STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT

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| In re: | : | |
| The Matter of the Application of EAP Ohio, LLC for Unit Operation | : | Application Date: August 4, 2025 |
| Good Shepherd HN GMN SW Unit | : | |

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UNITIZATION APPLICATION HEARING

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Before Hearing Host Jeff Large
All Parties Appearing Remotely
September 24, 2025, 11:30 a.m.

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Spectrum Reporting LLC
400 South Fifth Street, Ste. 201
Columbus, Ohio 43215
614-444-1000 or 800-635-9071
www.spectrumreporting.com

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# A P P E A R A N C E S

ON BEHALF OF OHIO DEPARTMENT OF NATURAL RESOURCES:

Ohio Department of Natural Resources
2045 Morse Road, Building F-3
Columbus, OH 43229
By Jennifer Barrett, Esq.
(Via videoconference)

ON BEHALF OF EAP OHIO, LLC:

Bricker Graydon, LLP
100 South Third Street
Columbus, OH 43215
By Jenae Allert, Esq.
(Via videoconference)

ALSO PRESENT:

Barbara Richardson (Via videoconference)
Cynthia Marshall (Via videoconference)
Cory Cosby (Via videoconference)
Abe Zayed (Via videoconference)
Scott Shaffer (Via videoconference)
Tyler Heckathorn, Esq. (Via videoconference)
Kathi Myers (Via videoconference)
Michael McConnell (Via videoconference)

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P R O C E E D I N G S

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MR. LARGE: Good morning, everyone. Before we begin, I would like to go over some instructions for this video and telephone conference.

If you have joined online, please mute your microphone. If you have called in via phone, please use the "mute" feature of your phone. Once the hearing begins, everyone will be muted except for those presenting. If you have called in, you can unmute yourself by pressing "star 6."

Witnesses for the Applicant and anyone wishing to make comments, please wait to be individually called upon by your attorney or by the Division before speaking. Please mute your microphones anytime you are not speaking and when you have finished presenting to avoid any feedback.

I am now asking anyone who would like to make comments, please state your name slowly and clearly for the Division. Please identify whether you are an unleased mineral owner, working

interest owner, or an owner with property in the Good Shepherd HN GMN SW unit. I would also like this information from anyone who represents any of these persons. We will make note of your name and call upon you when it is time for comments.

So if you have joined us via WebEx, please unmute yourself now, and state your name if you would like to make any comments.

Hearing none.

If you have joined us via telephone, please unmute yourself now by pressing "star 6," and state your name if you would like to make any comments.

MR. HECKATHORN: Good morning. My name is Tyler Heckathorn. I'm here on behalf of the Eric Petroleum parties.

MR. LARGE: Okay. Thank you. I have your name here. And I will call upon you at the end of the hearing if you would like to make any comments.

Anyone else?

Thank you. With that, we will begin the hearing.

Ms. Barrett.

MS. BARRETT: Thank you and good morning. Today is Wednesday, September 24th, 2025. And we are here on the matter of the application of EAP Ohio, LLC, for unit operation of the Good Shepherd HN GMN SW unit. This hearing before the Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, is convened pursuant to Ohio Revised Code Section 1509.28.

My name is Jennifer Barrett. And I'm an administrative officer for the Division. Also with me today is Program Administrator Jeff Large. we are conducting the hearing today and serve as the Chief's designees on this matter.

On August 4th, 2025, EAP filed with the Division an application for unit operations for a unit designated as the Good Shepherd HN GMN SW unit. EAP filed subsequent revisions to the application. The unit is proposed to be located in Harrison County, Ohio. In its application, EAP claims to have the mineral rights through voluntary agreements to approximately 760.257689 acres of the desired approximate 1,121.7916-acre unit.

The purpose of today's hearing is to determine whether EAP's Good Shepherd HN GMN SW unit application meets all the requirements of Revised Code Section 1509.28. Under that section, the Chief of the Division must issue an order if he determines that the Applicant has shown that, one, the unit is reasonably necessary to increase substantially the ultimate recovery of oil and gas; and two, the estimated additional recovery from the unit exceeds the additional cost.

Neither the Chief nor any of us here today have made any decisions on EAP's application. After today's hearing, we will review all of the information provided to us in order to make a determination. We have a court reporter present as well, and we will have a copy of the transcript of this hearing for review.

The Chief's decision will be issued through a Chief's Order, which will be posted on the Division's website. Pursuant to Revised Code Section 1509.36, any order may be appealed within 30 days after the date upon which the person to whom the order was issued received the order and for all other persons adversely affected by the

order within 30 days after the date of the order complained of.

The hearing will proceed as follows: EAP will present its witnesses and exhibits and will answer questions posed by the Division staff. Then any unleased mineral owners, working interest owners, and those persons with property included in the proposed Good Shepherd HN GMN SW unit will have the opportunity to present questions and concerns to the Division staff. And then the Division staff may take a break to determine if there are any additional questions for the Applicant.

To proceed in an orderly fashion, we ask that any interested party who speaks here today pose any questions to the Division and we will then ask any questions to EAP. Additionally, anyone speaking today will be asked to provide their information to the court reporter. If you are uncomfortable speaking during the hearing, we will also accept written comments.

For purposes of the record, the Division received written comments from Katherine Kimble on behalf of Elizabeth Ann Tipton and Anna

Marie Tipton and from Tyler Heckathorn on behalf of Eric Petroleum Corporation, Eric Petroleum, Utica LLC, and Bruce E. Brocker, trustee of the Brocker Royalty Trust No. 1 UAD 10/15/2010. These comments have been included as part of the record for the Good Shepherd HN GMN SW unit application.

Additionally, Tyler Heckathorn, on behalf of the Eric Petroleum parties, has indicated that he wishes to make comments. And those comments can be made at the end of the hearing.

We will now ask the Applicant to make its introductions and begin its presentation.

MS. ALLERT: Thank you and good morning. My name is Jenae Allert. And I'm an attorney with Bricker Graydon, here on behalf of the Applicant, EAP Ohio, LLC, also referred to as "EAP."

EAP is asking the Division to grant an order for unit operations for the Good Shepherd HN GMN SW unit, or for short, the "Good Shepherd Southwest" unit. This unit is proposed to be located in German, Green, and Rumley Townships, in Harrison County, Ohio.

As you will hear from EAP witnesses, EAP, as well as the consenting working interest owners, are the "owners," as that term is defined in Ohio Revised Code Section 1509.28, of more than 67 percent of the acreage in the proposed Good Shepherd Southwest unit. And this exceeds the 65 percent threshold set by ORC Section 1509.28.

As you can see from Exhibit D to the application, the proposed Good Shepherd Southwest unit consists of 66 tracts totaling approximately 1,121.7916 acres. EAP proposes to drill two horizontal wells from a pad site located in the north central part of the unit, drilling the 6H and 8H in a southeasterly direction. The lateral portion of these wells will each extend horizontally through the unit for approximately 20,045 feet for the 6H and 20,023 feet for the 8H.

EAP seeks an order for unit operations from the Division due to unleased tracts as well as non-consenting tracts in the unit. In support of its application, EAP will call Matt Buckles, a landman; Randy Daniels, a geologist; and Wes Casto, a reservoir engineer, who will each testify that the application meets the requirements for

granting an order for unit operations under ORC 1509.28.

With that, we would like to call our first witness, Matt Buckles.

MR. LARGE: Please swear in the witness.

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MATT BUCKLES

being first duly sworn, testifies and says as follows:

DIRECT EXAMINATION

BY MS. ALLERT:

Q. Good morning. Can you please state your name as well as your place of employment.

A. My name is Matt Buckles. I work for EOG Resources, Inc., or EOG, which is the parent company of EAP Ohio, LLC, the Applicant.

Q. And what is your position at EOG?

A. I am a land specialist at EOG.

Q. Can you please describe for us your educational background?

A. I have an undergraduate degree from Purdue University and an MBA from the University of Oklahoma.

Q. Can you also describe your professional experience specific to the oil and gas industry?
A. Sure. So I have worked in Utica since 2011. I originally worked for Chesapeake Energy before I left and moved to Oklahoma City, where I worked for Ascent Resources. And for the last six-and-a-half, seven years, I worked for Encino Energy before joining EOG in August.
Q. And how many years in the industry do you have?
A. Just about 15.
Q. Are you a member of any professional associations?
A. I'm a member of the American Association of Professional Landmen, or AAPL.
Q. Are there any continuing education requirements in order to maintain your membership as well as any certifications that you may hold?
A. Yes. I have my CDL, which is the highest designation for a certified professional landman. And as part of that, I'm required to obtain 50 continuing education credits every five-year period.
Q. Can you describe some of your

day-to-day roles and responsibilities as a land specialist with EOG?

A. Yeah. I help facilitate the development of our Utica Shale asset, where I manage all aspects of the landwork, including but not limited to lease acquisitions, title reviews, leasehold trade agreements, and just general development planning.

Q. Turning now to the Good Shepherd Southwest unit, are you the landman who assisted in preparing this application?

A. Yes, I assisted.

Q. Looking at Exhibit D, which is a color-coded map to the application. I would like to turn your attention to this slide as it appears in the application. First, is this a depiction of the proposed Good Shepherd Southwest unit?

