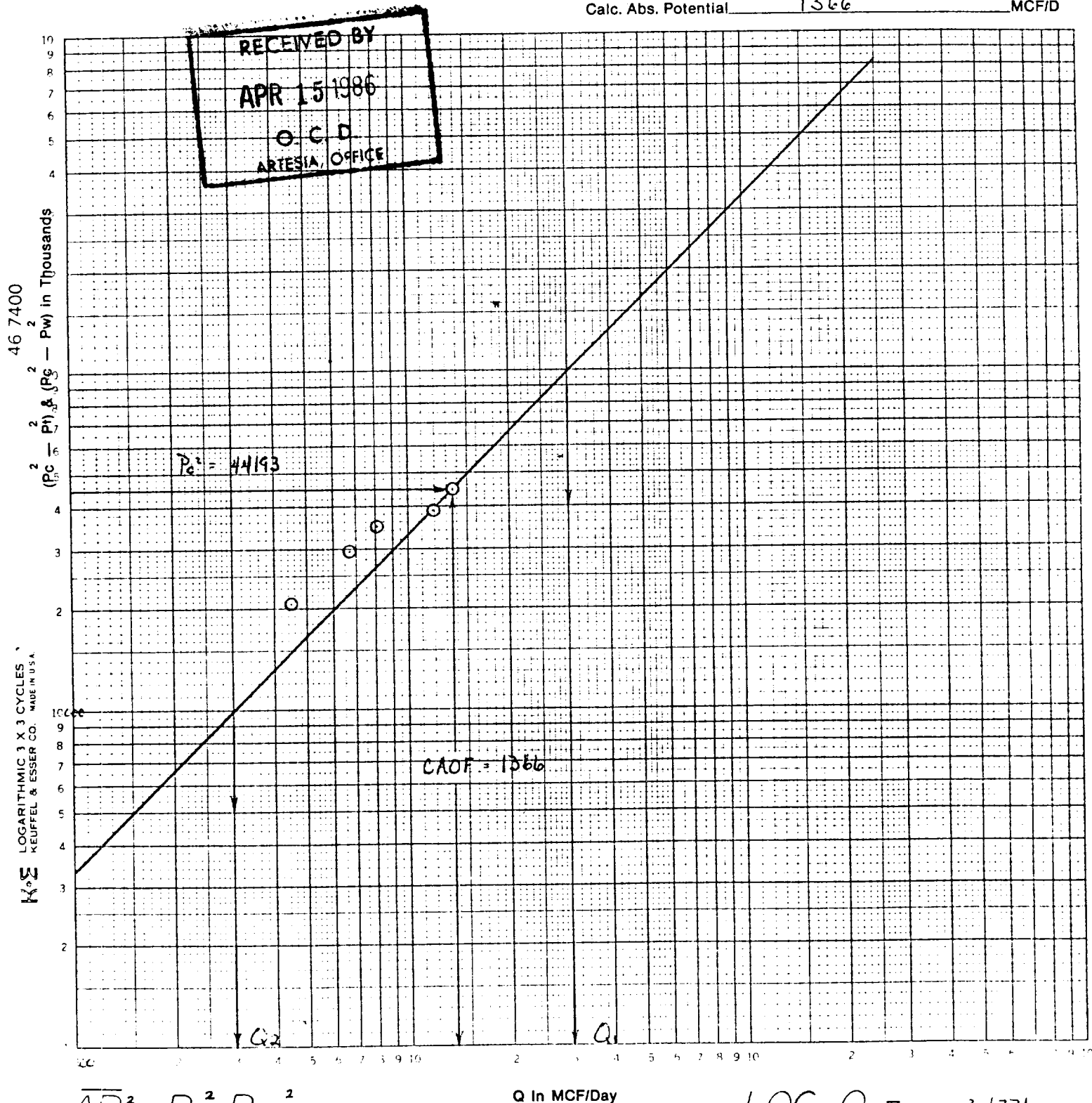


BENNETT & CATHEY PRODUCTION TESTING BACK PRESSURE CURVE

Operator Santa Fe Energy Lease Pure Gold "C" Fed Well No. 1
 County Eddy Field Location N 17 23S 31E
 Date of Test 3-7-86 Slope "n" 1.000 Angle of Slope 45.0

Calc. Abs. Potential 1366 MCF/D



$$\overline{\Delta P}_1^2 \quad P_c^2 - P_w^2 = \underline{100000}$$

$$\overline{\Delta P}_2^2 \quad P_c^2 - P_w^2 = \underline{10000}$$

$$Q_1 = \underline{3000}$$

$$Q_2 = \underline{300}$$

Q In MCF/Day

$$\text{LOG } Q_1 = \underline{3.4771}$$

$$\text{LOG } Q_2 = \underline{2.4771}$$

$$n = \underline{1.000}$$



LTR



Job separation sheet

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☒ INF. RESVR. ☒ Other _____

2. NAME OF OPERATOR
Santa Fe Energy Company

3. ADDRESS OF OPERATOR
500 W. Illinois, Suite 500, Midland, TX 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
At surface 660' FSL & 1980' FWL
At top prod. interval reported below Same
At total depth Same

5. LEASE DESIGNATION AND SERIAL NO.
NM-45235

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Atoka

7. UNIT AGREEMENT NAME
Pure Gold C Federal

8. FARM OR LEASE NAME
Pure Gold C Federal

9. WELL NO.
1

10. FIELD AND POOL OR WILDCAT
Atoka

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 17, T-23S, R-31E N1/4PM

12. COUNTY OR PARISH
Eddy

13. STATE
NM

14. PERMIT NO.
re/comp 11/11/86 2/14/86

15. DATE SPUDDED
1/31/82

16. DATE T.D. REACHED
7/21/82

17. DATE COMPL. (Ready to prod.)
3/4/86

18. ELEVATIONS (LT. RKB, RT. GE, ETC.) *
3327' GL

19. ELEV. CASINGHEAD
--

20. TOTAL DEPTH, MD & TVD
14,850'

21. PLUG, BACK T.D. MD & TVD
14,012'

22. IF MULTIPLE COMPL., HOW MANY *
--

23. INTERVALS DRILLED BY
10-14,850'

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) *
13,818-13,854' Atoka

25. WAS DIRECTIONAL SURVEY MADE
No

26. TYPE ELECTRIC AND OTHER LOGS RUN
CNL/FDC, DLL/MSFL, BHC

27. WAS WELL CORED
No

CASING RECORD (Report all strings set in well)						
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD		AMOUNT PULLED
20"	94#	604'	26"	800 sx Lite, 350 sx Cl C		
13 3/8"	61 & 54.5#	4151'	17 1/2"	4000 sx Lite, 300 sx Cl C		
9 5/8"	47#	12402'	12 1/4"	1st stg: 1700 sx Lite, 400 sx Cl H		
				2nd stg: 350 sx Cl H, 150 sx Cl C		

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT *	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
17 5/8"	11,977	14,247	400		2 7/8	13,657	13,661
5"	14,053	14,849	160				

PERFORATION RECORD (Interval, size and number)				ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
				DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
13,813-13,854' 4 JSPF				14,266-361'	Set CIBP @ 14,047' w/35' cmt on top
				13,813-854'	None

PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
3-4-86		Flowing				Producing	
DATE OF TEST	HOURS TESTED	CHUCK SIZE	PROD. N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3-7-86	1	11.5	→	--	1198	--	--
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
2570	pkp	→	--	1366	--	--	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)	TEST WITNESSED BY
Sold	Bennett & Cathey

35. LIST OF ATTACHMENTS
None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Billie Root TITLE Sr. Prod. Clerk DATE 3-31-86

*(See Instructions and Spaces for Additional Data on Reverse Side)

General: This form is designed for submitting a complete and correct well completion report and log on all types of leases and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal agency and/or State office. See instructions on items 22 and 24, and 23, below regarding separate reports for separate completions. If not filled prior to the time this summary record is submitted, copies of all correspondence, state, area, or regional, shall be submitted with this summary record.

Drillers, geologists, sample and core analysts, all types electric, etc.), formations, and procedure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 5a.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State and/or Federal office for specific instructions. All attachments and/or State laws and regulations.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any annotations. Indicate for separate projections (more than one interval) the number of intervals between the elevation and the datum.

interval, or intervals, top(3), bottom(3) and name(s) for only the interval reported in item 24. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Stacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. (See instruction for items 22 and 24 above.)

27. SUMMARY OF FORGUS ZONES:		38. GEOLOGIC MARKERS		39. NAME		40. MEAS. DEPTH		41. TRUE VERT. DEPTH	
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORDED INTERVALS; AND ALL DRILL STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION LOGS, TUBE TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERY.		DESCRIPTION, CONTENTS, ETC.		TOP		BOTTOM		TOP	
FORMATION		TOP		BOTTOM		NAME		MEAS. DEPTH	