

# 3<sup>rd</sup> ANNUAL STCL HOUSTON ENERGY LAW NEGOTIATION COMPETITION

## ROUND 2 GENERAL FACTS

### “All Steamed Up”

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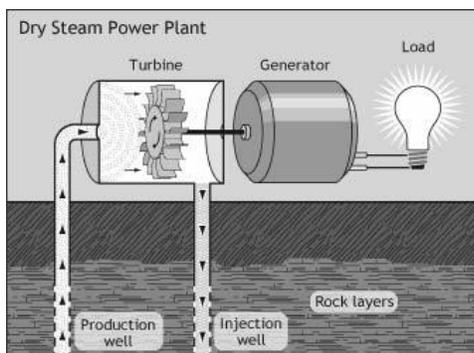
When Otto Lidenbrock (“Lidenbrock”) graduated cum laude in 1997 from St. Mary’s Hall preparatory in San Antonio, Texas, he had already accepted a full four-year scholarship to study geophysics at the University of California—Berkeley, where he graduated with honors. During the course of his studies, Lidenbrock became interested in furthering the use of geothermal resources for the purpose of generating electricity. He moved back to San Antonio and after working for a mid-sized oil and gas exploration company for eight years, Lidenbrock decided to start a green power company, Axel Earth, Inc., (“AE”), with a goal of applying geothermal resources to produce economic, commercially-viable electricity with a reduced carbon footprint. Although such projects were generating electricity in California, Alaska, and numerous other states, similar projects were in their infancy in Texas.

Using a revolutionary process created by Lidenbrock, AE planned to use water, which had been “preheated” to approximately 155°F by heat emanating from the earth’s mantle, in steam-driven electricity generating plants. By using mother earth’s geothermic hot water, it would take much less natural gas to bring water to a boil to power steam generators.<sup>1</sup> Therefore, AE hoped to produce electricity cheaper, and with less carbon emissions, than other electric producers in Texas.

During its second year of operations, AE had raised enough equity capital to build its first plant. They located and leased the surface, power line easements, and geothermic rights on a 14,000-acre tract of land near New Braunfels, Texas, which sat directly on the Balcones-Ouachita fault trend.

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<sup>1</sup> U.S. Dep’t of Energy, *Hydrothermal Power Systems*, <http://www1.eere.energy.gov/geothermal/powerplants.html>; utilized in *Development of Geothermal Resources: The Heat is on*, Robert P. Wright and C. Christopher Wilson, State Bar of Texas 28<sup>th</sup> Annual Advanced Oil, Gas and Energy Resources Law Course, <http://www.texasbarcle.com/Materials/Events/9275/124968.pdf>



This fault allows for a deep circulation of fluids to upwell along fractures which lift water at an average temperature of 153°F to an accessible depth. AE obtained all necessary governmental permits and allowances, built its first power-generating plant, and connected to the grid servicing Travis, Hays, and Comal Counties around Austin, Texas. Thanks to its lower retail rates and reduced carbon footprint, AE became a smash hit. Soon it reached maximum capacity and could accept no new energy subscribers.

Last year, AE located an ideal second site for another plant (“Second Plant”), a 20,000 acre tract (“Mohole Tract”) lying over the same fault trend, owned by Manny M. Mohole (“Mohole”). A 50-year term lease was successfully concluded, (“AE Lease”),<sup>2</sup> which granted AE all rights to geothermic hot water under the Mohole Tract, high voltage power line rights-of-way, utilities and roadways easement, pipelines easement, rights of ingress and regress, and a dedicated surface use to a specific 50 acres of land, more or less, (“AE Site Tract”), located in the western half of the Mohole Tract. The 50-acre AE Site Tract is specifically desired by AE because its geographic location is centrally located to its planned operations and will provide optimal economic efficiencies.

