NM Oil Cons. Commission
Drawer DD
Artesia, NM 88210

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BUREAU OF LAND MANAGEMENT
ROSWELL, NEW MEXICO

c/st

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

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ARTESIA, OFFICE

5. Lease Designation and Serial No.
NMNM 25480

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Gulf Federal # 1

2. Name of Operator
BEC Corporation

9. API Well No.
30-005-60738

3. Address and Telephone No.
P.O. Box 1392 Midland, Texas 79702 915 682-1828

10. Field and Pool, or Exploratory Area
19100 Double L Queen,Ass

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
NENW (660' FNL & 1980' FWL) Sec. 26 T-14-S R-29-E
Chaves County, New Mexico

11. County or Parish, State
Chaves, New Mexico

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Well Test Report of 7-5-94 By SubSurface Well Testing
P.O. Box 5254
Midland, Texas 79704

See Completed Form C-122 Attached

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ROSWELL, NEW MEXICO

14. I hereby certify that the foregoing is true and correct
Signed George Van Ohnsen Title Agent Date 7-7-94

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

ACCEPTED FOR RECORD
PETER W. CHESTER
JUL 15 1994
BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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.

SPECIFIC INSTRUCTIONS

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 13—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

*U.S. GPO: 1992-673-017/47040

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Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

JUL 25 '94
O. C. D.
ARTESIA, OFFICE

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: B.E.C. Corporation							Lease or Unit Name: Gulf Federal		
Type Test: ☐ Initial ☐ Annual ☐ Special							Test Date: 07/05/94	Well No.: 1	
Completion Date		Total Depth		Plug Back TD: 1934			Elevation	Unit Ltr. - Sec. - TWP - Rge.: Sec. 26 T-14S R-29E	
Csg. Size: 5 1/2	Wt.: 15#	d	Set At: 3510	Perforations: From: 1824		To: 1836		County: Chaves	
Tbg. Size: 2 3/8	Wt.: 4.7	d	Set At: 1836	Perforations: From:		To:		Pool: Queen	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At				Formation	
Producing Thru	Reservoir Temp. °F: 92		Mean Annual Temp. °F: 60	Baro. Press - P_a: 13.2				Connection	
L: 1824	H: 1824	Gg: .986	% CO_2: 10.58	% N_2: 55.56	% H_2S	Prover: Pos Chokes		Meter Run	Taps

	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		80		85			80		72
1.	6/64	77		86			77		1
2.	7/64	72		86			72		1
3.	8/64	68		87			68		1
4.	9/64	62		88			62		1
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, F pv.	Rate of Flow Q, Mcfd
1.	.1406		90.2	0.9759	1.007	1.005	12.53
2.	.1986		85.2	0.9759	1.007	1.005	16.71
3.	.2618		81.2	0.9750	1.007	1.004	20.96
4.	.3346		75.2	0.9741	1.007	1.004	24.78
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	0.153	546	1.712	0.9901
2.	0.145	546	1.712	0.9907
3.	0.138	547	1.715	0.9912
4.	0.128	548	1.718	0.9919
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ De
Specific Gravity Separator Gas 0.986 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 588 P.S.I.A. _____ P.S.I.
Critical Temperature 319 R _____

P_c 100.8 P_c^2 10.161

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		96.1	9.227	0.934
2.		91.4	8.346	1.815
3.		86.7	7.510	2.651
4.		80.1	6.413	3.748
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.711$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.729$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 42.84$

Absolute Open Flow 42.84 Mcfd @ 15.025 | Angle of Slope θ 61.2 ° | Slope, n 0.549

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:

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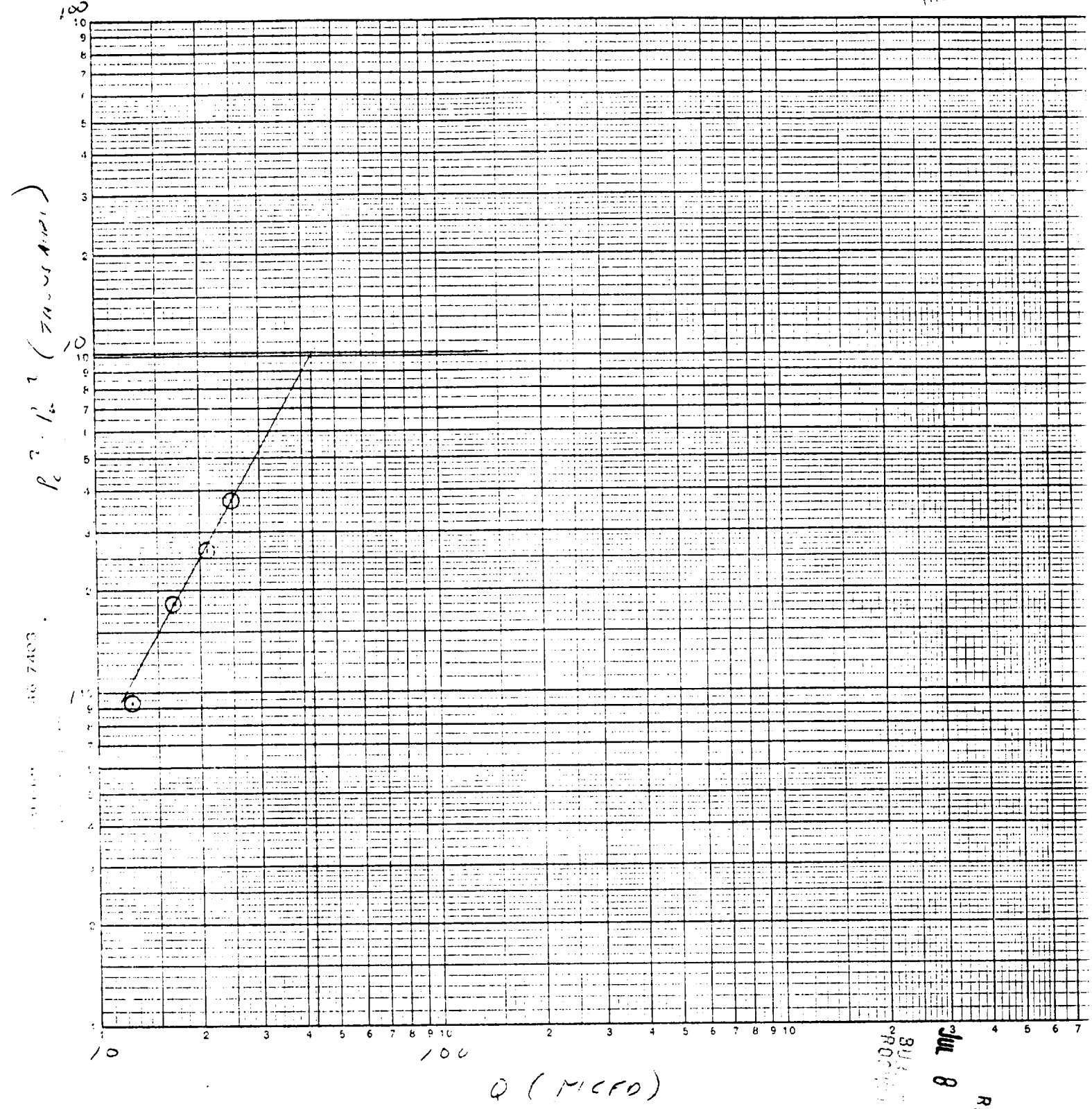
B.E.C. CORPORATION
Gulf Federal #1



n =

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ROSWELL RESOURCE AREA

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or ~~P_w~~)

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or ~~P_s~~)

Form C-122F
Adopted 9-1-65

COMPANY E.C. Corp LEASE Gulf Federal WELL NO. 1 DATE 7/5/94

LOCATION: Unit _____ Section _____ Township _____ Range _____

L 1824 H 1824 L/H 1 G 0.986 % CO_2 10.58 % N_2 55.56 % H_2S _____

GH 1798 P_{cr} 588 (TABLE IX & X) T_{cr} 319 (TABLE IX & X)

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	545							
2	T_s(B.H. °R)	552							
3	$T=(\frac{T_w + T_s}{2})$	548.5							
4	Z (Est.)	0.98	0.989						
5	TZ	537.5	542.5						
6	GH/TZ	3.345	3.314						
7	e^s(Table XIV)	1.134	1.132						
8	P_f or ~~P_s~~	107.2	107.2						
9	P_f^2 or ~~P_s^2~~	11.492	11.492						
10	$P_c^2 = P_f^2/e^s$ or ~~$P_w^2 = P_s^2/e^s$~~	10.139	10.152						
11	P_c or ~~P_w~~	100.7	100.8						
12	~~$P=(\frac{P_w + P_s}{2})$~~ or $(\frac{P_c + P_f}{2})$	104.0	104.0						
13	$P_r = (P/P_{cr})$	0.177	0.177						
14	$T_r = (T/T_{cr})$	1.719	1.719						
15	Z (Table XI)	0.989	0.989						

One copy to be filed in District Office (Work copy acceptable)

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_w)

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_s)

Form C-122F
Adopted 9-1-65

COMPANY B E. C. Corl LEASE Gulf Federal WELL NO. 1 DATE 7/5/94

LOCATION: Unit _____ Section _____ Township _____ Range _____

L 1824 H 1824 L/H 1 G 0.996 % CO_2 10.58 % N_2 55.56 % H_2S _____

GH 1798 P_{cr} 538 (TABLE IX & X) T_{cr} 319 (TABLE IX & X)