A. Yes, it is.

Q. And what is the size of the unit?

A. It is approximately 1,121.79 acres.

Q. And where is it proposed to be located?

A. It straddles German, Green, and Rumley Townships, in Harrison County, Ohio.

Q. Can you please provide for us some

other information that is depicted in this map?

A. Sure. As you noted, there are 66 tracts that are each identified by a tax parcel number as well as a tract number on that exhibit.

Yellow parcels are leased and consenting, green parcels are non-consenting, red parcels are generally unleased, and those tracts that are crosshatched in multiple categories -- there are a couple that are crosshatched in the multiple categories, yellow-and-red and yellow-and-green, that are a mixture of the categorization. And the black dotted lines shown illustrate the 400-foot setback required by law. And further, the map shows the planned surface location and the two planned wells that EAP plans to drill and produce from the Utica-Point Pleasant.

Q. You mentioned that two wells are proposed in this unit; how many wells will be drilled from the pad in total?

A. We have four wells currently planned.

Q. And does EAP have the right to drill and operate these wells from the proposed pad site?

A. Yes, we do.
Q. Looking at the Good Shepherd unit, what is the expected length of each of the laterals if you assume an order for unit operations is granted?
A. It looks like they are approximately just over 20,000 feet. So 20,045 for the 6H and 20,043 for the 8H, I believe.
Q. As far as the measurements that you just provided, do those lateral placements comply with Ohio statutory setbacks?
A. They do.
Q. What is your expected timeline for development?
A. I would anticipate that we will drill and complete these in compliance with the time frames that would be specified in the Chief's Order, should an order be issued.
Q. And as far as the yellow tracts, what percent of the unit is currently leased or consenting to unit operations?
A. At the moment, it's approximately 67.77174 percent.
Q. And who are the consenting working

interest owners to this unit?
A. Burj Energy, Eric Petroleum, and RHDK Oil and Gas.
Q. And are there non-consenting owners to the unit?
A. Yes. I have listed those in Exhibit A to the application.
Q. What percentage of this unit remains in a non-consenting status?
A. I think it's approximately 0.475259 percent.
Q. And can you generally describe your efforts to commit the remaining non-consenting working interest owners?
A. Sure. Over the last several months we have offered non-consenting owners the opportunity to sell, trade, or commit their acreage to the unit. And for those parties listed in the application, and as outlined in Exhibit G, we have ongoing efforts to commit the non-consenting working interest owners.
Q. As far as the tracts that are red, which you stated are designated unleased, what percentage of the unit is comprised of those

tracts?

A. As of today, it's approximately 31.753 percent.

Q. Do you know how many acres in the unit those unleased interests account for?

A. They account for just a little over 356 net mineral acres.

Q. And can you describe your efforts to lease the owners of the unleased tracts?

A. Sure. We make efforts to lease all the unleased interest, and those efforts are shown in our leasing affidavit in Exhibit G. Generally speaking, we will make phone calls, send mailings, and have in-person meetings to try to reach mutually agreeable lease terms.

Q. Since the filing of your application, have you continued your efforts to lease the unleased mineral owners, as well as commit the non-consenting working interest owners?

A. Yes.

Q. Are you familiar with Exhibit C to the application?

A. Yes.

Q. Can you please explain what that

exhibit is?

A. So Exhibit C is an exhibit used for any parcels that are the subject of pending ownership litigation or potentially adverse ownership claims.

Q. And have you included any parcels or parties on the Exhibit C for this application?

A. Yes. Parcels 1, 2, 51, and 54 are listed on this exhibit.

Q. And can you briefly explain the basis for those listings?

A. Sure. Parcels 1 and 2 are included due to ongoing quiet title proceedings between the surface owner and the heirs of a reserving party. And we have listed the prevailing party on Exhibit A and the appealing party on Exhibit C. And we are going to continue to monitor the proceedings, and we will update the application as required.

Q. And what about Tracts 51 and 54?

A. 51 and 54 are listed due to a dispute as to the subsisting nature of an underlying lease. We are working with the landowners' counsel now in order to reach a resolution.

We are going to continue those discussions with these parties post-hearing to the extent that we reach a resolution or continue in a constructive manner. And we will update the Division once that is resolved.

Q. Thank you. Turning now to another part of the application, I would like to talk for a moment about the unit plan that was included. Are you familiar with this document?

A. Yes.

Q. And what is the purpose of it?

A. The purpose is twofold: It helps define the respective rights of the party in the unit. And it combines the oil and gas rights as if the unit was under one lease.

Q. Under the unit plan, how are royalties and expenses proposed to be allocated?

A. On a surface acreage basis.

Q. And do you know why that is?

A. For the reasons that will be discussed by Mr. Daniels, including the uniformity of the formation, as well as this is the only way that I have seen allocation in my experience.

Q. So in other words, from your

experience, the allocation methodology is common in Ohio for the Utica-Point Pleasant play.

A. Yes.

Q. Under the unit plan, or JOA, who pays unit expenses?

A. Participating working interest owners.

Q. Do royalty owners pay unit expenses under the terms of the unit plan?

A. No.

Q. Have you included a joint operating agreement or JOA to this application?

A. Yes.

Q. Does that JOA contain a mechanism for proposing operations to non-operator working interest owners?

A. Yes.

Q. Could you please explain that?

A. Article 6 of the JOA provides that a proposal will be sent by the operator to the non-operating working interest owners. The proposal will contain the proposed location of the initial well, as well as an AFE setting forth estimated costs to drill and complete the initial well.

Q. Are there non-consent penalties contained in the JOA, to the extent a party elects to not participate in unit operations?
A. Yes.
Q. Given your history and experience in the oil and gas industry, as well as your experience in the Utica-Point Pleasant play, do you believe the non-consent penalties as set forth in the JOA to be just and reasonable?
A. Yes.
Q. Thank you.
MS. ALLERT: I have no further questions.
MR. LARGE: Thank you.
Good morning, Mr. Buckles.
THE WITNESS: Good morning.
MR. LARGE: Could you tell me, what is the current outstanding average offer to the unleased mineral owners in the proposed unit?
THE WITNESS: Yes. I believe it is approximately $4,000 an acre and an 18 percent royalty.
MR. LARGE: And is that average royalty based on a net or gross amount?

THE WITNESS: I'm sorry -- yeah. I believe that outstanding offers are based on the gross amount.

MR. LARGE: Okay. And do those offers include surface use?

THE WITNESS: A combination of both. But most do allow surface operations.

MR. LARGE: Okay. And when will those offers expire?

THE WITNESS: They don't currently have a specific expiration date. And we are going to continue negotiating to the extent it's fruitful. And beyond the order, nothing prohibits a landowner from entering into a lease with EAP.

MR. LARGE: Okay. And what is the average offer that was accepted by the leased mineral owners and the proposed unit?

THE WITNESS: So I think that is approximately $4,160 an acre and a little under 19 percent royalty. And that would be a mix of net and gross.

MR. LARGE: Okay. And can you please explain the difference between the current offer and the average accepted offers?

THE WITNESS: Over time, offers fluctuate up or down depending on, like, time -- time to development, existing interest in the unit, competitors in the area. And, you know, when we first come to an area, the offers, they start at a certain threshold, and as you develop around there, you kind of refine your understanding of the rock in the area.

MR. LARGE: Okay. And do you believe your lease attempts have been reasonable? And can you tell me why?

THE WITNESS: Yes. In some cases, we have reached out to mineral owners over the course of multiple years and multiple attempts in this area. We have taken thousands of leases, and we continue to negotiate with interested mineral owners. And we would like to enter into a mutually agreeable lease with any one of those that would also wish to.

MR. LARGE: Okay. And will you continue attempts to lease the unleased mineral owners after the hearing and after a unitization order is issued, if one is issued?

THE WITNESS: Yes, we will.

MR. LARGE: And do you believe your attempts to commit non-consenting working interest owners have been reasonable? And if so, why?

THE WITNESS: Yes. We have offered industry-standard terms for entering into agreements as well as purchase, trade, or otherwise acquire outstanding working interest in the unit. And in many cases, most non-consenting owners prefer to stay outside of committing themselves to these unitization operations.

MR. LARGE: Okay. And will you continue your attempts to commit non-consenting working interest owners after today's hearing?

THE WITNESS: Yes, we will. And we will be in touch with them on development plans and everything beyond.

MR. LARGE: Okay. And do the leases in the unit authorize drilling into and producing from the proposed unitized formations?

THE WITNESS: Yes, they do.

MR. LARGE: And to establish bonus and royalty amounts in leases, how are those generally determined?

THE WITNESS: Generally, you will start

working with your reservoir team to understand the range of bonus and royalty rates as guidance. And from that starting point, it's anything from competition in the area, existing volumes on a pipeline, parcel size, parcel location, specific clauses within the lease that affect our ability to operate under it that kind of dictate where those numbers go on a forward basis.

MR. LARGE: Okay. Thank you.

Ms. Barrett, do you have any questions?

MS. BARRETT: Yes, I do.

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CROSS-EXAMINATION

BY MS. BARRETT:

Q. On Exhibit G, as to Tract 42, which looks like the unleased mineral interest owner is listed, the last name is Ossman, O-S-S-M-A-N. There are only two entries on the log, but it also looks like they had asked not to call again. Is that why those were the only two leasing efforts that were listed on the log?

