STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

APPLICATIONS OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR NON-STANDARD OIL SPACING AND PRORATION UNITS, COMPULSORY POOLING, AND DOWN-HOLE COMMINGLING, LEA COUNTY, NEW MEXICO

CASE NOS. 16099-16101

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APPLICATIONS OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR NON-STANDARD OIL SPACING AND PRORATION UNITS AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

CASE NOS. 16102-16104

APPLICATIONS OF PRIDE ENERGY COMPANY FOR COMPULSORY POOLING, NON-STANDARD SPACING AND PRORATION UNITS, AND UNORTHODOX LOCATIONS, LEA COUNTY, NEW MEXICO

CASE NOS. 16169-16174

DEVON ENERGY PRODUCTION COMPANY, L.P.'S CLOSING STATEMENT

Devon Energy Production Company, L.P. ("Devon") submits the following closing statement for the above-referenced cases, which were consolidated and heard by the Division on June 12, 2018.

INTRODUCTION

These matters concern competing development plans in the Wolfcamp and Bone Spring formations in Sections 16 and 21, Township 25 South, Range 32 East. Devon has proposed three 2-mile Bone Spring wells and three 2-mile Wolfcamp wells in the W/2 and the W/2 E/2 of Sections 16 and 21 (collectively "the Marwari wells"). Pride Energy Company ("Pride") has proposed three 1-mile Bone Spring wells and three 1-mile Wolfcamp wells in the W/2 and the W/2 E/2 of Section 16 only (collectively, "the Paduca wells").

Fundamentally, these cases present a "fight between lateral lengths." Tr. 11:20-24. It is Devon's position—consistent with industry's experience and developing knowledge in this area of the Delaware Basin—that its 2-mile laterals, fracking and casing plan, and extensive drilling,

completion and operating experience are in the best interests of conservation, the prevention of waste, and the protection of correlative rights. Conversely, Pride believes that its 1-mile laterals, inadequate completion technique and casing plan, and lack of drilling, completion and operating experience are best suited for meeting statutory requirements. Upon consideration of the various factors invoked where competing applications have been filed as to the same acreage and target formations, the Division must grant Devon's applications while denying Pride's.

BACKGROUND

In Case Nos. 16099-16101, Devon filed applications seeking orders approving non-standard oil spacing and proration units in the 2nd Bone Spring formation, comprised of (1) the W/2 W/2 of Section 16 and W/2 W/2 of Section 21, to be dedicated to Devon's proposed Marwari 28-16 State Fed Com 232H well; (2) the E/2 W/2 of Section 16 and E/2 W/2 of Section 21, to be dedicated to Devon's proposed Marwari 21-16 State Fed Com 234H well, and; (3) the W/2 E/2 of Section 16 and W/2 E/2 of Section 21, to be dedicated to Devon's proposed Marwari 28-16 State Fed Com 236H well. These wells are all proposed as south-north 2-mile horizontals. Their locations are orthodox. *See* Devon's Hearing Exhibit Nos. 1 and 2.

Similarly, in Case Nos. 16102-16104, Devon filed applications seeking orders approving non-standard oil spacing and proration units in the Wolfcamp formation, comprised of (1) the W/2 W/2 of Section 16 and W/2 W/2 of Section 21, to be dedicated to Devon's proposed Marwari 28-16 State Fed Com 712H well; (2) the E/2 W/2 of Section 16 and E/2 W/2 of Section 21, to be dedicated to Devon's proposed 2-mile horizontal Marwari 21-16 State Fed Com 714H well, and; (3) the W/2 E/2 of Section 16 and W/2 E/2 of Section 21, to be dedicated to Devon's proposed 2-mile horizontal Marwari 28-16 State Fed Com 716H well. *See* Devon's Hearing Exhibit Nos. 1 and 5. Like Devon's proposed Bone Spring wells, its proposed Wolfcamp wells are all 2-mile horizontals. *See id.* Their locations are orthodox. Devon provisionally applied for

downhole commingling in the Wolfcamp wells, but formally withdrew this request at hearing. Tr. 24:14-24.

Ownership in the subject acreage is shown in Devon's Hearing Exhibit No. 3. In total, Devon owns 75% of the subject acreage to be committed to its Marwari wells. Devon owns 100% of the subject acreage in Section 21. Devon also owns 100% of the subject acreage in the S/2 of Section 16. Ownership in the subject acreage in the N/2 of Section 16 is held 100% by Pride Energy Company ("Pride"). Devon therefore proposed its Marwari wells to Pride—the only working interest owner in Section 16 other than Devon—and proposed a Joint Operating Agreement. *See* Devon's Hearing Exhibit Nos. 4 and 7. Devon attempted to negotiate in good faith with Pride, but was first rebuffed and then ignored. Ultimately, Pride refused to participate in Devon's Marwari wells and remains an uncommitted interest owner. Thus, these force pooling proceedings began.

Following the filing of Devon's applications, Pride filed its own applications for non-standard units, compulsory pooling and operatorship of the Paduca wells in Section 16. The Paduca wells are north-south 1-mile horizontals targeting the Bone Spring and Wolfcamp formations. *See* Pride Hearing Exhibits #2-7. Because Devon owns 100% of the subject acreage in the S/2 of Section 16 and Pride owns 100% of the subject acreage in the N/2 of Section 16, Pride's total ownership in its proposed units is only 50%. *See* Pride's Hearing Exhibit #1.

In these proceedings, the Division must essentially decide the fate of Section 16 and its underlying reserves. As explained herein, the hydrocarbons underlying Section 16 are best produced by Devon, not by Pride.

LEGAL AUTHORITY

In several recent Oil Conservation Commission and Oil Conservation Division orders, the State of New Mexico has concluded that a comparison of geologic evidence and prospect

difference between competing applications is "*the most important consideration in awarding operations to competing interest owners.*" Order R-14526, at 6 (quoting Order R-10731-B) (emphasis in original); *see also* Order R-14443 (focusing primarily on geologic and recovery issues when evaluating competing development plans). However, in the instant consolidated cases, there is no dispute as to the subject geology, and no significant difference in the parties' respective Bone Spring and Wolfcamp prospects. Tr. 77:19-78:5; 173:21-25; 187:21-25. In fact, Pride did not present a geologic witness at hearing or admit any relevant geologic evidence. As such, factors other than geologic evidence and differences between the targeted prospects must be considered.

When reviewing competing development plans, the Division considers and weighs the following factors:

(a) An evaluation of the mineral interest ownership held by each party at the time the application was filed;

(b) A review of "working interest control" and who first proposed wells within the area;

(c) A review of negotiations between the competing parties, to ensure that the parties attempted to negotiate in good faith;

(d) A comparison of risks associated with the parties' respective proposals;

(e) A comparison of the ability of each party to prudently operate the property, and thereby prevent waste;

(f) A comparison of differences in well cost estimates; and

(g) A comparison of differences in administrative and supervisory expenses.

See Order R-14518; Order R-107331-B; Order R-14443; Order R-13372-D; Order R-11869; Order R-12511-A. Although this authority does not mandate the relative weight to be given any one of these factors, it is clear that when considered *in toto*, the majority of these factors weigh heavily in favor of approving Devon's applications and denying Pride's applications.

ARGUMENT

A. Devon holds a greater share of the mineral interest ownership in its proposed units than does Pride in its proposed units.

The Division must evaluate the mineral interest ownership held by each party at the time the application was filed. Here, Devon holds a greater share of the mineral interest ownership in its proposed units than does Pride in its proposed units. Devon owns 100% of the acreage in Section 21 to be committed to its Marwari wells. Devon also owns 100% of the subject acreage in the S/2 of Section 16. Pride owns 100% of the subject acreage in the N/2 of Section 16. Accordingly, Devon owns 75% of the acreage to be committed to its Marwari wells, while Pride owns just 25%. *See* Devon's Hearing Exhibit No. 3; Pride's Hearing Exhibit #1.

With respect to Pride's proposed Paduca wells, ownership is equal. Pride owns 100% in the N/2 of Section 16, while Devon owns 100% of the S/2. Devon would therefore own 50% of the acreage to be committed to Pride's Paduca wells, while Pride would also own 50%. As such, this factor weighs in favor of Devon's development plan and against Pride's.[1]

B. A review of "working interest control" and an examination of the parties' respective proposed wells both weigh in Devon's favor.

Where there are only two competing parties, each owning 100% of their respective acreage to appropriate depths, Tr. 36:19-23, the analysis as to "working interest control" is the same as that set forth above with respect to mineral interest: Devon would have 75% "working interest control" in its Marwari wells, while Pride would only have 50% "working interest control" in its Paduca wells. This factor weighs in favor of Devon.

The timing of the parties' respective well proposal letters is essentially a wash. Pride sent its well proposal letters to Devon on February 26, 2018. *See* Pride's Hearing Exhibit #8.

[1] In addition, at hearing, Devon entered into evidence a letter of support from V-F Petroleum. Devon's Exhibit No. 8. V-F owns an overriding royalty interest in the S/2 of Section 16. *See id.*; Tr. 41:23-25.

Devon's letters were sent to Pride two days later, on February 28, 2018. *See* Devon's Hearing Exhibit No. 4.

Pride's well proposal letters, however, demonstrate Pride's lack of familiarity with this area of the Delaware Basin. Pride did not either furnish with its well proposal letters any proposed JOA, nor did Pride specifically call out the form of JOA it was proposing to Devon. Instead, Pride presented Devon with three options: (1) participate in Pride's drilling of the Paduca wells, although Pride had never before drilled a horizontal well in SE New Mexico (*see discussion,* § D.1 *infra*); (2) lease or assign Devon's 100% interest in the S/2 of Section 16 for $1,500 an acre plus a 1/8 royalty, or (3) lease or assign its interest for $1,000 an acre with a 3/16 royalty. *See* Pride's Hearing Exhibit #8.