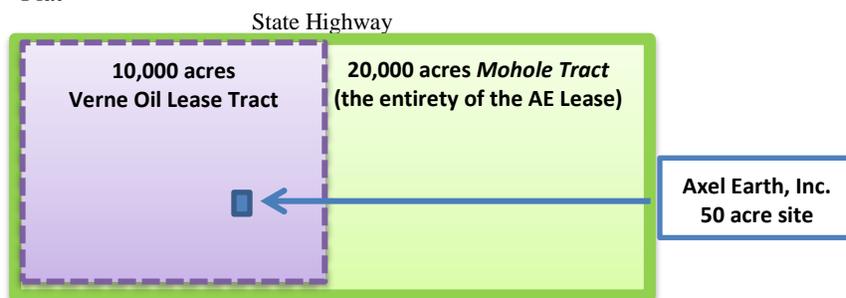
In exchange for the grant of the lease, easements and surface dedication, AE agreed to pay Mohole an annual rental fee of \$25,000 for each of the first ten years of the lease, and a 1.75% royalty on net income derived from each megawatt produced and sold from the Second Plant, for the life of the lease.

Prior to conveying any rights to AE, Mohole had granted a five-year oil, gas and other hydrocarbons lease on the 10,000-acre western half (“Verne Oil Lease Tract”) of the 20,000 acres Mohole Tract,<sup>3</sup> to Jay Verne (“Verne”), sole owner of Verne Oil, (“Verne Oil”), as lessee, (“Verne Oil Lease”), in which lessor Mohole reserved all other minerals and the equal and concurrent right to develop those minerals.<sup>4</sup> The Verne Oil Lease contains the following language:

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<sup>2</sup> Although called a “lease,” a mineral lease in Texas grants a determinable fee in the minerals it grants, subject to the possibility of reverter retained by the lessor. As an example, terms will typically provide that the leased mineral estate will revert back to the lessor after there is no production for X amount of time.

<sup>3</sup> Plat



<sup>4</sup> Generally, in Texas, geothermal heat and by-products thereof are a part of the mineral estate. See TNRC § 141.002, 003. As fee owner, Mohole only granted Verne Oil a lease for hydrocarbons; therefore, Verne Oil did not obtain any rights to an estate in geothermal heat and by-products. When Mohole granted the geothermal lease to AE, both AE

Lessor expressly EXCEPTS from this lease and RESERVES to Lessor, Lessor's heirs, successors, and assigns, all minerals of every kind and character in, on and under the leased premises, except only the minerals granted hereunder; and, in addition, Lessor EXCEPTS from this lease and RESERVES to Lessor, Lessor's heirs, successors and assigns, the concurrent right to use the leased premises and the surface thereof for the purpose of investigating, exploring, prospecting, drilling and mining for and producing all such other minerals excepted from this lease, laying pipelines, building roads, tanks, power stations, telephone lines and structures thereon to mine, produced, save, take care of, treat, transport and own said other minerals, provided, however, that such operations shall not unreasonably interfere with Lessee's operations and use of the leased premises.<sup>5</sup>

Prior to acquiring its Verne Oil Lease Tract, Verne Oil obtained a license to use the results of a two-dimensional seismic data study ("2D Seismic") of the Mohole Tract, and using this information, Verne Oil is in the process of completing its engineering plans for development of its entire 10,000-acre leasehold. So far, Verne Oil has completed three successful gas wells on the Verne Oil Lease Tract, and it expects to fully develop this field by drilling an additional six wells during the next five years. Verne Oil was only able to license 2D Seismic information, as opposed to a much superior three-dimensional seismic data study ("3D Seismic") due to budgetary constraints.<sup>6</sup>

From the AE Site Tract, AE plans to drill an initial production well to extract geothermic water with a bottom hole that lies 3,300 feet below the formation from which Verne Oil is currently producing gas, and an injection well to return the geothermic water to the production zone. During the next five years, AE will need to drill an additional three extraction wells and one injection well within the 10,000 acres Verne Oil Lease Tract, to sustain economic viability of the Second Plant.

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and Verne Oil became entitled to use as much of the surface as is reasonably necessary to develop their respective mineral estates.

