

west virginia department of environmental protection

Oil and Gas Conservation Commission 601 57th Street SE, Charleston, WV 25304 304-926-0499 Ext 1274

Barry K. Lay, Chairman dep.wv.gov

BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE REQUEST BY AMERICAN PETROLEUM PARTNERS OPERATING, LLC FOR AN ORDER FROM THE COMMISSION ESTABLISHING A DRILLING UNIT AND POOLING OF UNLEASED TRACTS AND INTERESTS OF OIL AND GAS OWNERS AND OPERATORS WHO HAVE NOT ENTERED INTO VOLUNTARY AGREEMENTS ALLOWING FOR THE DEVELOPMENT AND OPERATION OF THE WINTERFELL-9UH DRILLING UNIT CONSISTING OF 278.93 ACRES, AND FOR EXCEPTION TO RULE 39CSR1.4.2 FOR THE PROPOSED WELL WINTERFELL-9UH TO BE LOCATED IN WEBSTER DISTRICT, MARSHALL COUNTY, WEST VIRGINIA

DOCKET NO. 271-263 ORDER NO. 1

REPORT OF THE COMMISSION

On February 21, 2019, American Petroleum Partners Operating, LLC ("APP") appeared by counsel, Elizabeth B. Elmore, of Jackson Kelly PLLC, before the West Virginia Oil and Gas Conservation Commission (the "Commission") upon APP's application for an Order to establish a 278.93 acre drilling unit to be known as the Winterfell Southwest Unit, and pool unleased interests with respect to the well identified as the Winterfell-9UH Well, and for a location spacing exception for such well.

Upon presentation of evidence, and based upon testimony and exhibits, the Commission hereby forms a 278.93 acre drilling unit, grants a variance from Commission requirements, and grants deep well approval for the Winterfell-9UH Well. More specifically, the Commission

formed a unit with respect to the Winterfell Southwest Well pursuant to West Virginia Code §22C-9-7 and approves an exception to W.Va. C.S.R. §39-1-4.2, which states in relevant part that "each deep well drilled shall not be less than 3,000 feet from a permitted deep well location...." The spacing variance granted hereby permits the Winterfell-9UH Well to be drilled within three thousand feet of other deep wells. The Commission authorizes APP to intentionally deviate and drill the Winterfell-9UH Well with a lateral approximately as shown on the plat of said well filed as part of the hearing. The Commission also ordered that the transcript for Docket No. 271, Cause No. 256, be appended to the transcript for this proceeding.

The Commission received and admitted evidence in the form of exhibits and the testimony of three witnesses. Mr. Lee Hebert, District Landman for APP, provided testimony about the proposed unit. The Winterfell Southwest Unit includes 278.93 acres, and one proposed lateral, being the Winterfell-9UH Well. Mr. Hebert testified that APP performed a diligent search of the records to determine the owners of the oil and gas in the proposed unit as well as the adjoining operators.

Mr. Hebert testified that the names of all owners were provided to the Commission when APP requested the hearing for the Winterfell Southwest Unit. Mr. Hebert testified that a consent and easement agreement was obtained from the owners of the surface for the Winterfell Southwest well pad location. Mr. Hebert testified that one tract within the 278.93 acre proposed Winterfell Southwest Unit is unleased, which tract is identified as Webster District, Tax Map 2, Parcel 9, and accounts for 1.397329% of the unit. Mr. Hebert described APP's efforts to enter into voluntary leases with the unleased owner of Webster District, Tax Map 2, Parcel 9, and provided testimony regarding the prevailing market terms in the area. Mr. Hebert also testified that APP is willing to allow the unleased party to exercise all statutory options to which it is entitled. Mr. Hebert testified that the unit, as proposed, would recognize the correlative rights of the landowners, encourage maximum recovery of oil and gas and prevent waste.

Mr. Tunde Ajayi, Vice President of Completions for APP, and Mr. Braulio Silva, Vice President of Drilling for APP, also provided testimony. Their testimony and response to questions by members of the Commission included the reasoning for spacing the well with inter-

lateral spacing of 800 feet; characteristics of the Point Pleasant formation in which the proposed Winterfell-9UH Well will be drilled; environmental and surface impact; production and completion techniques; expected drainage; and well economics. Documents entered as exhibits included a map depicting the proposed wells, an amended Exhibit G to the Application for Pooling and Spacing Exception, and proof that all requisite notices were provided.

Following the testimony and examination by the Commissioners, the Commission adjourned for deliberation. Upon return, motions were made, seconded and passed to grant the relief requested. Thereupon, the Commission makes the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT

- 1. Members of the Commission present at the hearing were Barry Lay, Chairman; Robert Radabaugh, Commissioner; and James Martin, Commissioner. John S. Gray, Counsel to the Commission, was also present at the hearing, along with Susan Rose, Commission Staff.
- 2. APP is an operator within the meaning of paragraph (4) subsection (a) of West Virginia Code §22C-9-2.
- 3. The Winterfell-9UH Well is a deep well within the meaning of West Virginia Code §22C-9-2 *et seq.*, and the Commission has jurisdiction to consider and grant the relief requested. Through testimony and exhibits introduced, the Commission has adequate information to evaluate and approve APP's requests.
- 4. Once drilled, the Winterfell-9UH Well, which is a Point Pleasant Formation Well, will be spaced within 3,000 feet of other deep wells. Thus, an exception or variance to West Virginia C.S.R. §39-1-4.2 is required.
 - 5. No objection was filed or made to the relief requested by APP.