Devon's expert land witness testified that the offers made in Pride's well proposal letter were unreasonable in this market, demonstrating Pride's lack of familiarity with the area. Tr. 26:9-25, 38:11-23. Pride's landman could not explain why these offers were so low, instead suggesting they were extended only to encourage Devon to choose its first option—to participate in Pride's wells. Tr. 153:6-11. Devon, for its part, offered Pride the far more substantial sums of $18,000 to $20,000 per acre for Pride's interest. *Id.* Tellingly, Pride's land witness and co-owner testified that even these offers were rejected by Pride as "way inadequate." Tr. 146:2-11. The same witness would later testify that Pride's offers of $1,000 or $1,500 per acre were "fair market value" in February of 2018. Tr. 153:6-13. Within months, then, Pride extended a $1,000 or $1,500 per acre offer and rejected an $18,000 per acre offer, Tr. 168:7-10, calling into serious question whether Pride is indeed a steady and active participant in this market.

In any event, Pride's well proposals contained manifestly unreasonable offers. Although these letters were sent two days before Devon's, they should be considered a nullity for purposes of this factor.

C. Pride did not participate in negotiations in good faith.

The evidence demonstrates that Pride did not negotiate in good faith. Devon's expert land witness testified that he attempted, by both telephone and in writing, to communicate with Pride over the course of many months. Tr. 25:9-26:1. Initially, Devon made several attempts to buy Pride's interest in the oil and gas lease covering the NW/4 and W/2 NE/4 of Section 16—at first 100% of Pride's interest, then an undivided 75% of Pride's interest. Tr. 37:15-38:3. Pride rejected Devon's initial offer without negotiation, Tr. 166:16-167:19, and completely ignored Devon's last offer, Tr. 26:2-8. Pride then furnished Devon with its unreasonable well proposals and rejected Devon's fair market offers, all again without negotiation. Tr. 26:9-25, 38:11-23; *see generally,* Tr. 190:9-191:15; § B, *supra*.

Pride's land witness could not specifically recall a single telephone call or written communication he undertook with Devon. Tr. 163:12-165:3. Pride never attempted to negotiate those terms in Devon's proposals that it found to be unreasonable. Tr. 165:4-22. In fact, Pride's witness "didn't think there were" any communications at all following the parties' exchange of well proposals. Tr. 166:9-13. As Devon's land witness testified, this is because Pride wouldn't communicate. Tr. 25:9-26:1. Nothing about Pride's conduct suggests it made any attempt to negotiate in good faith, while rejecting without negotiation—or ignoring—Devon's reasonable offers. As a result, this factor weighs in favor of Devon.

D. The risks associated with Devon's proposal are less than the risks associated with Pride's, where Devon is better able to prudently drill, complete and operate the property and thereby prevent waste.

The next two factors are where the rubber really hits the road, and they are related. The risks associated with the parties' respective proposals must be compared, along with the ability of each party to prudently operate the property, and thereby prevent waste. Again, here, there is no dispute between the parties as to geologic risk. Tr. 77:19-78:5; 173:21-25; 187:21-25.

Further, both parties applied for the same 200% risk penalty. Tr. 59:6-13. Accordingly, the fundamental question is essentially the same under both factors: which party is best positioned to drill, complete and operate its proposed wells in the most efficient, most cost-effective, and least risky manner, while also preventing waste? An examination of the evidence shows that the risks associated with Devon's proposal are considerably less than those associated with Pride's, and that Devon is clearly the better-positioned operator.

1. Devon has extensive relevant experience where Pride has none.

Devon has extensive experience drilling and operating both Wolfcamp and Bone Spring horizontal wells in southeastern New Mexico. Tr. 21:18-22-3. Across the Delaware Basin, Devon has drilled, and continues to drill, hundreds of horizontal wells. *Id.*; Tr. 89:2-5. Devon is also the named operator of the Cotton Draw Unit, in which the S/E ¼ of the S/W ¼ and the S/W ¼ of the S/E ¼ (Units N and O) of Section 16, totaling 80 acres, is included. Tr. 20:21-21:7; 54:11-55:1. Devon currently operates 89 2nd Bone Spring horizontal wells within the Cotton Draw. Tr. 21:18-22:8. The Cotton Draw is a Delaware participating area, but it covers all depths. Tr. 46:14-21. As correctly noted at hearing by Examiner Brooks, the BLM has a preference for acreage within federal units—such as the Cotton Draw—to be operated by the unit operators. Tr. 53:20-55:1. Devon first commenced its geology evaluation of the 2nd Bone Spring in the area in the spring of 2011, Tr. 21:8-10, and its evaluation of the Wolfcamp in the area began before the fall of 2014, Tr. 34:16-20. In sum, the acreage at issue in these proceedings is very much within Devon's "home turf." Tr. 22:2-3; *see also* Devon's Exhibit 15, p. 4 (showing in yellow all nearby properties operated by Devon).

For Pride's part, their landman testified that Pride has "been operating in New Mexico for nearly twenty years." Tr. 140:24-25. However, Pride has no experience in New Mexico relevant to whether it is able to drill, complete, and prudently operate the wells it has proposed in these

matters. Pride's land witness testified that Pride does not operate a single Wolfcamp or Bone Spring horizontal well in the area. Tr. 161:8-16. The same witness had no idea whether Pride had operated or drilled other horizontal wells in the vicinity, and was unable to testify to how many miles away Pride's nearest horizontal well was located. Tr. 159:13-160:25. The only local operations that Pride's land witness could testify to were several 15-year-old vertical wells located in the N/2 of Section 16 and producing from the Delaware formation. Tr. 150:4-20; 176:8-19.

Publicly-available data demonstrates that Pride hasn't drilled, completed, or produced a single horizontal well in southeastern New Mexico in any horizon. *See* Exhibit A attached hereto.[2] Furthermore, Pride's witness readily admitted that Pride does not drill its own wells. Instead, Pride hires consulting engineers such as Steve Morris—its engineering witness in these cases. Tr. 150:4-20; 171:11-23. Pride therefore depends on the experience of hired guns such as Mr. Morris, willing to drill and complete a well for the "lowest price." Tr. 171:21-23. Mr. Morris would apparently be responsible for drilling and completing Pride's proposed wells, but would not be producing them. Tr. 194:24-195:1; 196:12-24. Accordingly, Mr. Morris ran only "root" Bone Spring EUR numbers, and provided only a broad range of predicted values. Tr. 223:13-17. He did not have any Wolfcamp production data, avoiding even on direct examination the question of anticipated EURs in the Wolfcamp. Tr. 223:13-224:6. And the only evidentiary support he presented was Pride's flawed Hearing Exhibit #18. Tr. 238:9-14. *See discussion infra* § D.2.

Devon, on the other hand, is a prudent and leading operator in this area with extensive experience in drilling horizontal wells. The Delaware Basin is currently one of Devon's primary

[2] The OCD may also take notice of these data from its own online database and other publicly-available sources. *See* 19.15.4.7(A) NMAC.

foci. Tr. 63:11-21. To date, Devon has drilled 668 horizontal wells in Eddy and Lea Counties, and a total of 336 horizontal wells in the 2nd Bone Spring. *See id.* Devon drilled the best producing well ever drilled in the Delaware Basin: the Boundary Raider 6 7 Federal Com 213H well (API No. 30-025-44147), which produced an IP24 of 12,868 barrels of oil equivalent per day from the Bone Spring. *See id.* To date, Devon has drilled a total of 25 horizontal wells in the Wolfcamp formation and counting, and recently completed two 2-mile wells in Section 27 of nearby Township 25 South, Range 31 East. *See id;* Tr. 34:24-35:6. Devon has also recently drilled four 2-mile wells in Section 7 and 18, two miles west of the acreage at issue in these cases. Tr. 104:11-22. Again, Pride has not drilled, completed, or produced a single horizontal well in any horizon.[3]

2. Devon's 2-mile laterals are superior to Pride's 1-mile laterals with respect to ultimate recovery, well life, and prevention of waste.

Devon established at hearing that its development plan maximizes the economic recovery of available hydrocarbons, and thus prevents waste, by employing longer laterals. In fact, testimony from Devon's expert geologist that Devon's development plan (1) enables the recovery of additional incremental reserves that would otherwise go unproduced, (2) avoids waste and the drilling of unnecessary wells, and (3) results in improved project economics, went entirely unrebutted by Pride's witnesses. Tr. 70:21-71:10; 73:15-74:2.

To begin with, despite Pride's unfounded suggestion to the contrary, longer laterals are undeniably the industry trend. *See* Exhibit B attached hereto. Generally, this is because longer laterals provide for higher efficiencies, less surface disturbance and better well economics. *See id.*; Tr. 29:3-9. As established below, Devon demonstrated that this is also true in the instant case. Pride's engineering witness provided absolutely no analysis, data, or modelling to support

[3] Likewise, Pride's hired consultant could not state how many Wolfcamp or Bone Spring wells he had drilled in the vicinity, proffering only a "guess." Tr. 227:7-20.

his extensive musings to the contrary.

First, Devon demonstrated at hearing that longer lateral lengths provide for increased EURs. *See* Devon's Hearing Exhibit No. 15, at 4; Tr. 90:16-92:22. Using Cotton Draw data, Devon's engineering expert showed that EUR increases 1.7 times when 1-mile laterals are compared to 1.5-mile laterals. *See* Devon's Hearing Exhibit No. 15, at 4. A similar ratio would be expected when increasing lateral length from 1-mile to 2-miles. Tr. 90:16-92:22; 114:22-121:16. This may be because the longer laterals are sweeping additional acreage from lease setbacks. *See id.* In any event, Devon demonstrated that drilling a longer lateral helps drain additional reserves. Tr. 92:20-22.

Second, Devon demonstrated that longer laterals have longer lives. *See* Devon's Hearing Exhibit No. 15, at 5; Tr. 88:10-17; 92:23-93:13. Devon compared its own Bone Spring and Wolfcamp plans to Pride's, and showed that in the 2nd Bone Spring, there's an additional 24 years of production—and corresponding royalty and severance taxes to the State of New Mexico—to be captured by use of Devon's proposed 2-mile laterals. *See id.* For the Wolfcamp, there are an additional seven years of well life, and thus an additional seven years of additional royalties to the state. *Id.* This testimony went entirely unrebutted by Pride.

