

STATE OF ALASKA
ALASKA OIL AND GAS CONSERVATION COMMISSION
333 West Seventh Avenue, Suite 100
Anchorage, Alaska 99501

Re: THE APPLICATION OF Fowler Oil & Gas,) Conservation Order No. 595
LLC for an order granting approvals, waivers,)
or variances relating to the following)
requirements in connection with the drilling) Kircher No. 1
and evaluation of the Kircher No. 1) Exploratory Gas Well
exploratory gas well: primary well control)
requirements of 20 AAC 25.033; diverter line) February 25, 2008
size requirements of 20 AAC 25.035(c);)
blowout prevention equipment requirements of)
20 AAC 25.035(e); wellbore survey)
requirements of 20 AAC 25.050(a)(2); gas)
well spacing requirements of 20 AAC)
25.055(a)(2); well site survey requirements of)
20 AAC 25.061(a); gas detection requirements)
of 20 AAC 25.065 and 20 AAC 25.066(a)(3);)
and collection of drill cuttings requirements of)
20 AAC 25.071(b)(2).)

IT APPEARING THAT:

1. Fowler Oil & Gas, LLC (Fowler) by Permit to Drill application dated and received on October 9, 2007, and by letter dated November 21, 2007, and received on November 23, 2007, requests an order from the Alaska Oil and Gas Conservation Commission (Commission) granting approvals, waivers, or variances relating to the following requirements in connection with the drilling and evaluation of the Kircher No. 1 exploratory gas well: the primary well control requirements of 20 AAC 25.033; diverter line size requirements of 20 AAC 25.035(c); blowout prevention equipment requirements of 20 AAC 25.035(e); wellbore survey requirements of 20 AAC 25.050(a)(2); gas well spacing requirements of 20 AAC 25.055(a)(2); well site survey requirements of 20 AAC 25.061(a); gas detection requirements of 20 AAC 25.065 and 20 AAC 25.066(a)(3); and collection of drill cuttings requirements of 20 AAC 25.071(b)(2).
2. The Commission published notice of opportunity for public hearing in the ANCHORAGE DAILY NEWS on December 7, 2007, pursuant to 20 AAC 25.540.
3. Several individuals and the organization Friends of Mat-Su submitted comments and requested that the public hearing be held.
4. A public hearing was held in the Commission's offices at 333 West 7th Ave., Suite 100, Anchorage, Alaska, at 9 a.m. on January 15, 2008.
5. The Commission left the record open until the close of business on January 25, 2008, to allow for additional comments.

FINDINGS:

1. Kircher No. 1 is planned to be a vertical, coal bed methane exploratory gas well located off Trunk Road in the Matanuska-Susitna Borough. The well is planned to be drilled from a surface location 1,299 feet from the west line and 965 feet from the south line of Section 26, Township 18 North, Range 1 East, Seward Meridian.
2. The well is planned to be located on an irregularly shaped, approximately 794-acre parcel referred to as the Kircher lease block. The surface and bottom hole locations are planned to be 1,344 feet from the east line of the parcel.
3. The landowners, as that term is defined in AS 31.05.170(7), within 3,000 feet of the well are Lohmann-Olson LLLP, Mr. Dale R. Mizer, Mr. Harry Owens, and Mr. Leonard B. Reid. All were provided notice of Fowler's application for a spacing exception by certified letters, dated November 21, 2007. None of the landowners commented on the application.
4. Fowler is the owner, as that term is defined in AS 31.05.170(10), and operator, as that term is defined in 20 AAC 25.990(46), of the Kircher lease block. There are no other owners or operators within 3,000 feet of the planned well location.
5. 20 AAC 25.033 requires the use of a drilling fluid with sufficient density to overbalance the pressure of the penetrated uncased formations, except 20 AAC 25.033(i) allows the Commission to approve underbalanced drilling operations when such operations can be performed without loss of well control. Fowler seeks approval under 20 AAC 25.033(i) to drill the well with compressed air and has provided a description of the procedures and equipment it plans to use to ensure proper containment of formation and return fluids. Should compressed air prove insufficient to achieve primary well control, Fowler plans to have on site the equipment and material necessary to convert to a mud-based drilling system.
6. To drill the 12¼-inch diameter surface hole section of the planned well with a 10-inch diverter line, Fowler seeks a waiver of the diverter line size requirements of 20 AAC 25.035(c), requiring diverter lines to be at least 16 inches in diameter and at least as large as the diameter of the hole to be drilled.
7. To drill the well with only an annular preventer, Fowler seeks a waiver from the blowout prevention equipment (BOPE) requirements of 20 AAC 25.035(e), requiring a BOPE stack comprised of an annular preventer and two sets of rams (one set of pipe rams sized to the drill pipe and a set of blind rams).
8. To drill the well without surveying every 500 feet during drilling operations, Fowler seeks a waiver of the wellbore survey requirements of 20 AAC 25.050(a)(2), requiring a non-deviated well to be surveyed every 500 feet. Fowler proposes to conduct a continuous directional survey upon completion of the drilling operations. Fowler plans to perform the surveys required by 20 AAC 25.050(a)(2) if it converts to drilling with a conventional mud system.