LINE		Flow 1		Flow 2		Flow 3		Flow 4	
		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	546		546		547		548	
2	T_s(B.H. °R)	552		552		552		552	
3	$T=(\frac{T_w + T_s}{2})$	549		549		549.5		550	
4	Z (Est.)	0.99	0.989	0.99		0.99		0.99	0.991
5	TZ	543.5	543.0	543.5		544.0		544.5	545.1
6	GH/TZ	3.308	3.311	3.308		3.305		3.302	3.298
7	e^S(Table XIV)	1.132	1.132	1.132		1.132		1.132	1.132
8	P_f or P_s	102.2	102.2	97.2		92.2		85.2	85.2
9	P_f^2 or P_s^2	10.445	10.445	9.448		8.501		7.259	7.259
10	$P_e^2 = P_f^2 e^S$ or $P_w^2 = P_s^2 e^S$	9.227	9.227	8.346		7.510		6.413	6.413
11	P_c or P_w	96.1	96.1	91.4		86.7		80.1	80.1
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	99.2	99.2	94.3		89.5		82.7	82.7
13	$P_r = (P/P_{cr})$	0.169	0.169	0.160		0.152		0.141	
14	$T_r = (T/T_{cr})$	1.721	1.721	1.721		1.723		1.724	1.724
15	Z (Table XI)	0.989	0.989	0.990		0.990		0.991	0.991

One copy to be filed in District Office (Work copy acceptable)

"Quality Testing of Oil & Gas Wells"

SUBSURFACE WELL TESTING

P. O. BOX 5254
MIDLAND, TEXAS 79704

PHONE: 915/682-7580

STATIC·FLOWING — B. H. PRESSURES

COMPANY BEC Corporation Well & No. Gulf Federal #1

FIELD _____ Date 07/05/94 Instrument No. 10692

DATE	STATUS	SERVICE TIME	ELAPSED TIME HRS.	ELAPSED TIME MIN.	D W T TP	DWT CP	BHP PSIG @ 1830'
07/05/94	In Lubricator	15:15			19	80	94
	On Bottom	15:30			19	80	94
	Opened on a 6/64" ck.	15:45	00:00		19	80	94
	1st rate cont.	16:00	00:15		19	79	92
	1st rate cont.	16:15	00:30		19	78	91
	1st rate cont.	16:30	00:45		19	78	90
	1st rate ended	16:45	01:00		19	77	89
	Opened on a 7/64" ck.	16:45	00:00		19	77	89
	2nd rate cont.	17:00	00:15		20	76	87
	2nd rate cont.	17:15	00:30		20	75	86
	2nd rate cont.	17:30	00:45		20	73	84
	2nd rate ended	17:45	01:00		20	72	84
	Opened on an 8/64" ck.	17:45	00:00		20	72	84
	3rd rate cont.	18:00	00:15		21	71	82
	3rd rate cont.	18:15	00:30		21	70	81
	3rd rate cont.	18:30	00:45		21	69	80
	3rd rate cont.	18:45	01:00		22	68	79
	Opened on a 9/64" ck.	18:45	00:00		22	68	79
	4th rate cont.	19:00	00:15		22	66	77
	4th rate cont.	19:15	00:30		22	65	75
	4th rate cont.	19:30	00:45		23	63	73
	4th rate ended	19:45	01:00		23	62	72

THE ABOVE PRESSURES ARE PSIG.

"Quality Testing of Oil & Gas Wells"

P.O. BOX 5254
MIDLAND, TEXAS 79704

PHONE
915/682-7580

BOTTOM HOLE PRESSURE REPORT

Operator B.E.C. Corporation Lease Gulf Federal Well 1

Field _____ Reservoir _____

Test Date 07/05/94 Well Status Static Hrs Shut In _____

Tubing 2 3/8 Depth 1836 End open Packer _____ S. N. _____

Casing 5 1/2 Depth 3510 Perf 1824 - 1836 Total Depth _____

		Depth (feet)	Pressure (psig)	Delta Pressure	Gradient (psi/ft)
Tubing Pres.	22	0	22		
Casing Pres.	80	1630	31	9	0.006
Top of Fluid	None	1730	46	15	0.150
Top of Water	1699	1830	94	48	0.480
Temp. @					
Degrees F.		1830	94 Ctr. of Perfs.		0.480
Elev. KB					
Elev GL					
Datum					
Last Test Date	/ /				
Press. Last Test					
Pres. Change					
Change per Day					
Inst. No.	10692				
Calibration	060793				
Tested By	Ralph				
Calculated By	Ralph				

Remarks--

"Quality Testing of Oil & Gas Wells"

SUBSURFACE WELL TESTING

P. O. BOX 5254
MIDLAND, TEXAS 79704

PHONE
915/682-7580

BOTTOM HOLE PRESSURE PLOT

Operator: B.E.C. Corporation
Lease: Gulf Federal
Well No.: 1

Test Date: 07/05/94
Status: Static