Third, in this case, Devon's proposed longer laterals cross the section line between Sections 16 and 21, thus ensuring that hydrocarbons located within regulatory setbacks are fully captured. Devon's Hearing Exhibit No. 15, at 3; Tr. 89:10-90:15. Devon's engineering witness calculated an additional 61 acres of additional reserves—i.e., waste—that can be captured in each horizon by use of 2-mile laterals. *See id.* And, while this calculation was performed under the statewide rule requiring 330-foot setbacks, Tr. 104:7-10; 114:8-21, the principle nonetheless holds under the new rules requiring 100-foot setbacks: Devon's plan for 2-mile laterals maximizes economics and prevents waste. Tr. 101:11-102:22.

Fourth, Pride's own Exhibit #18 supports findings that, not only are longer laterals more productive, but also that Devon is the most productive operator in the area. Pride's Exhibit #18 was proffered by its consulting engineer in support of his theory that lay-down wells would be inferior to stand-up wells in the N/2 of Section 16—for reasons that would no longer appear germane to the competing applications filed in these cases. Tr. 239:7-10. Pride's exhibit, however, reveals far more than it intended.

Pride's Exhibit #18 shows a "random selection" of wells "pulled off the OCD site" by Pride's consulting engineer. Tr. 241:1-3; 259:10-12. The wells were apparently chosen for their proximity to the subject acreage and their target formations, but were selected without regard for lateral length or operator. Tr. 239:5-10; 240:3-7. As it turns out, Pride's own data unwittingly support a finding that Devon is the most prudent and productive operator in the vicinity. All of the best performing wells shown on Exhibit #18 are Devon wells. *See* Exhibit C attached hereto (green lines are Devon wells; red lines are wells operated by others). Furthermore, Exhibit #18 demonstrates that longer laterals are generally more productive that 1-mile laterals. *See* Exhibit D attached hereto (green lines are 1.5-mile laterals; red lines are 1-mile laterals).

Finally, Exhibit #18 exposes Pride's lack of local knowledge and experience. Pride has included in its analysis wells that those with local knowledge, such as Devon, can readily identify as Leonard/Avalon or 3rd Bone Spring wells. *See* Exhibit E attached hereto (green lines are 2nd Bone Spring wells; red lines are Leonard/Avalon wells; blue lines are 3rd Bone Spring wells). These Leonard/Avalon and 3rd Bone Spring data points are irrelevant to the analysis of 2nd Bone Spring or Wolfcamp production germane to these matters, they call into question whether Pride's intended analysis concerning lay-down or stand-up wells is of any value at all, and they underscore Pride's lack of local knowledge in this area of the Delaware Basin.

3. Devon's completion techniques and casing plans are industry standard while Pride's are not.

As discussed above, Devon brings extensive local expertise in prudent hydrocarbon development. The completion technique and casing plan proposed by Devon are rooted in this expertise, while the completion and casing plans proposed by Pride once again expose Pride's lack of local knowledge and experience.

Devon's Bone Spring completion is a 1,500 lb./ft^2 frac job. This is the same frac job used to complete Devon's nearby Cotton Draw Unit No. 507H well (API No. 3002543914)—which recently IP'd at 6,689 barrels of oil equivalent per day—as well as the nearby and hugely successful Boundary Raider 6 7 Federal Com 213H well (API No. 025-44147)—which came in at more than 12,000 barrels of oil equivalent per day. Tr. 99:7-21. Devon's Wolfcamp completions will use even more sand at an even higher rate compared to the Bone Spring, due to what appears to be lower permeability in the Wolfcamp. Tr. 99:22-100:6.

On the other hand, Pride's proposed completion technique is manifestly inadequate. Pride's proposed Wolfcamp frac job does not meet current industry standards. Publicly-available IHS Markit Data, *see* https://ihsmarkit.com/products/us-oil-gas-production-data.html, shows that the average frac job size for the Wolfcamp formation in southeast New Mexico is increasing continuously. *See* Exhibit F attached hereto. The current average Wolfcamp frac job size is 2,230 pounds per foot of lateral. *See id.* Pride's Wolfcamp plan calls for just 1,500 pounds per foot. *See* Pride's Hearing Exhibit #14. Pride's frac job is therefore obsolete. In contrast, Devon's plan calls for 2,250 pounds per foot—a 50% larger frac job than Pride's—which is in line with the current industry standards for the Wolfcamp in southeastern New Mexico. Furthermore, Pride did not present any modeling of its anticipated frac job. Tr. 241:17-242:10.

Pride's Wolfcamp casing design is also inadequate, and perhaps dangerously so. Pride's engineer testified that no additional casing is needed in the Wolfcamp than is required in the Bone Spring. Tr. 229:12-230:20. However, IHS data shows that an additional set of intermediate casing around 10,000 to 13,000 feet TVD is necessary in the Wolfcamp in southeastern New Mexico for better well control. *See* Exhibit G, attached hereto. Including this second set of intermediate casing is in large part a safety issue, designed to protect the drilling crew from blow-out. *See id.* Pride's Wolfcamp drilling plan does not include this extra casing. *See* Pride's Hearing Exhibit #14. Devon—consistent with the industry in general, *see* Exhibit G—has planned for this additional casing so as to increase well control and maximize drilling safety.

4. Devon's plan minimizes surface disturbance and takes advantage of its existing infrastructure.

Devon's plans to drill its Marwari wells from south to north, from three pads located in the S/2 of Section 21. Tr. 29:10-12; 88:18-89:9. Devon recently got clearance from BLM to use larger pads than those set forth in its initial plans. Tr. 109:19-110:4; 172:10-18. From these larger pads, the Wolfcamp and 2nd Bone Spring in the W/2 and the W/2 E/2 of Sections 16 and 21 can efficiently be drained. Furthermore, Devon owns two miles of acreage to the south of the Section 21 section line and—from the same pads—intends to drill 2-mile laterals to the south for purposes of draining the Wolfcamp and 2nd Bone Spring formations underlying that acreage. Tr. 107:12-108:3; *see also* Devon's Hearing Exhibit No. 15, at 3. This plan minimizes surface disturbance and maximizes efficiency.

Pride's plan, on the other hand, would create twice the surface disturbance. Pride proposes to drill north to south from a pad located in the N/2 of Section 16. *See* Pride's Hearing Exhibits #2-7. Because Pride would be drilling 1-mile wells covering only Section 16, Pride

would then have to drill 1-mile wells in order to drain its 100% interest in the W/2 and W/2 E/2 of Section 21. *See id.* As a result, under Pride's development plan, two sets of surface locations would be required to drain Sections 16 and 21. Under Devon's plan, only one set of surface locations would be required to drain the same acreage—and the same pads will be used to drain acreage to the south. *See id.*

Devon has substantial existing infrastructure in the area. Tr. 41:2-12; 95:11-96-11. It has water takeaway capacity and gas lines for other wells Devon operates in the area. Tr. 62:20-25; 95:11-96:1. Critically, in light of a growing infrastructure bottleneck in this part of the Basin, Devon already has contracts in place to handle water, gas and oil. Tr. 95:23-96:1;. Devon has a compressor station with a CO2 scrubbing facility. Tr. 131:24-132:2. Fracking sand is sourced from a local mine at low cost. Tr. 135:6-10. And as discussed above, Devon intends to use a shared pad facility not only for the wells proposed here, but also for additional planned wells to the south, thus saving on costs. Tr. 97:24-98:7.

On the other hand, Pride's landman testified that it has no contracts in place, for drilling or for anything else. Tr. 170:1-21; 173:4-8. This is problematic because, as Pride's engineer testified, the costs of vendors and of drilling are both "rising exponentially." Tr. 200:12-18. Although Pride's engineer testified to having ongoing contracts with various vendors, he could not testify that he had any specific vendors committed to working the specific wells at issue here on any particular timeline. Tr. 244:18-246:14. Pride has not even decided who would perform completion on these wells. Tr. 245:24-246:14. That Pride's consulting engineer has prior relationships with vendors is not tantamount to having a concrete plan for drilling and completing these wells. Moreover, Pride's engineer danced around questions about Pride's takeaway capacity and could provide no takeaway information specific to Pride's proposed wells. Tr. 250:13-251:2. Further, Pride does not know what its saltwater disposal capacity is,

and its plans to drill additional saltwater disposal wells are vague and unrealistic in today's regulatory environment. Tr. 242:11-244:17.

F. Devon's AFE costs are significantly lower than Pride's on a per-mile basis.

A comparison of the parties respective AFEs shows that Devon's per-mile costs are significantly lower than Pride's.

Pride's Wolfcamp AFEs total $6.78M per well. *See* Pride's Hearing Exhibit #8. This total is, of course, for a 1-mile well. For Pride to drill two 1-mile wells at this rate would cost roughly twice this amount, or $13,560,000. *See* Exhibit H attached hereto. (This amount should in fact be greater, given the fact that Pride's Wolfcamp completion and casing plans are manifestly inadequate. Unlike Pride, Devon includes an additional industry-standard well casing string for well control and an industry-standard frac job. *See id.*; Tr. 97:1-23; 98:10-21; 99:1-100:6.) Meanwhile, Devon is proposing to drill and complete its 2-mile Wolfcamp wells for roughly $10.7M per well, considerably less than Pride's $13.56M for two 1-mile wells. *See* Devon's Hearing Exhibit No. 7; Exhibit H. This difference is explained by Devon's experience, efficiency, and large volume contract discounts. *See id.*

Similarly, Pride's Bone Spring AFEs come in at $6.672M per well. *See* Pride's Hearing Exhibit #8; Tr. 149:14-17. Again, this total is for a 1-mile well. For Pride to drill two 1-mile wells at this rate would cost roughly twice this amount, or $13,344,000. *See* Exhibit H. (Again, this amount should in fact be greater, given the fact that Pride's completion and casing plans are manifestly inadequate.) For its part, Devon is proposing to drill and complete its 2-mile Bone Spring wells for just over $7M per well. *See* Affidavit of Timothy J. Prout (filed concurrently herewith, with a courtesy copy attached hereto as Exhibit I). Again, this difference is likely due to Devon's experience, efficiency, and large volume contract discounts. In any event, the per-mile cost savings is clear in both the Bone Spring and the Wolfcamp.