A. Yes. But we are happy to send out mail or anything like that to try to reignite those communications, if that would be the preference

for the Division.

Q. Okay. But you had stopped just because they had asked "do not contact," correct?

A. That's correct, yeah.

Q. Okay. So we have received comments from the Eric Petroleum parties. They are a consenting working interest owner in this application, correct?

A. As to -- I think it's -- I cannot remember the specific tracts, but they are.

Q. Okay.

A. -- the specific tracts in the unit.

Q. Okay. And then just confirming EAP's position is that they have a right to develop those properties on behalf of the Eric Petroleum Corporation. I think there was an affidavit to that effect in the application; is that correct too?

A. That's correct.

Q. Okay. All right.

MS. BARRETT: No further questions for me at this time. Thank you.

THE WITNESS: Thank you.

MR. LARGE: Thank you.

Ms. Allert, please call your next witness.

MS. ALLERT: Thank you. Next we call Mr. Randy Daniels.

MR. LARGE: Can we please swear in the witness.

- - - - -

RANDY DANIELS

being first duly sworn, testifies and says as follows:

DIRECT EXAMINATION

BY MS. ALLERT:

Q. Hello. Can you please state your name as well as your place of employment.

A. Good morning. My name is Randy Daniels. And I am employed by EOG Resources.

Q. And what is your position with EOG?

A. So my title here at EOG is geoscience operations advisor.

Q. And can you please describe for us your educational background that led to your position with EOG? Please include any degrees that you have.

A. Sure. I have two degrees from the

University of Houston. I have a bachelor's degree in geology, as well as a master's in geology. I graduated in 2010.

Q. Can you also describe for us your professional experience as well as your work history?

A. I have over 14 years of petroleum industry experience as a geologist. I spent my first eight years at Marathon Oil Company. At Marathon, I worked multiple basins across the U.S., from the Anadarko, the Eagle Ford, Delaware, Permian, and Williston Basins.

I left Marathon in 2018 and joined Encino Energy, where I spent almost seven years leading a team in well planning and geosteering operations in the Appalachian Basin.

And then most recently, in August, I began working at EOG, the successor in interest to EAP.

Q. And can you describe some of your day-to-day roles as the geoscience operations advisor at EOG?

A. Yes. I'm one of the geologists responsible for the geological information

necessary to produce well permits and drilling plans for the development and drilling of the Utica-Point Pleasant asset owned or operated by EOG.

To accomplish this, my daily activities include well log analysis, geologic risk assessment using seismic data, geological mapping, well prognosis generation, and horizontal well planning. And the team and I are also responsible for the real-time geosteering of all of our horizontal wells to ensure each is accurately placed within the intended geologic target zone.

Q. Turning now to the Good Shepherd Southwest application, are you familiar with this application? And also, did you prepare geology exhibits that appear in the application?

A. Yes, I did.

Q. Can you please describe for us what the term "unitized formation" means with respect to the Good Shepherd Southwest unit?

A. So the unitized formation is described at a depth of 50 feet above the top of the Utica Shale to 50 feet below the top of the Trenton Limestone.

Q. And as part of the analysis that you performed, did you determine if the unitized formation is a pool or part of a pool as required for unitization under Ohio law?
A. Yes, I did.
Q. Are you aware that the word "pool" has a specific meaning for purposes of this application under Ohio law?
A. Yes, I am.
Q. And what does it mean to say that the unitized formation is part of a pool?
A. So a pool is defined to be an underground reservoir containing a common accumulation of oil or gas or both, but does not include a gas storage reservoir. Each zone of a geologic structure that is completely separated from any other zone in the same structure may contain a separate pool.
Q. And is that the definition that you used for purposes of your geologic analysis of the Good Shepherd Southwest unit?
A. Yes, it is.
Q. What information have you analyzed in order to determine whether the unitized formation

is a pool or part of a pool?

A. So in the case of this unitization, I reviewed available core reports, mud logs, and electric log data of nearby pilot holes.

Q. Looking at Exhibit F, which was included in the application, can you please describe what this map shows and why it is relevant to your geologic analysis?

A. So this map shows the Good Shepherd unit as the yellow box with the nearby pilot wells as blue circles. And these are the pilot wells that were used as part of that analysis to describe the pool underneath the Good Shepherd unit.

Q. Turning now to Exhibit E, can you please explain what this exhibit is and how it relates to your geologic analysis?

A. Yes. So this is the cross-section of the pilot wells adjacent to the Good Shepherd Southwest unit.

Geologic mapping shows that the Utica Shale pool underlies the entire unit and is of the same approximate thickness and reservoir quality throughout the unit area.

This accumulation of oil and gas extends in all directions beyond the proposed unit. And the rock properties, such as lithology, porosity, and fluid type, are similar throughout the entire unit and constitute a common source of supply. This is shown by the gamma ray, resistivity, and density logs on the cross-section. All three logs shown here have very similar characteristics in all three of these pilot wells.

Q. Thank you. One of the logs that you mentioned was gamma ray. Can you please explain how gamma ray works and why that is relevant?

A. Sure. So the gamma-ray log records the amount of natural gamma radiation emitted by rocks in the subsurface. The gamma-ray log is used to help correlate different formations and derive lithologies. For example, we are able to distinguish between a shale or a sandstone or a carbonate using this log.

Q. I'm looking at your Exhibit E. Can you please depict for us, or point out, what is the "gamma-ray log"?

A. So the gamma-ray log is the black log

on the far left on all three pilot wells. And as you can see from the log responses, the character of the log is very similar. The three logs are almost a perfect overlay of each other.

Q. And what does the pilot well gamma-ray graph tell us about the Good Shepherd Southwest unit, if anything?

A. I would expect the gamma-ray signature of the Utica Shale formation underlying the Good Shepherd Southwest unit to be consistent with the three pilot wells.

Q. Another log that you mentioned, or characteristic, is the "resistivity." Can you please explain how resistivity works and why that is relevant?

A. Sure. So the resistivity log measures electrical resistivity of the formation. And it's used to determine formation fluid type: water or oil or gas. Water-bearing formations typically have a lower resistivity, while hydrocarbon-bearing formations typically have a higher resistivity.

Q. And can you point that log out for us on the slide?

A. So that is the middle curve on all three pilot wells. And then once again, a very similar log response. Almost a perfect overlay of one another, indicating that there is uniform hydrocarbon saturation across the unit.

Q. And what do the resistivity graphs, as depicted on Exhibit E, tell us about the Good Shepherd Southwest unit, if anything?

A. I would expect the resistivity of the Utica Shale formation underlying the Good Shepherd unit to be consistent with what we are seeing here in these pilot wells.

Q. Can you explain for us the rightmost graph, which I think is "density" or "porosity," and why that is relevant?

A. Yes. The bulk density helps us understand just how dense or tight the rock is and helps us evaluate the potential for storage space or porosity within the rock.

Q. And how is that reflected on the slide?

A. So the bulk density curve is the far curve on the right of all three pilot wells. And again, the density curves on all three wells are almost identical, showing a uniform amount of

storage space across the unit.
Q. And what does this density log tell us, if anything, about the Good Shepherd Southwest unit?
A. So I would expect the storage potential, or porosity, of the Utica Shale formation underlying the Good Shepherd unit to be consistent with the three pilot wells.
Q. Did you use the data and analysis that you just described to form a professional opinion about whether the unitized formation, as described in the application, is a pool or part of a pool?
A. Yes, I did.
Q. And what is that professional opinion?
A. The unitized formation is part of a larger hydrocarbon pool.
Q. Is there uniform thickness across the unitized formation as described in the Good Shepherd Southwest application?
A. Yes.
Q. What is the thickness of the Utica Shale interval underlying the Good Shepherd Southwest unit?
A. It is expected to be 271 feet thick.

Q. And what is the height of your target zone for the wellbores?
A. The height of the target zone is about a 50-foot window.
Q. Given your opinion that the unitized formation is part of a pool, as well as that it has uniform thickness across the unit, in your professional opinion, would it be appropriate to allocate unit expenses and payment of proceeds of oil and gas production from the unit on a surface acreage basis?
A. Yes, it would.
Q. In your experience, is it common to allocate payments on a surface acreage basis for unit operations of the Utica-Point Pleasant Play?
A. Yes, it is.
Q. Thank you.
MS. ALLERT: No further questions.
MR. LARGE: Thank you. Good afternoon, Mr. Daniels.
THE WITNESS: Good afternoon.
MR. LARGE: Could you tell me, what is the anticipated true vertical depth of the horizontal portion of the wellbore?

THE WITNESS: So we are expecting to land this wellbore at a depth of 8,150.

MR. LARGE: I'm sorry, could you repeat that?

THE WITNESS: At a depth of 8,150.

MR. LARGE: Thank you. What is the anticipated true vertical depth of the top of the Utica, the Point Pleasant, and the Trenton formations?

THE WITNESS: So the Utica is expected at 7,959 feet, the Point Pleasant at 8,100 feet, and then the Trenton at 8,230 feet.

MR. LARGE: And do you expect any production from outside the Point Pleasant?

THE WITNESS: There is the potential for some production from the Lower Utica.

MR. LARGE: Thank you.

Ms. Barrett, do you have any questions?

MS. BARRETT: No, I do not. Thank you.

MR. LARGE: Thank you.

Ms. Allert, please call your next witness.

