNTY OF MIDLAND			
December, 1962, by F. G. Brock	as acknowledged before me this <u>30th</u> day of Marc suridge, dba Ruby 011 Company day of Marc , husband and wife.		
My Commission Expires6-1-63	Sam N. Snoly Notary Public		
	(Corporate)		
STATE OF	_		
COUNTY OF	_		
December, 1961, by	as acknowledged before me this day of of		
RUBY OIL COMPANY corporation on behalf of said co	, a		



GREAT WESTERN DRILLING CO.

4.36

April 6, 1962

Re: Malmar Unit Lea County, New Mexico

Commissioner of Public Lands State of New Mexico P.O. Box 791 Santa Fe, New Mexico

Attention: Mrs. Marian M. Rhea

Gentlemen:

Per your request of April 3, we are enclosing Ratification by Great Western Drilling Company to formally commit Tract 5 under State Lesse B-2516-18.

Also enclosed is Certificate stating that the Agreement has been filed for record.

The Malmar Unit Agreement became effective as of 7:00 A.M. April 1, 1962.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

S. H. Snoddy

Land Manager

SHS:mc Encl.

cc/encl. New Mexico Oil Conservation Commission
P.O. Box 871
Santa Fe, New Mexico
cc/encl. Mr. S. B. Christy, IV
Hervey, Dow & Hinkle
P.O. Box 10
Roswell, New Mexico

COPY

43504

CERTIFICATE

171

Great Western Drilling Company, by and through it's President, R. C. Tucker, does hereby certify:

1. Great Western Drilling Company is the Unit Operator of the Malmar Unit Agreement covering lands in Township 17 South, Ranges 32 and 33 East, N.M.P.M., Lea County, New Mexico. This Certificate is made pursuant to Section 23 (d) of said Unit Agreement.

2. The above Unit Agreement, and the attendant Unit Operating Agreement, were effective as of 7:00 A.M. on April 1, 1962.

3. (a) Prior to the above effective date, the above mentioned Unit Agreement and Unit Operating Agreement have been executed or ratified by Working Interest Owners owning a combined Unit participation of at least 90%, and the above mentioned Unit Agreement has been executed or ratified by Royalty Owners owning a combined interest of at least 66-2/3% of the Royalty Interest, in the Unit Area covered by said Unit Agreement.

(b) The Unit Agreement was approved by the Commissioner of Public Lands of the State of New Mexico on reh 22, 1962; the Unit Agreement was approved by the Oil Conservation Jomm'ssion of the State of New Mexico on February 3, 1962, by Order R-2155, in Case 2456.

(c) One counterpart of said Unit Agreement was filed for record in the Office of the County Clerk of Lea County, New Mexico, by the undersigned Unit Operator on March 23, 1962, and now appears in the Records of said County Clerk in Oil and Gas Book 183, at Page 307. All ratifications and approvals of the Unit Agreement received by Unit Operator prior to such recording was further recorded at said date and place.

DEIL DATED this 2nd day of April, 1962.

)

SS.

ATTEST:

STATE OF TEXAS

COUNTY OF MIDLAND

5

Assistant Secretary arman,

GREAT WESTERN DRILLING COMPANY

STATE OF NEW MEXICO COUNTY OF LEA FILED

Recorded in Book

MV

APR 2

ାଟ2

County Clark

Vor Me Devity

By: R. C. Tucker, President

The foregoing instrument was acknowledged before me this 2nd day of April, 1962, by R. C. Tucker, President of Great Western Drilling Company, a Texas purporation, on behalf of said corporation.

Netary Public

CAM H. SNOT Y CAM H. SNOT Y CONTACT OF THE AST CONTACT OF THE AST

The undersigned Working Interest Owner in the said Unit Agreement and Unit Operating Agreement, which embraces certain lands in Township 17 South, Ranges 32 and 33 East, N.M.P.M., for valuable consideration paid, ratifies, confirms and joins in the execution of said Unit Agreement and said Unit Operating Agreement (each of which is incorporated herein by a reference) to the same extent and effect as if the undersigned had executed the original of said Unit Agreement and said Unit Operating Agreement, or respective counterparts thereof. The undersigned does further commit all of the undersigned's right, title and interest in and to the Unitized Substances to the terms, provisions and agreements in said Unit Agreement and said Unit Operating Agreement.

