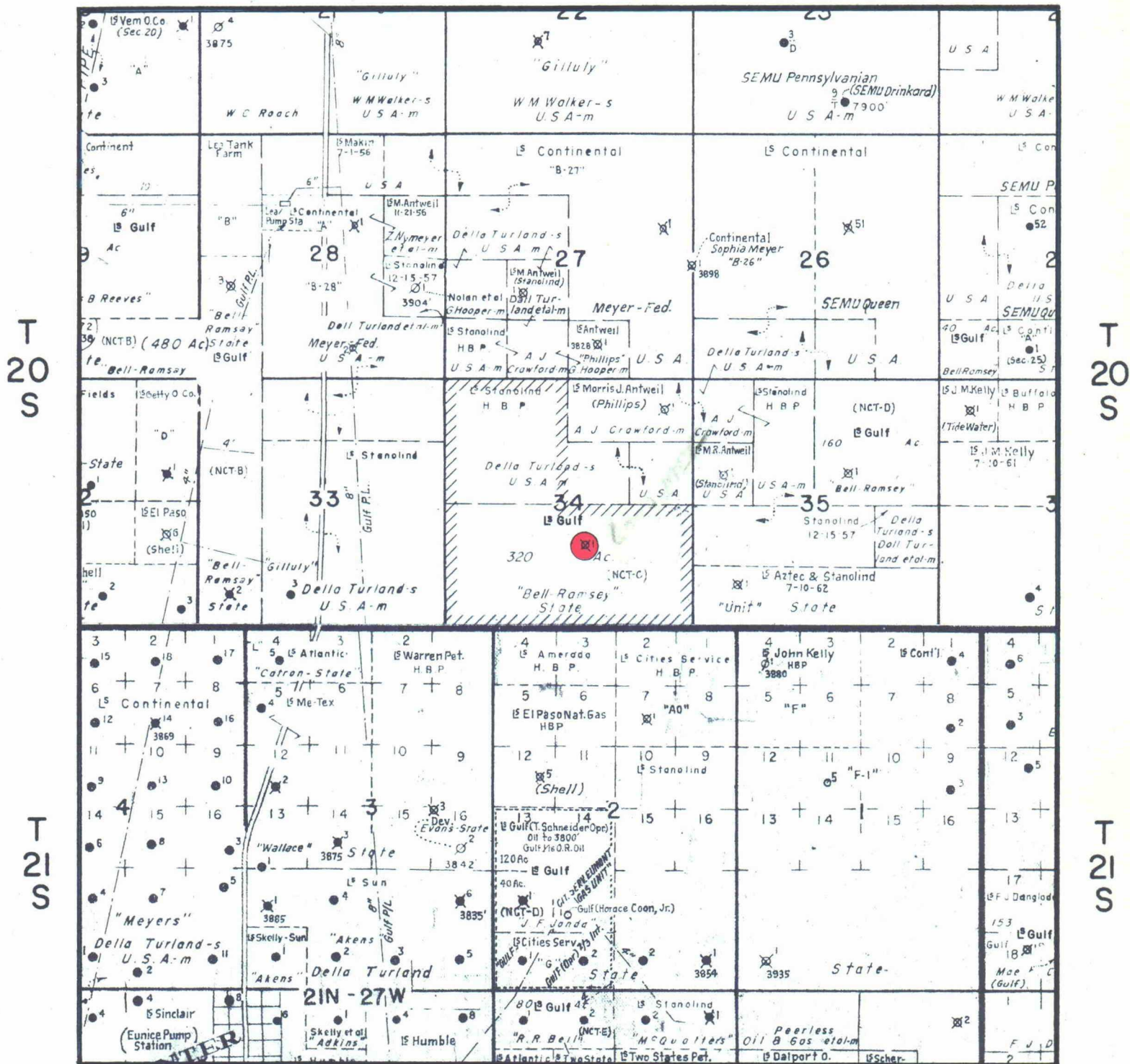


R-37-E



BELL RAMSAY "C" NO. 1

EUMONT POOL, LEA COUNTY, NEW MEXICO

GULF OIL CORPORATION

JANUARY 7, 1958

CASE NO. 1360
EXHIBIT NO. 1-A

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
(Deliverability)

Case No. 1360
Exhibit 1-B
Form C-122-C
4-1-54

Pool Eumont Formation Queen County Lea
Initial _____ Annual _____ Special x Date of test 11-25 to 12-4-57
Company Gulf Oil Corporation Lease Bell-Ramsay #CH Well No. 1
Unit J Sec. 34 Twp. 20S Rge. 37E Purchaser Permian Basin Pipeline Co.
Casing 7 Wt. 20 I.D. 6.456 Set at 3534 Perf. open hole To _____
Tubing 2 Wt. 4.7 I.D. 1.995 Set at 3671 Perf. _____ To _____
Gas Pay: From 3534 To 3680 L 3671 x G .675 = GL 2460 Bar. Press. 13.2
Producing Thru: Casing _____ Tubing x Type Well Single
Single- Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started		Taken		Duration	Type	Line	Orifice	Static	Differ-	Flow
Date	time	Date	time	Hours	Taps	Size	Size	Press.	ential	Temp.
11-26-57	AM	12-4-57	AM	189.5	Pipe	4	1.75	506.7	9.4	64
	PM		PM							