MS. ALLERT: Thank you. Our last witness is Mr. Wes Casto.

MR. LARGE: Can we please swear in the witness.

- - - - -

MICHAEL "WES" CASTO

being first duly sworn, testifies and says as follows:

DIRECT EXAMINATION

BY MS. ALLERT:

Q. Good afternoon. Can you please state your name for the record and also give us your place of employment.

A. Yes. My name is Michael Casto; I go by Wes Casto. My business is called Casto Petroleum Engineering. And I'm working as a contractor for EOG Resources, Inc., the successor in interest to EAP Ohio, LLC.

Q. And what is your job title?

A. Petroleum engineering consultant.

Q. Can you please describe for us your educational background, including any degrees that you have?

A. Yes. I have a Bachelor of Science in Petroleum Engineering from Marietta College.

Q. And can you also tell us about your

professional work experience after receiving your engineering degree?

A. Yes. After graduating from Marietta College, I worked for Chevron in drilling and completions, and then I worked for Wright & Company Petroleum Consultants for four years. And then in 2015, I became a licensed professional engineer in Ohio and started my company, Casto Petroleum Engineering. And I've testified as a reservoir engineer in numerous ODNR hearings for several operators. And I've testified as a petroleum engineering expert in many other legal matters.

Q. And what are some of your responsibilities that involve your work as a reservoir engineer for EOG?

A. So I specialize in reservoir engineering in the Utica and Marcellus Shales. And I perform reserve reports, mineral appraisals, acquisition and divestiture evaluations, and other types of analysis for many clients in the Appalachian Basin.

Q. Turning now to the specifics of this application, did you assist with preparing

exhibits and analysis in support of the Good Shepherd Southwest application?

A. Yes.

Q. I understand as part of that, you have analyzed the potential recovery of oil and gas from the Good Shepherd Southwest as well as the associated economics of the unit under two different scenarios.

The first scenario is if the Good Shepherd Southwest unit was drilled without an order for unit operations. The second scenario is if it was drilled with the benefit of an order for unit operations from the Division; is this correct?

A. Yes.

Q. I would like to talk through the well configurations that you used in each scenario so we can understand your economic analysis. Looking at Exhibit D, are you familiar with this map?

A. Yes.

Q. Does this map accurately depict the configuration of the wells that were the basis of your operational and economic analysis?

A. Yes, it does.

Q. As far as the lateral layout, will EAP produce from the whole length of each lateral if unit operations are approved?
A. Yes.
Q. If EAP does not receive an order authorizing unit operations, what would be the configuration and extent of each of these wells?
A. Under that scenario, the 6H lateral would be limited to 7,278 feet, and the 8H lateral will be limited to 7,746 feet.
Q. Given those limitations, would EAP drill these wells without an order for unit operations?
A. No, they would not.
Q. And why not?
A. In that case, each lateral would no longer compete with other internal prospects with regard to PV10 and other economic metrics. And as the economics table will show, the present value of each of the 6H and 8H wells would be greatly affected if they could not be unitized.
Q. Okay. Looking now at the economics and production that you configured in both the unitized and non-unitized scenarios, showing the

economics table, are these the economics that were included in the latest supplement to the application for the Good Shepherd Southwest unit?

A. Yes, they are.

Q. Starting with the bottom table, can you tell us the differences in lateral length between the unitized and non-unitized scenarios?

A. Yes. The differences are 12,767 feet for the 6H lateral and 12,277 feet for the 8H lateral.

Q. When coming up with your calculations, what did you look at in order to estimate the potential recovery from the Good Shepherd Southwest unit?

A. I created type curves for the proposed laterals based on the performance of analogous producing wells in the area. And in this analysis, I considered many variables like thermal maturity, completion parameters, proximity, and vintage, et cetera.

Q. We have on the screen now -- or, are going to have it, the analogue well maps as well as the list. Did you use this exhibit and these wells as part of your analysis?

A. I did.
Q. Looking at the well table, is this the information related to the number of analogue wells that you used?
A. Yes.
Q. Turning back to the economics table, we have discussed the lateral length, and I would like to now discuss some other columns that were included in your analysis. In particular, can you explain what "operating costs" are and give some examples of those costs?
A. Yes. So lease operating expenses are the day-to-day costs incurred by the wells after production begins. And they include variable oil cost, gas processing and transportation, water transportation, as well as fixed monthly costs in terms of dollars per well per month.
Q. I would like to now look at "capital costs." Can you tell us what is included in capital costs?
A. That would include all costs associated with land, drilling, completions, flowback, facilities, plugging and abandonment, and reclamation.

Q. Looking now at the value assessment that you made and applied to the estimated recovery in each scenario. What is the pricing index that you use in order to factor your calculations?

A. I used the June of 2025 SEC pricing to calculate revenues.

Q. Looking at the columns that are labeled "PV0 and PV10," can you tell us what those particular components mean?

A. Yes. So the present value is inclusive of operating and capital costs. And it's the cash flow that can be represented at different discount rates to account for the time value of money. PV0 was a zero percent discount rate, and PV10 is a 10 percent discount rate.

Q. For the PV numbers that you used for your calculations on the economic summary, are those net of reasonably expected capital costs and operating expenses?

A. Yes.

Q. Can you tell us what estimated growth recovery is?

A. That is the estimated volume of oil and

gas in terms of BCF equivalent that is expected to be recovered.

Q. Looking at the top table, which is a unitized scenario, can you tell us what you estimate for recovery volumes, revenue, expenses, and costs, as well as the value of recovery for the unitized scenario?

A. Yes. For the unitized scenario, we expect recovery volumes of 50.5 BCFe; an undiscounted value of estimated recovery of $147.1 million; operating cost of $60 million; capital cost of $31.2 million; PV0 of $28.8 million; and a PV10 of $8.9 million.

Q. Looking at the second table, which is the non-unitized scenario, can you provide those same figures for that scenario?

A. Yes. In the non-unitized scenario, we expect recovery volumes of 18.6 BCFe; the undiscounted value of estimated recovery of $54.1 million; operating costs of $22.7 million; capital costs of $12.1 million; PV0 of $9.2 million; and PV10 of $3.1 million.

Q. Given your economic summary and analysis, is it your professional opinion and

testimony here today that a unit order is reasonably necessary to increase substantially the ultimate recovery of oil and gas in the Good Shepherd Southwest unit?

A. Yes. I estimate EAP will recover an additional 31.9 BCFe of oil and gas if granted an order for unit operations.

Q. Is it your professional opinion and testimony here today that the value of the estimated additional recovery of oil and gas exceeds the estimated additional cost of unit operations?

A. Yes. If you compare the PV figures, there is an additional $93 million realized on an undiscounted basis, an additional $19.6 million realized on a PV0 basis, and an additional $5.8 million realized on a PV10 basis if unitized.

Q. Thank you.

MS. ALLERT: No further questions.

MR. LARGE: Thank you.

Good afternoon, Mr. Casto.

THE WITNESS: Good afternoon.

MR. LARGE: Could you tell me what the estimated economic life of the wells in years

would be?

THE WITNESS: At least 50 years.

MR. LARGE: And what price was used in your economic calculations?

THE WITNESS: The June of 2025 SEC pricing.

MR. LARGE: And could you tell me the estimated payout of the wells at one times, one-and-a-half times, two times, and three times?

THE WITNESS: So one-times payout is 4.1 years, one-and-a-half-times payout is 19.1 years, and the wells did not achieve two- or three-times payout.

MR. LARGE: Okay. And there are going to be four total wells drilled from this pad, correct?

THE WITNESS: Yes.

MR. LARGE: Okay. Are there any existing wells currently?

THE WITNESS: No.

MR. LARGE: Okay. And how are pad costs accounted for in your calculations?

THE WITNESS: They were divided evenly among the wells to be drilled.

MR. LARGE: Okay. So they are shared. Did you use actual pad costs or estimated pad costs?

THE WITNESS: Estimated.

MR. LARGE: And what was the amount included for plugging and restoration costs in your economic calculations per well?

THE WITNESS: $330,000 per well.

MR. LARGE: And could you tell me the estimated BCFe per 1,000 feet?

MR. CASTO: Yes. 1.26 BCFe per 1,000.

MR. LARGE: And what is the estimated recovery factor in the area?

MR. CASTO: 47 percent for gas.

MR. LARGE: Okay. Thank you.

Ms. Barrett, do you have any questions?

MS. BARRETT: Yes.

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CROSS-EXAMINATION

BY MS. BARRETT:

Q. A little bit different wording, but when do you estimate you will recover the cost of testing, drilling, and completing the wells at one, one-and-a-half, two, and three times? Is

that the same as the previous testimony, or is it different?

A. It will be slightly shorter than that.

Q. Okay.

A. I will have to follow up with you on that.

Q. Okay. We will go ahead and take comments. And if you are able to get that by the end of the hearing, we would appreciate that information.

A. Okay, I will.

Q. Okay. Thank you.

MS. BARRETT: No further questions for me at this time.

MR. LARGE: Okay. So once again, if you would like to make comments, I am first going to take all your names and note whether you are an unleased mineral owner, working interest owner, or an owner with property in the unit.

Only one person may speak at a time to properly record the hearing. And please mute your microphone once you have delivered your comments or questions to avoid any feedback. Additionally, anyone speaking today will be asked to provide

their information to the court reporter. If you are uncomfortable speaking during the hearing, we will also accept written comments.