<sup>5</sup> In Texas, the mineral estate is superior to the surface estate, and the term "mineral estate" encompasses many substances, including hydrocarbons (oil, gas, coal, etc.), as well as non-hydrocarbons such as gold, silver, uranium and geothermic heat and its by-products. Due to the exception and reservation language contained in the Verne Oil Lease, Mohole retained all rights in the mineral estate, other than hydrocarbons. A part of Mohole's right to develop the non-hydrocarbon mineral estate was subsequently transferred to AE through the AE Lease, when Mohole granted AE rights to geothermic hot water. Due to the terms of both the Verne Oil Lease, and the AE Lease, both Verne Oil and AE have equal rights to develop their respective mineral estates. Although interference by one mineral estate owner, with the rights of another, different mineral estate owner, can quickly become litigious, generally speaking, both AE and Verne Oil have a right to develop their mineral estates in a prudent manner, so long as it such development is reasonable, and reasonable accommodations are made with respect to other parties.

<sup>6</sup> Seismic surveys are conducted prior to drilling operations by "shooting" vibrations into the ground and "reading" the reverberations. Comparing a 2D Seismic study to a 3D Seismic study is akin to comparing an x-ray taken in a doctor's office in 1960, to a full 3 dimensional CT scan conducted in a clinic today. 3D is far superior, but also much more expensive. Some (frequently smaller) oil and gas operators still rely on 2D science due to financial constraints, particularly in areas with proven production.

Although AE instigated discussions about its coexistence on the Mohole Tract with Verne Oil, such negotiations have not lead to an agreement. Despite this, AE's board of directors is anxious about their plans for the Second Plant and AE proceeded with its developmental plans under an expectation that AE and Verne Oil would soon reach a satisfactory agreement.

Prior party discussions have raised the following expressed issues, with no resolutions to date ("discussed issues").

1. Although Verne Oil and AE agree that legally both sides have a right to use as much of the surface as is reasonably necessary to develop their respective mineral estates, Verne Oil does not agree that AE's plans are reasonable. Verne Oil was already developing its Verne Oil Lease Tract before the grant of the AE Lease, and it wants no unreasonable interference with its plans to drill its additional six wells during the next five years. AE has pointed out to Verne that even though the Verne Oil Lease Tract was established first, such fact does not give Verne Oil rights that are superior to the rights of AE.

As a result of their initial meetings, both sides are aware of the need by each other to drill additional wells and construct gathering pipelines to transport the production from each respective well. Each well site will require the exclusive dedication of approximately 2 acres of land and access to utilities and a roadway. Other than the next well planned by Verne Oil, neither side has determined exactly where the location of its future wells will be located. Both parties acknowledge that they need to agree to (1) fully communicate and provide maximum notice to the other party of well and pipeline locations once such plans are determined, (2) for safety as well as geological reasons, not drill a well within 1,000 feet of another well or announced planned well, and (3) in the event of a pipeline crossing, the second (in-time) pipeline should be buried at least 24 inches below any existing pipeline which is operated by the other party. Additionally, both sides acknowledge that they need to agree to obtain common liability insurance to protect the common leasehold and cover any damages caused by one party to the assets of the other, at an estimated cost of \$45,000 per year, and they hope to reach an agreement on the use of arbitration for future disputes, and to share costs for common roadways, fences, gates and other security measures.

All discussions went awry when it was discovered that the very next well planned by Verne Oil (and the only future planned well which location is currently determined), was "smack" in the middle of the 50-acre AE Site Tract. Resolution of this issue is of utmost importance to both parties; however, Verne became quite agitated when discussing it with AE, and no one has returned to the table since.

2. Verne is concerned that natural gas may be entrained in the hot geothermal water that AE brings to the surface, and he has argued that all such gas, if any, is the property of Verne Oil. Verne has asked for assurances that AE will meter, collect, and deliver via pipeline any such production to Verne Oil's gas gathering system at the expense of AE, for the sole

benefit of Verne Oil. In response to Verne's request, AE has taken the position that by statutory definition, geothermal resources include "by-products," which include any other elements found in a geothermal formation that are brought to the surface, regardless of whether or not used in geothermal heat or pressure inducing energy generation, and therefore any such natural gas produced is a "by-product" owned by the geothermal mineral owner who brings it to the surface.

