



RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

June 20, 2006

OIL AND GAS DOCKET NO. 06-0246973

APPLICATION OF ANADARKO E&P COMPANY LP, TO CONSIDER AN INCREASED NET GOR AUTHORITY FOR THE BRASSELL LEASE WELL NO. 308C, CARTHAGE (TRAVIS PEAK) FIELD, PANOLA COUNTY, TEXAS

HEARD BY: Thomas H. Richter, P.E.

DATE OF HEARING: June 16, 2006

APPEARANCES:

Ana Maria Marsland-Griffith
Deborah Hawthorne

REPRESENTING:

Anadarko E&P Company LP

EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unopposed application of Anadarko E&P for a net gas-oil ratio (GOR) which increases the permitted gas limit to 500 MCFD for the Brassell Lease Well No. 308C. Anadarko also requests that all overproduction be canceled for its Brassell Lease (RRC Lease No. 14175). The examiner recommends approval.

DISCUSSION OF THE EVIDENCE

The Carthage (Travis Peak) Field (designated as a gas field) was discovered in 1943 at 6,243' subsurface depth. The gas field operates pursuant to Special Field Rules and the allocation formula is suspended (1999). This is a very large multi-operator multi-well field. The Carthage (Travis Peak) Field was first designated as an associated oil field in 1987 at 6,190' subsurface depth. The field operates pursuant to Statewide Rules. There are nine operators and 13 wells. The top allowable for a well completed at this depth is 111 BOPD and a casinghead gas limit of 222 MCF per day.

The Anadarko E&P subject well was originally named as the CGU 3 Well No. 8-C and was completed April 20, 1993 through 2 sets of perforations from 6,838' to 6,852' subsurface depth as a gas well.¹ The well potentialized at 2,110 MCFD. In June 2002, the above perforations were plugged and new perforations in the Travis Peak established from 6,210' to 6,396' subsurface depth. The well was classified as an oil well (renamed to Brassell Well No. 308C) with a potential of 54

¹ This is a dual completion with the "tubing side" completed in the Cotton Valley Formation.

BOPD, 291 MCFD and no water. The GOR was 4234:1 flowing on an adjustable choke. The oil gravity is 42.2 °API. The initial flowing tubing pressure was 138 psig. In February 2006, the above perforations were plugged and new perforations in the Travis Peak established from 6,120' to 6,152' subsurface depth. The well was classified as an oil well with a potential of 15 BOPD, 355 MCFD and 8 BWPD. The GOR was 24,035:1 flowing on an adjustable choke. The oil gravity is 46° API. The initial flowing tubing pressure was 180 psig. The penalized oil allowable is 9 BOPD.

A net GOR resulting in a gas limit of 500 MCFD is appropriate. The testing shows that the well is rate sensitive. The Brassell Well No. 308C was tested over a 30 day period with the following results:

CHOKE (64ths)	OIL (BOPD)	GAS (MCFD)	GOR	FTP (PSI)	WTR (BPD)
64	7	280	45200	105	1.7
48	7	170	55000	110	1.4
38	4	195	60000	120	0.7
32	3	140	75000	114	1.1

It is necessary that the well be flowed at the highest rate in order to maintain sufficient velocity to lift the reservoir fluid. An indication of the diminishing production characteristics was the measurement of total fluid produced. The above testing averages do not present an accurate depiction of the flow dynamics of the well. Total fluid production was greatest with the highest flow rate for fluid dynamics and decreased with each successive choke reduction. The well produces in slug rate sequences. The slug rate became more erratic with the lower flow rates. This is an indication of wellbore fluid loading. The more erratic the flow rates, the greater the GOR swings to as high as 300,000:1. It is surmised that the well will be placed on gas-lift in the near future.

Cancellation of the over production will not harm correlative rights. The subject well is surrounded by Carthage (Travis Peak) gas wells that are producing at 100% deliverability. The Travis Peak formation is a series of stacked, discontinuous, lenticular sand packages that are not necessarily present from well to well.

FINDINGS OF FACT

1. Notice of this application was given to all person entitled to notice at least ten (10) days prior to the hearing.
2. There was no protest of the application.
3. The Carthage (Travis Peak) Field was first designated as an associated oil field in 1987 at 6,190' subsurface depth.

- a. The field operates pursuant to Statewide Rules.
 - b. The top allowable for a well completed at this depth is 111 BOPD and a casinghead gas limit of 222 MCF per day.
4. The Anadarko E&P, Brassell ell No. 308C, was named as the CGU 3 Well No. 8-C, and was completed April 20, 1993 through 2 sets of perforations from 6,838' to 6,852' subsurface depth as a gas well.
- a. In June 2002 and again in 2006 additional perforations were plugged and new perforations in the Travis Peak established and the current perforations are from 6,120' to 6,152' subsurface depth.
 - b. The well was classified as an oil well with a potential of 15 BOPD, 355 MCFD and 8 BWPD with a penalized allowable of 9 BOPD.
5. A net GOR resulting in a gas limit of 500 MCFD is appropriate as the testing shows that the well is rate sensitive.
- a. It is necessary that the well be flowed at the highest rate to maintain sufficient velocity to lift the reservoir fluid.
 - b. An indication of the diminishing production characteristics was the measurement of total fluid produced.
 - c. The well produces in slug rate sequences and becomes more erratic with the lower flow rates which is an indication of wellbore fluid loading.
 - d. The more erratic the flow rates, the greater the GOR swings to as high as 300,000:1.
 - e. It is surmised that the well will be placed on gas-lift in the near future.
6. Cancellation of the over production of the Brassell Lease (RRC Lease No. 14175) will not harm correlative rights.
- a. The subject well is surrounded by Carthage (Travis Peak) gas wells that are producing at 100% deliverability.
 - b. The Travis Peak formation is a series of stacked, discontinuous, lenticular sand packages that are not necessarily present from well to well.

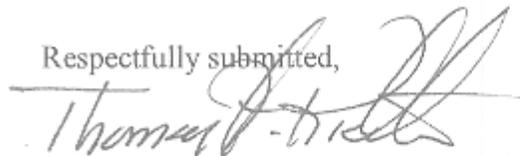
CONCLUSIONS OF LAW

1. Notice of this hearing was provided in accordance with all applicable regulatory statutes and rules.
2. All things have occurred or been accomplished to afford the Commission the jurisdiction to consider and decide this matter.
3. Consideration and approval of this application for a gas-oil ratio which results in a casinghead gas limit of 500 MCFD is a matter properly within the jurisdiction of the Commission to foster conservation and prevent waste.
4. Approval of the proposed application of Anadarko E&P for a net gas-oil ratio which increases the permitted GOR to a gas limit of 500 MCFD will foster conservation and prevent waste.
5. Cancellation of overproduction will not harm correlative rights.

EXAMINER'S RECOMMENDATION

It is recommended that the application of Anadarko E&P Company for a net gas-oil ratio which increases the permitted GOR to a gas limit of 500 MCFD for the Brassell Well No. 308C be approved. It is further recommended that all overproduction for the Brassell Lease (RRC Lease No. 14175) be canceled.

Respectfully submitted,



Thomas H. Richter, P.E.
Technical Examiner
Office of General Counsel