I have Mr. Tyler Heckathorn down already. But if anyone else would like to make comments, if you have joined us via WebEx, please unmute yourself now and state your name.

Hearing none.

If you have joined us via phone and would like to make any comments, please press "star 6" and state your name.

Hearing none.

Mr. Heckathorn, are you still on there?

MR. HECKATHORN: Yes, sir. I am.

MR. LARGE: Would you still like to give any comments?

MR. HECKATHORN: Yes, sir. I do have a few questions as well.

MR. LARGE: Okay. Can we please get him sworn in.

- - - - -

TYLER HECKATHORN.

Being first duly sworn, testifies and says as follows:

MR. HECKATHORN: My first question would be for the tracts that are involving pending or potential interest owners, which would be like the ones found on Exhibit C. What does EAP or EOG intend to do with the potential royalties to be paid out to those tracts?

MS. BARRETT: Is there someone from the Applicant who is able to answer the question related to the parties on Exhibit C?

MR. BUCKLES: For the parties on Exhibit C that are involved in ongoing litigation, like Tracts 1 and 2, we would intend to hold the royalties in suspense.

MR. HECKATHORN: Thank you. The testimony of the reservoir engineer today indicates that there are potential risks. There are always potential risks associated with drilling wells; are any of these risks found specific to this particular well, or are they just general to the drilling of all wells?

MS. BARRETT: If someone from the Applicant is able to answer that question?

MR. CASTO: I believe those comments were made by Randy Daniels, the geologist.

MR. DANIELS: Yes. Those comments are general to all wells. There is nothing specific in its path that's of a higher risk.

MR. HECKATHORN: Thank you, sir. If it was determined -- or was it determined if these wells were offset, developmental, or wildcat wells? And if so, what kind of wells are they?

MS. BARRETT: If someone from the Applicant is able to answer that question as well?

MR. DANIELS: Yes. These are development wells.

MR. HECKATHORN: Thank you.

Under the statute, unit plan approval ends up being required in writing by the royalty owners. In the past, EAP has usually tried to meet that requirement through an affidavit signed solely by the landman himself. Does EPA or EOG know if they plan on continuing that practice with this unit?

MS. BARRETT: Mr. Buckles, if you are able to answer that.

MR. BUCKLES: Yes. I believe we would continue.

MR. HECKATHORN: Thank you.

Specifically on this application, it's claimed that EPA has the right to commit acreage on behalf of Eric Petroleum. What does EAP believe gives it that right to do so?

MR. BUCKLES: We rely on an agreement executed in 2014, wherein Eric -- or Chesapeake's successors is operator of that underlying lease that we have committed.

MR. HECKATHORN: Thank you. Do you know if anyone from EPA has actually contacted anyone from Eric Petroleum prior to the hearing today?

MR. BUCKLES: I don't believe that outside of the -- to my knowledge, outside of the notices, that Eric's received -- have been contacted.

MR. HECKATHORN: Okay. Thank you. I would just like to finally direct the Division's attention to an explanation in our comments. It's in Paragraph 6 of the broker affidavit, which would be Page 63 of the total 260-page submission that we submitted. The REL of the terms of the acquisition agreement -- I believe that's the one that is being referred to today. Those terms

include that there must be a mutually agreeable JOA before Eric agrees to commit any of the -- what's being called "Haverhill Glen" acreage to the unit.

And secondly, that that JOA can't affect Eric's working interest in several leases that were under an asset sales agreement. In this case, I believe Tract 5 is under the Stewart lease, which is an ASA agreement. Therefore, the affidavit referred to earlier may be a little bit inaccurate on that.

The other thing I would like to request -- I did submit an email prior to this, maybe about a week ago. If there are any supplements that were given to the application, I would ask that they please be sent over to Eric Petroleum, please.

And with that, I thank everyone for their time, and I have nothing further.

MR. LARGE: Thank you.

MS. BARRETT: Yeah. Just a couple of things. As always, we will get that public records request logged. But as always, you are always able to email our unitization at

DNR.ohio.gov inbox for records requests.

MR. HECKATHORN: Well, that's the way that I did it. So that's good.

MS. BARRETT: Yeah. Okay. Thank you.

MR. LARGE: Was there anyone else that would like to make a comment?

Okay. Thank you.

MR. CASTO: Ms. Barrett, if you would like to ask that payout question again, I have those updated figures.

MS. BARRETT: Absolutely.

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RECROSS-EXAMINATION

BY MS. BARRETT:

Q. When do you estimate EAP will recover the cost of drilling, testing, and completing the wells? And we are looking for it at one, one and a half, two, and three times, please?

A. Yes. So one time is 3.3 years, one-and-a-half times is 15.6 years, two times is 35.8 years, and there is not a payback at three times.

Q. Okay. Thank you for getting that information.

MS. BARRETT: Mr. Large, I don't have any further questions either. Thank you.

MR. LARGE: Thank you.

Does the Applicant have any closing remarks?

MS. ALLERT: Yes. Just with regard to Eric Petroleum and its associated entity. The deadline to submit comments was September 10th of 2025. And we only received their 260 pages' worth of comments late in the day yesterday. So we do reserve the right to conduct a thorough reading and analysis of what has been untimely submitted.

We want to emphasize the unfairness to the participants of these proceedings, to not have a reasonable time to review and respond to 260 pages' worth of comments. We ask the Division to strike from the record those comments that were untimely submitted by Eric Petroleum and require them, as they do everyone else, to comply with the procedural guidelines set forth by the Division.

But that said, in the event the Division does not strike the comments, we reserve the right to respond to those comments after a reasonable opportunity to fully review the

contents, including any objections and clarifications that were requested inside of those comments. Thank you.

MR. LARGE: Thank you. And we may have one more person here.

Would anyone else like to make comments?

MS. BARRETT: Just one note on that: Mr. Heckathorn, to the extent that those comments are coming in late in the day, the day before the hearings, our team does have full days of hearings, generally on Wednesdays. So the extent you could get those in earlier, we do ask for comments generally two weeks ahead of time to allow our staff time to review those in preparation for the hearings. Obviously we will review anything that has come in; we have stated that many times over. However, to give us the best preparation as well, we ask for that in a reasonable period of time.

MR. HECKATHORN: Sure. And we certainly can try to do that. We can try to get them in sooner. I would like to note, however, for the record, that they even -- it's even stated

today, written comments can be submitted up to and even after the hearing if people don't wish to speak.

So as far as trying to strike them for the record, I think that would be a bit far, based on the fact that they don't even have to be submitted before the hearing; they can be submitted after as well. So we thank you for your time on that. And in the future we will try to get them in sooner.

MS. BARRETT: Thank you.

Okay. Mr. Large, if there is someone else with a comment, we can proceed.

(Kathi Myers sends a message requesting inquiry.)

MR. LARGE: Yeah. Ms. Myers, would you like to make a comment?

MR. BUCKLES: If Ms. Myers cannot connect --

If you put your phone number in the chat, we would be happy to reach out after the hearing if that's easier.

MR. LARGE: Okay. Was there something you would like to get on record? Or...

(Kathi Myers sends a message requesting to inquire post-hearing.)

MR. LARGE: After the hearing here, I can give you our phone number if that works.

MR. BUCKLES: Okay. That would be great. Thank you.

MR. LARGE: Okay. With that, the hearing is concluded. Thank you.

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Thereupon, the foregoing proceedings concluded at 12:28 p.m.

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State of Ohio : C E R T I F I C A T E
County of Franklin: SS

I, Bridget Mary Hoye, a Notary Public in and for the State of Ohio, do hereby certify that I transcribed or supervised the transcription of the audio recording of the aforementioned proceedings; that the foregoing is a true record of the proceedings.

I do further certify I am not a relative, employee or attorney of any of the parties hereto, and further I am not a relative or employee of any attorney or counsel employed by the parties hereto, or financially interested in the action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Columbus, Ohio, on October 14, 2025.



Bridget Mary Hoye, Notary Public - State of Ohio
My commission expires April 14, 2030.