G. Although Devon's administrative and supervisory expenses are higher, they are more realistic and in line with actual expenses than Pride's.

There is an obvious—but explainable—difference in the administrative and supervisory expenses estimated and requested by the parties. Devon's estimate for administrative and supervisory expenses is $11,000 per month in drilling overhead and $1,100 per month in producing overhead. Tr. 27:25-28:20; 39:20-40:14. Pride's are $7,500 and $750, respectively. Tr. 156:11-13; Pride's Hearing Exhibit #12.

Devon's land expert—who reviews many AFEs from other operators in the area, Tr. 39:16-19—testified that Devon's rates are competitive for a 2-mile well in this area. Tr. 28:7-12; 40:2-6. These numbers are in line with what Devon's accounting group has been receiving and what Devon has been paying other operators in the area, and generally reflect Devon's actual overhead. Tr. 63:25-64:8. Devon's expert in-house petroleum engineer explained further that Devon is a technological leader in the drilling field and, as a result, a major piece of drilling overhead is the WellCon Center that Devon uses to geosteer and ensure that the wellbore remains in zone throughout the 2-mile drill path. As noted by Examiner Jones and agreed to by Devon's geologist, geosteering will be particularly important in the Wolfcamp, where the structure map shows that some elevation changes may be necessary to stay in zone. Tr. 83:24-84:15; Devon's Hearing Exhibit No. 14. The added investment in geosteering is reflected in Devon's consistently excellent production numbers. Tr. 101:7-10. Given Devon's investment in the best technology, and its experience and expertise in this area of the Basin, Devon's overhead costs are reasonable, and the facial difference between the parties' overhead estimates is explainable.

CONCLUSION

In summary, Devon holds a greater mineral interest ownership and greater "working interest control" in its proposed units than does Pride. Devon attempted to negotiate in good

faith, while Pride did not. The risks associated with Pride's proposal greatly outweigh the risks associated with Devon's proposal, and Devon's proven ability to prudently operate the property and thereby prevent waste greatly exceeds that of Pride. Devon's per-mile well cost estimates are lower than Pride's, and the differences in the parties' estimated administrative and supervisory expenses are explainable. For the foregoing reasons, Devon's applications must be approved and Pride's applications must be denied.[4]

Respectfully submitted,

MONTGOMERY & ANDREWS, P.A.

By: *Seth C. McMillan*
Seth C. McMillan
Post Office Box 2307
Santa Fe, New Mexico 87504-2307
(505) 982-3873
smcmillan@montand.com

Attorneys for Devon Energy Production Company, L.P.

[4] Examiner Jones asked at hearing how many hearing orders the parties are asking the Division to write. Tr. 11:25-12:20. Devon is of the opinion that a single hearing order addressing all twelve (12) of the cases consolidated herein would be most efficient, given that the cases all involve the same acreage. In the alternative, a single order addressing the six (6) Bone Spring cases (Case Nos. 16099-16101 and 16169-16171) and a second order addressing the six (6) Wolfcamp cases (Case Nos. 16102-16104 and 16172-16174) would also be appropriate. In any event, Devon requests that an expedited order or orders be issued in these matters so the prevailing party can meet its spud dates.

CERTIFICATE OF SERVICE

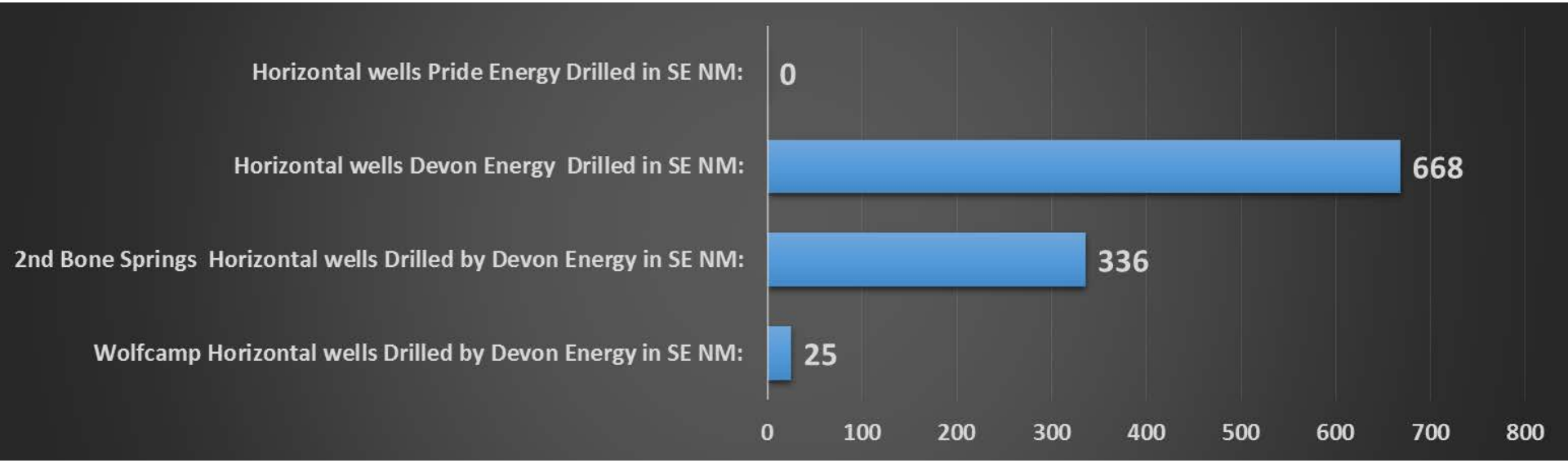
I hereby certify that a true and correct copy of the foregoing was served on the following counsel of record by electronic mail on July 27, 2018:

Ernest L. Padilla
Padilla Law Firm PA
PO Box 2523
Santa Fe, NM 87504-2523
padillalaw@qwestoffice.com
Attorney for Pride Energy Company

Seth C. McMillan
Seth C. McMillan

Drilling and Production Experience

Devon's exceeds in every metric



- ***Pride hasn't drilled, completed or produced a single horizontal well in SE NM in any horizon***
- Devon is prudent and leading operator in SE NM with extensive experience in drilling horizontal wells
  - Total of 668 horizontal wells drilled in Eddy and Lea County and counting
  - Total of 336 horizontal wells drilled in 2nd Bone Springs formation and counting
    - Best well ever drilled in basin (Boundary Raider, IP24 of 12,868 BOED) is by Devon Energy in 2nd Bone Springs formation
  - Total of 25 horizontal wells drilled in Wolfcamp formation and counting

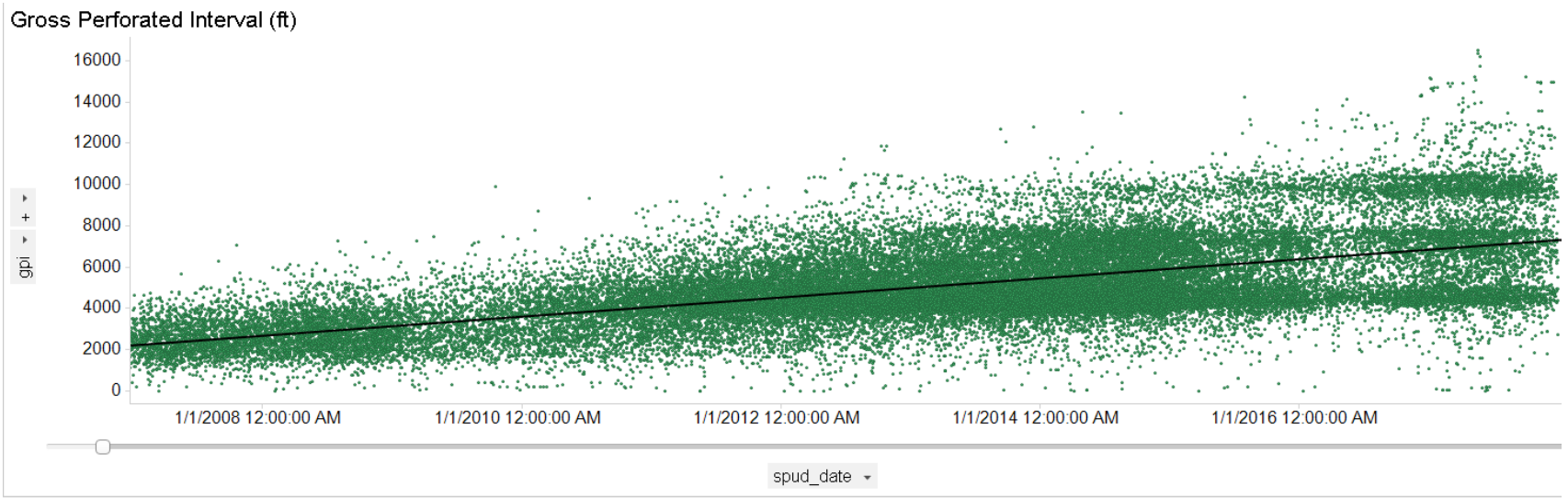
EXHIBIT A

Average Lateral Length Progression

Longer Laterals are Better

devon

Industry as a whole drilling longer laterals (Gross Perforated Interval) due to higher efficiencies, less surface disturbances and better well economics



