

**OIL AND GAS DOCKET NO. 04-0229992**

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**THE APPLICATION OF CODY ENERGY LLC TO CONSIDER STANDING AND IF STANDING IS GRANTED TO CONSOLIDATE VARIOUS RAYMONDVILLE AND RAYMONDVILLE, SOUTH FIELDS INTO A NEW FIELD TO BE KNOWN AS THE RAYMONDVILLE (CONSOLIDATED) FIELD AND TO ADOPT OPERATING RULES AND REGULATIONS FOR THE RAYMONDVILLE (CONSOLIDATED) FIELD, WILLACY AND KENEDY COUNTIES, TEXAS**

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**Heard by:** Margaret Allen, Technical Hearings Examiner

**Procedural history**

Application received: November 12, 2001

Hearing held: December 18, 2001

**Appearances**

Dale Miller

Representing  
Cody Energy

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Cody Energy is seeking standing to have various Raymondville and Raymondville, South fields consolidated into a new field to be known as the Raymondville (Consolidated) Field. The fields are listed in Finding of Fact 2. The proposed operating rules for the Raymondville (Consolidated) Field are summarized as follows:

1. Designated interval between 3718 feet and 12,078 feet as shown on the log of the Texas Oil & Gas Corporation Swanberg Lease Well No. 1; and
2. minimum lease-line spacing for oil and gas wells of 467 feet, with no minimum between-well spacing.

The applicant requested that there be no allowable and that wells be permitted to produce at capacity. The examiner declined to grant salvage classification and proposed two-factor allocation formulae for the oil field and the gas field. The applicant had no objection to allocation based 5% per well and 95% on a well's capability or deliverability. It did ask for the allocation formula to be suspended.

**DISCUSSION OF THE EVIDENCE**

There are 78 fields in the proposed consolidation. Cody Energy has standing to bring this application because it has all but one of the wells in the proposed consolidated interval. The only well operated by anyone other than the applicant is the EOG Morrow No. 1 in the Raymondville (9100) Field, with a deliverability of 947 MCF/D. Cody wants to recompleat wells in the lower Miocene, Anahuac and Frio formations in the Raymondville area to recover any reserves remaining in the various

sandstones. Most of these sandstones are no longer economic to produce by themselves and their remaining reserves will be recovered only if wells can be completed in multiple sands. Many wells have already been downhole commingled in more than one of the current fields.

The first oil field in this area was discovered in 1945, but most of the development was during the 1960's and 1970's. The last oil field was designated in 1996. Cody has nine wells in the 30 oil fields within the proposed consolidation. Only five of these wells are still active. The greatest reported capability of any oil well in the consolidated interval was 200 barrels per day but the oil wells each now produce less than 10 BOPD.

The first gas field was discovered in 1959 and the last gas field in the proposed consolidation was designated in June of 2001. There are 67 gas fields in the proposed consolidation, and Cody has wells in 22 of them. Only 18 of these gas wells are still active. The rest of the fields proposed for consolidation have no wells now, but their previous production was from the same correlative interval as the proposed designated interval of the consolidated field.

Six of the oil fields and five of the gas fields to be consolidated have had special field rules adopted, all with 40-acre proration units. The applicant believes that a rule specifying proration unit density is unnecessary. Almost all of the wells were drilled on 40 acre density but it may be difficult to draw 40-acre proration units around existing and recompleted wells without double assignment of acreage. Because of the large designated interval in the consolidated field, there may be wells originally carried in separate fields that are closer together than 1200 feet. To eliminate problems with closely spaced wells now being carried in the same field, Cody requested that between-well spacing be eliminated.

The top of the proposed designated interval is shown at 3718 feet and the base at 12,078 feet on the log of the Texas Oil & Gas Corporation Swanberg Lease Well No. 1. Because of the multiple reservoirs included within the proposed designated interval, two-factor allocation formulae for both oil wells and gas wells are necessary. Allocation formulae based 5% per well and 95% on deliverability or potential are close to the Statewide Rules, and will satisfy statutory requirements. No wells have reported production from below 9100 feet but the Raymondville, S. (Zeeker) Field was approved at a depth of 12,057 feet. Although no production was ever reported from this field, it must have appeared hydrocarbon-bearing to have been designated.

The applicant would prefer that there be no proration in the consolidated field and that all wells in it be treated as salvage. The examiner believes that an allocation formula should be adopted for both gas and oil wells as two-factor formulae are necessary for statutory reasons. Cody has requested that the gas allocation formula for the consolidated field be suspended. The other operator in the consolidated field has provided a waiver for this suspension.