6. Commissioner Radabaugh moved to grant the relief requested, the motion was duly seconded, and the motions were unanimously passed by the Commission.

CONCLUSIONS OF LAW

- 1. West Virginia Code §22C-9-1 *et seq*. permits the Commission to form drilling units upon notice and hearing. West Virginia C.S.R. §39-1-4.2 requires that all deep wells drilled shall be not less than 3,000 feet from a permitted deep well location for the same formation. West Virginia C.S.R. §39-1-4.3 allows for exceptions to that requirement upon notice and hearing.
- 2. Due and proper notice, of time, place and purpose of hearing has been given in all respects as required by law.
- 3. The Commission has jurisdiction over the subject matter and the authority to grant the relief requested.
- 4. The hearing was properly convened, and a quorum of Commissioners was present.
 - 5. APP is an experienced, qualified operator of deep horizontal wells and units.
- 6. The requested unit, deviation and spacing variances are necessary to promote the exploration for and development, production, utilization and conservation of oil and gas resources.
- 7. APP presented exhibits which show the unit APP intends to form, and testimony regarding the unit, which was adequate for the Commission to review and approve the unit, deviation and spacing requested.

8. Forming the unit, and the spacing variations requested, will prevent waste, promote conservation, exploration, development and maximum recovery of oil and gas, and protect correlative rights of owners and operators such that each well will receive a just and equitable share of production.

THE COMMISSION HEREBY ORDERS

- 1. With respect to the Point Pleasant Formation only, a 278.93 acre drilling unit known as the Winterfell Southwest Unit for the Winterfell-9UH Well, as shown on the map for such well, admitted in evidence, is hereby formed, and all oil and gas tracts in the unit and all ownership interests in the unit are hereby pooled for purposes of the Winterfell Southwest Unit. APP is appointed operator of the unit and authorized to drill, complete and produce one horizontal deep well in the unit. Regardless of the tract or tracts in said unit from which oil or gas is produced, the operator shall divide and allocate revenue from production to tracts in the unit on the basis the acreage in the unit, or portion thereof, included in the unit bears to the total acreage in the unit, and then the royalty with respect to that tract, or portion thereof, shall be allocated to royalty owners in that tract (calculating partial interests on a pro rata basis for royalty interests in any parcel owned in common). All operations, including but not limited to the commencement, drilling or operation of the Winterfell-9UH Well upon any portion of said unit shall be deemed for all purposes the conduct of such operations upon each separately owned tract in the unit by the owners thereof. That portion of the production allocated to a tract included in a drilling unit shall, when produced, be deemed for all purposes to have been actually produced from such tract by a deep well drilled thereon.
- 2. All persons deemed to be an operator as defined in West Virginia Code \$22C-9-2(a)(4) may elect to participate in the development of the Winterfell Southwest Unit and the Winterfell-9UH Well in which their acreage is pooled by submitting in writing to APP and the Commission their election to participate within twenty (20) days of the date of personal service or attempted personal service to known operators of the order of the Commission. Such election shall obligate said persons to pay their share, calculated on the net oil and gas acreage in the unit, of all reasonable costs and expenses incurred in the drilling, completing, equipping, operating and eventual plugging of the well unit to which their acreage is attributable, including reasonable

charges of the operator for supervision of the operation of the well. Pursuant to West Virginia Code §22C9-7(b)(5), any operator not wishing to participate as a working interest owner may elect to:

- (a) Have his or her unleased interest in the Point Pleasant formation only, be deemed leased, pursuant to West Virginia Code § 22C-9-7(b)(5)(A) to APP for the financial consideration of \$7,000.00 per net mineral acre and a production royalty of 20% of gross proceeds, which shall be paid free from deductions for post-production costs and calculated based upon a price equal to or greater than the contract price paid by a non-affiliated 3rd party market; or
- (b) Participate on a carried basis, as described in West Virginia Code § 22C-9-7(b)(5)(B), and in West Virginia Code § 22C-9-7(b)(6) by notifying APP and the Commission, in writing, within twenty (20) days of the date of personal service or attempted personal service to known operators of the Order of the Commission of his or her election to participate on a carried basis.
- 3. Any operator entitled to make an election under Paragraph 2 of this order who fails to notify APP and the Commission of his or her election within twenty (20) days of personal service or attempted personal service to known operators of the Order of the Commission shall, pursuant to the Commission's authority to prevent waste and protect correlative rights, be deemed to have elected to have his or her interest, in the Point Pleasant formation only, deemed leased to APP as set forth in Paragraph 2(a) above.
- 4. This order shall not operate to prevent unleased owners of interests in oil and gas within any of the units from hereafter leasing or otherwise assigning or conveying said interest.
- 5. Within ten (10) days of the date of this order, APP shall provide notice to the unleased owner of an interest in Webster District, Tax Map 2, Parcel 9 of its options as provided for in this order and West Virginia Code §22C-9-7(b). APP shall provide to such owner sufficient information for him/her to evaluate their election options; however, such owner shall

not make such information available to the general public. APP shall provide to such owner a copy of the applicable Authorization for Expenditure, provided that the information contained in the Authorization for Expenditure shall be used only by such owner in evaluating its election

options and shall not be made available to the general public.

