

Approved: March 2, 2006  
Date

MINUTES OF THE HOUSE UTILITIES COMMITTEE

The meeting was called to order by Chairman Carl Holmes at 9:00 A.M. on January 12, 2006 in Room 231-N of the Capitol.

All members were present except:

Annie Kuether- excused  
Judy Morrison- excused

Committee staff present:

Mary Galligan, Kansas Legislative Research  
Dennis Hodgins, Kansas Legislative Research  
Mary Torrence, Revisor's Office  
Heather Klaasen, Research Intern  
Rena Hansen, Committee Secretary

Conferees appearing before the committee:

Leo Haynes, KCC, Head of Natural Resources Pipeline Safety

Others attending:

See attached list.

Leo Haynes, KCC, Head of Natural Resources Pipeline Safety, (Attachment 1), presented a progress report on Southwest Kansas H<sub>2</sub>S and Low Pressure Task Force. Additionally graphs were attached that showed the Wellhead Working Pressure and Estimated H<sub>2</sub>S PPM. He gave a synopsis to tell how the information was gathered on the data they presented.

Questions were asked by Representatives: Forrest Hawk, Lynne Oharah, Melody Miller, Carl Holmes, Oletha Faust-Goudeau, Mitch Holmes, Vaughn Flora, and Tom Sloan.

The next meeting is scheduled for January 18, 2006.

Meeting Adjourned.

# HOUSE UTILITIES COMMITTEE GUEST LIST

DATE: January ~~10~~<sup>12</sup>, 2006

| NAME             | REPRESENTING                  |
|------------------|-------------------------------|
| ROGER RANDALL    | KANSAS CITY POWER & LIGHT CO. |
| TOM DAY          | KCC                           |
| LEO HAYNOS       | KCC                           |
| Judy Shaw        | SWKIA                         |
| BOB ADERSON      | AGVICA                        |
| KIMBERLY CERCOZ  | AGVICA                        |
| Whitney Damron   | KS Gas Service                |
| Steve Johnson    | ONEOK - Ks Gas Service        |
| Roger Thorpe     | ONEOK                         |
| Carole Jordan    | KDA                           |
| Sue Schulte      | KCGA                          |
| Mark Schwesber   | Westar                        |
| Dana Bradbury    | KCL                           |
| Matt Tome        | KCL                           |
| Ben Cleaves      | DOB                           |
| Jennifer Lyon    | Ruegar, Smith, & Associates   |
| LOW STANTON      | NORTHERN NATURAL GAS          |
| Chris P. Bearner |                               |
| Ron Seber        | Ken Haas Firm                 |
|                  |                               |

**Before the House Utilities Committee  
Comments by the  
Staff of the Kansas Corporation Commission  
January 12, 2006**

**Progress Report on Southwest Kansas  
H<sub>2</sub>S and Low Pressure Task Force**

Thank you, Mr. Chair, and members of the Committee. I am Leo Haynos, chief of pipeline safety for the Corporation Commission. As many of you may recall, gas supply to 110 residential consumers served from gas gathering pipelines in Southwest Kansas was terminated last winter. The supply termination was based on concerns over the presence of Hydrogen Sulfide, (H<sub>2</sub>S), in the gas stream. H<sub>2</sub>S is a contaminant of natural gas that is naturally occurring in the reservoir. It is toxic to humans at very low concentrations. One of the gas gathering system operators became concerned last winter that the concentrations of H<sub>2</sub>S in their pipelines posed an immediate danger to consumers using the contaminated gas to heat their homes. The aftermath of the supply termination eventually led to the passage of Section 15 of House Bill 2263. The other outcome from the service termination was the establishment of the Southwest Kansas H<sub>2</sub>S and Low Pressure task force. In a meeting with several members of the legislature, the Corporation Commission agreed to facilitate a working group in an effort to define the extent of Hugoton field operational issues that impact natural gas supply in rural areas of Southwest Kansas. We held our first meeting on March 1 of 2005 which was attended by 66 stakeholders representing legislators, commissioners, gas gatherers, producers, gas transmission companies, gas distribution companies, agriculture and residential consumers, and various state agencies. In my opinion, the size of the group that turned out to discuss this issue is an indication of the

importance of the topic. The majority of the attendees at that first meeting are still actively involved in working with the task force. The task force defined three goals:

1. Acquire input from interested parties on the legal, contractual, and public policy aspects that direct supply of natural gas to rural consumers in the Hugoton Field;
2. Develop a clear technical understanding of the impact that H<sub>2</sub>S and low pressure have on consumers of unprocessed natural gas within the Hugoton field area; and
3. Investigate alternate means of providing natural gas service to these consumers.