# Good Shepherd HN GMN SW

**September 24, 2025**

Jenae C. Allert

Lila M. Appaya

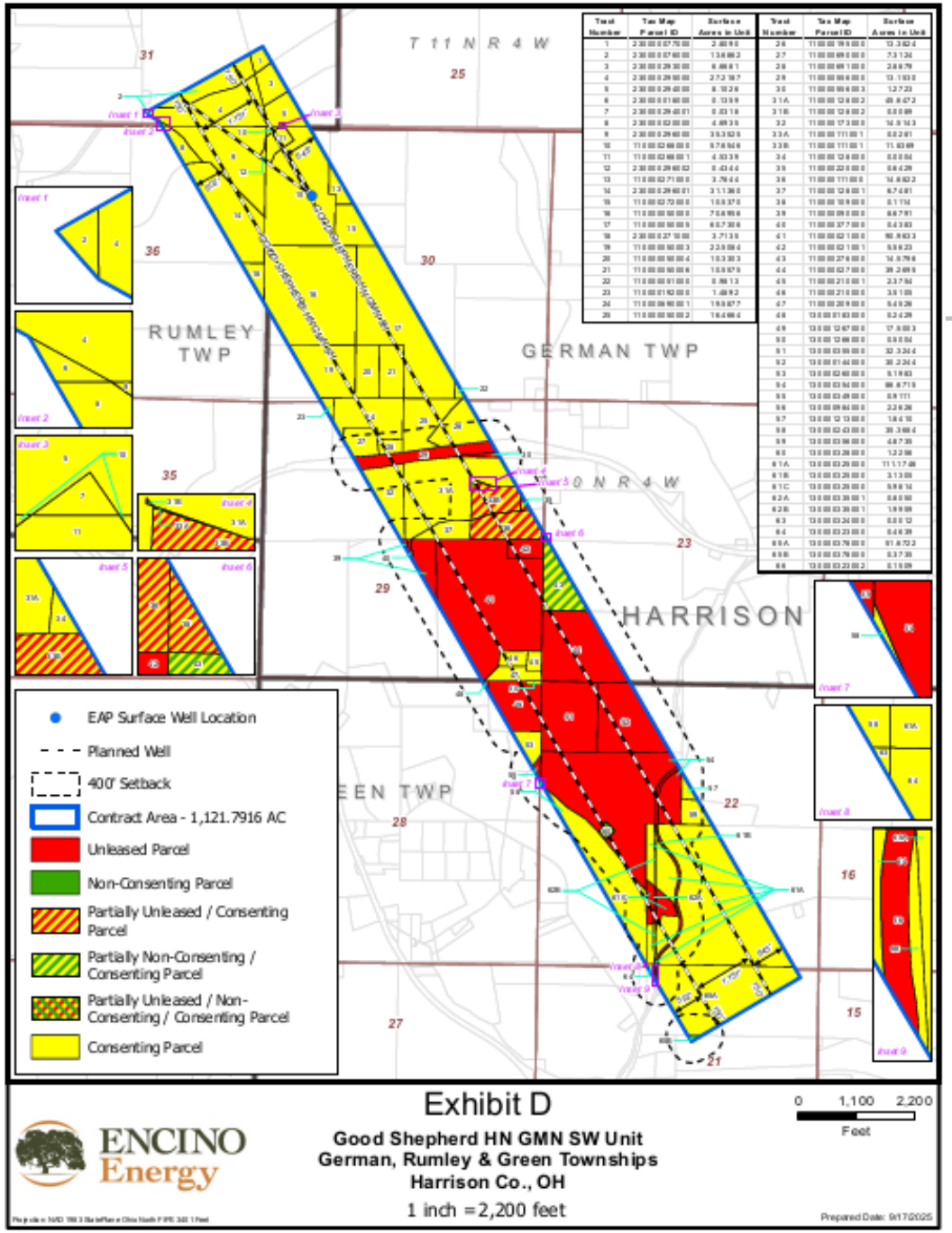
ENCINO Energy

eog resources

Bricker Graydon

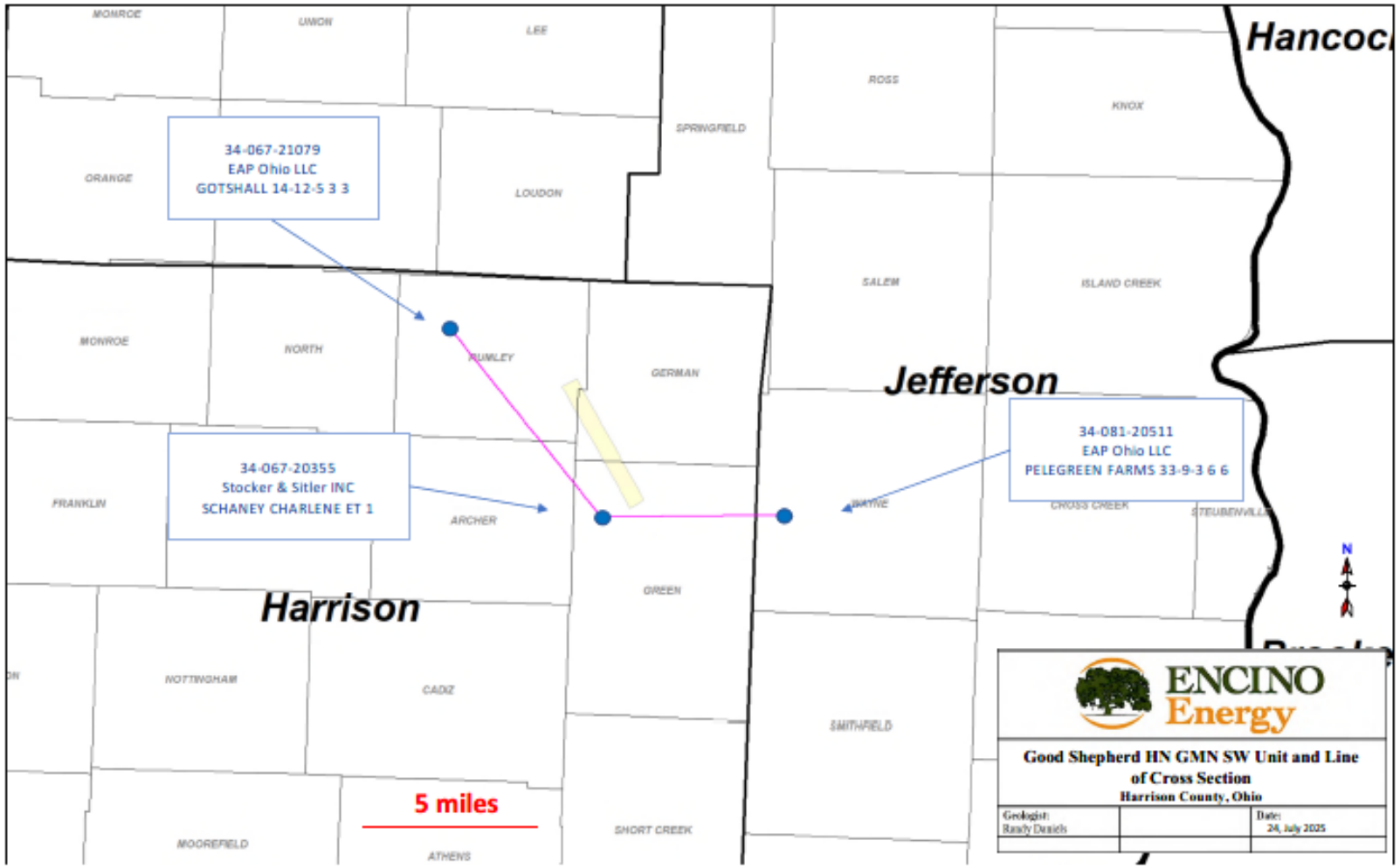
# Good Shepherd HN GMN SW

## Exhibit “D”



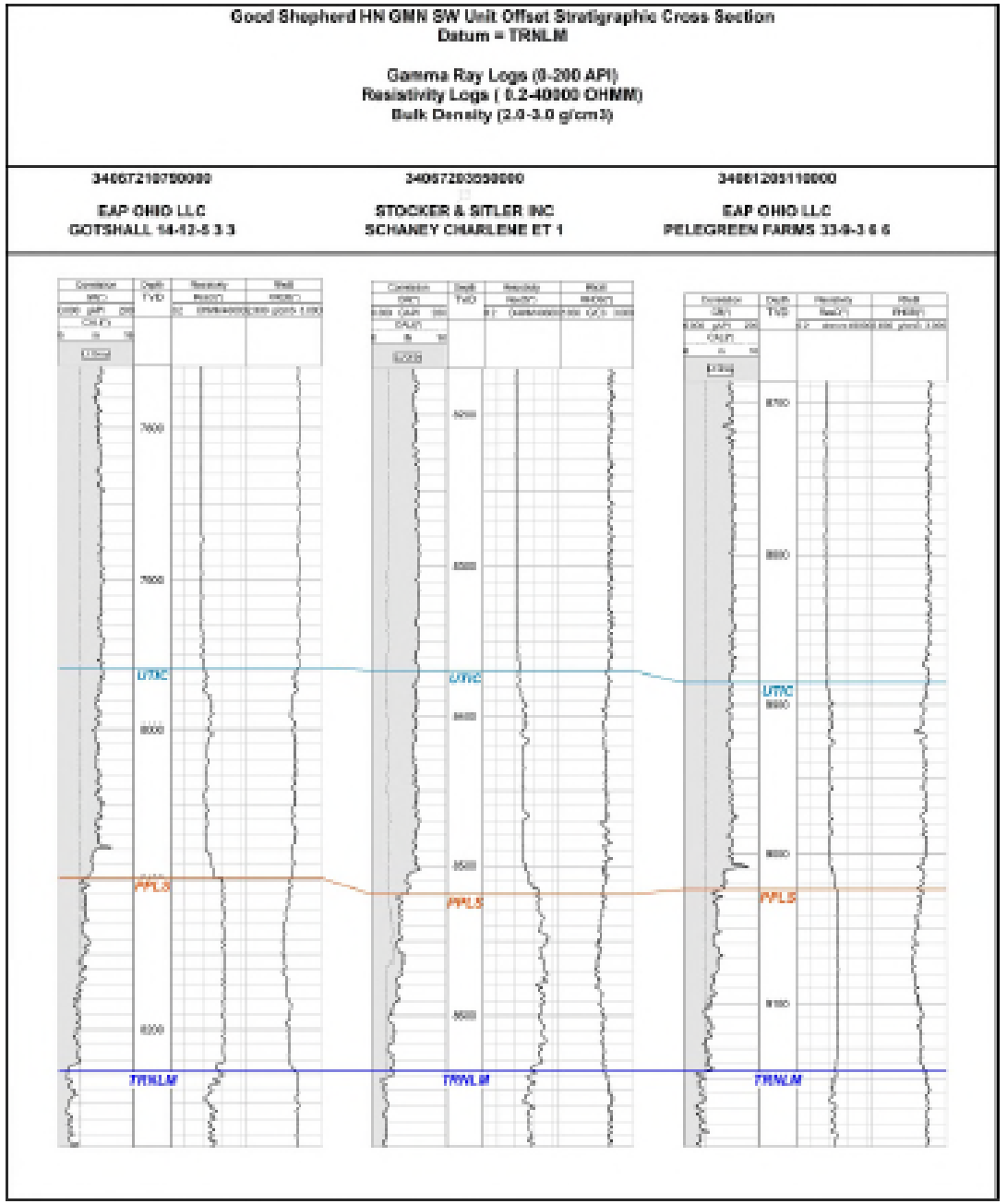
# Good Shepherd HN GMN SW

## Exhibit “F”



# Good Shepherd HN GMN SW

## Exhibit “E”




Bricker Graydon

# Good Shepherd HN GMN SW

# Economic Summary

## Section 5. Economic Calculation Summaries *Required*

### Unitized Scenario

| Well Name | Lateral Length (ft) | Measured Depth (ft) | Operating Costs (MM$) | Capital Costs (MM$) | Undiscounted Value of Estimated Recovery (MM$) | PV0 (MM$) | PV10 (MM$) | Estimated Gross Recovery (BCFe) |
|---|---|---|---|---|---|---|---|---|
| Good Shepherd HN GMN 6H | 20,045 | 28,585 | 30.0 | 15.6 | 73.6 | 14.4 | 4.5 | 25.3 |
| Good Shepherd HN GMN 8H | 20,023 | 28,563 | 30.0 | 15.6 | 73.5 | 14.4 | 4.4 | 25.2 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| **Total:** | 40,068 | 57,148 | 60.0 | 31.2 | 147.1 | 28.8 | 8.9 | 50.5 |

### Non-Unitized Scenario

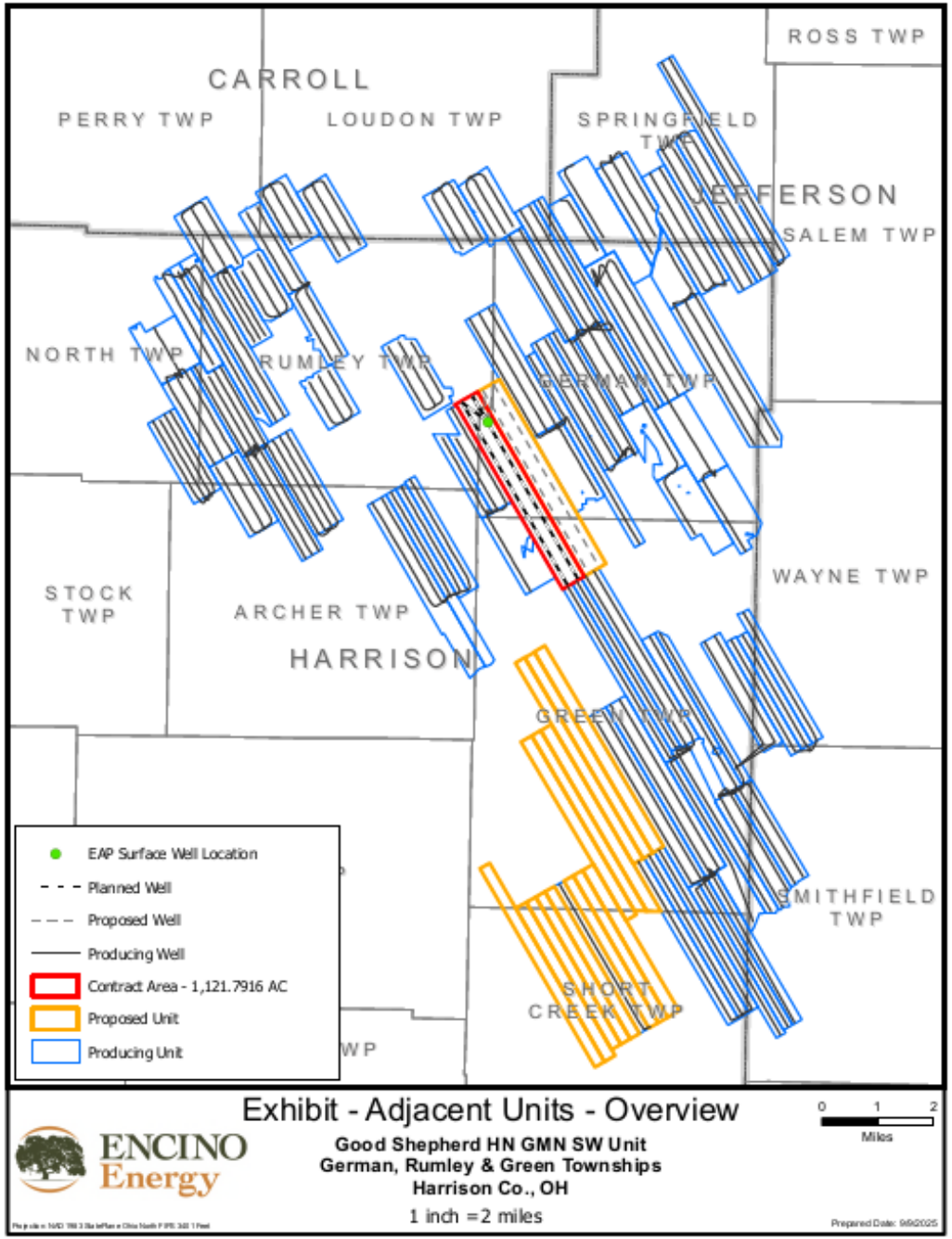
| Well Name | Lateral Length (ft) | Measured Depth (ft) | Operating Costs (MM$) | Capital Costs (MM$) | Undiscounted Value of Estimated Recovery (MM$) | PV0 (MM$) | PV10 (MM$) | Estimated Gross Recovery (BCFe) |
|---|---|---|---|---|---|---|---|---|
| Good Shepherd HN GMN 6H | 7,278 | 15,818 | 11.0 | 5.9 | 26.2 | 4.4 | 1.5 | 9.0 |
| Good Shepherd HN GMN 8H | 7,746 | 16,286 | 11.7 | 6.2 | 27.9 | 4.8 | 1.6 | 9.6 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| **Total:** | 15,024 | 32,104 | 22.7 | 12.1 | 54.1 | 9.2 | 3.1 | 18.6 |

### Difference

| Well Name | Lateral Length (ft) | Measured Depth (ft) | Operating Costs (MM$) | Capital Costs (MM$) | Undiscounted Value of Estimated Recovery (MM$) | PV0 (MM$) | PV10 (MM$) | Estimated Gross Recovery (BCFe) |
|---|---|---|---|---|---|---|---|---|
| Good Shepherd HN GMN 6H | 12,767 | 12,767 | 19.0 | 9.7 | 47.4 | 10.0 | 3.0 | 16.3 |
| Good Shepherd HN GMN 8H | 12,277 | 12,277 | 18.3 | 9.4 | 45.6 | 9.6 | 2.8 | 15.6 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| **Total:** | 25,044 | 25,044 | 37.3 | 19.1 | 93.0 | 19.6 | 5.8 | 31.9 |