6. If a dispute arises as to the costs associated with the Winterfell-9UH Well or the

percentage working interest and/or royalty interest or if an operator elects to participate as a

working interest owner in the Winterfell Southwest Unit, the Commission may conduct further

hearings and issue additional orders in this matter.

7. The unit hereby formed and the interests hereby pooled shall exist until the

Commission orders otherwise.

8. The spacing exception is granted and the Winterfell-9UH Well may be drilled

directionally and spaced as proposed in the respective permit applications therefor.

9. Within 90 days of the completion of the Winterfell-9UH Well, APP is directed to

comply with West Virginia C.S.R. §39-1-4.6 regarding provision of well records and drilling

logs to the West Virginia Department of Environmental Protection, Oil and Gas Conservation

Commission, and with West Virginia C.S.R. §39-1-4.5 regarding annual reports of production.

IT IS SO ORDERED.

IN THE NAME OF THE STATE OF WEST VIRGINIA

OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRIGINIA

Bv:

Barry K. Laly, Chairman

Dated this 6th day of March, 2019, at Charleston, West Virginia.

BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE REQUEST BY AMERICAN PETROLEUM PARTNERS OPERATING, LLC, FOR AN ORDER FROM THE COMMISSION ESTABLISHING A DRILLING UNIT AND POOLING OF UNLEASED TRACTS AND INTERNISTS OF OIL AND GAS OWNERS AND OPERATORS WHO HAVE NOT ENTERED INTO VOLUNTARY AGREEMENTS ALLOWING FOR THE DEVELOPMENT AND OPERATION OF THE WINTERFELL-9UH DRILLING UNIT CONSISTING OF 278.93 ACRES,

DOCKET NO. 271 CAUSE NO. 263

AND
FOR EXCEPTION TO RULE 39CSR 1.4.2 FOR
THE PROPOSED WELL, WINTERFELL-9UH TO BE
LOCATED IN WEBSTER DISTRICT, MARSHALL
COUNTY, WEST VIRGINIA

Transcript of PROCEEDINGS had on February 21, 2019, at 11:40 a.m., in the offices of the Oil and Gas Conservation Commission located at the West Virginia Department of Environmental Protection, 601 47th Street, SE, Charleston, West Virginia, pursuant to notice and to the West Virginia Rules of Civil Procedure.

BEFORE: Barry K. Lay, Chairman

Robert Radabaugh, Commissioner James Martin, Commissioner

BONNIE K. WOLFE

Certified Court Reporter
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APPEARANCES:

ON BEHALF OF THE APPLICANT:

Elizabeth Elmore, Esquire Jackson Kelly, PLLC 1600 Laidley Tower Charleston, WV 25301

ON BEHALF OF THE WV-OGCC:

John Gray, Assistant Attorney General

Susan Rose, Staff

INDEX

APPLICANT'S WITNESSES	DIRECT	<u>EXAMINATION</u>
Lester Ebert	7	12 (Lay)
Babatunde Ajayi	13	
Braulio Silva	16	19 (Martin) 22 (Lay) 24 (Martin)

<u>EXHIBITS</u>	IDENTIFIED	RECEIVED
No. 1 (Notice of Hearing)	4	4
No. 2 (Sec. of State Confirm.)	5	5
No. 3 (Newspaper Ad)	5	5
No. 4 (Application)	5	5
No. 5 (Force Pooling Applic.)	5	5
No. 6 (Amended Exhibit G)	6	26
No. 7 (Winterfell SW Plat)	6	26
No. 8 (Distances to Wells)	14	26

Reporter's Certificate

28

CHAIRMAN LAY: Before the Oil and Gas

Conservation Commission for the State of West Virginia in the matter of the request by American Petroleum Partners

Operating, LLC, for an Order from the Commission establishing a drilling unit and pooling of the unleased tracts and interests of oil an gas owners and operators who have not entered into voluntary agreements allowing for the development and operation of the Winterfell-9UH drilling unit consisting of 278.93 acres, and for exception to Rule 39CSR 1.4.2 for the proposed well Winterfell-9UH to be located in Webster District, Marshall County, West Virginia.

This is Docket No. 271, Cause No. 263. Let the record show that present are members of the Commission, James Martin, Robert Radabaugh and Barry Lay. Also present is counsel, John Gray, and Susan Rose of Staff.

I would like to place of record as Exhibit 1 a copy of the Notice of Hearing and Certified Mail receipts.

(WHEREUPON, said document was identified as Exhibit No. 1 and was received in evidence.)