3. AE's geothermal well will pierce Verne Oil's gas-producing strata when it drills to 3,300 feet and 1,500 feet below such zone to extract and subsequently re-inject hot water. Of course, AE will comply with all governmental standards in casing its production and injection wellbores<sup>7</sup>. However, Verne seeks additional assurances that his production zone will be protected from seepage from AE's wells, because migration of any of these fluids could be ruinous to Verne Oil's production from its current prospective zone, based upon Verne Oil's geological studies. Therefore, Verne has been insistent that AE utilize protective casing which is two grades above the standard set by the Texas Railroad Commission,<sup>8</sup> where AE's wells penetrate Verne Oil's producing strata. Verne Oil also wants the right to elect at its sole option to take over any well to be plugged and abandoned by AE following a 30-day notice by AE of its decision to turn over such well.

Concerned that he has not been able to reach any agreements with AE, and observing the amassing of heavy equipment next to his leasehold, Verne has retained a respected law firm to represent Verne Oil's interests. Verne has expressed no desire to become embroiled in a drawn out lawsuit; however, he will not allow AE to damage Verne Oil's future plans or income from the Verne Oil Lease Tract. Upon being contacted by Verne's legal representatives, AE's in-house counsel decided they also needed tough litigators, and hired a highly regarded law firm to address their issues with Verne and company.

Finally, Mohole recently hosted both Verne and Lidenbrock to lunch at the Wildcat Country Club, during which Mohole expressed that (a) he stood to lose a substantial amount of money if both sides could not agree to terms, (b) he was prepared to bring suit for tortious interference with a business relationship if either side substantially limited the rights of the other party to fully develop its mineral estate on the Mohole Tract, and (c) he would sever any future business relationship with both parties if they did not promptly resolve their issues. Furthermore, Mohole reminded them that he has very deep pockets and it would be "no problem (for him) to fund a very long and damaging, never-ending battle in court, if such became necessary." Mohole owns numerous large fee parcels in central Texas, some of which may be important to the future plans of both AE and Verne Oil.

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<sup>7</sup> A wellbore is a hole that is drilled for the recovery of oil and gas and it becomes the actual hole that forms the well. It can be encased by materials such as steel or cement.

<sup>8</sup> The Texas Railroad Commission regulates oil and gas developmental operations in Texas.

## ROUND 2

### **CONFIDENTIAL FACTS FOR THE ATTORNEYS REPRESENTING AXEL EARTH**

You are representing AE, not Lidenbrock. However, the two are so intertwined it is hard to separate one from the other. While your sole duty is to the shareholders of AE, you hope to satisfy AE, its Board of Directors, and Lidenbrock while maximizing AE's position.

Confidential Information regarding the discussed issues presented in the general facts:

1. Your client has informed you that the planned footprint of their facilities will consume 24 of the 50 acres which comprise the AE Site Tract. The plant will cover approximately seven acres, and outbuildings, an employee fishing pond and picnic area, and parking lot will cover an additional 17 acres of land. Although AE plans to utilize only 24 total acres and it desires to keep its dedicated 50 acre AE Site Tract, it realizes that it needs to be flexible in working with Verne Oil on surface use, and is willing to reasonably yield to the needs of Verne Oil, so long as AE operations are not impacted by such use. If it were to become absolutely necessary, AE can reduce the footprint of its planned improvements to 12 acres by eliminating the employee park and fishing lake. AE is not opposed to sharing its park and fishing lake with the employees of Verne Oil, if Verne Oil will share in the cost of taxes, upkeep, and insurance on same, and indemnify AE for damages or injuries to Verne Oil employees and guests.

