
From: David Craig <dtc.bayern@gmail.com>

Date: December 11, 2017 at 5:37:10 PM CST

To: "Dr. James F. Holden-Rhodes (Sandoval County NM Commissioner District 1)" <jholden-rhodes@sandovalcountynm.gov>, "Jay C. Block (Sandoval County NM Commissioner District 2)" <jblock@sandovalcountynm.gov>, "Don G. Chapman (Sandoval County NM Commissioner District 3)" <dchapman@sandovalcountynm.gov>, "David J. Heil (Sandoval County NM Commissioner District 4)" <dheil@sandovalcountynm.gov>, "F. Kenneth Eichwald (Sandoval County NM Commissioner District 5)" <keichwald@sandovalcountynm.gov>

Cc: "Sidney Hill (Sandoval County NM Public Information Officer)" <shill@sandovalcountynm.gov>

Subject: PUBLIC COMMENT: Sandoval County Oil & Gas Ordinance -- Request to table ordinance at commission meeting on December 14, 2017

(This email is being sent as a public comment for the Sandoval County commission's oil and gas ordinance. This email is sent to the commissioners and county's PIO for inclusion in the county's public comment record for this ordinance. I request the county web site include a web site page for all these public comments as has been done for prior commission meeting comments so others may be able to easily view all the public comments. Please also include any attachments in this email as part of the public record too.)

Hello Commissioners,

As a resident of the Town of Cochiti Lake since 2004 I please request for your consideration the following:

TABLE THE PROPOSED OIL AND GAS ORDINANCE AT YOUR SCHEDULED DECEMBER 14, 2017 MEETING UNTIL THE NEW MEXICO TECH ASSESSMENT APPROVED ON 17 JULY 2017 IS COMPLETED IN MAY 2018.

I am making this request since I am in favor of responsible oil gas drilling in Sandoval County and do not think that the current proposed ordinance provides the necessary safeguards for the county's water systems. Tabling the proposed ordinance should give the county more time to adequately review the potential water system problems with this drilling and amend the ordinance to provide the necessary water system safeguards.

The NM Tech \$62,009.07 assessment agreement whose title appears below is also attached here for your review in case you have not seen this agreement (request the PIO to include this PDF attachment as part of the county's public comments for this ordinance):

Oil & Gas Resource Assessment of Sandoval County and Relationship of Potential Resources to Ground Water

Thank you for your time and consideration of my ordinance tabling request.

- David Craig
- 6450 Vooscane
- Town of Cochiti Lake
, New Mexico 87083
- (505) 465-0087
- dtc.bayern@gmail.com

Oil & Gas Resource Assessment of Sandoval County and Relationship of Potential Resources to Ground Water

SUMMARY

This project, submitted to the Sandoval County Planning and Zoning Division for funding, will develop an assessment of the potential for oil and natural gas resources throughout Sandoval County. The entire county will be assessed including areas historically productive of oil and gas in the northwestern part of the county and nonproductive areas in the remainder of the county. Key geologic parameters relevant to oil and natural gas potential will be mapped across the county. Mapping of potentially productive strata will enable assessment of depth to potentially productive reservoirs across the county. Pertinent aspects of aquifers, including the distribution of aquifers prevalent in the county and depth to the base of the aquifer interval, will also be mapped in a reconnaissance manner. This, in conjunction with projected depth to potentially productive oil and gas reservoirs, will allow for assessment of the effect of oil and natural gas production on aquifers. Also evaluated in this regard will be the effect of modern drilling and well completion technologies on oil and natural gas production and potential effects of modern drilling and production technologies on aquifers. The project will last approximately 9½ months. The contract shall cost Sandoval County \$62,009.07.

SCOPE OF WORK

Professional Services. The New Mexico Bureau of Geology and Mineral Resources, a Division of New Mexico Institute of Mining and Technology, will provide the Sandoval County Planning and Zoning Division with an assessment of the potential for oil and gas resources throughout Sandoval County, New Mexico.

1. Areas to be analyzed and assessed. Areas the assessment will cover all of Sandoval County including the historically productive northwestern parts of the county as well as nonproductive parts of the county. Nonproductive parts of the county have recently drawn interest for exploratory oil and natural gas drilling. Exploratory drilling may result in the discovery of viable, producible resources and therefore lead to future oil and natural gas production.
2. Geologic information to be included in the project. Key geologic parameters will be mapped across the county. Parameters to be evaluated include identification of stratigraphic units (“formations”) that have oil and gas potential, lithology and type of reservoirs, hydrocarbon shows encountered by previous exploratory drilling, petroleum source rock parameters and distribution, areas of current and historical production, and areas that have the potential for future oil and natural gas production, which will be mapped by stratigraphic unit. Mapping of potentially productive strata will allow

assessment of depth to potentially productive reservoirs across the county. Pertinent aspects of aquifers will also be mapped in a reconnaissance manner, including the distribution of aquifers prevalent in the county and the depth to the base of the aquifer interval. This, in conjunction with projected depth to potentially productive oil and gas reservoirs, will allow for assessment of the effect of oil and natural gas production on aquifers. Also evaluated in this regard will be the effect of modern drilling technologies on both oil and natural gas production and on aquifers.

3. **Products.** The final project report will include a thorough written report as well as maps and other figures that illustrate the variation in geologic parameters relevant to oil and natural gas potential and to project-relevant aspects of aquifers. The maps will have coverage across Sandoval County. An appendix will contain data used in the analysis so that independent verification of maps and analyses will be possible. Key maps and relevant data will be presented as a basic GIS project. To facilitate transparency, the final project report will be published online as an open-file report of the New Mexico Bureau of Geology and Mineral Resources, although issuance of the open-file report may post-date the project termination date for logistical reasons.
4. **Time frame.** The proposed start date of the project is July 1, 2017. The proposed termination date is May 11, 2018 or 9½ months after the start date if the start date occurs after July 1, 2017.

Delivery of work product. The contractor shall provide the deliverables listed below to the Sandoval County Planning and Zoning Division by the termination date.

- a. Project report discussing the oil and natural gas potential of Sandoval County as well as other geologic information described above and the assessment of effects of oil and natural gas production on aquifers.
- b. Maps and other figures that illustrate the variation in geologic parameters relevant to oil and natural gas potential.
- c. Maps and other figures that illustrate relevant aspects of aquifer geology in the county.
- d. An appendix of data used in the report, in one or more databases.
- e. A GIS project that has themes of data relevant to oil and gas resource assessment as well as project-relevant aquifer assessment.

COMPENSATION

The Sandoval County Planning and Zoning Commission shall pay the contractor \$62,009.07 for the services and products described above. A budget for the project costs is described below.

Budget

Direct Costs

Salaries and benefits

| | |
|--------------------------------|--------------|
| Broadhead, Petroleum geologist | \$ 17,537.17 |
| (740.75 hours, 40%) | |

| | |
|--|----------|
| Mansell, GIS Specialist (80 hours, 4%) | 2,088.92 |
|--|----------|

| | |
|---|-----------------|
| <u>Aquifer hydrogeologist (160 hours, 9%)</u> | <u>4,615.38</u> |
|---|-----------------|

| | |
|--------------------------|---------------------|
| <i>Subtotal salaries</i> | <i>\$ 24,241.47</i> |
|--------------------------|---------------------|

| | |
|-------------------------|--------------|
| Fringe benefits @ 59.4% | \$ 14,399.43 |
|-------------------------|--------------|

Travel

Travel to Roswell to obtain geologic/geophysical
 Data from Jim Manatt of Thrust Energy, Inc.

| | |
|--------------------------------|-----------|
| Per diem, 1 day @ \$135.00/day | \$ 135.00 |
|--------------------------------|-----------|

| | |
|--------------------------------|---------------|
| Mileage, 330 miles @ \$0.54/mi | <u>178.20</u> |
|--------------------------------|---------------|

| | |
|------------------------|------------------|
| <i>Subtotal travel</i> | <i>\$ 313.20</i> |
|------------------------|------------------|

Other direct costs

| | |
|--|-------------|
| Supplies, well log and map duplication, etc. | \$ 1,000.00 |
|--|-------------|

| | |
|----------------------------------|----------------------------|
| <i>Total Direct Costs</i> | <i>\$ 39,954.41</i> |
|----------------------------------|----------------------------|

Indirect Costs:

| | |
|------------------------|---------------------|
| Indirect costs @ 55.2% | <u>\$ 22,054.66</u> |
|------------------------|---------------------|

| | |
|--------------------|---------------------|
| TOTAL COSTS | \$ 62,009.07 |
|--------------------|---------------------|

Approved by:



Michael Springfield

Sandoval County Planning & Zoning Division Director

7/17/17

Date



Cleve McDaniel
Vice President for Administration and Finance
New Mexico Institute of Mining and Technology

7/12/17

Date