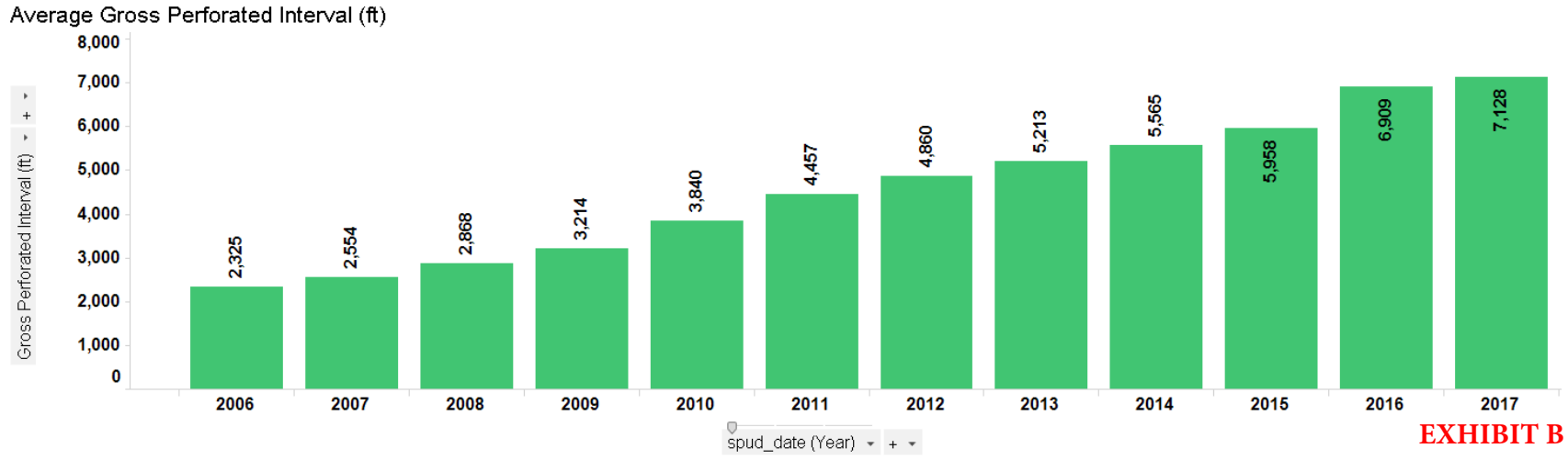


EXHIBIT B

Pride Exhibit 18 Analysis

Devon is Better Operator

devon

Pride's own analysis (exhibit 18) shows that Devon Energy is more prudent operator in the area and all the best performing wells are Devon Energy's wells

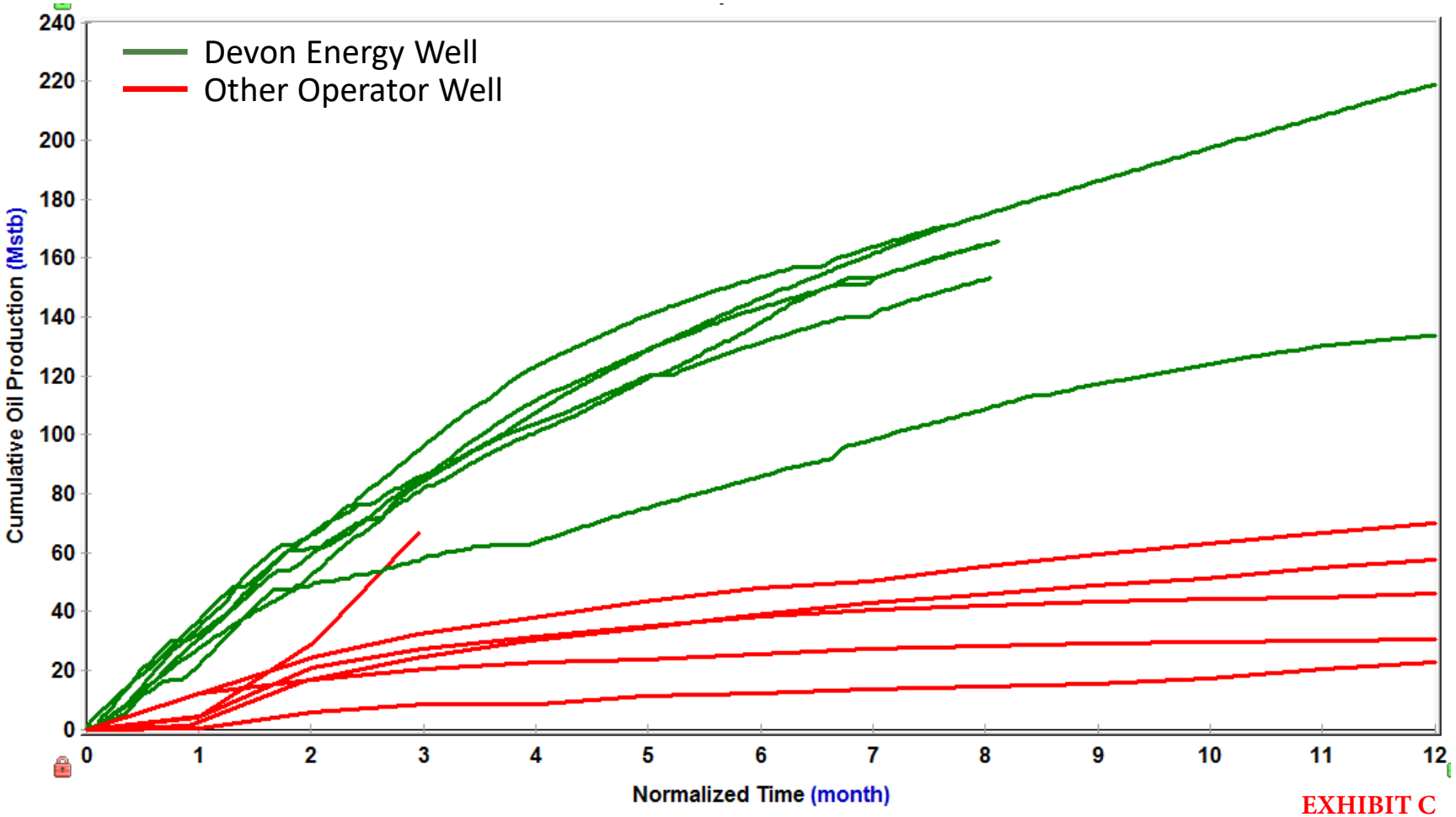


EXHIBIT C

Pride Exhibit 18 Analysis

Devon is Better Operator

devon

Pride's own analysis (exhibit 18) shows that often longer lateral results in better performance

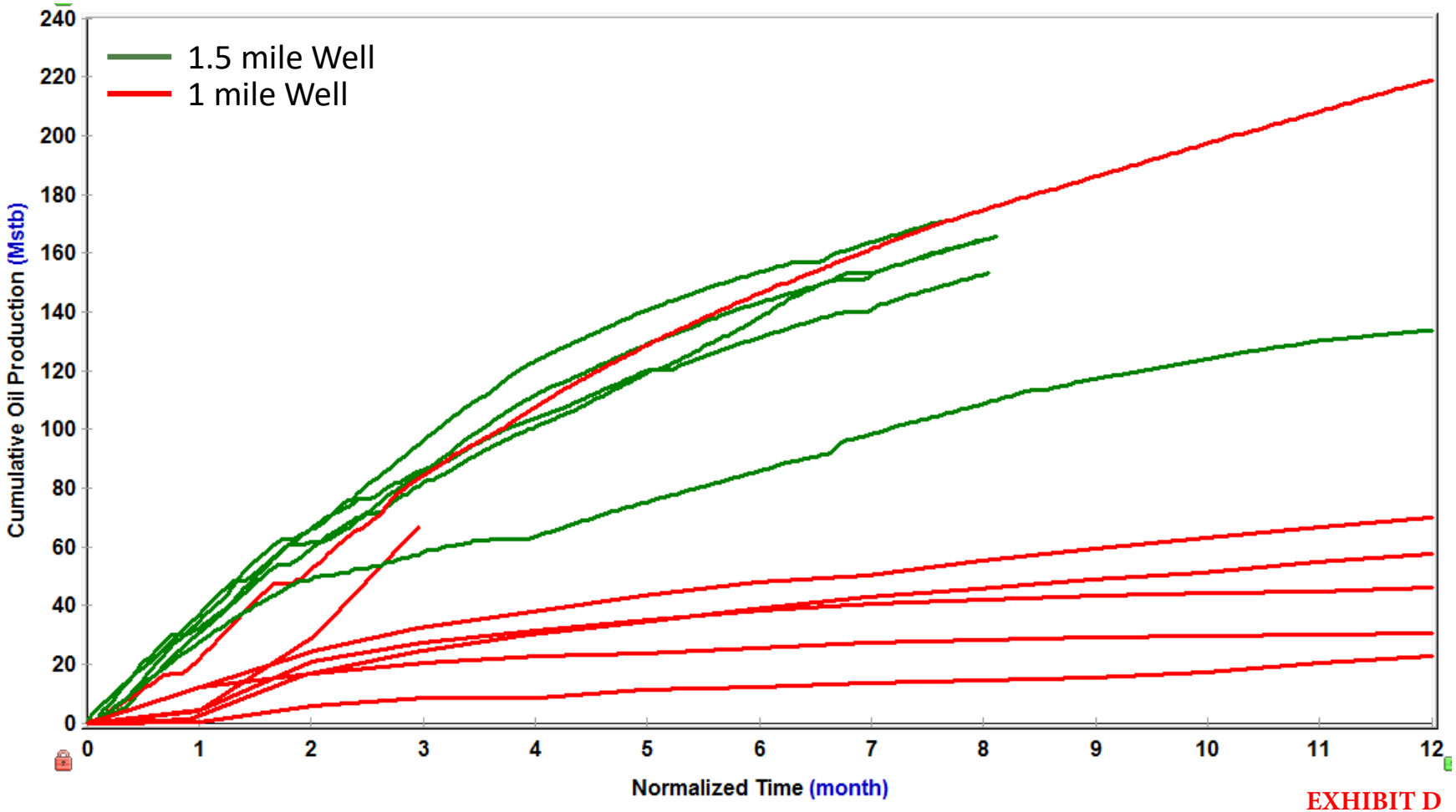


EXHIBIT D

Pride Exhibit 18 Analysis

Devon is Better Operator

devon

Pride's exhibit 18 shows data from irrelevant formations like Leonard / Avalon and 3rd Bone Springs for 2nd Bone Springs Sands analysis which is actually the formation under consideration, ***it shows Pride Energy's lack of local knowledge and experience.***

