NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 7-20-72	
Company: AMOCO PRODUCTION COMPANY		Connection: None		
Pool: Blanco		Formation: Pictured Cliffs		Unit
Completion Date: 7-13-72	Total Depth: 2400	Plug Back TD: 2334	Elevation: 5729 GR	Farm or Lease Name: Houck Gas Com "B"
Csg. Size: 4-1/2 / Wt.: 9.5 / d: 4090 / Set At: 2397		Perforations: From 2282 To 2314		Well No.: 1
Tbg. Size: 1-1/4 / Wt.: 2.33 / d: 1.380 / Set At: 2291		Perforations: From Open To Ended		Unit: C / Sec.: 6 / Twp.: 29N / Rge.: 9W
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: None		County: San Juan
Producing Thru: Tbg	Reservoir Temp. °F: @	Mean Annual Temp. °F: 60° Est.	Baro. Press. – P_a: 12 PSIA Est.	State: New Mexico
L	H	Gg: .650	% CO_2	% N_2 / % H_2S / Prover / Meter Run / Taps

FLOW DATA

NO.	Prover Line Size	X	Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI	7 Day		Choke				846		846		
1.	2-Inch		.750				91	60°	322		3 Hr.
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	12.3650		103	1.000	.9608	1.000	1224
2.							
3.							
4.							
5.							

NO.	P_r	Temp. °R	T_r	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

RECEIVED
JUL 28 1972
OIL CON. COM.
DIST. 3

P_c 858 P_c^2 736,164

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		.334	111,556	624,608
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.179$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.151$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1409$

Absolute Open Flow 1409 Mcfd @ 15.025 | Angle of Slope θ _____ | Slope, n .85

Remarks: _____

Original Signed by
A. ARNOLD SMELL

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	B. D. Dukes	P. C. Ellison	J. A. Snell

TABULATION OF DEVIATION TESTS

HOUCK GAS COM "D" NO. 1
AMOCO PRODUCTION COMPANY

DEPTH	DEVIATION
218'	3/4°
709'	3/4°
1010'	1/4°
1202'	1°
1608'	3/4°
2400'	3/4°

A F F I D A V I T

THIS IS TO CERTIFY that to the best of my knowledge the above tabulation details the deviation tests taken on AMOCO PRODUCTION COMPANY'S Houck Gas Com "D" No. 1 located 890' FNL and 920' FWL, Section 6, T-29-N, R-9-W, San Juan County, New Mexico.

Signed J. Arnold Snell
Title Area Engineer

THE STATE OF NEW MEXICO)
) SS.
COUNTY OF SAN JUAN)

BEFORE ME, the undersigned authority, on this day personally appeared J. Arnold Snell known to me to be Area Engineer for Amoco Production Company and to be the person whose name is subscribed to the above statement, who, being by me duly sworn on oath, states that he has knowledge of the facts stated herein and that said statement is true and correct.

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for said County and State this 26th day of July, 19 72.

Eleanor S. Brown
Notary Public

My Commission Expires: December 28, 1975

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: SF 078199

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Hauck Gas Com "D"

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Blanco Pictured Cliffs

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: NE/4 NW/4 Section 6, T-29-N, R-9-W

12. COUNTY OR PARISH: San Juan

13. STATE: New Mexico

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

JUL 27 1972

U. S. GEOLOGICAL SURVEY

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: 501 Airport Drive, Farmington, New Mexico 87401

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 890' FNL & 920' FWL
At top prod. interval reported below: Same
At total depth: Same

14. PERMIT NO.: DATE ISSUED:

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
6-15-72	6-19-72	7-20-72	5729'	5730'

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
2400'	2334'		→	2400'	

RECEIVED
JUL 30 1972
OIL CON. COM.
DIST. 3

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 2282-2314' Pictured Cliffs

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Gamma Ray, Neutron (cased hole)

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	23#	217'	12-1/4"	236 cu. ft.	None
4-1/2"	9.5#	2397'	7-7/8"	1112 cu. ft.	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
1-1/4"	2291'	None

31. PERFORATION RECORD (*Interval, size and number*)
Perf 2282-87' X 2292-2314' x 1 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
2282-2314'	Sand-water frac with 37,400 gal. treated water and 32,500 lb. sand.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
		SI

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7-20-72	3 hr.	.750			153		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
91 psig	322 psig			1224		

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): To be connected to El Paso Natural Gas Co.

TEST WITNESSED BY: B. B. Dukes

35. LIST OF ATTACHMENTS

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

SIGNED: Original Signed by J. ARNOLD SHELL TITLE: Area Engineer DATE: July 26, 1972

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands 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 and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure 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 35.

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 or Federal office for specific instructions.

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 attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. 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: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Fruitland	2,000'	
Pictured Cliffs	2,265'	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636
GPO 837-497