The undersigned acknowledges the receipt of a copy of said Unit Agreement and said Unit Operating Agreement, and further acknowledges that this instrument has been signed and unconditionally delivered at the date shown hereon.

WORKING INTEREST OWNER

GREAT WESTERN DRILLING COMPANY

By: R.C. Zucker

Address: P.O. Box 1659

Midland, Texas

Notary Public

(Individual)

STATE OF

COUNTY OF ____

Date: March 30, 1962

ATTEST:

The foregoing instrument was acknowledged before me this _____ day of December, 1961, by

, husband and wife.

My Commission Expires

(Corporate)

STATE OF				
COUNTY OF				
The foregoing instrument was acknowledge Becchmer, 1997, by R. C. Tucker, Pre-	ged before me sident	this 30th	day of of	March, 196
Great Western Drilling Company	, а	Texas		
corporation on behalf of said corporation.				
	Samp	And	en_	
My Commission Expires 6-1-63	· ····································	Notar	y Public	

My Commission Expires 6-1-63

2456

March 22, 1962

Great Western Drilling Company P. O. Box 1659 Midland, Texas

> Re: Malmar Unit Lea County, New Mexico

Gentlemen:

The Commissioner of Public Lands approved as of March 22, 1962, the Malmar Unit Agreement, Lea County, New Mexico.

We are retaining two copies of Certificate of Approval and handing Mr. Sam H. Snoddy four copies of the Ceretficate: of Approval.

Very truly yours,

E. S. JOHNNY WALKER COMMISSIONER OF PUBLIC LANDS

SY: (Mrs.) Marian M. Rhea, Supervisor Unit Division

ESW/bmr/v

DIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

January 4, 1961 Mr. Howard Bratton Hervey, Dow & Hinkle P. O. Box 10 Roswell, New Mexico Gentlemen: Enclosed herewith is Commission Order No. R-2155, entered in Case No. 2456, approving the Great Western Drilling Company's Malmar Unit Area and Malmar Water Flood Project. According to our calculations, when all of the authorized injection wells have been placed on active injection, ' the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 798 barrels per day. This is based upon the assumption that the wells on each of the 40-acre tracts in the waterflood project area are completed in and producing from the Maljamar (Grayburg-San Andres) Pool. Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate District proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

CIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

Mr. Howard Bratton January 4, 1961 -2-

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ALP/og



STATE OF NEW MEXICO

STATE ENGINEER OFFICE SANTA FE

S. E. REYNOLDS

November 30, 1961

ADDRESS CORRESPONDENCE TO: STATE CAPITOL SANTA FE, N. M.

Mr. A. L. Porter, Jr. Secretary-Director Oil Conservation Commission Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Great Western Drilling Company of Midland, Texas which seeks approval of the Malmar Unit Agreement and authority to institute a water flood project in the Maljamar Grayburg-San Andres Pool. A copy of the application was received in this office on November 22, 1961.

After careful study of PartII of the application "Water Flood Project" which appears on pages 3 and 4, I have reached the conclusion that the proposed method of injection will not constitute a threat of contamination to the fresh waters which may exist in the area and therefore offer no objection to the granting of the application.

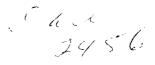
Yours truly,

S. E. Reynolds State Engineer

Bv:

Frank E. Irbý Chief Water Rights Division

FEI/ma cc-John T. Hampton F. H. Hennighausen



GREAT WESTERN DRILLING CO. MIDLAND, TEXAS

November 20, 1961

State Engineer Box 1079, Santa Fe, New Mexico

Dear Sir:

Great Western Drilling Company is making application to the New Mexico Oil Conservation Commission for approval of the Malmar Unit Agreement and for approval of a secondary recovery project in said Unit.

The secondary recovery project will consist of injecting water into the producing formation on an 80 acre 5 spot pattern. This water is fresh water and will be purchased from Yucca Water Company.

We are attaching to this letter a copy of our application to the Oil Conservation Commission. A copy of the analysis of the water will be furnished you as soon as possible.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

kiel .

John T. Hampton Chief Production Engineer

JTH:tr