

ARCO Oil and Gas Company
Permian District
Post Office Box 1610
Midland, Texas 79702
Telephone 915 684 0149
Jerry L. Tweed
District Engineer



August 9, 1983

~~CERTIFIED
RETURN RECEIPT
REQUESTED~~

Mr. Joe D. Ramey
New Mexico Oil Conservation Division 2
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

Application for Downhole Commingling
Tubb-Drinkard and Blinebry Pools
Justis Field
Stuart "A" WN Well #2
330' FNL, 2310' FWL, Sec. 14, T-24-S, R-37-E
Lea County, New Mexico

ARCO Oil and Gas Company, a Division of the Atlantic Richfield Company respectfully requests administrative approval under the provisions of Rule 303-C to downhole commingle the Justis-Tubb-Drinkard and the Justis Blinebry pools in its Stuart "A" WN Well #2C. This well is located 330' FNL, 2310' FWL, Sec. 14, T-25-S, R-37-E, Lea County, New Mexico.

This well was completed 10-12-64 as a dual completion Justis Blinebry Justis Tubb-Drinkard oil well. Both wells were placed on rod pump, and in 1969 the Tubb-Drinkard pool was plugged because it was uneconomical to produce. The well currently produces from the Blinebry, 8 BOPD plus 35 MCFPD. By commingling in the wellbore and pumping both zones without a packer, the well is expected to produce 16 BOPD and 70 MCFPD.

It is requested that the oil and gas production from the commingled well be allocated equally between pools, 50% to the Blinebry and 50% to the Tubb Drinkard. The ownership is the same in both zones and the value of the oil and gas produced will be the same for both zones, therefore no inequity will result from this commingling.

The following are attached in support of this request:

1. Exhibit A - List of offset operators
2. Exhibit B - map showing location of well and offset operators
3. Exhibit C - worksheet for downhole commingling
4. Exhibit D - well data sheet
5. Exhibit E - Well diagram before commingling
6. Exhibit F - well diagram after commingling
7. Exhibit G - Blinbry production curve
8. Exhibit H - Tubb Drinkard production curve
9. Exhibit I - Form C-116 Well Test

By copy of this letter each of the offset operators listed on Exhibit A is being notified by certified mail of this request. Two stamped, addressed envelopes are enclosed with each copy, and the operators are asked to sign their approval and mail one copy in each of the envelopes. These approved copies go to Mr. Joe D. Ramey of the Oil Conservation Division and to Mr. Jerry Tweed of ARCO Oil and Gas Company, respectively.

We trust that this provides enough information on this matter. If additional information is needed, please let us know.

Yours very truly,



J. L. Tweed

JLT/BLS:dmm
Atts.

Xc: Offset Operators
ARCO Hobbs Office
NMOCD - Hobbs, New Mexico

APPROVED:

Company _____
By _____
Title _____
Date _____

OFFSET OPERATORS
STUART "A" WN NO. 2C

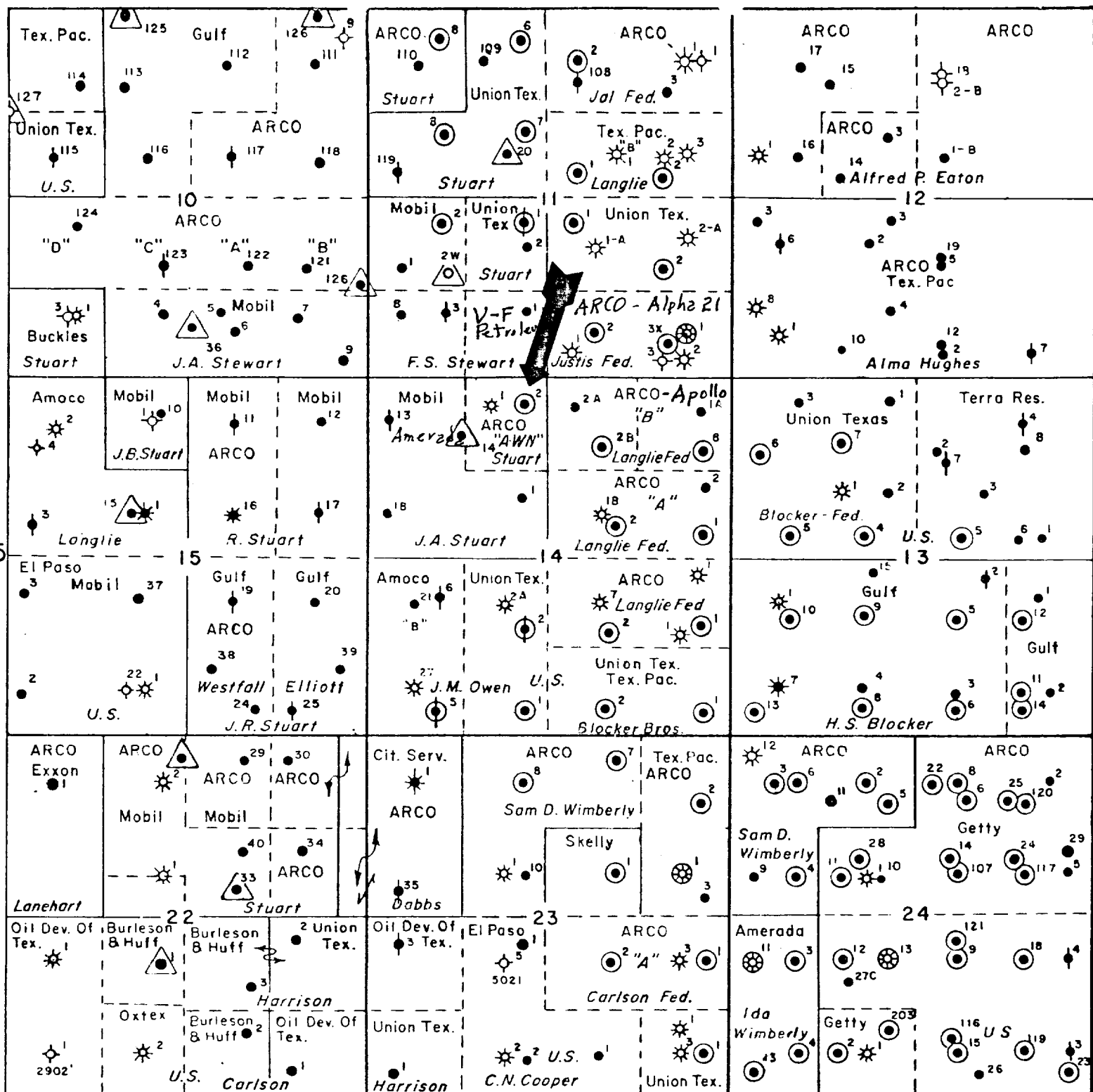
Amerada Hess Corporation
2207 Industrial
Midland, Texas 79701

Apollo Oil
P. O. Box 1737
Hobbs, New Mexico 88240

Mobil Producing Texas and New Mexico
P. O. Box 633
Midland, Texas 79702

V-F Petroleum, Inc.
One Marienfeld Place, Suite 580
Midland, Texas 79701

Alpha 21
Room 2100, First National Bank Bldg.
Midland, Texas 79701



ARCO Oil and Gas Company 
 A subsidiary of Atlantic Richfield Company
 Permian District Midland, Texas

STUART "A" WN NO. 2
 JUSTICE FIELD
 Lea County, New Mexico

Exhibit B

Scale: 1" = 2000'

By: RICK MORTON	Drawn By: R.C.T.	Date: 6/16/83
Date: 6/16/83	Reviewed By:	Date:
Dep: WEST ENGR.	Comp No:	

Information for Downhole Commingling
EXHIBIT C

- (a) Operator: ARCO Oil and Gas Company, Division of Atlantic Richfield Co.
P. O. Box 1610
Midland, Texas 79702
- (b) Lease, Well, and Location:

Stuart "A" WN No. 2
330' FNL & 2310' FWL
Section 14, T-25-S, R-37-E
- (c) Commingled Pools: Tubb-Drinkard and Blinebry
Division Order Authorizing Dual Completion: MC-1553
- (d) 24-hour Productivity Test:

(See Attached C-116)
- (e) Decline Curves and Completion Resume:

(See Attachments)
- (f) Bottom Hole Pressures:

Most recent bottom hole pressure survey of a nearby well was performed 7-6-79. The bottom hole pressure of the Blinebry was 613 psig, and the bottom hole pressure of the Tubb-Drinkard was 625 psig.
- (g) Fluid Incompatibility:

Order No. PC-238 allowed surface commingling of the two zones producing from the subject well. No fluid incompatibility was observed. This order was cancelled when the Tubb-Drinkard was shut in. Nearby wells operated by ARCO are downhole commingling the zones with no fluid incompatibility.
- (h) Value of Commingled Fluids:

The Tubb-Drinkard and Blinebry should both be classified under the same pricing category. The Tubb-Drinkard has been shut in since 1969. By opening the zone to production, and downhole commingling with the Blinebry, eight additional barrels of oil a day should be recovered, thereby increasing the total value of the produced fluid.
- (i) All offset operators have been notified by registered mail of the proposed downhole commingling.

Well Data Sheet
EXHIBIT D

Field: Justis
Company: ARCO Oil and Gas
Lease: Stuart "A" WN
Well: No. 2

County: Lea
Location: 330' FNL & 2310' FWL
of Sec. 14, T25S, R37E

TD: 6250 PBD: 6088 New PBD: 5840
Casing: 9-5/8 @ 1004
7 @ 6250

Completion Date: 10-12-64
Completion Interval: Blinebry 5377-5618'
Drinkard 5958-6079'

Initial Potential: Blinebry 201 BOPD
Drinkard 189 BOPD + 3 BOPD

History:

8/23/64 Spudded
9/28/64 Perf Drinkard 6098-6171. Acidize w/1500 gal. Frac w/15,000 gal.
and 10,000# sand.
10/5/64 Perf Drinkard 5958-6079. Set BP @ 6088. Ac w/1500 gal. Frac
15,000 gal. and 15,000# sand.
10/12/64 Perf Blinebry 5377-5618. Ac w/1500 gal. Frac w/20,000 gal.
+ 26,000# sand.
12/7/64 Tubb-Drinkard put on pump.
3/11/69 Set D.R. plug in Model "D" packer @ 5850 w/2 sx cement on top.
to PBD 5840'. Perf Blinebry 5165-5337. Ac w/2,000 gal. Frac
4/13/69 w/30,000 gal. and 30,000# sand. Put on pump.

General Purpose Worksheet

Subject	STUART "A" WN #2	Page No.	Of
File	WELL SKETCH	By	RPL
		Date	6/29/83

Well Condition
Before Commingling
Exhibit E

9 5/8" 32.3 # & 36 #, H-40 & J-55 @ 1004'

2 3/8" PRODUCTION TBG

PERFS - 5165', 72', 91', 97', 5209', 22', 26', 45', 48', 52', 58', 61', 90', 5313', 37' (15 HOLES)

PERFS - 5377', 84', 5412', 67', 85', 5529', 89', 5600', 11', 18' - (10 HOLES)

5840' PBD

MODEL "D" PKR w/ DR PLUG @ 5850'

PERFS - 5958', 60', 6011', 24', 51', 54', 71', 74', 79' - (9 HOLES)

CIBP @
6088'

PERFS - 6098', 6102', 06', 13', 34', 36', 54', 56', 68', 71' - (10 HOLES)
(NON-PRODUCTIVE)

7" 23 # N-80 @ 6250'

General Purpose Worksheet

Subject	STUART A WN #2	Page No.	01
File	WELL SKETCH	By	RPL
		Date	6/29/83

Well Condition
After Commingling
Exhibit F

9 5/8" 32.3 # 36 #, H-40 & J-55 @ 1004'

2 3/8" PRODUCTION TBG

PERFS - 5165', 72', 91', 97', 5209', 22', 26', 45', 48', 52', 58', 61', 90', 5313', 37' (15 HOLES)

PERFS - 5377', 84', 5412', 67', 85', 5529', 89', 5600', 11', 18' - (10 HOLES)

PERFS - 5958', 60', 6011', 24', 51', 54', 71', 74', 79' - (9 HOLES)

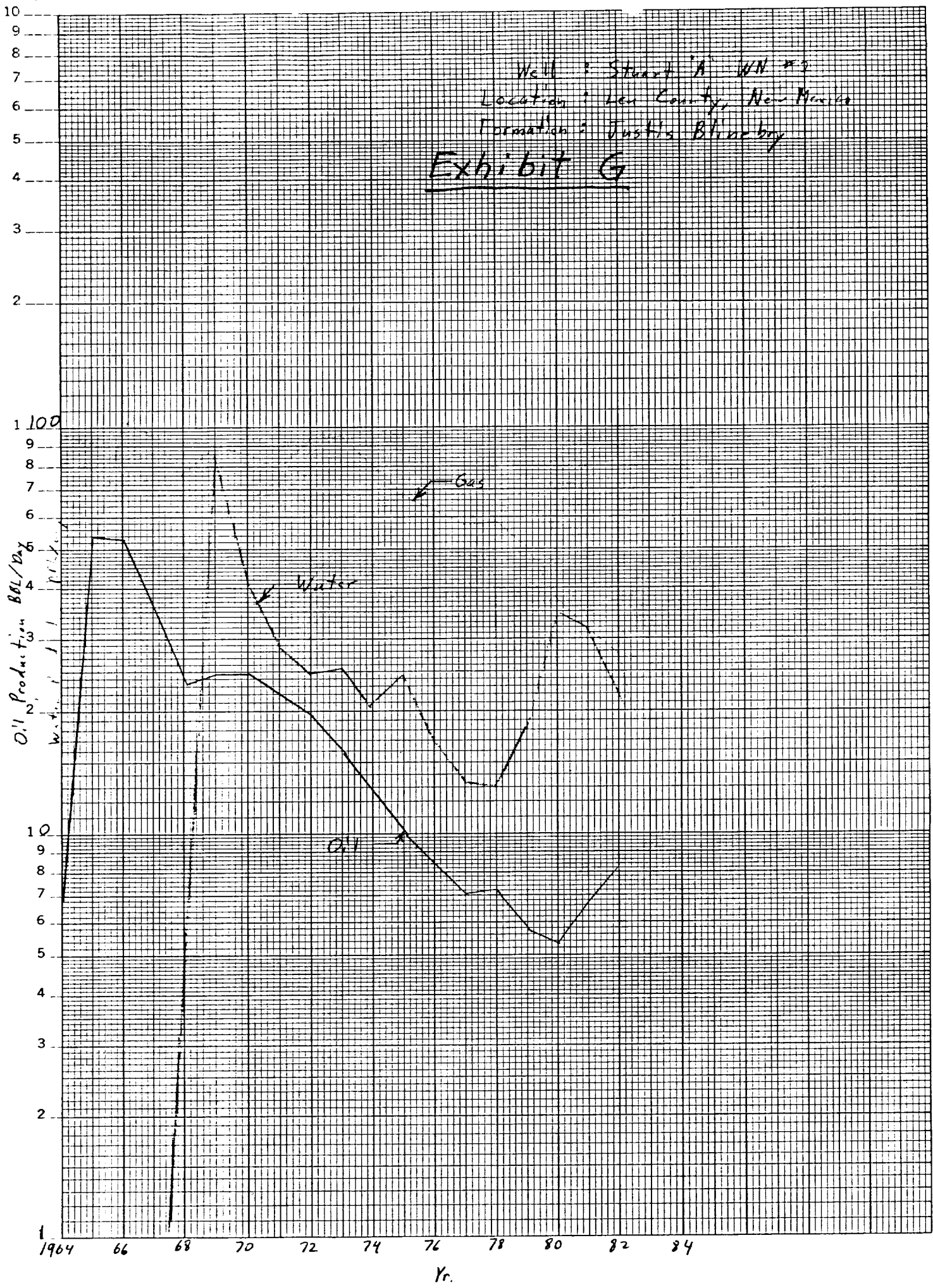
PERFS - 6098', 6102', 06', 13', 34', 36', 54', 56', 68', 71' - (10 HOLES)
(NON-PRODUCTIVE)

7" 23 # N-80 @ 6250'

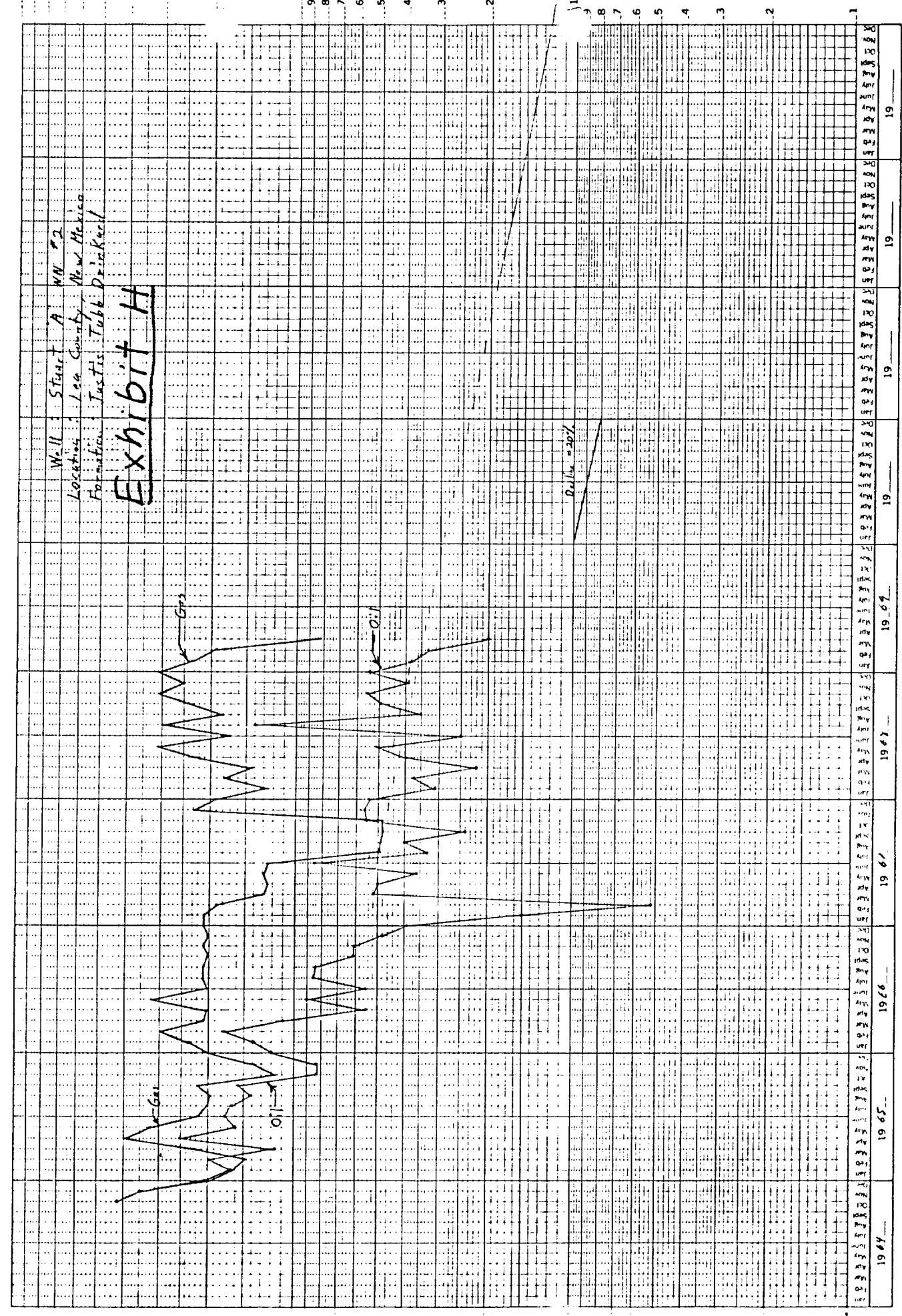
CIBP @
6088'

46 5813

K&E
SEMI-LOGARITHMIC 3 CYCLES x 140 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.



Oil Production (BBL/DAY)
Gas Production (MCF/DAY)



GAS-OIL RATIO TESTS

Operator ARCO Oil and Gas Company Division of Atlantic Richfield Co.		Pool Justis Blinebry		County Lea												
Address P.O. Box 1710, Hobbs, NM 88240		TYPE OF TEST - (X)		SCHEDULED ☐ COMPLETION ☐ SPECIAL ☒												
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./BBL.			
		U	S	T						R	WATER BBL'S.	GRAV. OIL		OIL BBL'S.	GAS M.C.F.	
Stuart "A" WN	2	C	14	25	37	7-18-83	P			10	24	26	35.3	8	35	4,375

NOTE: This is a current (within 30 days) 24 hr productivity test for proposed application to down hole commingle with the Temp Aband. Justis Tubb Drinkard zone.

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.
Well 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.

David J. Hinkel
(Signature)
Engr. Tech. Spec.
8/4/83 (Title)

Exhibit I