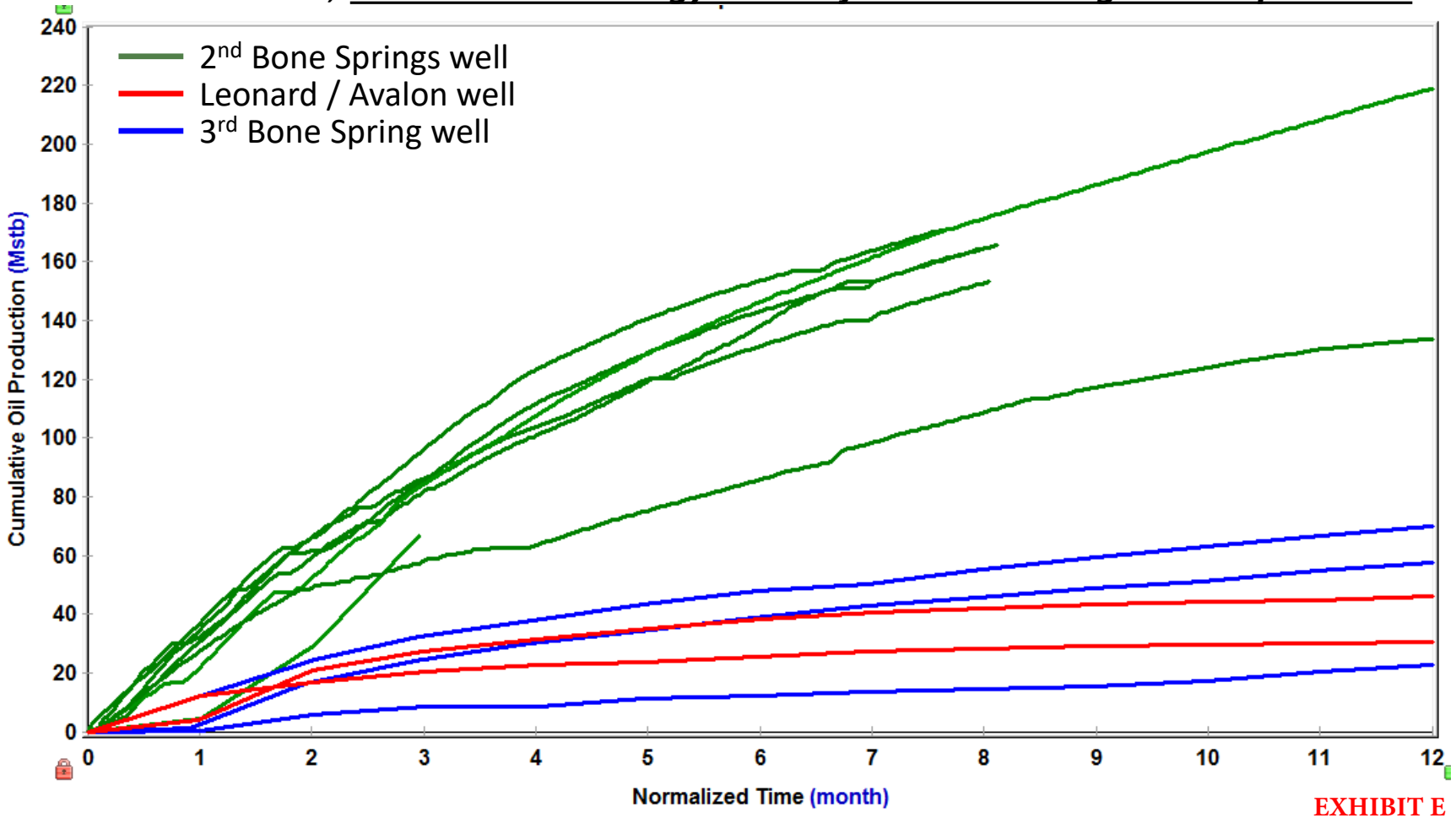
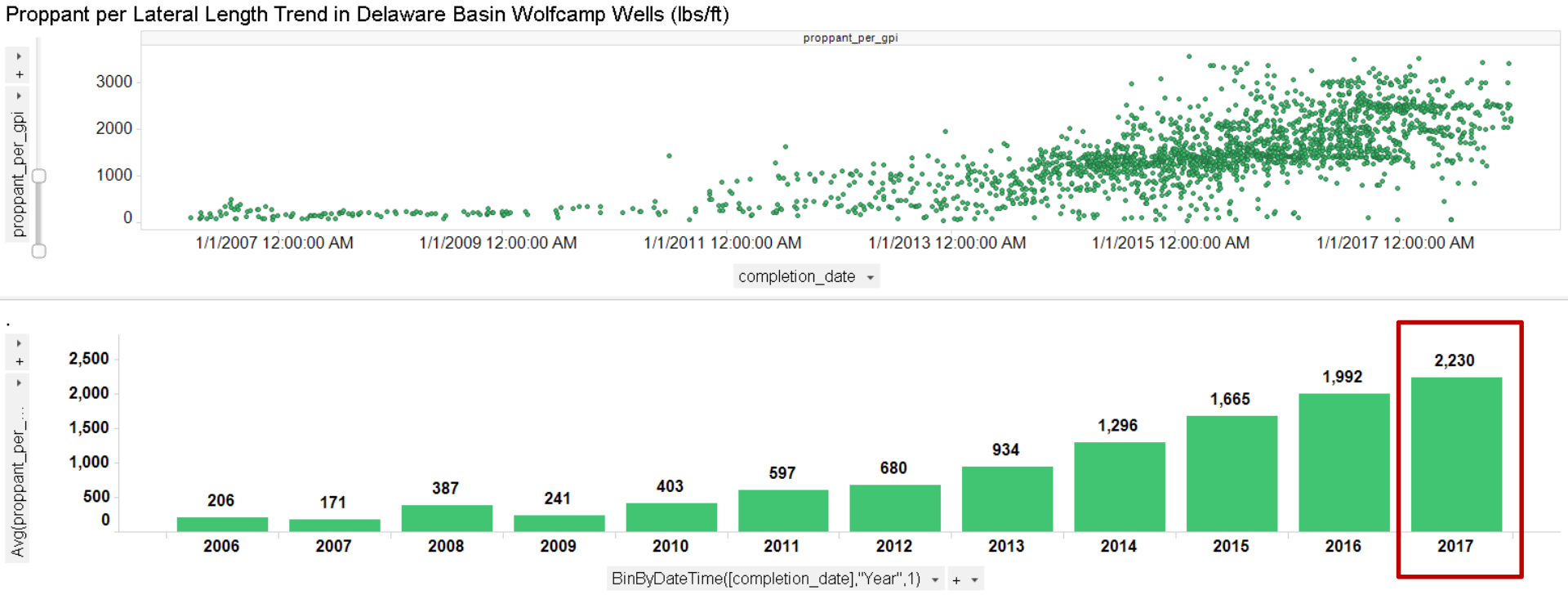