AE believes it can accommodate Verne Oil's next planned well location; however, for numerous reasons they are quite desirous that a well location not exist in the very middle of their 50-acre site. They are willing to work with Verne Oil on reconfiguring their plans, if Verne Oil will move its planned location from the middle of the AE Site Tract toward either the North or East edge of its site. The Second Plant will cover the South section of the AE Site Tract, and too many commitments and engineering plans have transpired to change this location. A planned employee fishing pond and picnic area is planned for the West side, the existence of which is not vital. Verne will need to move his site at least 1,000 feet to the North or East of the middle of the tract. For reasons stated above, movement to the South is not possible, and movement to the West is not desirable. AE has informed you that it has planned to construct a parking lot in the middle of its tract, and reconfiguration of the parking lot and related facilities will add an additional cost of approximately \$30,000.

AE is concerned that it has not been able to reach an agreement with Verne Oil regarding an accommodation by Verne Oil as to its future well location needs, as the same may conflict with Verne Oil's future needs. AE has advised you that it feels such agreement is of paramount importance for purposes of mitigating future litigation at a time when such additional operations become vital. At this point, neither side is certain as to the exact location of future wells or pipelines, so the most they hope to accomplish at this time regarding future locations is a general understanding. They have instructed you not to "walk away" without an agreement

that includes commitments for open communications between all parties, and an understanding that both sides will exercise the utmost good faith in accommodating plans made by the other.

Additionally, AE believes an economy of scale can be achieved by working with Verne Oil on shared costs of roadways, utility easements, and other common needs, and is desirous that you reach an accord with Verne Oil to share responsibilities for such needs.

2. AE is insistent about its desire to use, for its own purposes, all gas that may be produced due to its extraction of geothermal heated water especially because the gas can help power its second plant. This could save AE approximately \$500,000 over the next five years. AE has argued that by statutory definition, geothermal resources include “by-products,” including other elements found in a geothermal formation that are brought to the surface, and therefore any such natural gas is a “by-product” owned by the geothermal owner who brings it to the surface. Accordingly, your client’s position is that any such gas is the property of AE, as the geothermal lessee and producer. However, after researching the issues, you have concluded differently. You advise your client that although this issue has not been adjudicated in a Texas court, it is likely that AE’s argument would not be meritorious, given Texas’s long standing reverence for mineral estates and hydrocarbon production.<sup>9</sup> You further advise your client that to prevent future litigation, they should consider yielding on this issue. However, you point out that Verne should not get a free ride, and it should pay for most, if not all, of the cost of metering, collecting, and transporting such gas to their gathering system (approximately \$30,000), unless Verne can offer you another incentive (here or on another issue) which makes paying for some or all of it worth your while.
3. In response to Verne Oil’s request for further assurances and protection against the possibility of seepage, AE’s position is as follows. AE believes that the Texas Railroad Commission casing requirements are stringent, and points out such standards meet all federal and state regulatory requirements. Any additional casing protections are not necessary and would only impose an unnecessary expense and delay upon AE. Additionally, it is your opinion that a Texas court would not support such demand by Verne Oil. The contractor who has been hired to drill the first geothermal extraction and injection well has informed AE that such additional casing requirement would add \$95,000 to AE’s initial drill costs plus additional time delays. Despite the time delays which would be incurred, AE is willing to add such extra protection but AE would strongly prefer that Verne Oil pay for it. However, AE understands that casing seepage can happen over time, and for the sake of continuing this relationship, AE is willing (but not happy) to split the costs with Verne for casing that is only one grade above the minimum requirement. This extra casing would cost \$40,000 total. Otherwise, you are willing to consider other potential safeguards or assurances.

