1-File
1-Engr PWS
1-Foreman HS
1-Mr. Larry Hall-Midland
1-BLM-Carlsbad

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED BY
MAY 18 1984
O. C. D.
ARTESIA, OFFICE

Type Test: XX Initial ☐ Annual ☐ Special				Test Date: 5/14/84	
Company: GETTY OIL COMPANY ✓			Connection: NONE		
Pool: PECOS SLOPE ABO			Formation: ABO		Unit:
Completion Date: 5-14-84	Total Depth: 4200		Plug Back TD: ~~4135~~ 4155	Elevation: 3726.4	Farm or Lease Name: Getty P.S. 18 Federal
Csg. Size: 4.5 / Wt.: 11.6&10.5 / d: 4.052 / Set At: 4200'			Perforations: From 3741 To 3943		Well No.: 2
Tbg. Size: 2 3/8 / Wt.: 4.7# / d: 1.995 / Set At: 3707'			Perforations: From Open To Ended		Unit: F / Sec.: 18 / Twp.: 6S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: None		County: Chaves
Producing Thru: Tbg.	Reservoir Temp. °F: 99 @ 4200		Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: New Mexico
L: 3707	H: 3707	Gg: 0.702	% CO_2: 7.8	% N_2: 3.9	% H_2S: – / Prover: – / Meter Run: 3" / Taps: Flange

	FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							936		942		
1.	3"	x	1"	300	13	74	920	76	930	76	.75 hr.
2.	3"	x	1"	300	25	74	915	76	925	76	.75 hr.
3.	3"	x	1"	300	49	74	900	76	910	76	1 hr.
4.	3"	x	1"	300	92	74	884	76	900	76	1 hr.
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	4.801	63.8	313.2	.9868	1.194	1.027	370.6
2	4.801	88.5	313.2	.9868	1.194	1.027	514.1
3	4.801	123.9	313.2	.9868	1.194	1.027	719.8
4	4.801	169.7	313.2	.9868	1.194	1.027	985.9
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.45	534	1.46	0.949
2	0.45	534	1.46	0.949
3	0.45	534	1.46	0.949
4	0.45	534	1.46	0.949
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.702 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 695 P.S.I.A. _____ P.S.I.A.
Critical Temperature 367 R _____ R

P_c 955.2 P_c^2 912.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		943.2	889.6	22.8
2		938.2	880.2	32.2
3		923.2	852.3	60.1
4		913.2	833.9	78.5
5				

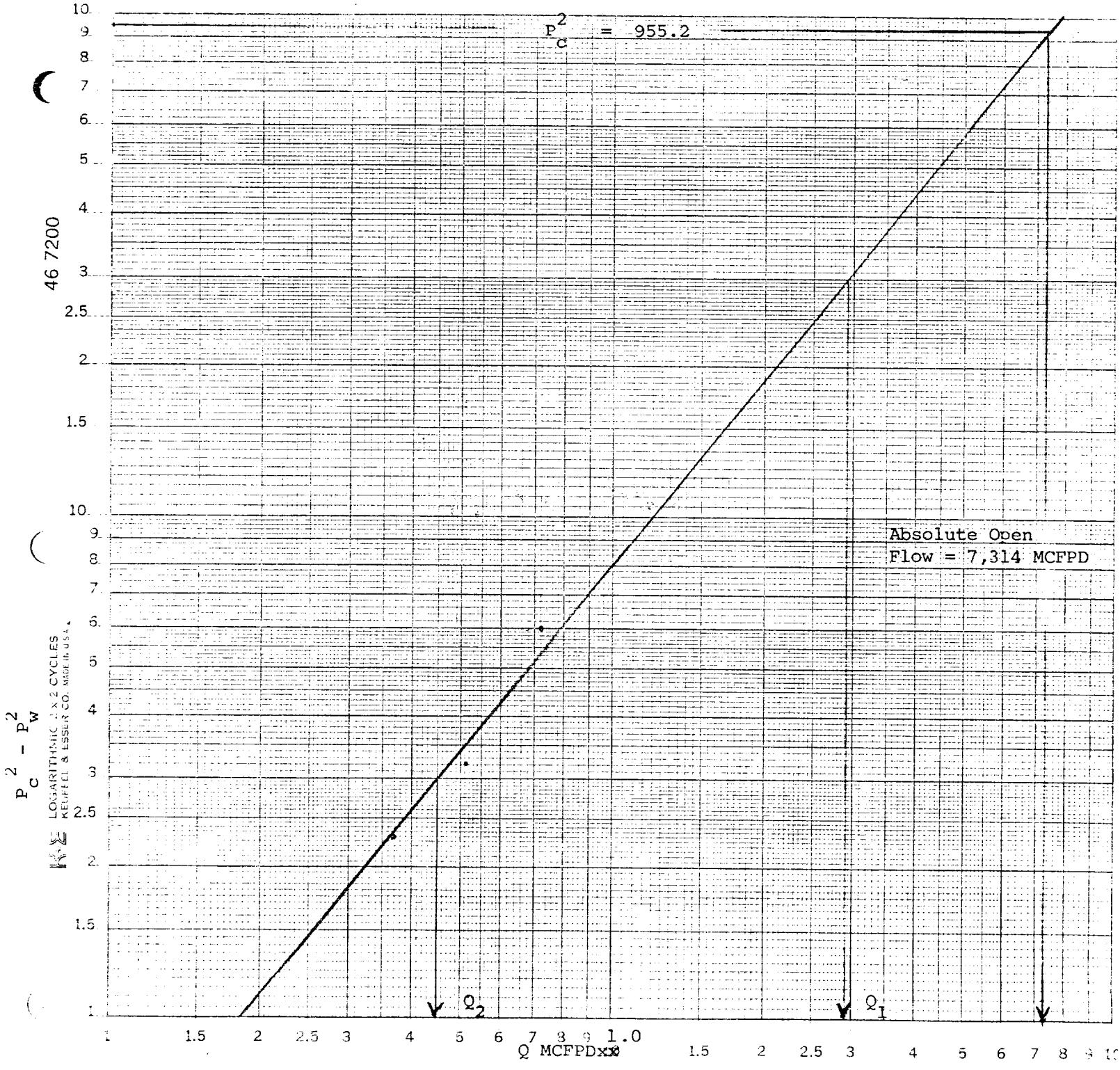
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 13.03$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 8.13$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 7,314$ MCF

Absolute Open Flow 7,314 Mcfd @ 15.025 | Angle of Slope θ _____ | Slope, n 0.816

Remarks: The 95% and 75% flowing pressure criteria was not met, to avoid returning frac sand and to minimize waste.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Manuel Martinez	Phil Smith PWS	Peter J. Bolas



Q_1 = 2930 Log Q_1 = 3.469

Q_2 = 450 Log Q_2 = 2.653 n = 0.816

NEW-TEX LAB

PHONE 505/393-3561 • P. O. BOX 1161 • 611 W. SNYDER • HOBBS, NEW MEXICO 88240

ANALYSIS CERTIFICATE

CLIENT:	GETTY OIL COMPANY	ANALYSIS NUMBER:	3312
ADDRESS:	BOX 730	DATE OF RUN:	05/15/84
CITY, STATE:	HOBBS NM 88240	DATE SECURED:	05/14/84

SAMPLE IDENT: ABO GAS - GETTY FEDERAL 18 #2
SAMPLING PRESS: SAMPLING TEMP:

********** GAS ANALYSIS **********

	MOLE PERCENT	GAL/ MCF
NITROGEN	3.938	
CARBON DIOXIDE	7.771	
METHANE	81.333	
ETHANE	4.147	1.106
PROPANE	1.550	0.425
ISO-BUTANE	0.255	0.083
NORMAL BUTANE	0.507	0.159
ISO-PENTANE	0.128	0.047
NORMAL PENTANE	0.165	0.060
HEXANES	0.206	0.085
TOTAL	100.000	1.965

PROPANE GPM:	0.43	BUTANES GPM:	0.24
ETHANE GPM:	1.11	PENTANES PLUS GPM:	0.19

SPECIFIC GRAV (CALC): 0.7024
MOLE WEIGHT: 20.34

HHV-BTU/CU FT PRESSURE (PSIA)	WET	DRY
14.696	963	981
14.650	960	977
14.730	966	983
14.735	966	983

DEANE SIMPSON

ORIGINAL SIGNED BY
DEANE SIMPSON

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

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

5. LEASE DESIGNATION AND SERIAL NO.: NM-54991

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Getty P.S. 18 Federal

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: Pecos Slope Abo

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 18, T-6S, R-26E

12. COUNTY OR PARISH: Chaves

13. STATE: NM

RECEIVED BY
JUN 11 1984
O. C. D.
ARTESIA, OFFICE

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR: Getty Oil Company ✓

3. ADDRESS OF OPERATOR: P.O. Box 730, Hobbs, NM 88240

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements.*)
At surface: Unit Ltr. F, 1980 FNL & 1980 FWL
At top prod. interval reported below
At total depth

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
4/21/84	4/28/84	5/14/84	3726.4 GR	-

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
4200'	4155'	-	→	0'-4200'	-

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 3741-3943' - Pecos Slope Abo

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: DDL, MLL, Comp. Density, Com. Neutron GR

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
10 3/4	45.5#	892'	14 3/4"	500 sxs	
4 1/2	11.6# & 10.5#	4200'	7 7/8"	1750 sxs	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	3707'	

31. PERFORATION RECORD (*Interval, size and number*): 3741-3943'

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3741-3943'	6,600 gals of 15% acid 40,250 gals of Mini-Max III-40, 456 bbls of CO_2 & 125,000# 20/40 sand

33.* PRODUCTION

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

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
5/14/84	1	15/64		-	~~985.9~~	-	-

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
884	900		-	~~985.9~~ 7314 AOF	-	-

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Vented

35. LIST OF ATTACHMENTS

ACCEPTED FOR RECORD
PETER W. CHESTER
JUN 6 1984

TEST WITNESSED BY

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

SIGNED Dale R. Crockett TITLE Area Superintendent DATE May 22, 1984

*(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.
	0	641	Red bed
San Andres	641	1628	Dolomite
Glorieta	1628	3124	Sand & Dolomite
Tubb	3124	3690	Sand
Abo	3690	4200	Lime & Shale

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

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