



REGIONAL OFFICE  
MIDLAND, TEXAS 79701

P. O. BOX 4067  
1509 WEST WALL STREET

TEL. 915-684-5584  
TWX. 910-895-5324

September 17, 1980

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

RE: Application for Exception to  
Statewide Rule No. 303-C  
Downhole Commingle Production  
Penrose/Skelly/Grayburg and  
Paddock, Elliott B-15 Well No. 2  
Lea County, New Mexico

Gentlemen:

Sun Texas Company respectfully requests administrative approval to downhole commingle Penrose/Skelly/Grayburg and Paddock production in the Elliott B-15 Well No. 2. This well is located 660 feet FNL, 660 feet FEL, Section 15, T-22-S, R-37-E, Lea County, New Mexico.

Pertinent well information is as follows:

- (a) The Penrose/Skelly/Grayburg (upper zone) is perforated from 3587'-3830'. The Paddock (lower zone) is perforated from 5063'-5153' and has been TA'd since 7/72.
- (b) A production decline curve is attached for each zone. (See Attachments I and II).
- (c) Both zones are classified as oil zones and require artificial lift.
- (d) The combined total daily production from these zones does not exceed 30 BOPD as allowed for the deepest perforations in the lower zone.
- (e) BHP for each zone:

Penrose/Skelly/Grayburg (upper): 115 psi @ midperf  
Paddock (lower): 147 psi @ midperf



A DIVISION OF SUN OIL COMPANY (DELAWARE)

Energy and Minerals Department  
Oil Conservation Division  
September 17, 1980  
Page Two

- (f) The Penrose/Skelly/Grayburg oil is 34.5° API @ 90° F and the Paddock oil is 34.6° API @ 87° F.
- (g) Production tests on Form C-116 are attached showing the amount of oil, gas and water produced. (See Attachments III and IV).
- (h) A computation follows showing that the value of the commingled production will not be less than the sum of the values of the individual streams:

Before commingled -

Penrose Crude - 4 BOPD @ \$35.82/bbl.

Paddock Crude - TA'd

$(4 \text{ BOPD} \times \$35.82/\text{bbl}) = \$143.28/\text{day}$

After Commingled -

Paddock Crude - 13 BOPD @ \$40.75/bbl.

$(13 \text{ BOPD} \times \$40.75) + (4 \text{ BOPD} \times 35.82) = \$673.03/\text{day}$

Although Paddock oil production was somewhat less than 13 BOPD in 1971 and 1972, (due to the well sanding up from an unsuccessful frac on the upper zone) a workover of the lower zone will take place after the downhole commingling permit has been received, with anticipated production being 13 BOPD.

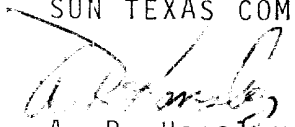
It is requested that production allocation for each zone after commingling be based on the recoverable reserves attributed to each zone. (See Attachments I and II).

By commingling downhole, operating costs would be reduced to the point where producing the Paddock would be economically feasible. This action would prevent underground waste and protect our correlative rights.

All offset operators have been notified by copy of this request, including the United States Geological Society.

Yours very truly,

SUN TEXAS COMPANY

  
A. R. Hensley  
Regional Engineer

Energy and Minerals Department  
Oil Conservation Division  
September 17, 1980  
Page Three

MLS:lw

cc: New Mexico Oil Conservation Commission  
P. O. Box 1980  
Hobbs, New Mexico 88240

United States Geological Society  
Box 1157  
Hobbs, New Mexico 88240

Offset Operators:

Gulf Oil Corporation  
Box 1150  
Midland, Texas 79702

Sohio Petroleum Company  
Box 3000, Rankin Hwy.  
Midland, Texas 79702

J. H. Hendrix Corporation  
525 Midland Towers  
Midland Texas 79701

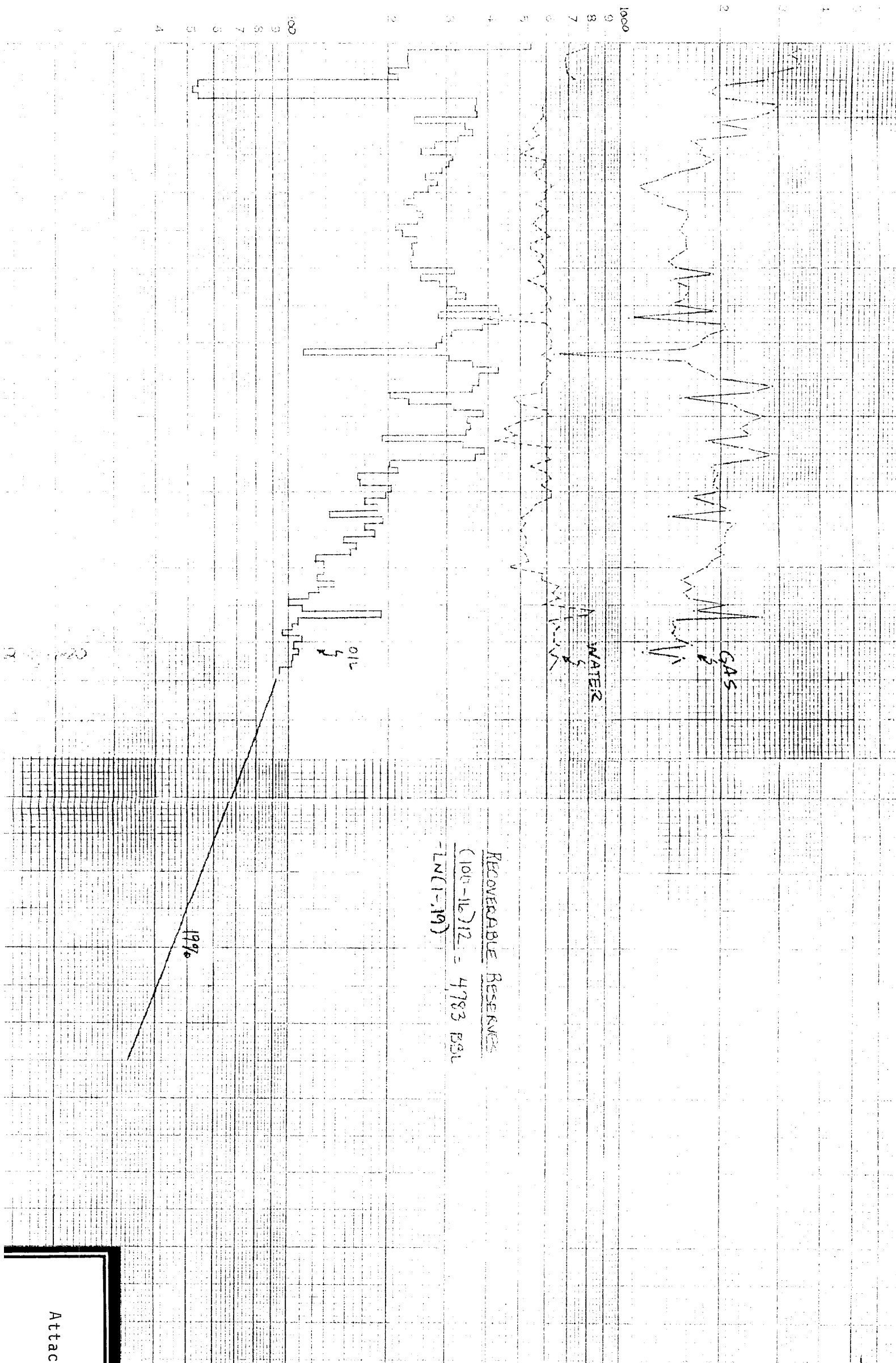
Amerada Hess Corporation  
2207 Industrial  
Midland, Texas 79701



BOF/M - 1000

WATER - 1000

ROF/M - 1000



$$\frac{\text{RECOVERABLE RESERVE}}{(100-19)12} = 4783 \text{ BBL}$$
$$- \text{LN}(1-19)$$



**NEW MEXICO OIL CONSERVATION COMMISSION  
GAS-OIL RATIO TESTS**

C-116  
Revised 1-1-65

Operator <b>TEXAS PACIFIC OIL COMPANY, INC.</b>		Pool <b>PENROSE SKELLY GRAYBURG</b>		County <b>LEA</b>											
Address <b>P. O. Box 4067, Midland, Texas 79701</b>		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Special <input type="checkbox"/>											
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT./BB	
		U	S	T						R	WATER BBLs.	GRAV. OIL	OIL BBLs.		GAS M.C.F.
Elliott A-15 Elliott B-15 Elliott B-15	1	J	15	22	37	9/4/79	P 2"	25	19	24	16		14	25	1,785
	2A	A	15	22	37	9/5/79	P 2"	30	11	24	21		4	40	10,000
	3	B	15	22	37	9/6/79	P 2"	25	6	24	16		5	50	10,000
State "B"	1	N	18	21	37	10/6/79	P 2"	35	2	24	25		1	86	86,000
Walden	1	D	15	22	37	8/20/79	P 2"	25	4	24	8		2	59	29,500
Walden	2	C	15	22	37	8/24/79	P 2"	25	7	24	17		4	59	14,750

No well will be assigned an allowable greater than the amount of oil produced on the official test.  
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.  
Gas volumes must be reported in MCF measured at a pressure base of 15.025 will be 0.60.  
Report casing pressure in lieu of tubing pressure for any well producing through  
Mail original and one copy of this report to the district office of the New Mexico  
Rule 301 and appropriate pool rules.

Attachment 3

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

\_\_\_\_\_  
(Signature)  
Senior Foreman  
(Title)  
10/25/79

NEW MEXICO OIL CONSERVATION COMMISSION  
GAS-OIL RATIO TESTS

C-116  
Revised 1-1-65

*[Signature]*

Operator		Pool		Address		Type of Test - (X)		Sched. <input checked="" type="checkbox"/> Test <input type="checkbox"/>		Date		Time		Location		Date of Test		Choke Size		TBG. Press.		Daily Allowable		Length of Test		Prod. During Test		Gas - Oil Ratio	
LEASE NAME		WELL NO.		U		S		T		R		DATE OF TEST		CHOKE SIZE		TBG. PRESS.		DAILY ALLOWABLE		LENGTH OF TEST HOURS		WATER BLS.		GRAV. OIL BLS.		GAS M.C.F.		CU. FT./BBL.	
Ellicott B-9	1	C	9	22	37	6-1-63	Temporarily Abandoned	15	24	3	15	162	10,200																
Ellicott B-9	2	D	9	22	37	6-1-63	Temporarily Abandoned	15	24	3	15	162	10,200																
Ellicott B-12	1	D	12	22	37	5-4-63	Temporarily Abandoned	15	24	3	15	162	10,200																
Ellicott B-15	2	A	15	22	37	6-5-63	Temporarily Abandoned	15	24	3	15	162	10,200																
Weldon	5	C	15	22	37	5-11-63	Temporarily Abandoned	15	24	3	15	162	10,200																

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Report casing pressure in lieu of tubing pressure for any well producing through  
Mail original and one copy of this report to the district office of the New Mexico  
Rule 301 and appropriate pool rules.

Attachment 4

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Original Signed by C.R. Tilley

(Signature)

Area Production Foreman

7-10-68