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<sup>9</sup> *Development of Geothermal Resources: The Heat is on*, Robert P. Wright and C. Christopher Wilson, State Bar of Texas 28<sup>th</sup> Annual Advanced Oil, Gas and Energy Resources Law Course, <http://www.texasbarcle.com/Materials/Events/9275/124968.pdf>

Additional confidential information:

At a cost of \$700,000, AE commissioned a three-dimensional seismic study (“3D Seismic”) in and under the 20,000 acre Mohole Tract, and considers its results to be proprietary. AE is aware that Verne Oil, like many operators in the area, only has a 2D Seismic survey, and believes that Verne would love to have 3D Seismic data covering his 10,000 acre leasehold because it could significantly enhance the future placement and productivity of Verne Oil’s operations. AE has authorized you to license their 3D Seismic as a negotiation tool with AE, subject to proper confidentiality agreements. Although the value of seismic information is subjective, it should be anticipated that it will have significant value to Verne Oil, and Lidenbrock estimates the cost of obtaining 3d Seismic on the Verne Oil Lease Tract would normally cost about \$350,000. However, he has suggested that you should try to obtain at least \$100,000 cash or value from Verne, for the use of this data. Lidenbrock points out that \$100,000 for 3D Seismic covering 10,000 acres is less than a third of the real cost for such data, and he has emphasized that Verne would only be given a license to use such data—Verne would not own it and he would have no rights to republish such data.

Lidenbrock has also filed for patents on a new engineering technique (codenamed “Hansbach”) which he believes will make it possible to drill a well 25% faster than previously possible, and therefore significantly reduce drilling costs. He believes that upon successful testing and licensing, it could become a significant source of personal revenue. Lidenbrock suggests that Verne may be interested in testing Hansbach on his next well, in return for there being no charge by Lidenbrock for its use, provided Verne Oil makes other satisfactory concessions. Lidenbrock estimates that such process could save Verne Oil up to \$50,000 in drilling costs for each new well it drills, and suggests that such process could be made available to Verne, for field testing purposes, as a way to offset any costs incurred by Verne Oil when all negotiations are complete. Hansbach became quasi-public knowledge after Lidenbrock filed two patent applications with the United States Department of Commerce, Patent and Trademark Office, and Lidenbrock suspects that Verne may be “somewhat aware” of its potential.

AE has entered into commitments for short- and long-term debt to build the Second Plant, and is very optimistic about its future, so long as the Second Plant is online within two years. AE does not have the reserves, resources, or projected revenue from the first plant to service all AE commitments unless the Second Plant is online no later than 24 months from now.

Although the first plant is a resounding success, AE has potentially overextended itself in preparation for the Second Plant, and they cannot afford to enter into costly and unnecessary agreements with Verne Oil. AE has invested much of its remaining capital into engineering and pre-construction costs, and has obtained commitments for short term and long term financing. In addition, three construction companies and a drilling contractor have been scheduled to begin work in about one month, proper permits have been filed, and heavy equipment and materials are already accumulating in an adjacent construction yard. In addition, the engineering and construction

contracts executed by AE contain very heavy cancelation penalties. Lidenbrock has privately expressed to you his concern and stated that if plans for the Second Plant unraveled, AE's bright future might unravel too.

AE cannot spend more than \$50,000 cash to conclude negotiations with Verne Oil. However, in addition to such cash, the Board has authorized you to utilize up to an additional 5,000 shares of AE treasury stock, currently worth about \$72,750, for settlement purposes with Verne Oil. The board believes 5,000 shares will be worth \$350,000 if the Second Plant is a success. AE shares originally entered the market as penny stocks, but have steadily increased in value to a current counter price is \$14.55. Several institutional fund managers are interested in adding AE to a few of their portfolios, and have expressed interest in helping AE become listed on the NYSE. Everyone feels that if the Second Plant is as successful as the first plant, listing on the Big Board is realistic. The Board of Directors believes that such success could drive AE shares to the \$65 to \$70 range during its first 18 months of listing. However, as an attorney you obviously must be careful about making representations as to future value. Two members of the Board have admonished you to not give Verne any of "their" treasury stock unless it is absolutely necessary.