9. To drill the planned well at the location 1,344 feet from the property line where the landowner changes, Fowler seeks a waiver from the gas well-spacing requirements of 20 AAC 25.055(a)(2), requiring gas wells to be drilled at least 1,500 feet from a property line where the owner or landowner changes.
10. Fowler seeks a waiver from the well site survey requirements of 20 AAC 25.061(a), requiring a seismic survey for exploratory wells. The purpose of the seismic survey is to identify potential shallow gas sources that could pose drilling hazards. This request is based on the lack of shallow gas in wells in the area and Fowler's plan to utilize a diverter while drilling the surface hole and an annular preventer while drilling the remainder of the wellbore.
11. To drill without mounted hydrogen sulfide sensors, Fowler seeks a variance to the gas detection requirements of 20 AAC 25.065 and 20 AAC 25.066(a)(3), requiring monitoring for hydrogen sulfide gas. Fowler notes there are few, if any, enclosed spaces that would allow for the accumulation of hydrogen sulfide gas. Fowler plans to utilize individual hydrogen sulfide monitors worn by the rig crew.
12. Fowler seeks a waiver from the collection of drill cuttings requirements of 20 AAC 25.071(b)(2), requiring the collection and submission of washed and dried drill cutting samples for each sample interval. This request is based on Fowler's assertion that drill cutting samples would not add significantly to the geologic knowledge of the area.
13. Five individuals and the organization Friends of Mat-Su provided written comments and/or testimony during the January 15, 2008, hearing. Several comments were made concerning matters beyond the Commission's jurisdiction. The comments and testimony on the Fowler application that bear on matters within the Commission's authority and jurisdiction can be grouped into the following categories:
 - a. comments regarding the need for regulations specific to coal bed methane operations;
 - b. comments regarding the adequacy of the Commission's bonding requirement of \$100,000 for an individual well or \$200,000 for all of an operator's wells within the state;
 - c. concerns about potential injection operations;
 - d. concerns about possible adverse impacts to water wells and fresh water aquifers in the area;
 - e. comments regarding how subsequent horizontal wellbores off the main wellbore would be permitted;
 - f. concerns about possible violations of correlative relative rights and wellbore collisions as a result of waiving the wellbore survey requirements of 20 AAC 25.050(a)(2) for the planned well; and
 - g. opposition to granting waivers of any kind.

CONCLUSIONS:

1. 20 AAC 25.033(i) authorizes the Commission to approve underbalanced drilling operations and associated equipment changes upon a determination that such operations can be performed without the loss of well control. Fowler's request includes a description of the equipment and procedures necessary to ensure proper containment of the formation and return fluids. The Commission has previously authorized the drilling of shallow gas wells with compressed air, finding this practice safe and reliable. Fowler's plan to have on site the equipment and material necessary to convert to a mud-based drilling system is a prudent contingency plan.
2. 20 AAC 25.035(c)(1)(A) authorizes the Commission to approve a diverter line size of less than 16 inches to account for smaller hole size. The surface hole is planned to be 12¼ inches, which justifies reducing the size of the diverter line below the default 16-inch line.
3. 20 AAC 25.035(c)(1)(B) requires that a diverter line be at least as large as the hole being drilled unless a pilot hole no larger than the size of the diverter line is drilled first. The regulation requires that the Commission waive this requirement if drilling experience in the near vicinity demonstrates that drilling the pilot hole would not be necessary for safety. Fowler plans to employ a 10" diverter line while drilling a 12-1/4" hole. While wells have been drilled in the area, the Commission does not consider a well more than 3 miles from the planned well to be in the near vicinity. **Therefore, a pilot hole of 10 inches or less in diameter must be drilled or a diverter line of at least 12¼ inches must be used.**
4. 20 AAC 25.035(h)(1) allows the Commission to approve a variance to the BOPE requirements of 20 AAC 25.035(e) if the variance provides at least an equally effective means of well control. Based on the Commission's evaluation of the Permit to Drill application, which is confidential, the Commission concludes that the method of well control proposed by Fowler would provide at least an equally effective means of well control.
5. 20 AAC 25.050(h) allows the Commission to waive all or part of the directional survey requirements of 20 AAC 25.050 if the variance at least equally ensures accurate surveying of the wellbore to prevent well intersection, comply with the well spacing requirements, and protect correlative rights. Conducting inclination surveys every 500 feet while drilling with air would be unnecessarily burdensome because it would require shutting down drilling operations and pulling the drill string from the hole in order to run the survey. There are no other wellbores in the area that could present a collision risk with the planned well, and a spacing exception is being requested that takes into account the concerns related to well spacing and protection of correlative rights. Therefore, conducting a complete wellbore directional survey after the well reaches total depth would provide assurances at least equal to those that would be achieved by conducting inclination surveys every 500 feet while drilling; it would also provide the required information regarding the well path to prevent well intersections, to comply with spacing requirements, and to ensure protection of correlative rights.
6. 20 AAC 25.055 and 20 AAC 25.505(b) allow the Commission to approve exceptions to the standard well spacing requirements. Fowler submitted a spacing exception

application that complies with 20 AAC 25.055(d). None of the landowners within 3,000 feet objected to Fowler's request for a spacing exception. Granting Fowler's request would not result in waste or harm correlative rights.

7. 20 AAC 25.061(c) allows the Commission to grant a waiver to the well site survey requirements of section 20 AAC 25.061 if the operator can identify, by other equally effective means, the likelihood of encountering potential shallow gas hazards, or if other information substantiates the presence or absence of shallow gas hazards. Deep wells drilled in the area of the planned well have not encountered any significant accumulations of shallow gas. Should shallow gas be detected, Fowler plans to be able to effectively divert the gas. Therefore, conducting a well site survey for the planned Kircher No. 1 well is not necessary.
8. 20 AAC 25.066(d)(3) allows the Commission to approve a variance to the hydrogen sulfide detection requirements of 20 AAC 25.066 if the variance provides at least an equally effective means of gas detection. 20 AAC 25.505(b) allows the Commission to issue orders in conformance with 20 AAC 25.540 that prevail over the requirements of 20 AAC 25.065(c)(1), requiring that three manual hydrogen sulfide detectors be available on location. The type of rig proposed for drilling the Kircher No. 1 well has few, if any, spaces where hydrogen sulfide gas could accumulate. Therefore, the use of personal hydrogen sulfide detectors by the rig crew would provide a superior means of hydrogen sulfide detection than the use of rig mounted detectors and eliminates the need for manual detectors.
9. 20 AAC 25.071(c) allows the Commission to waive the drill cuttings sample collection requirements if the samples would not significantly add to the geologic knowledge of the area given the information that is available from other wells in the area. The geology of this area of the state is well understood and drill cutting samples from the planned well would not significantly add to this understanding. The cuttings collection that the Commission requires is for scientific purposes; only a very small volume is collected: approximately $\frac{1}{4}$ cup or 3 ounces of cuttings per sample interval. Section 20 AAC 25.071(b)(2) does not address the disposal of the drill cuttings generated during drilling. Cuttings disposal is regulated by the Alaska Department of Environmental Conservation through a solid waste disposal permit.
10. Responses to written comments and testimony:
 - a. The Commission's regulations provide an effective means for dealing with the coal bed methane operations. Establishing regulations specific to coal bed methane operations is unnecessary given the adequacy of the current regulatory framework with respect to preventing waste, ensuring ultimate recovery, protecting correlative rights, protecting the environment, and ensuring safety and given the current lack of a viable coal bed methane industry in Alaska.
 - b. AS 31.05.030(d)(4) authorizes the Commission to require bonding sufficient to cover the cost of abandoning or repairing a well. The Commission has no statutory authority to require bonding for any other purpose. The adequacy of the bonding for the planned well is outside the scope of this application. It will be evaluated in the context of the Permit to Drill application.
 - c. **This application does not relate to any injection operations. Any such operations would require an order from the Commission. To obtain such an order, Fowler must submit an application in accordance with 20 AAC 25.252.**

Such an application would require, among other things, the identification of suitable disposal and confining zones and would be subject to public comment and hearing.

- d. None of Fowler's requests raise issues regarding the protection of freshwater. Moreover, the Commission considers the protection of freshwater in many contexts, including in the context of Permit to Drill applications. With respect to nonconventional gas, including coal bed methane wells, AS 31.05.030(j) requires that wells be drilled and operated in a manner that will not adversely affect an aquifer that serves as a source of water for human consumption or agricultural purposes. AS 31.05.030(j) specifically provides that as a condition of approval of a Permit to Drill a well for the regular production of coal bed methane, the operator must design and implement a water well testing program that provides baseline data on water quality and quantity.
- e. The Commission's regulations consider each individual horizontal lateral as a separate wellbore requiring its own Permit to Drill application, and unless a drilling unit or pool is established, any requests for approvals, variances or waivers would be subject to the same regulatory review process as the subject application. Should a drilling unit or pool be requested, that application would also be subject to public notice and opportunity for public comment and hearing.
- f. The issues raised in the public comments related to waiving the wellbore survey requirements of 20 AAC 25.050(a)(2) for the planned well are addressed in Conclusion 5 above.
- g. The Commission's authority for granting each approval, variance, or waiver requested in the subject application is identified above.

