

Atlantic Richfield Company

North American Producing Division
Permian District
Post Office Box 1610
Midland, Texas 79701
Telephone 915 682 8631



April 17, 1974

Mr. R. L. Stamets
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Hearing April 10, 1974
Cases No's. 5212 and 5213
Citgo Empire Abo Unit
Supplemental Data Request

Dear Mr. Stamets:

At the subject hearing Mr. Jason Kellahin, attorney for Cities Service, requested additional data from Atlantic Richfield.

Attached is a copy of Atlantic Richfield's calculations regarding estimated production and voidage efficiency for the year 1977 for the ARCO Empire Abo Unit.

This is set up in the same form as ARCO Exhibit No. 3 at the subject hearing. This fulfills Mr. Kellahin's request as we understood it at the hearing.

Very truly yours,

S. Hugh Christianson

SHC/agp

cc: Mr. Jason W. Kellahin
Kellahin & Fox, Attorneys
500 Don Gaspar Avenue
P. O. Box 1769
Santa Fe, New Mexico 87501

Mr. Clarence E. Hinkle
Hinkle, Bondurant, Cox & Eaton
600 Hinkle Building
P. O. Box 10
Roswell, New Mexico 88201

CITGO EMPIRE ABO UNIT

Example Gas Bank

<u>Mth</u>	<u>Accumulation</u>								
	<u>1</u> Gas Produced	<u>2</u> Fuel Gas	<u>3</u> Gas Limit	<u>4</u> Gas Avail.	<u>5</u> 90% of Avail.	<u>6</u> Gas Injected	<u>7</u> Bank Change	<u>8</u> Bank Acct.	<u>9</u> Bank Limit
1	139624	4898	52824	81902	73712	86800	-0-	-0-	-0-
2	126112	4424	47712	73976	66578	78400	11822	11822	28933
3	139624	4898	52824	81902	73712	86800	13088	24910	55066
4	135120	4740	51120	79280	71352	84000	12648	37558	84000
5	139624	4898	52824	81902	73712	86800	13088	50646	83067
6	135120	4740	51120	79280	71352	84000	12648	63294	85867
7	139624	4898	52824	81902	73712	86800	13088	76382	84933
8	139624	4898	52824	81902	73712	86800	13088	85866	85866
9	135120	2370	51120	81630	73467	42000	-31467	54399	85866
10	139624	2370	52824	84430	75987	42000	-33987	20412	71866
11	135120	3160	51120	80840	72756	56000	-16756	3656	56933
12	139624	4898	52824	81902	73712	86800	13088	16744	46666
1	139624	3318	52824	83482	75134	58800	-16334	410	61600
2	126112	4424	47712	73976	66578	78400	11822	12232	67200
3	139624	4898	52824	81902	73712	86800	13088	25320	74667

EMPIRE ABO POOL

ARCO Unit - Production and Voidage Efficiency for 1977, as estimated by Atlantic Richfield Company.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	NUMBER OF WELLS	DAILY OIL RATE (BOPD)	GAS/OIL RATIO (ft ³ /BO)	DAILY WATER RATE (BWPD)	RESERVOIR NET VOIDAGE RATE (RVB/DAY)	RESERVOIR VOIDAGE EFFICIENCY FACTOR (RVB/STB) (5)/(2)	RESERVOIR VOIDAGE RATE PER WELL (RVB/DAY/WELL) (5)/(1)	ALLOWABLE VO RATE PER WELL (RVB/DAY/WELL)
ARCO Unit, 1977 (estimated)	221	41,300	1,410	5,000	38,532	0.93	174	25

The above data was requested by Mr. Jason Kellahin at the April 10, 1974 hearing of Citlites Service Cases No's. 5212 and 5213.

JASON W. KELLAHIN
ROBERT E. FOX
W. THOMAS KELLAHIN

KELLAHIN AND FOX
ATTORNEYS AT LAW
500 DON GASPAR AVENUE
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO 87501

TELEPHONE 982-4315
AREA CODE 505

April 30, 1974

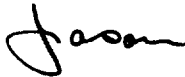
Mr. Richard L. Stamets
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Dick:

At the conclusion of the hearing on Case No. 5213, you requested that I submit a proposed form of order on behalf of Cities Service Oil Company. Our proposed order in original and one copy is attached.

If you have any questions, please let me know.

Yours very truly,



Jason W. Kellahin

JWK:ks

Enclosure

cc: Mr. Clarence E. Hinkle
w/ encls.

Mr. E. F. Motter
w/ encls.



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

I. R. TRUJILLO
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER
STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

June 11, 1974

Mr. Tom Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: CASE NO. 5213
ORDER NO. R-4808
Applicant:
Cities Service Oil Co.

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC x
Aztec OCC

Other State Engineer Office



CITIES SERVICE OIL COMPANY

Box 1919
Midland, Texas 79701
Telephone (915) 684-7131
August 5, 1975

RECEIVED

AUG 6 1975

O. C. C.
ARTESIA, OFFICE

Artesia
New Mexico Oil Conservation Commission
Drawer DD 88210

Gentlemen:

In accordance with the Commission's Order Number R-4808 dated June 11, 1974 Cities Service Oil Company is submitting the initial Citgo Empire Abo Unit Pressure Maintenance Project Operator's Report for approval be the Commission. This report for June, 1975, if approved, will be a precedent in form for all future reports. Future reports will be computer print-outs tabulated and presented in the same fashion as the current report.

Due to delays in compiling a computer program, the June, 1975, report requesting the allowabe for August, 1975, is unavoidably late. Succeeding reports will be filed requesting allowables for the second month following. For example, July's report will request an allowable for September, and so on. This should allow ample evaluation time for the commission and will allow accurate and complete voidage calculations. Due to a one month delay in gas accounting, reports of gas production figures are lagged by one month. Reporting and requesting over a three month span permits voidage calculations to be made with exact production figures.

The report will consist of four separate tables. One table will list wells, locations, most recent well test data, and production figures for the month being reported. A second table will list wells and individual daily and monthly oil allowables as calculated by the reservoir voidage calculations. The voidage calculations for each well are listed in a third table. A fourth table is a gas bank statement.

During the month of June the unit was overproduced due to the fact that considerable downtime was encountered on the compressors trying to get them started and running smoothly. In order to compensate for this over-voidage, the daily voidage for August was set at 510 reservoir barrels. Individual allowables were requested based on voidage calculations performed on each well. Producing GOR's from the month of May were used in each calculation. A G_i/G_p ratio of .89734 was also used in each calculation.

If, after reviewing the report, you have any questions about the accuracy or procedure used in the calculations, please notify me. I will provide any information you need.

Sincerely yours,

Mike Sackash

CITGO EMPIRE ABO UNIT
PRESSURE MAINTENANCE PROJECT
N.M.O.C.C. ORDER R-4808
CITIES SERVICE OIL COMPANY-OPERATOR

MONTHLY REPORT FOR JUNE, 1975

Test Data
Latest 24 Hour

Tract No.	Well No.	Sec.	T	R	Well Status	Date Mo-Yr.	Oil Bbl	Water Bbl	Gas MCF	GOR CF/B	Oil BOPD	Water BWPD	Gas MCFD	GOR CF/B
1	9	35	17S	27E	1	5-74	124	0	445	3589	4	23	460	5000
1	10	35	17S	27E	1	5-74	74	0	557	7527	35	27	337	9629
2	13	35	17S	27E	1	5-74	124	0	641	5169	106	0	964	9094
2	14	35	17S	27E	1	5-74	97	0	467	4814	83	19	690	8313
3	5	2	18S	27E	1	5-74	135	0	470	3481	103	110	621	6029
4	4	2	18S	27E	1	5-74	140	0	334	2386	103	114	524	5087
							434	43	3156	ave GOR	434	43	3156	ave GOR
										277				Total

Injection Averages

802

- 1 = Flowing
2 = Pumping
3 = Injection

CITGO EMPIRE ABO PRESSURE MAINTENANCE PROJECT
ALLOWABLE REQUEST FOR AUGUST 1975

Tract No.	Well No.	Sec.	T	R	Well Status	Daily Allowable BOPD	Monthly Allowable BOPM
1	9	35	17S	27E	1	55	1705
1	10	35	17S	27E	1	25	775
2	13	35	17S	27E	1	40	1240
2	14	35	17S	27E	1	80	2480
3	5	2	18S	27E	1	110	3410
4	4	2	18S	27E	1	110	3410
Total						420	13020

CITGO EMPIRE ABO UNIT
PRESSURE MAINTENANCE PROJECT
RESERVOIR VOIDAGE CALCULATIONS

for summary

Tract No.	Well No.	Sec.	T	R	Qo Bbl/Day	Oil Voidage (Qo)*(Bo) RVB/Day	Gas Voidage (Qo(Bg) (Rp(I-Gi/Gp) -Rs) RVB/Day	Total Net Voidage RVB/Day
1	9	35	17S	27E	55	78	-28	50
1	10	35	17S	27E	25	36	11	47
2	13	35	17S	27E	40	57	9	66
2	14	35	17S	27E	80	114	11	125
3	5	2	18S	27E	110	156	-36	120
4	4	2	18S	27E	110	156	-54	102
Totals					420	597	-87	510

CITGO EMPIRE ABO UNIT
PRESSURE MAINTENANCE PROJECT

GAS BANK STATEMENT

MONTH	GAS PRODUCED MCF/MO.	GAS INJECTED MCF/MO.	BANK CREDIT MCF	BANK DEBIT MCF	BANK STATUS MCF
June	94670	24050	-	31470	-31470

157525

70197

46946

-78416