Lidenbrock laughingly told you that during a recent phone conversation, Verne informed him that he wanted AE to pay all of the legal expenses incurred by Verne Oil in this matter. Although Lidenbrock did not respond to Verne at the time, Lidenbrock said to you that AE would pay Verne Oil's legal expenses as soon as Iceland melted and slipped into the sea, but not before. Lidenbrock also has his own steep legal fees due to this issue. Your firm has required a \$35,000.00 retainer to accept Lidenbrock as a client, and it is your firm's belief that without courtroom activities, current issues can be resolved for an estimated total legal cost of \$15,000.00. A courtroom battle could triple this cost estimate, at a minimum.

## ROUND 2

### **CONFIDENTIAL FACTS FOR THE ATTORNEYS REPRESENTING VERNE OIL**

Although you are representing Verne Oil, it is a sole proprietorship owned entirely by Jay Verne, so you consider both to be your client.

Verne is “madder than the last mastodon” at Mohole for giving a lease to AE and feels certain he has valid claims against both Mohole and AE for slander of title, a few other select torts, and claims in contract. Although he is not one to be pushed around, Verne is a business man and hopes to reach an agreement with AE to limit future operational problems and to preserve a good relationship with Mohole. However, Verne recently stated that if AE gets “too big for their britches” and asserts unreasonable demands or refuses to pay for reasonable requests, he would rather “just pull the plug out of any future plans with Mohole, while Verne develops the current lease to its fullest extent and tells AE to go jump down Stromboli volcano.”

Confidential Information regarding the discussed issues presented in the general facts:

1. Verne is adamant that Verne Oil’s right to future development must be protected against any interference by future developmental plans of AE on the Verne Oil Lease Tract. Verne wants assurances from AE that any operations it conducts outside the AE Site Tract and on the surface of the Verne Oil Lease Tract, such as the locations of any pipelines or geothermal extraction or injection wells, will fully accommodate Verne Oil’s future development plans. Through its 2D Seismic interpretations, Verne Oil has made preliminary plans for its future wells, and has instructed you do everything possible to reach an accord with AE regarding the issues about which they have already spoken.

The current plans for the AE Site Tract will disrupt the planned spud point (surface entry location) of Verne Oil’s next planned and permitted well, (the only future well for which Verne Oil has already planned its specific location), which if moved and re-engineered to a location off of the AE Site Tract, would cost Verne Oil an additional estimated \$395,000. Verne states that if he stayed within the AE Site Tract, but moved the well to the side of the tract, it would cost approximately \$170,000 in “re-work” costs to make such a move. Regardless, Verne and his geologist are of the opinion that the operations for Verne Oil’s next well must be as close to the center of the AE Site Tract as possible to maximize the production from the planned well. The ideal relocation would be 1,000 feet to the South; however, 1,000 feet to the East is also feasible. Either way, such relocation will cost Verne \$170,000, so long as the relocation remains within the AE site tract.

At this point, neither side is certain as to the exact location of future wells or pipelines, so the most they hope to accomplish at this time regarding future locations is a general understanding. Issues center on the need for good communications and the exercise of good faith accommodations by both parties regarding the needs by both parties for future well, pipeline,

and utilities placement. Verne has stated that he wants both parties to reach a general understanding that both parties will coordinate all activities and actively strive to not interfere with and to accommodate each other's interests, as the same relates to the location and construction of well sites and operations, pipelines, utility lines, and seismic activities. Verne desires that both sides share in the expense of the placement and common maintenance of roadways, gates, fences, security measures, and common insurance. However, you must ensure that no roads are built over any future planned drill sites as those sites become determined.