The average deliverability reported for the 17 Cody wells on the proration schedules is 642 MCF/D, with the highest deliverability being 1251 MCF/D. Cody and EOG have jointly requested that the yardstick oil allowable for wells completed at the depth of the bottom of the proposed designated interval--287 BOPD--be adopted for oil wells.

The applicant believes that approval of this application will result in the recovery of reserves that would otherwise be unrecovered. If sandstones can be downhole commingled, the economic limit per completion will be reduced and a wellbore can be produced longer. Cody Energy estimated that 26 wells can be downhole commingled in this fashion, increasing the recoverable reserves by at least 10%.

**FINDINGS OF FACT**

1. Notice of this hearing was given to all operators of wells in the fields to be consolidated on November 15, 2001.
2. The following fields can be produced economically, and without causing waste, if consolidated into a single field:

<b><u>FIELD NAME</u></b>	<b><u>FIELD NO.</u></b>	<b><u>COUNTY</u></b>	<b><u>OIL/GAS</u></b>
Raymondville	74975001	Willacy	Oil & Gas
Raymondville (A-1-A)	74975014	Kenedy	Gas
Raymondville (A-2)	74975028	Kenedy	Oil & Gas
Raymondville (A-2, North)	74975040	Willacy	Gas
Raymondville (A-4)	74975028	Willacy	Oil
Raymondville (A-4A)	74975084	Willacy	Oil & Gas
Raymondville (A-5)	74975112	Willacy	Oil
Raymondville (A-5A)	74975120	Willacy	Gas
Raymondville (A-6)	74975130	Kenedy	Oil
Raymondville (A-8)	74975140	Willacy	Oil
Raymondville (A-9)	74975155	Willacy	Oil
Raymondville (A-10, North)	74975167	Kenedy	Oil
Raymondville (A-10)	74975168	Willacy	Oil & Gas
Raymondville (A-10, Lower)	74975169	Willacy	Oil & Gas
Raymondville (A-12)	74975170	Willacy	Gas

<b><u>FIELD NAME</u></b>	<b><u>FIELD NO.</u></b>	<b><u>COUNTY</u></b>	<b><u>OIL/GAS</u></b>
Raymondville (A-13)	74975180	Willacy	Oil & Gas
Raymondville (A-14-A)	74975185	Willacy	Oil & Gas
Raymondville (A-15)	74975190	Willacy	Gas
Raymondville (A-15, Lower)	74975193	Willacy	Oil & Gas
Raymondville (A-16)	74975196	Willacy	Oil & Gas
Raymondville (F-1)	74975224	Willacy	Gas
Raymondville (F-2)	74975252	Willacy	Oil & Gas
Raymondville (F-3)	74975280	Willacy	Gas
Raymondville (F-4)	74975300	Willacy	Gas
Raymondville (F-4-A)	74975308	Willacy	Gas
Raymondville (F-4-C)	74975322	Willacy	Gas
Raymondville (F-4-D)	74975328	Willacy	Gas
Raymondville (F-5)	74975336	Willacy	Oil & Gas
Raymondville (F-5, Upper)	74975350	Kenedy	Oil
Raymondville (F-6)	74975364	Willacy	Oil & Gas
Raymondville (F-6, Lower)	74975375	Willacy	Gas
Raymondville (F-7)	74975392	Willacy	Oil & Gas
Raymondville (F-7A)	74975420	Willacy	Gas
Raymondville (F-8)	74975448	Willacy	Oil & Gas
Raymondville (F-9)	74975476	Willacy	Oil & Gas
Raymondville (F-10)	74975504	Willacy	Gas