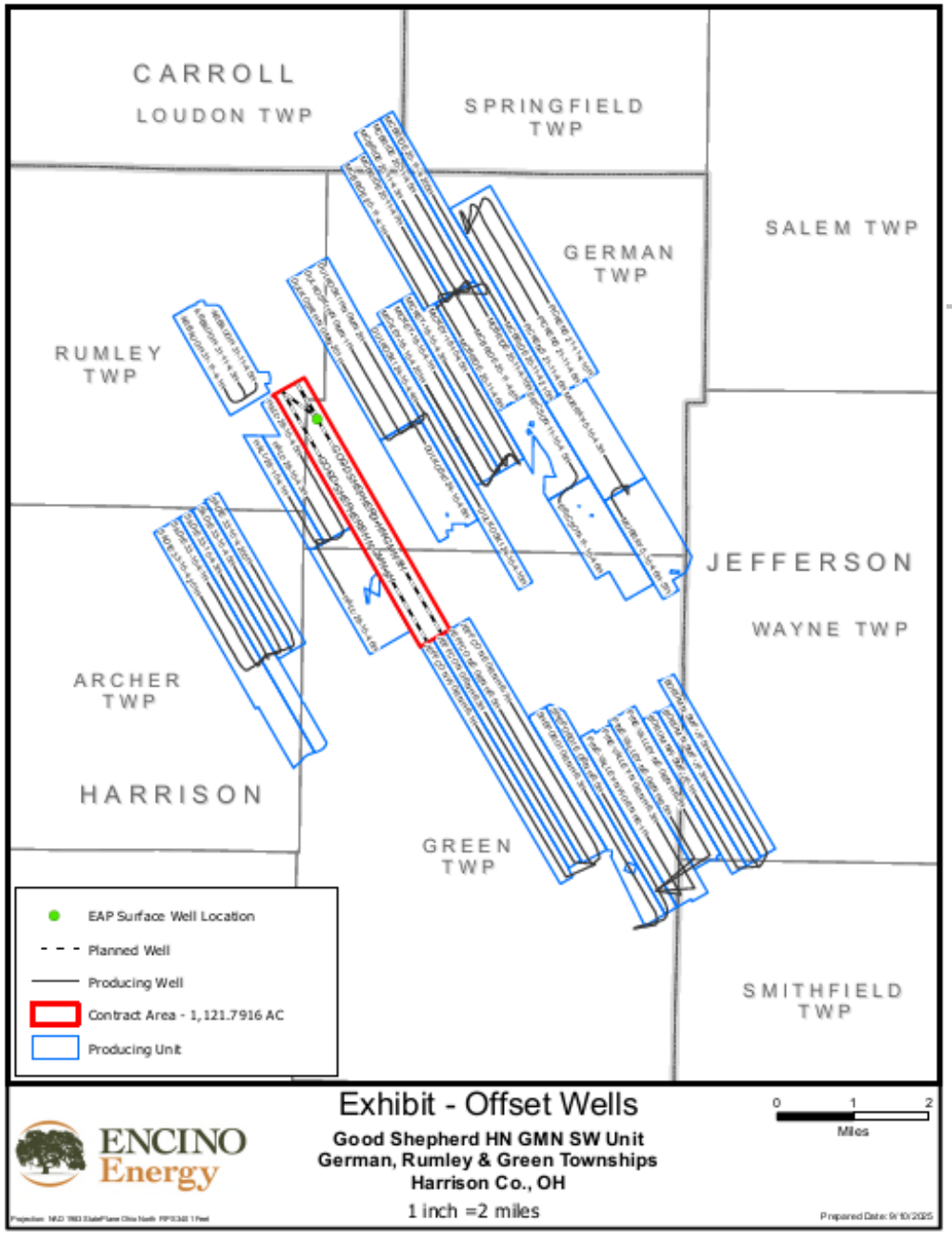
Good Shepherd HN GMN SW

# Adjacent Units



Good Shepherd HN GMN SW

# Offset Wells



## Good Shepherd HN GMN SW

# Offset Wells

| Well Name | API Number | Start Date | Lateral Length (Ft) | Distance from Unit (Mi) |
|---|---|---|---|---|
| ERICSON 11-10-4 5H | 34067211510000 | 4/1/2016 | 6,889 | 2.31 |
| ERICSON 11-10-4 6H | 34067211520000 | 4/1/2016 | 5,602 | 2.09 |
| ARBAUGH 31-11-4 1H | 34067212340000 | 12/1/2014 | 6,653 | 0.36 |
| ARBAUGH 31-11-4 5H | 34067212390000 | 12/1/2014 | 6,692 | 0.24 |
| ARBAUGH 31-11-4 3H | 34067212430000 | 12/1/2014 | 6,432 | 0.35 |
| HALL 29-10-4 3H | 34067212810000 | 2/1/2016 | 7,406 | 0.30 |
| HALL 29-10-4 6H | 34067212820000 | 1/1/2016 | 8,232 | 0.30 |
| HALL 29-10-4 1H | 34067212940000 | 1/1/2016 | 8,245 | 0.30 |
| HALL 29-10-4 5H | 34067212950000 | 2/1/2016 | 10,477 | 0.08 |
| MURRAY 5-10-4 6H | 34067213380000 | 4/1/2016 | 7,899 | 2.72 |
| MURRAY 5-10-4 3H | 34067213400000 | 4/1/2016 | 7,747 | 2.90 |
| MCBRIDE 20-11-4 8H | 34067214060000 | 12/1/2015 | 8,398 | 2.28 |
| DULKOSKI 24-10-4 8H | 34067214120000 | 6/1/2016 | 6,942 | 0.90 |
| DULKOSKI 24-10-4 4H | 34067214660000 | 6/1/2016 | 6,956 | 0.91 |
| SADIE 33-10-4 3H | 34067215030000 | 6/1/2018 | 11,198 | 1.80 |
| SADIE 33-10-4 5H | 34067215040000 | 6/1/2018 | 11,155 | 1.59 |
| SADIE 33-10-4 205H | 34067215050000 | 6/1/2018 | 11,364 | 1.38 |
| SADIE 33-10-4 1H | 34067215070000 | 6/1/2018 | 11,155 | 1.83 |
| SADIE 33-10-4 201H | 34067215080000 | 6/1/2018 | 10,840 | 1.83 |
| MICKEY 18-10-4 1H | 34067215430000 | 8/1/2018 | 13,130 | 1.52 |
| MICKEY 18-10-4 3H | 34067215440000 | 8/1/2018 | 13,269 | 1.71 |
| PICKENS 21-11-4 6H | 34067215450000 | 9/1/2018 | 13,962 | 2.88 |
| PICKENS 21-11-4 8H | 34067215500000 | 9/1/2018 | 14,166 | 2.88 |
| PICKENS 21-11-4 10H | 34067215510000 | 10/1/2018 | 13,850 | 2.88 |
| MCBRIDE 20-11-4 205H | 34067215520000 | 5/1/2019 | 13,706 | 2.30 |
| MCBRIDE 20-11-4 5H | 34067215530000 | 5/1/2019 | 12,878 | 2.30 |
| SHEPORGI GRN HR 3H | 34067216160000 | 7/1/2020 | 16,451 | 1.60 |
| SHEPORGI E GRN HR 5H | 34067216170000 | 7/1/2020 | 16,316 | 1.71 |
| MCBRIDE 20-11-4 3H | 34067216230000 | 2/1/2020 | 12,607 | 2.30 |
| MCBRIDE 20-11-4 210H | 34067216240000 | 2/1/2020 | 8,655 | 2.30 |
| DULKOSKI 24-10-4 10H | 34067216800000 | 8/1/2022 | 13,176 | 0.90 |
| PINE VALLEY NW GRN HR 1H | 34067216950000 | 5/1/2022 | 12,935 | 0.04 |
| PINE VALLEY N GRN HR 3H | 34067216960000 | 5/1/2022 | 12,625 | 0.04 |
| PINE VALLEY NE GRN HR 5H | 34067216970000 | 5/1/2022 | 11,581 | 0.04 |
| PINE VALLEY NE GRN HR 7H | 34067216980000 | 5/1/2022 | 11,450 | 0.05 |
| DULKOSKI HN GMN 1H | 34067216990000 | 8/1/2022 | 12,557 | 0.73 |
| DULKOSKI HN GMN 201H | 34067217000000 | 8/1/2022 | 12,420 | 0.53 |
| DULKOSKI HN GNM 2H | 34067217010000 | 8/1/2022 | 12,438 | 0.90 |
| JEFFCO NW GRN HR 1H | 34067217260000 | 12/1/2023 | 19,155 | 0.00 |
| JEFFCO N GRN HR 3H | 34067217280000 | 12/1/2023 | 18,321 | 0.00 |

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## Good Shepherd HN GMN SW

# Offset Wells

| Well Name | API Number | Start Date | Lateral Length (Ft) | Distance from Unit (Mi) |
|---|---|---|---|---|
| JEFFCO NE GRN HR 5H | 34067217300000 | 12/1/2023 | 18,584 | 0.03 |
| JEFFCO NE GRN HR 7H | 34067217310000 | 12/1/2023 | 18,902 | 0.20 |
| MCBRIDE 20-11-4 1H | 34067217320000 | 5/1/2023 | 11,122 | 1.89 |
| MCBRIDE 20-11-4 6H | 34067217330000 | 5/1/2023 | 8,429 | 2.06 |
| MCBRIDE 20-11-4 7H | 34067217340000 | 5/1/2023 | 11,152 | 2.12 |
| MCBRIDE 20-11-4 10H | 34067217350000 | 5/1/2023 | 8,403 | 2.30 |
| MICKEY 18-10-4 5H | 34067218160000 | 12/1/2024 | 11,468 | 1.84 |
| MICKEY 18-10-4 201H | 34067218170000 | 12/1/2024 | 13,157 | 1.34 |
| MICKEY 18-10-4 201H | 34067218170001 | 12/19/2024 | 13,157 | 1.34 |
| BORUM N SMF JF 3H | 34081209200000 | 4/1/2022 | 12,240 | 3.04 |
| BORUM NW SMF JF 1H | 34081209210000 | 4/1/2022 | 12,397 | 0.05 |
| BORUM NE SMF JF 5H | 34081209220000 | 4/1/2022 | 13,548 | 2.94 |

# Good Shepherd HN GMN SW

## Pricing

| JUNE 2025 SEC PRICING | |
|---|---|
| HENRY HUB NATURAL GAS | $3.20/MMBtu |
| WEST TEXAS INTERMEDIATE OIL | $67.33/BBL |
| OIL PRICE<br><br>GAS PRICE | WTI - $8.00/BBL<br><br>93% OF HENRY HUB |
| NGL PRICE | 35.5% OF WTI |

# Thank You

Bricker Graydon