NOW, THEREFORE, IT IS ORDERED:

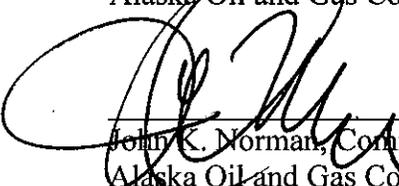
1. The requested approvals, waivers, or variances relating to the following requirements in connection with the drilling and evaluation of the Kircher No.1 exploratory gas well are hereby granted: primary well control requirements of 20 AAC 25.033; diverter line size requirements of 20 AAC 25.035(c)(1)(A); blowout prevention equipment requirements of 20 AAC 25.035(e); wellbore survey requirements of 20 AAC 25.050(a)(2); gas well spacing requirements of 20 AAC 25.055(a)(2); well site survey requirements of 20 AAC 25.061(a); gas detection requirements of 20 AAC 25.065 and 20 AAC 25.066(a)(3); and collection of drill cuttings requirements of 20 AAC 25.071(b)(2).
2. **The requested waiver to the requirement to drill a pilot hole with a diameter no larger than the diverter line is hereby denied.** The operator must comply with the provisions of 20 AAC 25.035(c)(1)(B).
3. **Granting of these waivers and variances does not constitute approval of the Permit to Drill application for the subject well.**
4. To the extent not inconsistent with this order the operator must adhere to the operations and alternative compliance measures included in an approved Permit to Drill application.
5. Except to the extent expressly modified by this order, the operator must adhere to the regulations of 20 AAC 25.

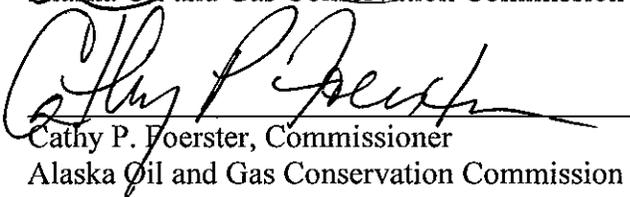
6. **The Kircher No. 1 well may not be hydraulically fractured or tested for production without separate approval from the Commission.**

ENTERED at Anchorage, Alaska, and dated February 25, 2008.




Daniel F. Seamount, Jr., Chair
Alaska Oil and Gas Conservation Commission


John K. Norman, Commissioner
Alaska Oil and Gas Conservation Commission


Cathy P. Foerster, Commissioner
Alaska Oil and Gas Conservation Commission

RECONSIDERATION AND APPEAL NOTICE

As provided in AS 31.05.080(a), within **20** days after written notice of the entry of this order, or such further time as the Commission grants for good cause shown, a person affected by it may file with the Commission an application for reconsideration of the matter determined by the order. If the notice was mailed, then the period of time shall be **23** days. The application for reconsideration must set out the respect in which the order is believed to be erroneous. The Commission shall grant or refuse the application for reconsideration in whole or in part within 10 days after it is filed. The failure to act on it within the 10-day period is a denial of it. If the Commission denies an application for reconsideration by order or inaction, upon denial, this order and the order denying reconsideration or inaction become **FINAL** and may be appealed to superior court. The appeal **MUST** be filed within **33** days after the date on which the Commission mails, **OR 30** days if the Commission otherwise distributes, the order denying reconsideration, **UNLESS** the denial results from inaction, in which case the appeal **MUST** be filed within **40** days after the date on which the application for reconsideration is filed. If the Commission grants an application for reconsideration, this order does not become final. Rather, the order on reconsideration will be the **FINAL** order of the Commission, and it may be appealed to superior court. That appeal **MUST** be filed within **33** days after the date on which the Commission mails, **OR 30** days if the Commission otherwise distributes, the order on reconsideration. As provided in AS 31.05.080(b), “[t]he questions reviewed on appeal are limited to the questions presented to the commission by the application for reconsideration.” In computing a period of time above, the date of the event or default after which the designated period begins to run is not included in the period; the last day of the period is included, unless it falls on a weekend or state holiday, in which event the period runs until 5:00 p.m. on the next day that does not fall on a weekend or state holiday.