FLOW CALCULATIONS

Static Pressure P _f	Differ- ential h _w	Meter Extension $\sqrt{P_f h_w}$	24-Hour Coeff- icient	Gravity Factor F _g	Temp. Factor F _t	Compress- ability F _{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
519.9	9.4	69.91	21.69	.9427	.9962	1.057	1505

SHUT-IN DATA

Shut-in		Press. Taken		Duration	Wellhead Pressure (P _c) psia		W.H. Working Pressure (P _w) and (P _t) psia	
Date	Time	Date	Time	Hours	Tubing	Casing	Tubing	Casing
11-25-57	AM	11-26-57	AM	24	706.1	704.9	535.9	565.4
	PM		PM					

FRICTION CALCULATIONS(if necessary)

DELIVERABILITY CALCULATIONS

P_w _____ P_c _____ P_w + P_c _____

$1 - \frac{P_w}{P_c}$ _____ $1 + \frac{P_w}{P_c}$ _____ $\left(1 - \frac{P_w}{P_c}\right) \left(1 + \frac{P_w}{P_c}\right) = M$ _____

.36 + M _____ Log _____ x (n) _____ = _____ +

SUMMARY

P_c = _____ psia

Q = _____ MCF/Da.

P_w = _____ psia

P_d = _____ psia

D = _____ MCF/Da.

COMPANY Gulf Oil Corporation

ADDRESS Box 2167, Hobbs, N.M.

AGENT and TITLE W. L. Smith, Gas Tester

WITNESSED Joe Horton

COMPANY Permian Basin Pipeline Co.

Log Q = _____

Log D = _____

Antilog = _____ = D

REMARKS

INSTRUCTIONS

This form is to be used for reporting deliverability tests in the designated Dry Gas Pools of Lea County as ordered by New Mexico Oil Conservation Commission Directive dated March 15, 1954, which directive was provided for by Orders R-365-A through R-376-A. For details regarding this test please refer to the above mentioned Directive.

NOMENCLATURE

Q = Actual flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia

P_d = Deliverability pressure; 80 % of 72 hour individual wellhead shut-in pressure (P_c). psia

P_w = Static wellhead working pressure as determined at the end of flow period. (Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing). psia

D = Deliverability at Deliverability pressure (P_d) MCF/da. @ 15.025 psia and 60° F.

p_f = Static meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressibility factor.

n = Slope of back pressure curve.

DELIVERABILITY FORMULA

$$D = Q \left[\frac{.36}{\left(1 - \frac{P_w}{P_c}\right) \left(1 + \frac{P_w}{P_c}\right)} \right]^n$$

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

PRODUCTION BY MONTHS - BELL RAMSAY "C" WELL NO. 1
EUMONT POOL, LEA COUNTY, NEW MEXICO

Case No. 1360

Exhibit I-C

<u>MONTH-YEAR</u>	<u>UNDERPRODUCTION MCF</u>	<u>DAYS OPERATED</u>	<u>PRODUCTION MCF</u>	<u>CURRENT ALLOWABLE-MCF</u>
Sept. 55	52,129	2	5,023	39,914
Oct. 55	69,452	6	12,147	29,470
Nov. 55	75,180	19	40,313	46,041
Dec. 55	99,134	16	33,232	57,186
Jan. 56	102,667	17	38,040	41,583
Feb. 56	82,793	22	38,805	18,921
Mar. 56	90,090	14	34,007	41,304
Apr. 56	109,084	10	23,615	42,609
May 56	102,091	15	37,731	30,738
June 56	89,842	17	35,733	23,484
July 56	100,871	9	13,619	24,648
Aug. 56	105,030	18	37,793	41,952
Sept. 56	139,301	8	10,711	44,982
Oct. 56	172,106	0	0	32,805
Nov. 56	206,924	0	0	34,818
Dec. 56	243,626	0	0	36,702
Jan. 57	276,420	0	0	32,794
Feb. 57	295,098	8	7,229	25,907
Mar. 57	246,106	31	68,925	29,933
Apr. 57	220,706	29	57,339	31,939
May 57	177,183	31	61,329	17,806
June 57	122,424	30	53,069	17,297
July 57	79,967	30	53,967	11,510
Aug. 57	89,880	29	43,993	53,906
Sept. 57	69,091	30	50,230	29,441
Oct. 57	64,580	31	49,545	45,034
Nov. 57	84,716	30	44,093	64,229