CHAIRMAN LAY: Exhibit 2 is a copy of the Secretary of State's website posting.

1 (WHEREUPON, said document was 2 identified as Exhibit No. 2 and was 3 received in evidence.) 4 CHAIRMAN LAY: Exhibit 3 is a copy of the legal advertisements. 5 6 (WHEREUPON, said document was 7 identified as Exhibit No. 3 and was 8 received in evidence.) 9 CHAIRMAN LAY: Exhibit 4 is excerpts from the 10 Application. 11 (WHEREUPON, said document was 12 identified as Exhibit No. 4 and was 13 received in evidence.) 14 CHAIRMAN LAY: And Exhibit 5 is the forced 15 pooling applications. 16 (WHEREUPON, said document was 17 identified as Exhibit No. 5 and was 18 received in evidence.) 19 CHAIRMAN LAY: The Commission will now take 20 appearances. 21 MS. ELMORE: Good morning. I'm Beth Elmore with 22 the law firm of Jackson Kelly. I'm here on behalf of 23 American Petroleum Partners, LLC, with respect to our 24 application for pooling and spacing exception for the

Winterfell Southwest unit and the Winterfell 9UH well.

As a preliminary matter, we have a couple of exhibits we could go ahead and mark. One is an amended Exhibit G to the Application for Force Pooling. We'd like to clarify that there were two tracts set forth in our Application for Force Pooling that were leased by Chevron.

We've subsequently worked out an arrangement with Chevron whereby those tracts were assigned to pooling partners. So they have been deleted from Exhibit G. So that's an amended Exhibit G as well as a map that depicts the Winterfell Southwest unit for illustrative purposes which we'll use in our testimony this morning.

CHAIRMAN LAY: So this (indicating) would be Exhibits 6 and 7?

(WHEREUPON, said documents were identified as Exhibits Nos. 6 & 7.)

MS. ELMORE: And our first witness this morning will be Lee Ebert. If we may, we would like to request that the transcript from the immediately preceding hearing on the Casterly Rock Southwest unit be appended to the transcript for this hearing so that we don't need to repeat all of the testimony of our witnesses with regard to their qualifications and opinions that are general with respect to issues in both hearings.

1 CHAIRMAN LAY: No objections? Okay. We will so 2 do. 3 (Witness sworn.) 4 THEREUPON came 5 LESTER EBERT, IV 6 called as a witness for the Applicant herein, being first 7 duly sworn according to law, testified as follows: 8 DIRECT EXAMINATION 9 BY MS. ELMORE: 10 Mr. Ebert, are you familiar with the Application 11 for Force Pooling and safety exception for the Winterfell 12 Southwest unit and the 9UH well filed by APP? 13 Д Yes. 14 And are you familiar with the well that APP 15 proposes to drill from the Winterfell well pad from a land 16 perspective? 17 Α Yes. 18 Q If you would look at the plat that I passed out, 19 it's an overview of the wells that APP proposes to drill 20 from the Winterfell well pad. Would you please identify 21 the well pad for the proposed well as set forth on this 22 exhibit? 23 Α It's here on this file.

And is it depicted by color?

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1 А Yes. It's blue. Very good. Are there any wells currently 3 situated on this well pad? 4 Α We have two permits issued. 5 Okav. And what are those API numbers? 0 6 API 4705102106 and 4705102118. Α 7 How many units are currently anticipated to 8 utilize the Winterfell well pad? 9 А Two. 10 Okay. How many acres are included in the 11 Winterfell Southwest unit? 12. 278.93. Α 13 Okay. And how many wells are shown as proposed 14 to be drilled at this time from the well pad? 15 Α One. 16 Looking at the well pad, how large is the surface 17 tract on which the well pad will be located? 18 There are a couple parcels affecting this well 19 pad. The first parcel is 86.13 acres, and the other parcel 20 is 13 acres. 2.1 Okay. How much total surface acreage disturbance is contemplated by your operation? 22 Seveneen acres. 23 Α

Okay. And what will the size of the well pad

24

Q

1 itself be?

12.

- A 2.7 acres, approximately.
- Q Has APP obtained the surface owner consent and easement as required by law?
 - A Yes.
- Q And does APP have under lease the oil and gas underlying the surface tract where the well pad is situated?
 - A Yes.
 - Q And that tract is fully leased to APP?
 - A Yes.
- Q Okay. With respect to the 9UH well, have you included the names of all individuals, leased and unleased, in the Application that has been submitted to the Commission?
 - A Yes.
- Q And we passed out an amended Exhibit G. Can you tell me what the amended Exhibit G -- what's different about the amended Exhibit G from the original Exhibit G?
- A The acreage. Exhibit G has tax amount 15-2-9; gross assessed is 8.73. The surveyed acres is 3.89. The owner's Mahatme Hira, and the ownership in the unit is 1.39 acres. The net acres in the unit is 3.89.
 - O Okay. And two additional tracts be an interest

1 in protecting that parcel, 15-7-25, have been deleted from that amended exhibit? 3 Yes. I'm sorry. Yes, ma'am. 4 0 Okay. And with respect to the map, can you 5 identify for us how we identify the unleased tract with 6 respect to the map we handed out previously? 7 It's in hash marks on the side. 8 Q And shown in green? 9 Α Green on this map. 10 Very good. How much of tract 15-2-9 is included 11 in the unit? 12 3.897570747 acres. Α 13 How many people own an interest in the oil and 14 gas underlying this particular tract? 15 Α One owner. 16 And how was the ownership of the oil and gas 17 underlying tract, 15-2-9, determined? 18 Α We had a title opinion rendered. 19 0 Okay. And the name of the owner of this parcel? Mahatme Hira. 20 Д 2.1 And with regard to Ms. Hira, has APP made contact 22 with her and attempted to lease her interest in the oil and 23 gas estate? 24 Α Yes, ma'am.

