Original letter mailed to Santa Fe.

Sun Production Division
Southwestern District

SUN

Sun Exploration and Production Company
901 W Wall
Post Office Box 1861
Midland Texas 79702
915 685 0300

October 13, 1983

Mr. Joe D. Ramey
Energy and Minerals Dept.
Oil Conservation Division
P. O. Box 2088
Santa Fe, N.M. 87501

Re: Application of Sun Exploration & Production Company for approval of downhole commingling of production in the Elliott B-13 Well No. 2 (Unit E, Sec 13, T-22-S, R-37-E), Drinkard and Wantz Granite Wash Pools.

Dear Mr. Ramey:

Sun requests your administrative approval for an exception to Rule 303-A to permit down hole commingling of production in the subject well from the Drinkard and Wantz Granite Wash Pools.

Currently this is a dual completed well pumping from the Wantz Granite Wash formation and the Drinkard formation. Both zones are classified as oil zones. Ownership of the two zones is common. The total daily oil production from both zones before commingling does not exceed 50 barrels per day, and neither zone produces more water than the combined oil limit. Please note that our Walter Lynch No. 2L (Unit L, Sec 1, T-22-S, R-37-E) is already commingled in the Drinkard and Wantz Granite Wash as per Administrative Order DHC-272.

The additional information concerning this application as outlined in Rule 303-C is attached for your consideration.

Yours truly,

Coby Osborne

Coby Osborne
Production Engineer

CO/nc
cc: R. K. Beggs
Tom Golden
Fritz Brandes
Deann Kemp
Tom Fox
Well file

10/12/83

A. OPERATOR:
Sun Exploration and Production
Sun Production Division
P. O. Box 1861
Midland, Texas 79702

B. LEASE:
Elliott B-13 #2
Unit E, Sec. 13, T-22-S, T-37-E
Lea County, New Mexico

C. Well is completed in the Drinkard and Wantz Granite Wash as a dual completion as per Order No. MC-2250

D. The C-116 for both zones is attached.

E. Production decline curves for both the Drinkard and Wantz Granite Wash zones are attached.

F. BOTTOM HOLE PRESSURE DATA:
Drinkard: 24 hr. SIBHP - 745 psi (9/30/83)
Granite Wash: 41 hr. SIBP - 1070 psi (9/30/83)

G. FLUID CHARACTERISTICS:
There is no evidence of fluid incompatibility. Sun's Walter Lynch #2L is already downhole commingled in the Drinkard and Wantz Granite Wash pools.

H. VALUE OF COMMINGLED FLUIDS:
Because Drinkard and Granite Wash production is already surface commingled as per Administrative Order PC-528, the value of both crudes will not be affected by downhole commingling in Well #2.

I. ALLOCATION FORMULAS:

$$X = \frac{Y}{Z}(100)$$

where X = percent allocation of commingled production to desired zone.
Y = latest daily oil rate of desired zone, BOPD
Z = total combined Drinkard and Wantz Granite Wash daily oil rate, BOPD

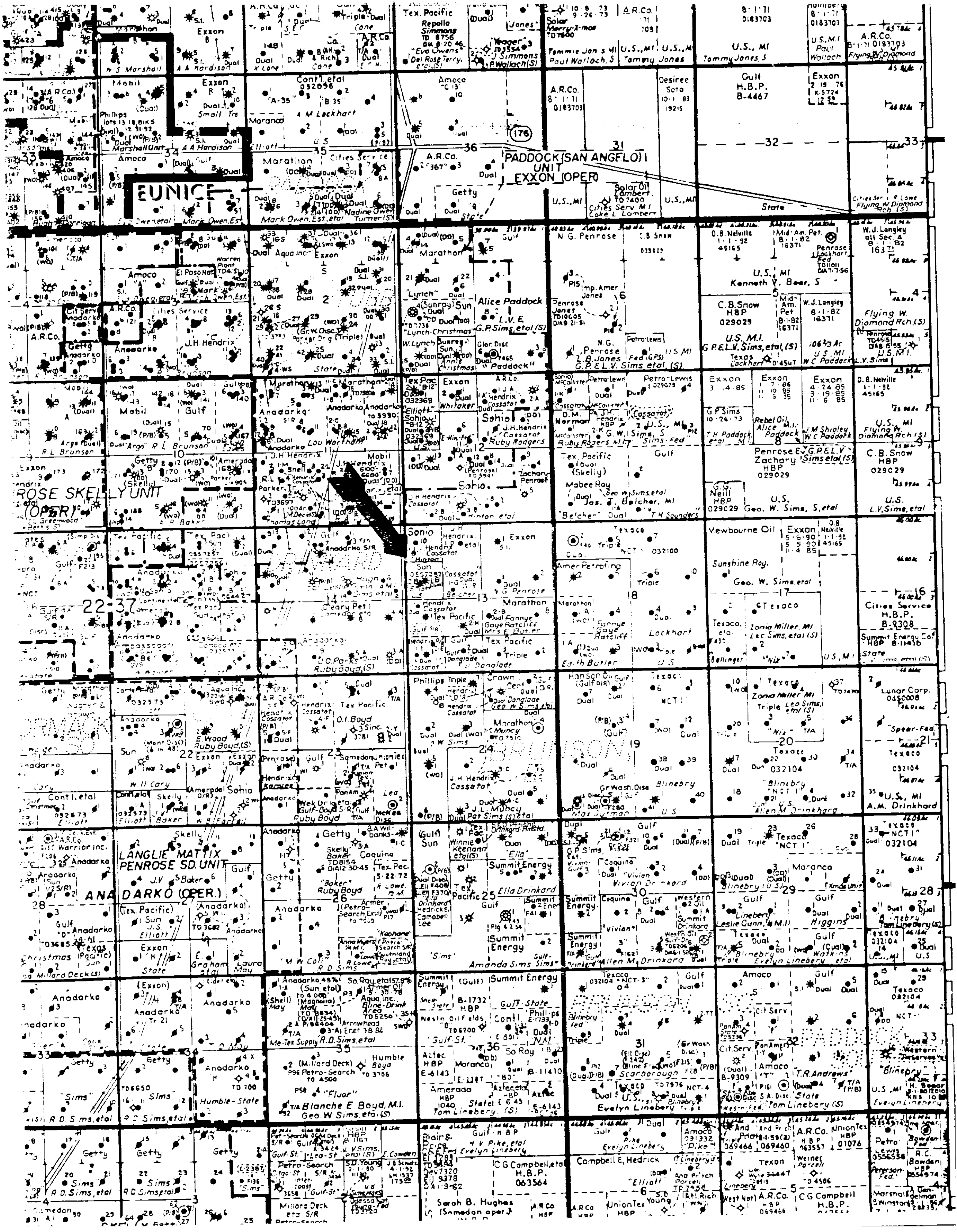
Drinkard:

$$X = \frac{14}{(14 + 22)}(100)$$
$$= 38.9\%$$

Wantz Granite Wash:

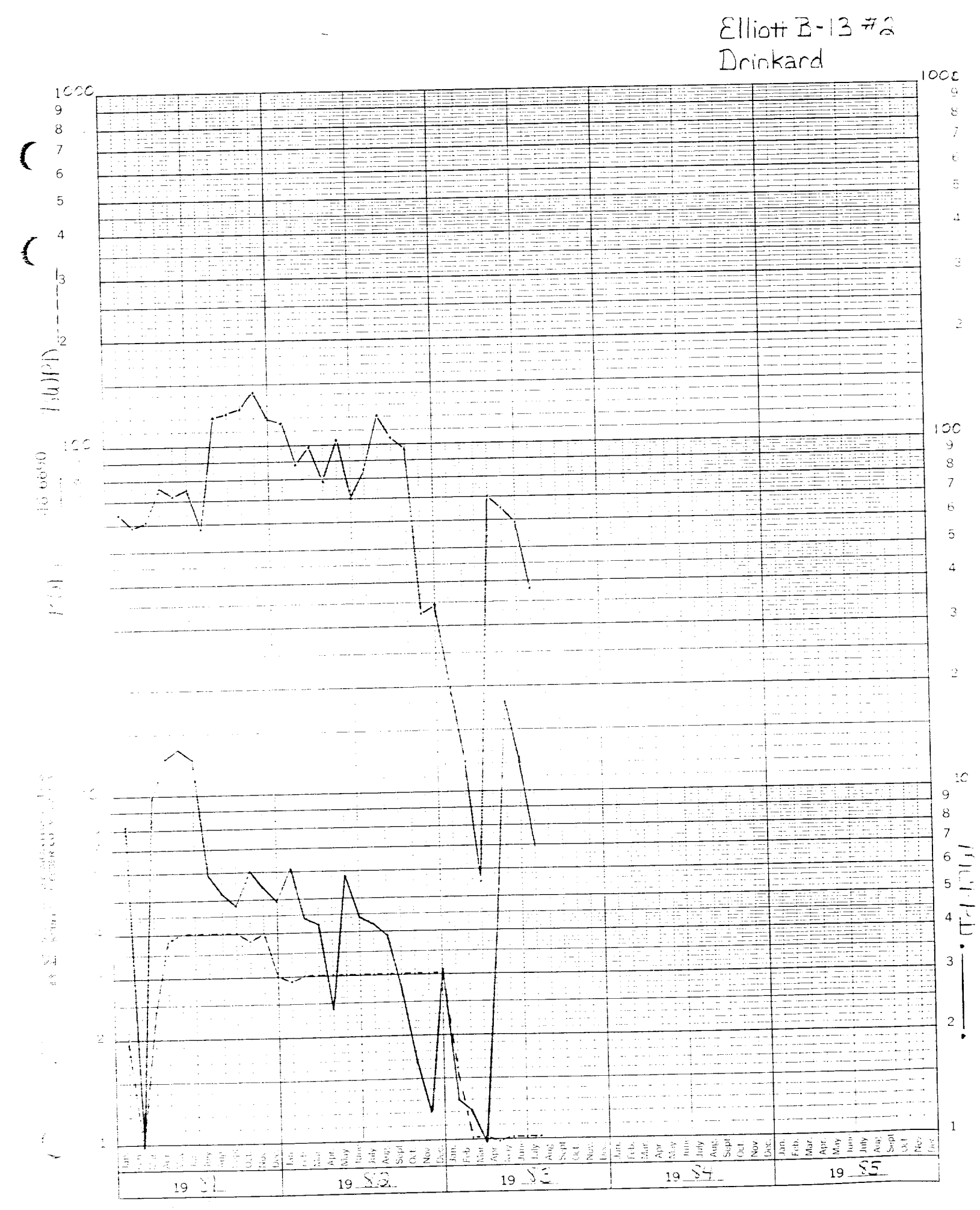
$$X = \frac{22}{(14 + 22)(100)}$$
$$= 61.1\%$$

J. All offset operators have been notified by a copy of this application:
1) Gulf Oil Exploration and Production Co.
Box 670
Hobbs, New Mexico 88240
2) Sohio Petroleum Co.
Box 3000, Rankin Hwy.
Midland, TX 79702
3) Samedan Oil Corp.
900 Wall Towers East
Midland, TX 79701
4) John H. Hendrix Corp.
525 Midland Tower
Midland, TX 79701

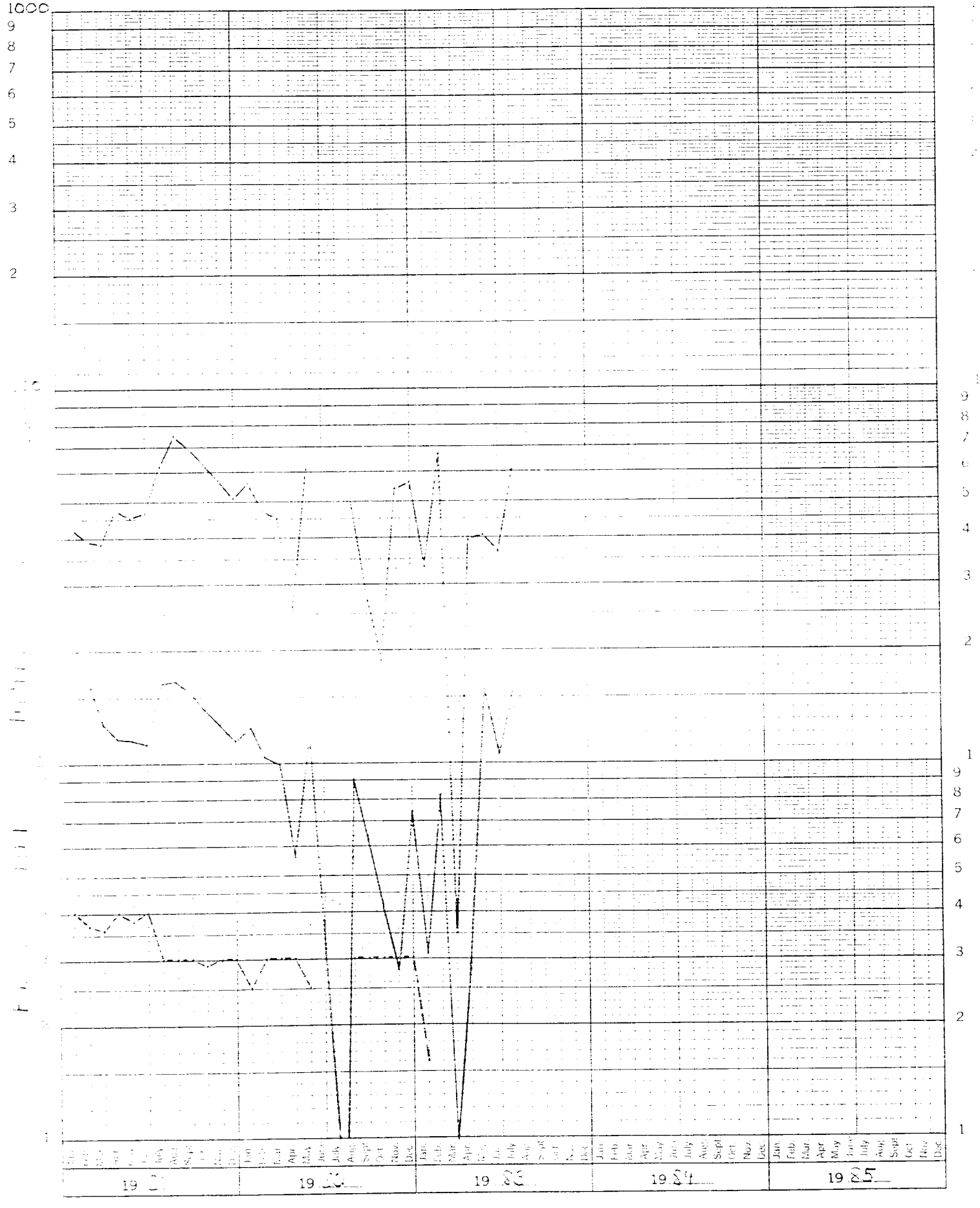


EUNICE
PADDOCK (SAN ANGELO) UNIT
EXXON (OPER)
ROSE SKELLY UNIT
(OPER)
LANGLIE MATTIX
PENROSE SD. UNIT
ANADARKO (OPER.)
22-37
Alice Paddock
Lou Worthan
Ruby Rogers
Ruby Boyd
Ella Drinkard
Amanda Sims
Allen M. Drinkard
Evelyn Lineberry
Blanche E. Boyd, M.I.
Geo. W. Sims, etal (S)
Tom Lineberry (S)
Sarah B. Hughes
C.G. Campbell
Campbell E. Hedrick
Flying W. Diamond Rch.(S)
Cities Service
H.B.P.
B-9308
Summit Energy
Lunar Corp.

Elliott B-13 #2
Drinkard



Elliott B-13 #2
Wantz Granite Wash



ENERGY AND MINERALS DEPARTMENT

Form C-116
Revised 10-1-78

GAS-OIL RATIO TESTS

Operator: Sun Exploration & Production | Pool: Drinkard | County: Lea

Address: P.O. Box 1861 Midland, Texas 79702 | TYPE OF TEST - (X) Scheduled [X] Completion [ ] Special [ ]

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS - OIL RATIO CU.FT/BBL.
Boyd	3	A	23	22	37	T.A.										
	5L	B	23	22	37	T.A.										
Cone,S.E.	1	J	26	21	37	3-8-83	F	17/64	28	1	24	0		1	55	55,000
	2	I	26	21	37	3-9-83	F	14/64	30	2	24	1		2	15	7,500
Langlade	3	O	13	22	37	3-15-83	F	24/64	25	6	24	1		6	31	5,167
Elliott A-15	2	J	15	22	37	4-12-83	F	52/64	22	Gas well	24	1		0	143	143,000
Elliott B-9	3	D	9	22	37	1-12-83	F	2"	35	14	24	8		14	33	2,357
	4	C	9	22	37	1-15-83	F	2"	100	6	24	3		6	208	34,667
Elliott B-12	2	D	12	22	37	4-12-83	F	32/64	55	Gas well	24	0		1	295	295,000
Elliott B-13	21	E	13	22	37	4-13-83	P	2"	26	14	24	1		14	55	3,929
Elliott B-15	1	B	15	22	37	3-11-83	F	19/64	30	1	24	0		1	68	68,000
	4	A	15	22	37	3-12-83	F	26/64	110	Gas well	24	0		0	200	200,000

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 Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 331 and appropriate pool rules.

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

Rick McKnight
(Signature)

SR. ENGR. TECH.
(Title)

April 14 1983

GAS – OIL RATIO TESTS

C-116
Revised 1-1-65

Operator	Pool	County
SUN OIL COMPANY	Wantz Granite Wash	Lea

Address: P. O. Box 1861 Midland, Texas 79702

TYPE OF TEST – (X): Scheduled [X] Completion [ ] Special [ ]

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS – OIL RATIO CU.FT/BBL.
Elliott B-12	2	D	12	22	37	4-10-83	P	32/64	0	0	24	0		0	0	0
Elliott B-13	2	E	13	22	37	4-11-83	P	2"	20	22	24	2		22	55	2,500
Annie Christmas HC Permit # R-5482	1	N	1	22	37	4-18-83	P	2"	20	15	24	0		15	139	92,667
									33%	Drinkard	6BO	46MCF				
									67%	Wantz GW	9BO	93MCF				
									100%		15BO	139MCF				
Walter Lynch	1	K	1	22	37	4-13-83		This well has a workover going at this time.								
	2	L	1	22	37	4-8-83	F	2"	20	16	24	0		8	100	12,500
									50%	Drinkard		4BO	50 MCF			
									50%	Wantz GW		4BO	50 MCF			
									100%			8BO	100 MCF			
	5	M	1	22	37	4-12-83	P	2"	18	16	24	1		5	18	3,600

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 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

Rick M. Wright
(Signature)

SR. ENGR. TECH.
(Title)

April 20, 1983
(Date)

KUYKENDALL BOTTOM HOLE PRESSURE SERVICE CO.

P.O. Box 11296 / A/C 915 563-5231 / Odessa, Texas 79760

BOTTOM HOLE PRESSURE REPORT

Operator Sun Exploration & Production Lease Elliott B-13 Well No. 2

Field Drinkard Reservoir Drinkard Datum MP 6394

Test Date September 30, 1983 Well Status Shut In Hours Shut In 24

Tubing 2-3/8 Depth 6773 End _____ Packer 6771 S. N. 6771

Casing 7 Depth 7440 Perf. 6261 - 6528 Total Depth 7440

Tubing Press 572
Casing Press _____
Top Of Fluid None
Top Of Water _____
Temp. _____ °F @ _____
Elev. KB _____ GL _____
Last Test Date _____
Press. Last Test _____
Change _____ Per Day _____
Inst. No 38116 Cal 9-83
Tested By Otwell
Calcu. By Spruell
Prod. Index _____ Bbls/Day/Lb. _____
Drop _____
Cumulative Prod _____

Depth	Press. Lbs/Sq. In.	△ Press	Gradient Lbs/Ft.
-0-	572		
2,000	600	28	.014
4,000	626	26	.013
5,000	653	27	.027
6,000	713	60	.060
6,500	745	32	.064

Remarks:

KUYKENDALL BOTTOM HOLE PRESSURE SERVICE CO.

P.O. Box 11296 / A/C 915 563-5231 / Odessa, Texas 79760

BOTTOM HOLE PRESSURE REPORT

Operator Sun Exploration & Production Lease Elliott B-13 Well No. 2

Field Drinkard Reservoir Granite Wash Datum MP 7378

Test Date September 30, 1983 Well Status Shut In Hours Shut In 41

Tubing 2-3/8 Depth ____ End 7178 Packer 7207 S. N. 7179

Casing 7 Depth 7440 Perf. 7321 - 7426 Total Depth ____

Tubing Press 10
Casing Press ____
Top Of Fluid +272
Top Of Water ____
Temp. ____ °F @ ____
Elev. KB ____ GL ____
Last Test Date ____
Press. Last Test ____
Change ____ Per Day ____
Inst. No 38116 Cal 9-83
Tested By Otwell
Calcu. By Spruell
Prod. Index ____ Bbls/Day/Lb. ____
Drop ____
Cumulative Prod ____

Depth	Press. Lbs/Sq. In.	△ Press	Gradient Lbs/Ft.
-0-	10		
2,000	13	3	.002
4,000	15	2	.001
6,000	603	588	.294
7,000	942	339	.339
+ 378	+ 128		
7,378	1,070	(Mid Perf.)	(.339)

Remarks: