

New Well.....
Workover.....
Re-Test.....
Reclassified.....
Oil to Gas.....

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

Form GWT-1
Back Pressure Test
for Gas Wells

RRC Dist. Field **Julesburg** Reservoir **Tatum** County **Lin**
Well Owner **Simclair Oil & Gas Company** Lease **State 157 "B"** Well No. **8**
Section **7** Block **2** Survey **8-22-8** Location **NE SE NW**
Date of Test **1-10-56** Acres **1.60** Pipe Line Conn. **None**
Gravity (Raw Gas) **669** Avg. Shut-In Temp. **530** Bottom Hole Temp. **565** @ **359'**
Size CSG **T** " Wt./Ft. **2 1/2** Lbs. I. D. CSG **63 1/2** Set at **370'**
Size TBG **2.9** " Wt./Ft. **65** Lbs. I. D. TBG **2 1/2** Set at **380'**
Prod. Section From **359'-370'** Avg. Prod. Length, (L) **359'**
Elevation **377'** Date of Completion **12-24-55** Producing through Tubing **X** through Casing

FIELD DATA

Run No.	Time of Run Min.	Choke Size	Coefficient	Choke Press PSIA	Choke Temp. °F	Wellhead Press P _w PSIA	Wellhead Flow Temp. °F	P _w ² (Thousands)
Shut-In	78					1154	70	1338
1	180					1088	70	1057
2	180					955	70	912
3	180					880	70	776
4	180					777	70	606
5								

VOLUME CALCULATIONS

Run No.	Size Line Fig.-Tap	Size Orifice	Meter Coeff. 24 Hrs.	Static P _m	Diff. h _w	Flow Temp. °F	Temp. Factor F _T	Gravity Factor F _G	Compress Factor F _{cp}	Volume MCF/Day
1	2 GWT	5/16"	2.153	1088		70	.9905	.9103	1.168	2138
2		3/8"	1.964	955		70	.9905	.9103	1.153	2048
3		7/16"	1.790	880		70	.9905	.9103	1.140	1972
4		1/2"	1.512	777		70	.9905	.9103	1.120	1385
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Gas Liquid Hydrocarbon Ratio..... MCF per Bbl.

PRESSURE CALCULATIONS

Gravity of Liquid Hydrocarbons..... Deg.

Gas produced into pipe line during test..... MCF.

$$(D E_{ff})^{8/3} = 10.886 \quad \sqrt{T} = \sqrt{999} = 31.65$$
$$C = \frac{1118 \times (D E_{ff})^{8/3}}{\sqrt{T}} = \frac{1118 \times 10.886}{31.65} = 380.8$$
$$\sqrt{GL} = \sqrt{2138} = 46.29 \quad \frac{\sqrt{GL}}{C} = \frac{46.29}{380.8} = .1218$$
$$G_{mix} = .669$$

Run No.	R	R ² (Thousands)	P _i	R _w /P _i	F	K	S = 1/Z	E ^{KS}	R _F a	P _F ² a	P _F ² - P _S ²
Shut-In						.0621	1.290	1.168	1878	1633	
1	224	50.18	1088	.977	.988	.064	1.239	1.166	1137	1293	360
2	248	61.60	955	.957	.979	.066	1.239	1.165	1055	1113	280
3	261	68.12	880	.919	.960	.0768	1.223	1.167	969	976	655
4	313	97.97	777	.862	.942	.0773	1.212	1.098	853	786	985
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OPEN FLOW TEST:

Shut-In Press		Psig	
Time Shut-In.....		Hrs.	
Producing Through.....			
In. H ₂ O		In. Hg.....	
Psig.....			
Time	Reading	Time	Reading
15		25	
20		30	

Absolute Open Flow..... **6,500** MCF/Day

Comm:

Conn:

Co:

Other:

Signatures

(See Reverse Side)

REMARKS:

AFFIDAVIT

STATE OF TEXAS

COUNTY OF.....}

BEFORE me, the undersigned authority, on this day personally appeared.....
....., known to me to be the person whose name is subscribed to this instru-
ment, who, after being by me duly sworn on oath, states that he is employed by or associated with.....
..... in the capacity of.....;
that these tests were made by affiant or under the supervision of affiant; that the test data and factual data
shown hereon are true and correct; and that no pertinent matter inquired about in said report has been
omitted.

Subscribed and Sworn to before me on this the.....day of....., 19.....

Notary Public in and for.....
County, Texas