EXHIBIT E

Average Proppant per Foot Lateral

Wolfcamp Formation in Delaware Basin

devon

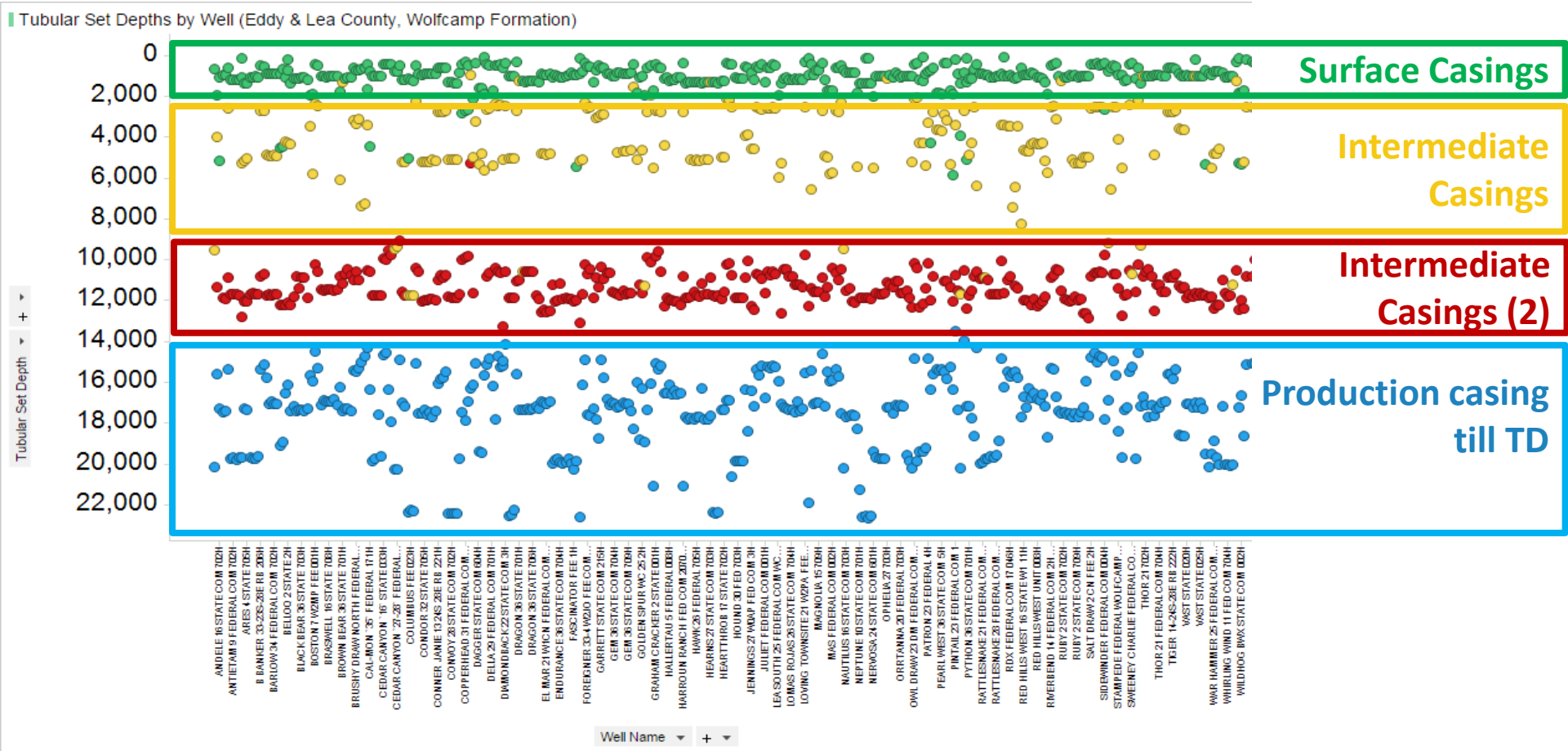


- Frac job size for Wolfcamp formation in SE New Mexico is increasing continuously
- Current average frac job size for Wolfcamp formation in SE New Mexico is 2,230 pound per foot of lateral
- Pride's Plan for Wolfcamp is 1,500 pound per foot frac job size is obsolete
- Devon's plan calls for 2,250 pound per foot frac job size which is in line with current industry standards for Wolfcamp formation in SE New Mexico

EXHIBIT F

Average Proppant per Foot Lateral

Wolfcamp Formation in Delaware Basin

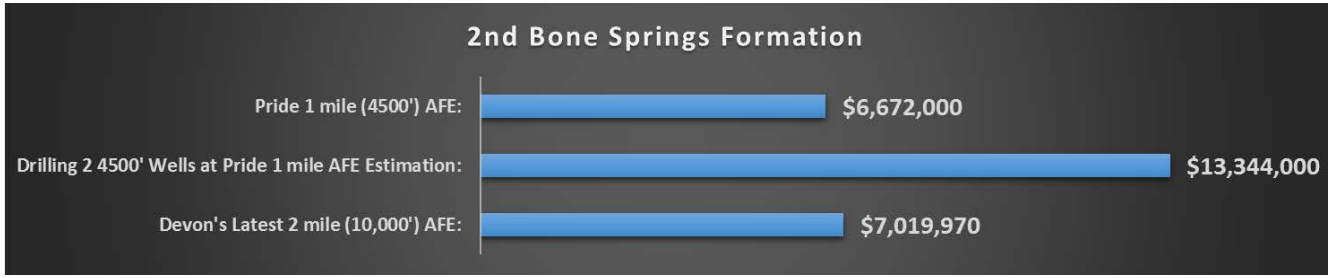


- Wolfcamp formation in SE New Mexico requires additional set of **intermediate casing (2)** around 10,000 ft to 13,000 ft TVD for better well control, safety of the drilling crew from blow-outs due to high pressure
- Pride's plan doesn't include it which can cause well-control and safety issues
- Devon's plans for this casing string like the industry standard shown above in graph

EXHIBIT G

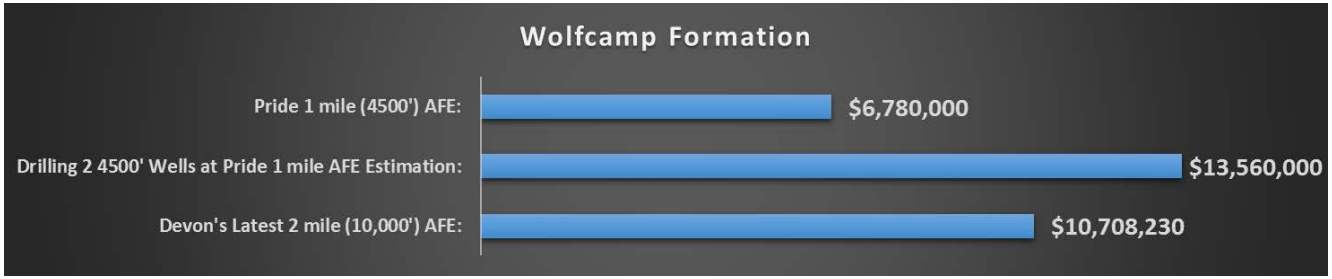
AFE Comparison

Devon Costs are Cheaper



In 2nd Bone Springs formation, Devon is drilling and completing a 2 mile well at a similar cost as 1 mile well proposed by Pride (~$7 million each)

- ***Due to Devon's experience, efficiency and large volume contract discounts***



In Wolfcamp formation, Devon is drilling and completing a 2 mile well ~$3million cheaper compared to drilling 2 4500' (1 mile) wells at a similar cost proposed by Pride

- ***Additionally, Devon cost includes additional casing string for well control, just like every other peer is installing in the industry. Pride proposal doesn't include it.***
- ***Devon proposal also calls for 50% bigger frac job (2,250 ppf) compared to Pride's frac job size (1,500 ppf). This is in line of what peers are pumping for better production.***

EXHIBIT H

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

APPLICATIONS OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR NON-STANDARD OIL SPACING AND PRORATION UNITS, COMPULSORY POOLING, AND DOWN-HOLE COMMINGLING, LEA COUNTY, NEW MEXICO

CASE NOS. 16099-16101

APPLICATIONS OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR NON-STANDARD OIL SPACING AND PRORATION UNITS AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

CASE NOS. 16102-16104

APPLICATIONS OF PRIDE ENERGY COMPANY FOR COMPULSORY POOLING, NON-STANDARD SPACING AND PRORATION UNITS, AND UNORTHODOX LOCATIONS, LEA COUNTY, NEW MEXICO

CASE NOS. 16169-16174

AFFIDAVIT OF TIMOTHY J. PROUT

I, being duly sworn on oath, state the following:

1. I am over the age of eighteen years and have the capacity to execute this Affidavit, which is based on my personal knowledge.

2. The above-captioned matters were consolidated and heard by the Division on June 12, 2018. At hearing, I was qualified by the Division as an expert petroleum landman.

3. Devon's most recent AFEs, as of the hearing date, for its proposed 2nd Bone Spring wells (Cases 16099-16101) were admitted as a matter of record by the Division in connection with Devon's Hearing Exhibit No. 7.

4. Devon's Hearing Exhibit No. 7 reflects a total AFE estimate of $4,935,402.15 for each of the three 2nd Bone Spring wells proposed by Devon in these cases. Devon's expert

witnesses, including myself, testified that this amount reflected Devon's most recent AFE for these wells.

5. Since the June 12, 2018 hearing, Devon has updated its AFE estimates for its proposed 2nd Bone Spring wells.

6. Attached as Exhibit A to this Affidavit are updated AFEs for Devon's proposed 2nd Bone Spring wells. The revised AFE estimate for each of the three 2nd Bone Spring wells proposed by Devon in Cases 16099-16101 is, as of today's date, $7,019,970.01

FURTHER AFFIANT SAYETH NAUGHT

Timothy J. Prout

Subscribed to and sworn before me this 25th day of July, 2018.

RACHEL GERLACH NOTARY # 11005642 EXP. 06/22/19 PUBLIC STATE OF OKLAHOMA

Notary Public

devon

Authorization for Expenditure

AFE # XX-127218.01
Well Name: MARWARI 28-16 STATE FED COM 232H **AFE Date: 07/24/2018**
Cost Center Number: 1093846401 **State: NM**
Legal Description: SECTION 28-25S-32E **County/Parish: LEA**
Revision: ☐

Explanation and Justification:

DRILL AND COMPLETE

Code	Intangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6060100	DYED LIQUID FUELS	93,625.00	0.00	0.00	93,625.00
6060130	GASEOUS FUELS	32,700.00	0.00	0.00	32,700.00
6080100	DISPOSAL - SOLIDS	51,230.00	1,050.00	0.00	52,280.00
6080110	DISP-SALTWATER & OTH	0.00	149,625.00	0.00	149,625.00
6090100	FLUIDS - WATER	48,675.00	468,441.28	0.00	517,116.28
6100100	PERMIT SURVEY&TITLE	40,000.00	0.00	0.00	40,000.00
6100110	RIGHT OF WAY	5,000.00	0.00	0.00	5,000.00
6110130	ROAD&SITE PREP SVC	100,000.00	12,600.00	0.00	112,600.00
6110170	DAMAGE & REMEDIATION	10,000.00	0.00	0.00	10,000.00
6130170	COMM SVCS - WAN	4,769.00	0.00	0.00	4,769.00
6130360	RTOC - ENGINEERING	0.00	10,500.00	0.00	10,500.00
6130370	RTOC - GEOSTEERING	28,273.00	0.00	0.00	28,273.00
6150100	CH LOG PERFRTG&WL SV	0.00	278,302.50	0.00	278,302.50
6160100	MATERIALS & SUPPLIES	545.00	0.00	0.00	545.00
6170110	SNUBBG&COIL TUBG SVC	0.00	242,809.59	0.00	242,809.59
6190100	TRCKG&HL-SOLID&FLUID	80,250.00	0.00	0.00	80,250.00
6190110	TRUCKING&HAUL OF EQP	62,400.00	15,750.00	0.00	78,150.00
6200130	CONSLT & PROJECT SVC	95,375.00	94,853.84	0.00	190,228.84
6230120	SAFETY SERVICES	44,963.00	0.00	0.00	44,963.00
6300270	SOLIDS CONTROL SRVCS	107,000.00	0.00	0.00	107,000.00
6310120	STIMULATION SERVICES	0.00	1,905,850.24	0.00	1,905,850.24
6310200	CASING & TUBULAR SVC	79,400.00	0.00	0.00	79,400.00
6310250	CEMENTING SERVICES	157,000.00	0.00	0.00	157,000.00
6310280	DAYWORK COSTS	517,400.00	0.00	0.00	517,400.00
6310300	DIRECTIONAL SERVICES	329,000.00	0.00	0.00	329,000.00
6310310	DRILL BITS	94,100.00	0.00	0.00	94,100.00
6310330	DRILL&COMP FLUID&SVC	219,000.00	2,100.00	0.00	221,100.00
6310380	OPEN HOLE EVALUATION	24,750.00	0.00	0.00	24,750.00
6310480	TSTNG-WELL, PL & OTH	0.00	79,887.24	0.00	79,887.24
6310600	MISC PUMPING SERVICE	0.00	58,302.05	0.00	58,302.05
6320100	EQPMNT SVC-SRF RNTL	59,527.00	201,379.26	0.00	260,906.26
6320110	EQUIP SVC - DOWNHOLE	180,450.00	0.00	0.00	180,450.00
6320160	WELDING SERVICES	2,000.00	0.00	0.00	2,000.00
6520100	LEGAL FEES	20,000.00	0.00	0.00	20,000.00
6550110	MISCELLANEOUS SVC	33,650.00	0.00	0.00	33,650.00
6630110	CAPITAL OVERHEAD	8,175.00	0.00	0.00	8,175.00
6740340	TAXES OTHER	272.00	0.00	0.00	272.00
	Total Intangibles	2,529,529.00	3,521,451.00	0.00	6,050,980.00