Raymondville (F-11)	74975532	Willacy	Oil & Gas
Raymondville (F-12)	74975560	Willacy	Gas
Raymondville (F-12-A)	74975588	Willacy	Gas
Raymondville (F-13)	74975600	Willacy	Gas
Raymondville (F-13, Upper)	74975601	Kenedy	Gas
Raymondville (F-14)	74975616	Willacy	Gas
Raymondville (F-14, Upper)	74975618	Kenedy	Gas
Raymondville (F-15)	74975644	Willacy	Gas
Raymondville (F-16)	74975672	Willacy	Gas
Raymondville (F-17)	74975700	Willacy	Gas
Raymondville (F-18)	74975728	Willacy	Gas
Raymondville (F-19)	74975740	Kenedy	Gas
Raymondville (F-20)	74975748	Willacy	Gas
Raymondville (F-21)	74975756	Willacy	Gas
Raymondville (F-22)	74975760	Willacy	Gas
Raymondville (F-23)	74975772	Willacy	Gas
Raymondville (F-24)	74975784	Willacy	Gas
Raymondville (F-25)	74975785	Willacy	Gas
Raymondville (F-27)	74975787	Willacy	Gas
Raymondville (F-28)	74975788	Willacy	Oil & Gas
Raymondville (F-30)	74975790	Willacy	Gas
Raymondville (F-33)	74975793	Willacy	Gas
Raymondville (F-34-L)	74975816	Willacy	Gas
<b><u>FIELD NAME</u></b>	<b><u>FIELD NO.</u></b>	<b><u>COUNTY</u></b>	<b><u>OIL/GAS</u></b>
Raymondville (F-34-U)	74975817	Willacy	Gas
Raymondville (Frio 8000)	74975840	Willacy	Gas
Raymondville (LM-9)	74975848	Kenedy	Gas
Raymondville (LM-14)	74975853	Kenedy	Gas
Raymondville (LM-15)	74975854	Willacy	Gas
Raymondville (LM-16)	74975857	Willacy	Gas
Raymondville (LM-17)	74975860	Willacy	Oil
Raymondville (LM-19)	74975864	Kenedy	Oil
Raymondville (Miocene, Lo.)	74975868	Willacy	Oil & Gas
Raymondville (6750)	74975896	Willacy	Oil & Gas
Raymondville (7500)	74975924	Willacy	Gas
Raymondville (9100)	74975950	Willacy	Gas
Raymondville, South (F-5)	74979100	Willacy	Gas
Raymondville, South (F-7)	74979200	Willacy	Oil
Raymondville, South (F-9)	74979400	Willacy	Gas
Raymondville, South (LM-19-A)	74979500	Willacy	Oil
Raymondville, South (Zeeker)	74979550	Willacy	Gas
Raymondville, South (7070)	74979600	Willacy	Gas
Raymondville, South (7290)	74979800	Willacy	Gas
All Wildcat intervals between the above listed fields.			

3. The first oil field among the listed fields was discovered in 1945, and the first gas field was discovered in 1959.

4. The proposed interval, from 3718 feet to 12,078 feet in the Texas Oil & Gas Swanberg No. 1, includes the lower Miocene, Frio and Anahuac sandstones
5. The sandstones in the 78 fields to be consolidated are largely depleted.
6. Cody has wells in 22 of the 67 gas fields in the proposed consolidation, though only 17 of them are active; the average deliverability of the wells is 642 MCF/D.
7. Cody has nine wells in the 30 oil fields within the proposed consolidation, but only five are active, averaging less than 10 BOPD. The highest capability of any oil well in the consolidated interval is 200 barrels per day.
8. Most of the fields were developed on 40-acre density with minimum lease line spacing of 467 feet and between-well spacing of 1200 or 933 feet.
9. Eliminating the between-well spacing will facilitate downhole commingling as many of the wells now carried in different fields are less than 1200 feet apart.
10. Adopting a 40-acre density rule could hamper the recompletions, as some areas may have wells clustered such that 40-acre proration units cannot be drawn around them without double assignment of acreage.
11. Downhole commingling marginal production from various sandstones in a single wellbore will lower the economic limit of each completion and allow the recovery of at least 10% more reserves.
12. As the designated interval includes multiple, stratigraphic reservoirs within the Upper Frio, a two factor allocation is required for statutory reasons.
13. Gas allocation based 5% per well and 95% on deliverability is similar to the current allocation formulae in most of the gas fields and will satisfy statutory requirements.
14. Oil well allocation based 5% per well and 95% on potential, is similar to the current allocation formulae in most of the oil fields and will satisfy statutory requirements. The yardstick allowable for oil wells between 12,000 and 12,500 feet is 287 BOPD.
15. The gas allocation formula can be suspended as the only two operators have certified that they have a market for 100% of the gas produced from the consolidated field.

#### **CONCLUSIONS OF LAW**

1. Proper notice was given as required by statute.
2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
3. Consolidation of the requested fields will prevent waste and protect correlative rights, while encouraging conservation.
4. Cody Energy has standing to request consolidation of the various fields into the proposed Raymondville (Consolidated) Field as it operates wells producing from within the stratigraphic

interval.

5. The requested field rules for the resultant field, the Raymondville (Consolidated) Field, will prevent waste, protect correlative rights within the field, and satisfy statutory requirements.

**EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the requested fields be consolidated into a new field to be known as the Raymondville (Consolidated) Field. The field rules proposed for the resultant Raymondville (Consolidated) Field should be adopted, with allocation formulae based 95% on deliverability or capability and 5% per well.

Respectfully submitted,

Margaret Allen  
Technical Hearings Examiner