2. Verne has instructed you to not allow AE to take any gas that might be entrained in AE's geothermal production. Verne has asked for assurances by AE that any production of entrained natural gas, which occurs as a result of AE operations, will be metered, collected, and delivered via pipeline to Verne Oil's gas gathering system, at the expense of AE, for the sole benefit of Verne Oil. Verne believes that a Texas court would view any confiscation of natural gas, occurring due to geothermic harvesting activities by AE, as a trespass upon his mineral estate and an unlawful taking by AE. After initial research by an associate attorney, you are of the belief that Verne's position has merit, and despite statutory wording, a Texas court would likely rule that entrained gas belongs to the hydrocarbon mineral estate. Therefore, you have decided to be unyielding in the position that all natural gas harvested by AE is the property of your client. Verne guesses that any such entrained gas might be worth \$450,000 over the course of the next five years. Another option, Verne suggests, is to meter and sell the entrained gas to AE, at prevailing Nymex<sup>10</sup> rates, less a 10% discount. This would provide an estimated revenue stream of approximately \$405,000 to Verne Oil, and save AE an estimated \$45,000 over the next five years. Verne is willing to pay for the metering, collecting and delivery costs (approximately \$30,000) of all such gas sold to AE, under such an arrangement. If AE does not wish to purchase the gas from Verne, Verne is willing to pay up to half of the metering, collecting, and delivery costs if absolutely necessary.
3. Verne Oil's geologist has informed Verne that any seepage from AE's wellbores into the producing zone where Verne Oil's is producing could be devastating to Verne Oil's wells. Consequently, Verne is insistent that additional protective measures be taken where AE's wellbore penetrates or transverses within Verne Oil's production horizon.

To protect its producing field against seepage from AE's wells, Verne Oil has requested that AE use casing which is two grades above the mandatory requirements of the Texas Railroad Commission. After some research, you have advised Verne that a court would likely find such demand unreasonable, because the mandatory casing standards issued by the Railroad Commission are accepted as an industry standard and fall within all federal and state regulatory guidelines. It is your opinion that any attempt to prevent AE from developing their mineral estate on such basis would fall flat and risk tort liabilities for your client. Although Verne

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<sup>10</sup> New York Mercantile Exchange

accepts that his desire for AE to utilize casing which is two grades above mandatory requirements may be difficult, he desires that you at least try to obtain such a concession from AE. Verne has informed you that he realizes you may have to yield on the demand for upgraded casing, but to “at least try.” In the event AE will not pay for the employment of casing which is two grades above mandatory requirements, Verne would consider one grade above and is open (but not happy) to splitting the cost. At this point, you do not know how much additional casing would cost for AE’s wells and you are eager to find out this information if AE has it. Verne is also open to discussing other potential safeguards and assurances.

Additional confidential information:

Verne hopes to complete all planned drilling operations in its Verne Oil Lease Tract sooner than the five years it has projected so he can retire. As of this time, AE is unaware of this fact.

Verne has heard that Lidenbrock has a phenomenal mind and that he has filed several patent applications for a new drilling process which could potentially drill through the earth 25 to 30% faster than previously believed feasible. Verne believes that if true, this ability could save Verne Oil approximately \$35,000 of drilling cost for each future well. Verne has asked you to make an inquiry to determine if such information is correct, and if so, whether Verne Oil might be able to avail itself to such technology.

As an aside, Verne has expressed that he wishes he had 3D Seismic because such knowledge could give him an opportunity to obtain more aggressive financial backing that would allow him to develop the Verne Oil Lease Tract project a year sooner than originally projected, which would allow him to retire sooner. Verne only owns rights to 2D Seismic and feels this has somewhat handicapped his geologist’s ability to ensure that Verne Oil’s wells are in the optimal place to maximize gas production. He has lamented that he did not obtain 3D Seismic “back when he could have afforded it and before it became so expensive.” Verne has estimated that it would cost approximately \$325,000 to obtain 3D Seismic on the 10,000-acre Verne Oil Lease Tract, a price he simply cannot afford. Although Verne does not desire to pay money for such possibilities, he has informed you that some of these potential savings could be applied towards other costs incurred by Verne Oil due to concessions made in reaching a final agreement with AE.

Verne believes that because “all of these problems” have developed due to AE taking a lease from Mohole, AE should pay for some, if not all, legal costs incurred by Verne Oil to resolve all issues with AE. Your firm has required a \$40,000.00 retainer to accept Verne as a client, and it is your firm’s belief that without courtroom activities, current issues can be resolved for an estimated total legal cost of \$15,000.00. A courtroom battle could quadruple this cost estimate, at a minimum.