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310150	CASG-COND&DRIVE PIPE	50,000.00	0.00	0.00	50,000.00
6310460	WELLHEAD EQUIPMENT	65,000.00	36,750.00	0.00	101,750.00
6310530	SURFACE CASING	22,638.00	0.00	0.00	22,638.00

EXHIBIT A

Costs on this form are estimates only. Working Interest Owners should not consider these estimates as establishing any limit on the monies which will be required to perform the proposed operation.

Authorization for Expenditure

AFE # XX-127218.01
Well Name: MARWARI 28-16 STATE FED COM 232H **AFE Date: 07/24/2018**
Cost Center Number: 1093846401 **State: NM**
Legal Description: SECTION 28-25S-32E **County/Parish: LEA**
Revision: ☐

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310540	INTERMEDIATE CASING	350,799.00	0.00	0.00	350,799.00
6310550	PRODUCTION CASING	393,303.01	0.00	0.00	393,303.01
6310580	CASING COMPONENTS	50,500.00	0.00	0.00	50,500.00
	Total Tangibles	932,240.01	36,750.00	0.00	968,990.01

TOTAL ESTIMATED COST	3,461,769.01	3,558,201.00	0.00	7,019,970.01

WORKING INTEREST OWNER APPROVAL

Company Name:

Signature: **Print Name:**

Title:

Date:

Email:

Note: Please include/attach well requirement data with ballot.

Costs on this form are estimates only. Working Interest Owners should not consider these estimates as establishing any limit on the monies which will be required to perform the proposed operation.

Authorization for Expenditure

AFE # XX-127219.01
Well Name: MARWARI 21-16 STATE FED COM 234H **AFE Date: 07/24/2018**
Cost Center Number: 1093846501 **State: NM**
Legal Description: SECTION 21-25S-32E **County/Parish: LEA**
Revision: ☐

Explanation and Justification:

DRILL AND COMPLETE

Code	Intangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6060100	DYED LIQUID FUELS	93,625.00	0.00	0.00	93,625.00
6060130	GASEOUS FUELS	32,700.00	0.00	0.00	32,700.00
6080100	DISPOSAL - SOLIDS	51,230.00	1,050.00	0.00	52,280.00
6080110	DISP-SALTWATER & OTH	0.00	149,625.00	0.00	149,625.00
6090100	FLUIDS - WATER	48,675.00	468,441.28	0.00	517,116.28
6100100	PERMIT SURVEY&TITLE	40,000.00	0.00	0.00	40,000.00
6100110	RIGHT OF WAY	5,000.00	0.00	0.00	5,000.00
6110130	ROAD&SITE PREP SVC	100,000.00	12,600.00	0.00	112,600.00
6110170	DAMAGE & REMEDIATION	10,000.00	0.00	0.00	10,000.00
6130170	COMM SVCS - WAN	4,769.00	0.00	0.00	4,769.00
6130360	RTOC - ENGINEERING	0.00	10,500.00	0.00	10,500.00
6130370	RTOC - GEOSTEERING	28,273.00	0.00	0.00	28,273.00
6150100	CH LOG PERFRTG&WL SV	0.00	278,302.50	0.00	278,302.50
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6310300	DIRECTIONAL SERVICES	329,000.00	0.00	0.00	329,000.00
6310310	DRILL BITS	94,100.00	0.00	0.00	94,100.00
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Authorization for Expenditure

AFE # XX-127219.01
Well Name: MARWARI 21-16 STATE FED COM 234H **AFE Date: 07/24/2018**
Cost Center Number: 1093846501 **State: NM**
Legal Description: SECTION 21-25S-32E **County/Parish: LEA**
Revision: ☐

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
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6310550	PRODUCTION CASING	393,303.01	0.00	0.00	393,303.01
6310580	CASING COMPONENTS	50,500.00	0.00	0.00	50,500.00
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TOTAL ESTIMATED COST	3,461,769.01	3,558,201.00	0.00	7,019,970.01

WORKING INTEREST OWNER APPROVAL

Company Name:

Signature: **Print Name:**

Title:

Date:

Email:

Note: Please include/attach well requirement data with ballot.

Costs on this form are estimates only. Working Interest Owners should not consider these estimates as establishing any limit on the monies which will be required to perform the proposed operation.

Authorization for Expenditure

AFE # XX-127255.01
Well Name: MARWARI 28-16 STATE FED COM 236H **AFE Date: 07/24/2018**
Cost Center Number: 1093848401 **State: NM**
Legal Description: SECTION 28-25S-32E **County/Parish: LEA**
Revision: ☐

Explanation and Justification:

DRILL AND COMPLETE

Code	Intangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
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6130370	RTOC - GEOSTEERING	28,273.00	0.00	0.00	28,273.00
6150100	CH LOG PERFRTG&WL SV	0.00	278,302.50	0.00	278,302.50
6160100	MATERIALS & SUPPLIES	545.00	0.00	0.00	545.00
6170110	SNUBBG&COIL TUBG SVC	0.00	242,809.59	0.00	242,809.59
6190100	TRCKG&HL-SOLID&FLUID	80,250.00	0.00	0.00	80,250.00
6190110	TRUCKING&HAUL OF EQP	62,400.00	15,750.00	0.00	78,150.00
6200130	CONSLT & PROJECT SVC	95,375.00	94,853.84	0.00	190,228.84
6230120	SAFETY SERVICES	44,963.00	0.00	0.00	44,963.00
6300270	SOLIDS CONTROL SRVCS	107,000.00	0.00	0.00	107,000.00
6310120	STIMULATION SERVICES	0.00	1,905,850.24	0.00	1,905,850.24
6310200	CASING & TUBULAR SVC	79,400.00	0.00	0.00	79,400.00
6310250	CEMENTING SERVICES	157,000.00	0.00	0.00	157,000.00
6310280	DAYWORK COSTS	517,400.00	0.00	0.00	517,400.00
6310300	DIRECTIONAL SERVICES	329,000.00	0.00	0.00	329,000.00
6310310	DRILL BITS	94,100.00	0.00	0.00	94,100.00
6310330	DRILL&COMP FLUID&SVC	219,000.00	2,100.00	0.00	221,100.00
6310380	OPEN HOLE EVALUATION	24,750.00	0.00	0.00	24,750.00
6310480	TSTNG-WELL, PL & OTH	0.00	79,887.24	0.00	79,887.24
6310600	MISC PUMPING SERVICE	0.00	58,302.05	0.00	58,302.05
6320100	EQPMNT SVC-SRF RNTL	59,527.00	201,379.26	0.00	260,906.26
6320110	EQUIP SVC - DOWNHOLE	180,450.00	0.00	0.00	180,450.00
6320160	WELDING SERVICES	2,000.00	0.00	0.00	2,000.00
6520100	LEGAL FEES	20,000.00	0.00	0.00	20,000.00
6550110	MISCELLANEOUS SVC	33,650.00	0.00	0.00	33,650.00
6630110	CAPITAL OVERHEAD	8,175.00	0.00	0.00	8,175.00
6740340	TAXES OTHER	272.00	0.00	0.00	272.00
	Total Intangibles	2,529,529.00	3,521,451.00	0.00	6,050,980.00

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310150	CASG-COND&DRIVE PIPE	50,000.00	0.00	0.00	50,000.00
6310460	WELLHEAD EQUIPMENT	65,000.00	36,750.00	0.00	101,750.00
6310530	SURFACE CASING	22,638.00	0.00	0.00	22,638.00

Costs on this form are estimates only. Working Interest Owners should not consider these estimates as establishing any limit on the monies which will be required to perform the proposed operation.

Authorization for Expenditure

AFE # XX-127255.01
Well Name: MARWARI 28-16 STATE FED COM 236H **AFE Date: 07/24/2018**
Cost Center Number: 1093848401 **State: NM**
Legal Description: SECTION 28-25S-32E **County/Parish: LEA**
Revision: ☐

Code	Tangible Description	Drilling Costs	Completion Costs	Dry Hole Costs	Total Costs
6310540	INTERMEDIATE CASING	350,799.00	0.00	0.00	350,799.00
6310550	PRODUCTION CASING	393,303.01	0.00	0.00	393,303.01
6310580	CASING COMPONENTS	50,500.00	0.00	0.00	50,500.00
	Total Tangibles	932,240.01	36,750.00	0.00	968,990.01

TOTAL ESTIMATED COST	3,461,769.01	3,558,201.00	0.00	7,019,970.01

WORKING INTEREST OWNER APPROVAL

Company Name:

Signature: **Print Name:**

Title:

Date:

Email:

Note: Please include/attach well requirement data with ballot.

Costs on this form are estimates only. Working Interest Owners should not consider these estimates as establishing any limit on the monies which will be required to perform the proposed operation.