1 And when was the last contact with Ms. Hira? 0 2 It was in December of 2018. 3 Okay. What is her percentage of ownership in the 0 4 unit with respect to this tract? 5 Α 1.397329 percent. 6 So for the Winterfell Southwest unit and the 9UH 7 well, what percentage of acreage in the unit is under lease 8 to APP at this time? 9 98.60267 percent. 10 Okay. And are we requesting that the Commission 11 enter an Order today designating APP as Operator of the 12 proposed 9UH well? 13 Α Yes. 14 With respect to Ms. Hira, what was the final, 15 highest offer made to her for her interest? 16 Α For her interest in the Utica formation, it was 17 \$5,000.00 and 20 percent gross royalty. 18 And what was the treatment of post-production 19 costs in the lease offer to her? 20 It was a gross royalty lease. 21 Okay. With respect to the unleased interest in 22 the Winterfell Southwest unit, do you believe APP made reasonable efforts to enter into a lease with this owner? 23 24 Α Yes.

1 Does APP have adequate funds to enter into a 2 lease with the unleased owner on terms determined by the 3 Commission? 4 Α Yes, ma'am. 5 Does APP understand that with force pooling a 6 party who is force pooled has a statutory option to 7 participate as a royalty owner or as a working interest 8 owner? 9 Α Yes. 10 MS. ELMORE: Okay. I'm sorry. I'm trying to not 11 be repetitive. I believe those are all the questions that 12 we didn't cover in the previous proceeding relevant to the 13 unleased tract. If the Commission has any questions for 14 Mr. Ebert--15 CHAIRMAN LAY: Questions? 16 COMMISSIONER RADABAUGH: No. 17 CHAIRMAN LAY: Mr. Martin? 18 COMMISSIONER MARTIN: No. 19 EXAMINATION 20 BY CHAIRMAN LAY: 21 Looking at Exhibit 7, it appears that the 22 distance from the toe is 400 feet on this particular --23 Yes, sir. Α 24 --because it reports that you don't have the

13 1 property adjacent. Is that correct? 2 Yes, sir. Α 3 CHAIRMAN LAY: Okay. That's my only questions. 4 MS. ELMORE: Okay. That's all the questions that we have for Mr. Ebert. Our next witness will be Mr. Ajayi. 5 6 (Witness excused.) 7 (Witness sworn.) 8 THEREUPON came 9 BABATUNDE AJAYI 10 called as a witness by the Applicant herein, being first 11 duly sworn according to law, testified as follows: 12 DIRECT EXAMINATION 13 BY MS. ELMORE: All the testimony you have previously given today 14 15 remains true and accurate to the best of your knowledge? 16 А Yes. 17 Very good. What type of well is APP proposing to 18 drill in the Winterfell Southwest unit? A horizontal well drilled into the Utica/Point 19 20 Pleasant. 21 Are there any other operators who have expressed 22. a desire to operate the 9UH well? 23 Α No. 24 What is the estimated depth of the 9UH well?

- A 11,400 feet deep.
- Q And the proposed total depth for the well?
- A 24,861 feet total measured depth.
- Q Is the proposed well located at least 400 feet from the relevant unit boundary?
 - A Yes. It is.
- Q And how far apart is the well spaced from other permitted wells? And I'll hand out yet another exhibit which will show well distances from other wells in the vicinity. That would be Exhibit 8.

(WHEREUPON, said document was identified as Exhibit No. 8.)

THE WITNESS: So this Winterfell unit is on the same pad as two other permitted Winterfell wells. It is 1.6 miles away from the Casterly Rock APP permitted wells. It is four miles away from the Chevron Curry 8H well. It is also about 2.7 miles away from the new CNX MAJ6EHSUT well. There are a few Marcellus wells in the area.

BY MS. ELMORE:

- Q And APP is requesting a spacing exception to the 3,000 foot requirement set forth in the regulations so that this well can be drilled using 800 feet spacing?
 - A Yes.
 - Q And based on your best estimate of the drainage

area, that would be the correct spacing of the well as you've proposed it, 800 feet?

A Yes.

Q Does APP anticipate the proposed 9UH well will be economic for APP and its royalty owners?

A Yes.

Q Can you estimate the number of vertical wells which would have to be drilled and hydraulically fractured in order to produce the amount of oil and gas estimated to be recoverable by the proposed well in the Winterfell Southwest unit?

A We would expect 84 vertical wells would be required to produce a similar EUR in a similar time period.

Q Would the estimated cost to drill 84 wells vertically be more or less than the cost of the proposed horizontal well?

A The cost to drill the 84 vertical wells would be much more than the cost of the proposed horizontal well.

Q Would it be feasible to drill 84 wells in the area encompassed by the Winterfell Southwest unit?

A The surface disturbance would be excessive, and it would not be feasible to drill all these wells given the mining operations in the area.

Q From a geological point of view, will granting

16 1 the Application encourage the maximum recovery of oil and qas? 3 Α Yes. 4 MS. ELMORE: No further questions for this 5 witness in light of his prior testimony. 6 CHAIRMAN LAY: Okay. Questions from members of 7 the Commission? 8 COMMISSIONER RADABAUGH: No. 9 CHAIRMAN LAY: Witness may be excused. Call your 10 next witness. 11 (Witness excused.) 12 MS. ELMORE: Final witness will again be Braulio 13 Silva. 14 (Witness sworn.) 15 THEREUPON came 16 BRAULIO SILVA 17 called as a witness by the Applicant herein, being first 18 duly sworn according to law, testified as follows: 19 DIRECT EXAMINATION 20 BY MS. ELMORE: 2.1 Mr. Silva, you've previously testified today. 22 All of the testimony that you've previously given remains 23 true and correct to the best of your knowledge? 24 Α Yes.

17 1 0 The type of well that's being proposed is the 9UH well? 3 Α Yes. 4 0 Is it a Utica/Point Pleasant well? 5 Α Yes. 6 And can you explain to the Commission how this 7 well will be drilled? 8 Α Same as all the other wells in the area, setting 9 9-5/8 around 9,800 feet or 400 to 600 feet below the top of 10 the Queenston, is what we like to call it. And then air 11 drill and then swap our fluid system to a synthetic 12 oil-based mud and then drill lateral to TD. 13 From a geological point of view, do you believe 14 the proposed well will be economically successful? 15 А Yes. 16 Can you explain to the Commission what you 17 believe the estimated reserves are for the wells to be 18 drilled in this proposed unit? 19 Α Same as all the other ones, about 2.5 billion per 1,000. 20 21 And based on the estimated reserves, have you 22 concluded whether this well will be economical or 23 commercially reasonable as far as production is concerned? 24 Α Yes.

1 In your opinion, is the size and shape of this 2 unit a reasonable proximation of the area which will be 3 efficiently and economically drained by the proposed well? 4 Yes. Α 5 Looking specifically at the Winterfell 9UH well, 6 has an AFE been prepared for this well? 7 Α Yes. 8 Does APP have adequate funds on hand to drill 9 this well? 10 Α Yes. 11 Is the well scheduled for drilling? 0 12 Yes. A 13 Will the well provide royalty income as well as 14 operating income? 15 Α Yes. 16 Will APP pay severance taxes to the State from 17 its oil and gas well? 18 Α Yes. 19 Will the State of West Virginia benefit if the 20 Commission grants this application? 21 Α Yes. 22 MS. ELMORE: Very good. Unless the Commission 23 has any questions for Mr. Silva, that concludes his testimony. 24

CHAIRMAN LAY: Questions?

EXAMINATION

BY COMMISSIONER MARTIN:

Q I'll just ask the same questions I asked earlier about the coal in this area. So is it a similar situation with your coal--

A Yes. This one in particular is between -- is on a-- Two coal mines meet right there, so we're right at the border of two other coal mines, one to the east and one to the west.

We have a solid coal block in between the two coal mines. So that solid coal block is about 600 feet in width, and it goes for a couple miles in length because that's where the corridors for the coal mines will be located.

O So that coal won't be mined?

A Around those, yes. So to the east and to the west, there's going to be longwall mining, but we're not sitting on a chain pillar. We're seeing on actual coal.

Q But that coal that you're sitting on won't be mined?

A No.

Q You said earlier you go on air down to where the 9-5/8 will be set?

Α Yes, sir.

also add water.

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Have you ever had to add anything? strictly air or are there any--

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And you add, you said, foam or soap or--Q

So you always add water?

During that section?

Yeah. Foam or salt--Α

--surfactant?

Yes, sir.

Yes, sir.

Α So usually, we put different types of additives. We have shale inhibitors which maintain the shales from swelling, number one. We also have foam, which what it does is it makes all the cuttings be able to come to surface. So the foam keeps the cuttings suspended in our system and gets them to be able to come to surface. And we

Sometimes, depending on which section, we'll be adding anywhere from 20 to 50 gallons of water per This water is recirculated through our system, and it is recycled. So it all comes-- We have a closed-loop system on location. All the water comes to surface. It gets treated through our centrifuges, and then we recycle it and pump it back into the system.

A --and, yeah, surfactant. And then we also have shale inhibitors.

- Q That's always the case?
- A Pretty much, yes.
- Q For that section?

A Yeah. Especially in West Virginia, once you come to the east side of the river, of the Ohio River, you have a lot of red shales that tend to cave in once you're drilling. So in order for you to keep those shales from just swelling, you've got to have high chlorides in your system. That way, they don't react.

As soon as you pump fresh water, they will react and just -- and just collapse.

Q So if you didn't add water, would you need to use a shale inhibitor?

A So, yes. The problem is that, in order for us to drill through some of these zones, especially because some of the zones that we're drilling through make water, our hole gets wet. And in order for us to get that water out, we need to continuously inject foam.

So what we do is: that water that comes out, we just recirculate it through the system. And we continue to drill with the same water that we're producing, which most of the time tends to be salty water.

1 COMMISSIONER MARTIN: Okay. Thank you. 2 EXAMINATION 3 BY CHAIRMAN LAY: 4 So you're not hammer drilling? 0 5 Α We are. 6 You're hammering on--0 7 Α Yeah. We hammer drilled the first two sections. 8 We hammer drill our 20-inch casing section. It's about 24 9 to 26 inches hole. We do hammer that section. 10 hammer the 17-1/2 inch hole section. But once we go to 11 drill our 9-5/8 casing hole section, which is 12-1/4 inch 12 big in diameter, we will drill with a Tricone. 13 Tricone? 0 14 Α By steel and air. 15 Do you log the intermediate holes? 16 So actually, funny that you just asked that, 17 because we're about to log our 12-1/4 inch hole like today. 18 Do you typically log the intermediate holes? 19 Usually, you don't. We are doing it because 20 we want to know more about the geology in the area. 2.1 typically, you don't log it. What we do is we have mud 22 loggers on location to determine the depths of where we 23 are. 24 So because we already have logs from other

wells in the area, we already know the characteristics of a lot of these rocks. So the mud loggers on location continue to get samples as we're drilling.

So as we're drilling deeper and deeper, they gain samples. They put those samples under the microscope and compare those samples with logs from other wells in the area. That way, they'll know which formation we're in.

Q Want to make sure that any well logs that you run you file with the Commission.

A Definitely. Usually, we send that to the State.

Another thing that we also do is that we provide a full mud log report to the State once we drill our first well or initial well.

O To the State?

COMMISSIONER MARTIN: Probably going to Surveying, I'm guessing.

THE WITNESS: No. I mean, the mud log, we give to the DEP.

COMMISSIONER MARTIN: Oh, it comes here?

THE WITNESS: Yes.

BY CHAIRMAN LAY:

Q We never see those.

A Yeah. We usually submit those. In fact, it's a regulation. Like we have to submit a full--

1 Q Yeah. You're supposed to submit them to us. 2 Α Yeah. 3 CHAIRMAN LAY: Okay. That's the only--4 EXAMINATION 5 BY COMMISSIONER MARTIN: 6 I have one. I have a followup question. 7 asking earlier about the gases when you're drilling on air. 8 Α Uh-huh. 9 That was from 9-5/8. Right? 10 Usually, they're all the same. Α 11 Q So what string is set through the fresh water? 12 Α The fresh water? We set it at twenty inch. 13 Twenty inch. So how are you drilling-- It's on Q 14 air. Right? 15 It is on air. Do you add additives with that? 16 17 Not on that one. On that one, we drill with 18 fresh water. You know, obviously, because it's a fresh 19 water string, that one we tend to drill without any 20 additives. In that one, we're trying to -- on a lot of the 21 permits that we have submitted, we are trying to cover the 22 red rock right there because it's at the bottom of the 23 casing.

And we case it off without putting any

24

1	additives because, even after you If you don't case it
2	off, even after you add additives, it'll still come apart.
3	So we tend to try to case it off on the first casing, which
4	is the best thing for everybody. That way, there's no
5	issues drilling past beyond that 20-inch casing point.
6	COMMISSIONER MARTIN: Thank you.
7	CHAIRMAN LAY: That's all the questions I have.
8	Witness may be excused.
9	(Witness excused.)
10	CHAIRMAN LAY: Any other witnesses?
11	MS. ELMORE: No other witnesses.
12	CHAIRMAN LAY: Okay. Let's go off the record.
13	COMMISSIONER RADABAUGH: Wait a minute. Back up,
14	back up, back up.
15	CHAIRMAN LAY: Back up.
16	COMMISSIONER RADABAUGH: One lease question.
17	What was you all pay on average to other people in that
18	particular lease? Do you know offhand?
19	MS. ELMORE: That testimony would be unchanged
20	from
21	COMMISSIONER RADABAUGH: The other testimony?
22	MS. ELMORE: Exactly. That's why I skipped over
23	it.
24	COMMISSIONER RADABAUGH: Okay. Go enough.

CHAIRMAN LAY: If there's no objection we'll admit Exhibits 6, 7 and 8.

(WHEREUPON, the documents previously identified as Exhibits Nos. 6-8 were received in evidence.)

(WHEREUPON, a discussion was had off the record.

CHAIRMAN LAY: Do I have a motion?

COMMISSIONER RADABAUGH: I have a motion. Make a motion to grant American Petroleum Partners Operating, LLC, their request to establish a 278.93 acre drilling unit and pooling of unleased tracts and interests for the Winterfell-9UH well at the bonus rate of \$7,000.00 per acre and a royalty rate of 20 percent free of all post-production costs and a price equal to or greater than the contract price paid by a non-affiliated thirty-party market.

APP will provide a detailed AFE to the Commission prior to the commencement of operations of the wells. Should any party elect to participate as a working interest owner, APP will request a supplemental hearing to establish terms for that participation. This pooling is only for the Point Pleasant formation.

I'd also like to make a motion to grant APP

1

their request for the exception to Rule 39CSR 1.4.2 for the drilling of the Winterfell-9UH well located in Marshall County, West Virginia, at 800 feet between laterals or unit boundaries.

Also, within 90 days of the respective completions of said well, APP is directed to comply with the West Virginia 39CSR 1.4.6 regarding the provision of well records and any and all logs run on the wells mentioned above to the Oil and Gas Conservation Commission.

> COMMISSIONER MARTIN: I'll second.

CHAIRMAN LAY: Got a motion and a second. Any further discussion? If not, all those in favor, aye? Opposed, nay? Motion carry. Granted your relief. If you would be so kind as to prepare a draft Order for the Commission, counsel and staff--

MS. ELMORE: Thank you very much. We appreciate it.

CHAIRMAN LAY: Anything else for the record? not, close the record. Thank you.

> (WHEREUPON, the hearing was adjourned.)

REPORTER'S CERTIFICATE

STATE OF WEST VIRGINIA,
COUNTY OF KANAWHA, to-wit:

I, BONNIE K. WOLFE, Certified Court Reporter and Notary Public of West Virginia, do hereby certify that the foregoing is, to the best of my skill and ability, a true and accurate transcript of all the proceedings as set forth in the caption hereof.

Given under my hand this $4^{\rm th}$ day of March, 2019. My commission expires October 21, 2019.

Certified Court Reporter

Bonne K Walfe

NOTARY PUBLIC OFFICIAL SEAL BONNIE K WOLFE State of West Virginia My Comm. Expires Oct 21, 2019 1211 Ellen Dr South Charleston WV 25303

BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE REQUEST BY AMERICAN PETROLEUM PARTNERS OPERATING, LLC, FOR AN ORDER FROM THE COMMISSION TO AMEND THE EXISTING CASTERLY ROCK UNIT, OPERATOR IS PROPOSING TO INCLUDE AN ADDITIONAL WELL IDENTIFIED AS CASTERLY ROCK-4UH THEREBY INCREASING THE SIZE OF THE UNIT TO 634.0 ACRES, FURTHER, OPERATOR REQUESTS THE POOLING OF UNLEASED OPERATORS WHO HAVE NOT ENTERED INTO VOLUNTARY AGREEMENTS ALLOWING FOR THE DEVELOPMENT AND OPERATION OF THE 634.0 ACRE CASTERLY ROCK UNIT AND FOR EXCEPTION TO RULE 39CSR 1.4.2 FOR THE PROPOSED WELL, CASTERLY ROCK-4UH TO BE LOCATED IN UNION DISTRICT, MARSHALL COUNTY, WEST VIRGINIA AND THE OBJECTION FROM CHEVRON U.S.A., INC., REGARDING THE INTENTIONAL DEVIATION

DOCKET NO. 271 CAUSE NO. 256

Transcript of PROCEEDINGS had on February 21, 2019, at 10:00 a.m., in the offices of the Oil and Gas Conservation Commission located at the West Virginia Department of Environmental Protection, 601 47th Street, SE, Charleston, West Virginia, pursuant to notice and to the West Virginia Rules of Civil Procedure.

BEFORE: Barry K. Lay, Chairman Robert Radabaugh, Commissioner James Martin, Commissioner

					APP - 271/256
Sheet 2 Page APPEARANCES:	2				Page 4
	BEHALF OF THE APPLIC	CANT:		1	CHAIRMAN LAY: Before the Oil and Gas
Eli:	zabeth Elmore, Esqui	re		2	Conservation Commission of the State of West Virginia in
Jacl	kson Kelly, PLLC			3	the matter of the request by American Petroleum Partners
	D Laidley Tower rleston, WV 25301			4	Operating, LLC, for an Order from the Commission to amend
				5	the existing Casterly Rock Unit, operator is proposing to
ON I	BEHALF OF THE WV-OGO	CC:		6	include an additional well identified as the Casterly Rock
John	n Gray, Assistant At	torney Ge	neral	1	4-UH thereby increasing the size of the unit to 634.0
Susa	an Rose, Staff			0	acres, further, operator requests the pooling of unleased
				10	tracts and interests of oil and gas owners and operators
				10	who have not entered into voluntary agreements allowing for
				11	the development and operation of the 634.0 acre Casterly
				12	rock Unit and for exception to Rule 39CSR 1.4.2 for the
				13	proposed well, Casterly Rock-4UH, to be located in Union
				14	District, Marshall County, West Virginia and the objection
				15	from CHEVRON U.S.A., Inc., regarding the intentional
				16 17	deviation.
					This is Docket No. 271, Cause No. 256. