OIL AND GAS DOCKET NO. 08-0226034

APPLICATION OF COASTAL OIL & GAS CORP. FOR AN MER AND INCREASED NET GOR AUTHORITY FOR THE GLENN W. HILGER "A" WELL NO. 2 IN THE BLALOCK LAKE, E. (WOLFCAMP) FIELD, GLASSCOCK COUNTY, TEXAS

HEARD BY: Thomas H. Richter, P.E. **DATE OF HEARING:** October 17, 2000

APPEARANCES: REPRESENTING:
John Soule, lawyer Coastal Oil & Gas Corp.
Terry Payne

PROTESTANTS: None

EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unprotested application of Coastal Oil & Gas Corp. for an MER of 225 BOPD and a net gas-oil ratio (GOR) which results in a casinghead gas limit of 1,800MCF of gas per day for the Glenn Hilger "A" Well No. 2 in the Blalock Lake, E. (Wolfcamp) Field. Coastal also requests that all overproduction be canceled for the subject well.

DISCUSSION OF THE EVIDENCE

The Blalock Lake, E. (Wolfcamp) Field was discovered in 1971 at approximately 7,914 feet subsurface depth. This field is governed by special field rules that provide for minimum well spacing of 660'/1320', oil proration units of 160 acres and optional 80 acre density. The top allowable for a well completed at this depth on 160 acres is 396 BOPD and a casinghead gas limit of 792 MCF per day. For wells completed on the optional 80 acre units, the top allowable is 198 BOPD and a casinghead gas limit of 396 MCFD. This is a multiple operator and multiple well field.

The Wolfcamp producing formation is wide spread in this area as there are numerous Wolfcamp Fields. However, it is apparent the Wolfcamp is either lenticular or discontinuous with areas of sand deposit "build-ups". There are numerous dry hole wells in the area that were drilled deep enough to test the Wolfcamp Formation.

The Coastal Oil & Gas Corp. Glenn W. Hilger "A" Well No. 2 was completed December 19, 1999 through selective perforations from 7,629' to 7,796' subsurface depth. The well is completed on an 80 acre oil proration unit, thus the top allowable for the well is 198 BOPD and 396 MCF of casinghead gas. The well potentialed at 643 BOPD and 448 MCFD, no water and an initial gas-oil ratio of 697:1. The oil gravity is relatively high at 43.8° API. Through the nine month period from

December 1999 to September 2000, the GOR has continued to increase from 600:1 to roughly 5500:1. Oil production has declined from 600 BOPD to approximately 200 BOPD. The casinghead gas production has increased from 400 MCFD to approximately 1,200 MCFD.

The well was tested over a 30-day period. Oil production rates ranged from 47 BOPD to 237 BOPD. Associated casinghead gas production yields ranged from 278 MCFD to 1,100 MCFD. The calculated producing gas-oil ratios ranged from 4,199:1 to 5,915:1.1

CHOKE	OIL	GAS	GOR	FTP	WTR
(64 <u>ths</u>)	(BOPD)	(MCFD)		(PSI)	(BPD)
22	210	1075	5100	520	0
18	142	640	4500	500	0
23	236	1050	4450	505	0
14	77	376	4880	460	0

The test data shows that the GOR's are not relatively rate sensitive i.e. approximately 10%. The casinghead gas rate at 376 MCFD (GOR 4880:1) is not that much lower than the casinghead gas rate at 1075 MCFD (GOR 5100:1). Therefore reservoir energy will not be unduly wasted by allowing the well to produce at the higher rates of up to 225 BOPD and 1,200 MCFD of casinghead gas. ²

It is further requested that all casinghead gas and oil production produced in excess of the penalized allowable be canceled.

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 Blalock Lake, E. (Wolfcamp) Field was discovered in 1971 at approximately 7,914 feet subsurface depth.
 - a. This field is governed by special field rules that provide for minimum well spacing of 660'/1320', oil proration units of 160 acres and optional 80 acre density.

¹ These ranges show the extremes and not the averages for stabilized flow on each flow rate.

² Coastal Oil & Gas had requested a casinghead gas limit of 1,800 MCFD. Test data does not indicate the higher rate is warranted. The gas production rate of the well since June 2000 shows a stabilized daily production rate of approximately 1,100 MCFD.

- b. The top allowable for a well completed at this depth on 160 acres is 396 BOPD and a casinghead gas limit of 792 MCF per day. For wells completed on the optional 80 acre units, the top allowable is 198 BOPD and a casinghead gas limit of 396 MCFD.
- c. This is a multiple operator and multiple well field.
- 4. The Coastal Oil & Gas Corp. Glenn W. Hilger "A" Well No. 2 was completed December 19, 1999 through selective perforations from 7,629' to 7,796' subsurface depth.
 - a. The well is completed on an 80 acre oil proration unit, thus the top allowable for the well is 198 BOPD and 396 MCF of casinghead gas.
- 5. The well was tested over a 30-day period. Oil production rates ranged from 47 BOPD to 237 BOPD. Associated casinghead gas production yields ranged from 278 MCFD to 1,100 MCFD. The calculated producing gas-oil ratios ranged from 4,199:1 to 5,915:1.

CHOKE (64 <u>ths</u>)	OIL (BOPD)	GAS (MCFD)	GOR	FTP (PSI)	WTR (BPD)
22	210	1075	5100	520	0
18	142	640	4500	500	0
23	236	1050	4450	505	0
14	77	376	4880	460	0

- a. The test data shows that the GOR's are not relatively rate sensitive.
- b. Reservoir energy will not be unduly wasted by allowing the well to produce at the higher rates of up to 225 BOPD and 1,200 MCFD of casinghead gas.
- 6. All casinghead gas and oil production produced in excess of the penalized allowable should be canceled.

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 net gas-oil ratio is a matter properly within the jurisdiction of the Commission to foster conservation and prevent waste.

- 4. Approval of the proposed application of Coastal Oil & Gas Corp. for Commission consideration for a net gas-oil ratio and MER for the Glenn W. Hilger "A" Lease Well No. 2 in the Blalock Lake, E. (Wolfcamp) Field will foster conservation and prevent waste.
- 5. Cancellation of the casinghead gas and oil production in excess of the penalized allowable will not harm correlative rights.

EXAMINER'S RECOMMENDATION

It is recommended that the application of Coastal Oil & Gas Corp. for Commission consideration for a net gas-oil ratio and MER for the Glenn W. Hilger "A" Lease Well No. 2 in the Blalock Lake, E. (Wolfcamp) Field be approved. It is further recommended that the casinghead gas and oil production produced in excess of the penalized allowable be canceled.

Respectfully submitted,

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