Based largely upon input from the task force members, Staff developed a series of questions regarding various interpretations of the gas gathering statutes found in K.S.A. 55-1,101 et. seq. The questions were condensed into a general investigation initiated by the Commission to determine policy regarding customers served from gas gathering lines. At this point of the proceeding, we have just finished taking comments from the interested parties. They can be viewed from the Commission website at [www.kcc.state.ks.us](http://www.kcc.state.ks.us) under the docket number 06-GIMG-400-GIG.

Work on the second goal of the task force, i.e. to develop a technical understanding of the impact of H<sub>2</sub>S in the Hugoton field, continues at this time. I expect to finalize a report of the task force's findings within the next month. Unfortunately, the conclusions reached by the task force do not provide any easy answers to what is a very complex problem.

The first step of the task force was to collect data on the extent of H<sub>2</sub>S contamination, the current pressure of the production field, and the number of customers that receive gas supply from gathering or gas wells. Attached to my testimony are maps that provide an indication of the extent of H<sub>2</sub>S concentration as well as the operating pressure of the gathering systems in southwest Kansas. These maps are based on data acquired from 11,500 gas wells and an additional 15,000 sampling points on the gathering systems. Based on the data received, there are 900 customers spread across 9 counties in the southwest corner of the state that depend on this infrastructure for gas supply. For the most part, these "customers" are irrigation wells. As with any study of this size, our preliminary results have perhaps raised more questions than they have answered. Although the map attached to my testimony shows H<sub>2</sub>S levels at or below 30 parts per million, (ppm), it is unclear if these measurements were taken before or after treating the gas to remove H<sub>2</sub>S from the gas stream. We are also uncertain as to the exact number of irrigation wells that rely on natural gas for energy. The task force report will recommend we conduct another round of data collection in order to get a more accurate picture of these two parameters.

One of the goals of the task force is to facilitate the development of infrastructure to supply processed natural gas to consumers currently served with unprocessed gas from gas gathering lines. Ultimately, the extension of distribution systems is an economic decision of the gas provider. Any extension is dependent on customer density. However, the task force report has several examples where this has been successfully completed. We also have compiled an electronic map of gas piping throughout southwest Kansas that can be incorporated with other

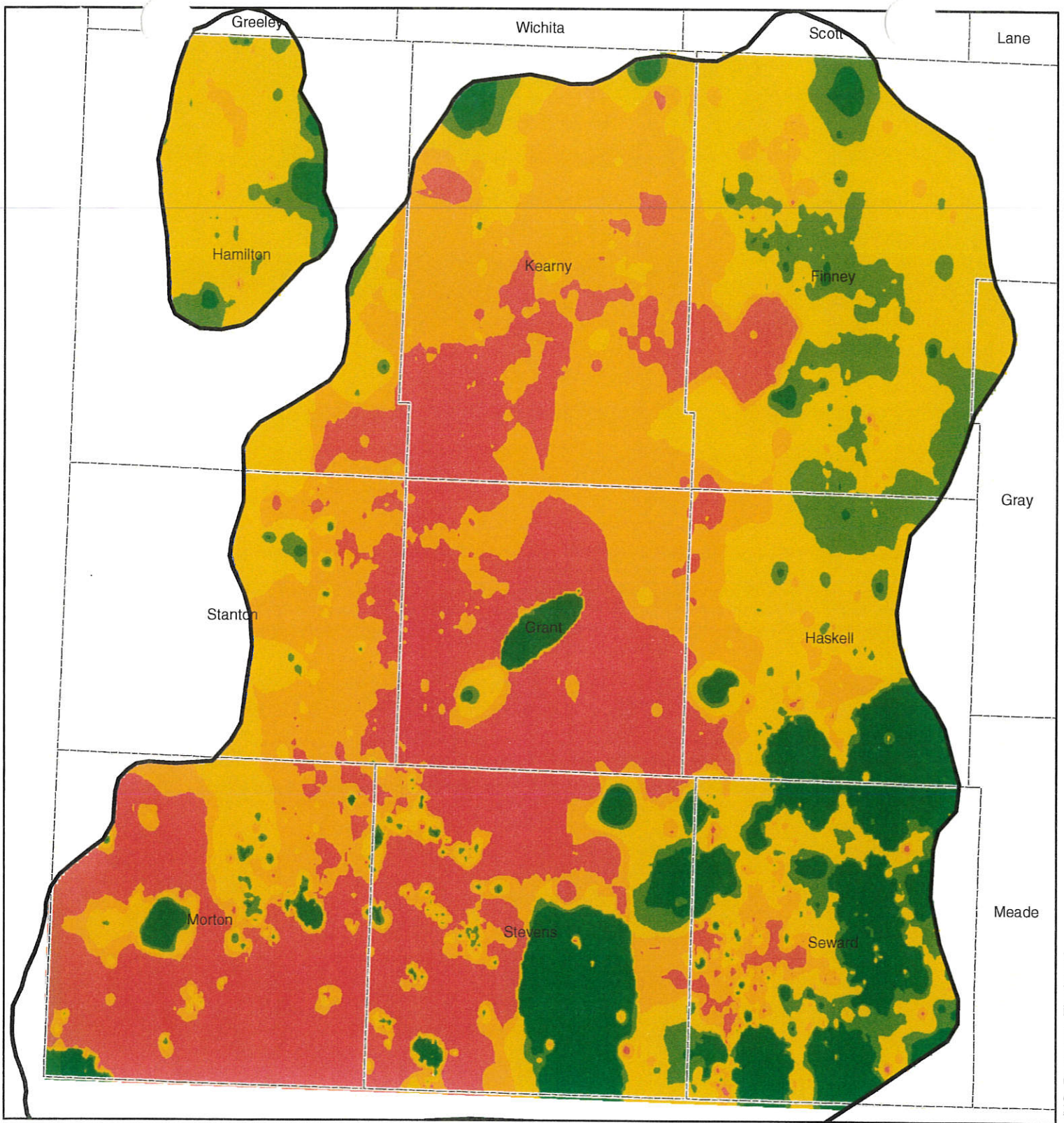
GIS databases to determine if gas service will be a viable energy option for consumers in the area.

In addition to data acquisition, the task force also researched the levels of H<sub>2</sub>S contamination that can be considered as acceptable for residential gas consumption. Other than the policy issues which are being discussed in the docket I mentioned earlier, defining the threshold of allowable H<sub>2</sub>S concentration was the most contentious undertaking of the task force. Because of the variety of factors that interact with H<sub>2</sub>S in an unprocessed gas system, there is no single value for allowable H<sub>2</sub>S concentration. Depending on conditions and the type of consumer, H<sub>2</sub>S concentrations could range from 4 ppm to 30 ppm and present minimal risk to the user.

Our efforts to date confirm that H<sub>2</sub>S is present and all indications are that the levels will probably get worse. Given the toxicity of H<sub>2</sub>S, its presence does present a risk that must be managed in order to provide adequate safety to consumers and to the general public. To this end, the task force recommended a public information campaign to educate those most likely to be placed at risk such as first responders, gas industry personnel, and agricultural workers.

Kansas has no laws that regulate the release of H<sub>2</sub>S from oil or gas production operations. The task force researched activities of nearby states and industry best practices in dealing with H<sub>2</sub>S. It appears that the operators of the majority of wells in Southwest Kansas currently follow the industry H<sub>2</sub>S management practices published in the American Petroleum Institute's Recommended Practice RP55. As noted earlier, the low H<sub>2</sub>S contamination levels acquired in

the first round of data collection do not indicate a significant benefit from regulatory action to protect public or workplace safety. Rather, the task force is recommending additional sampling for H<sub>2</sub>S upstream of any H<sub>2</sub>S removal treatment process and the results reported to the KCC. If the reported data indicates H<sub>2</sub>S concentrations are consistently found at levels of 100 ppm or greater, the task force recommends regulations protecting public safety from H<sub>2</sub>S be considered for promulgation at that time.



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**Working Pressure**

- 0.77 - 15
- 16 - 30
- 31 - 60
- 61 - 80
- 81 - 2,000

# Wellhead Working Pressure

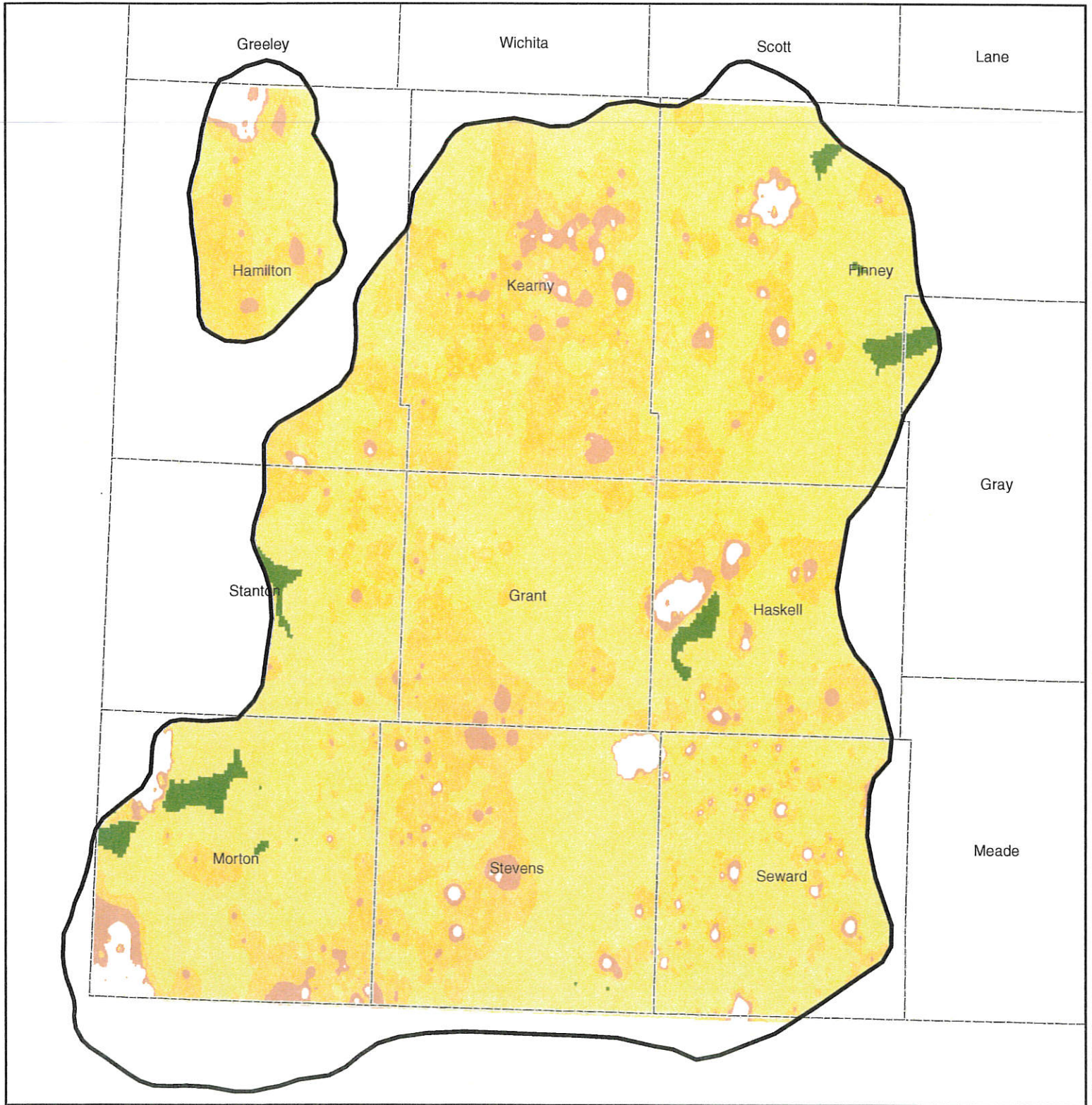
Pressure readings from  
1/04 to 7/05



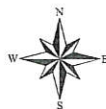
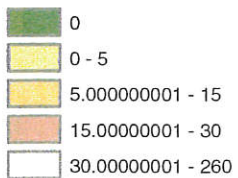
**KANSAS CORPORATION COMMISSION**  
9 September 2005



# Study Area with Estimated H2S PPM



## H2S PPM



**KANSAS  
CORPORATION  
COMMISSION**  
9 September 2005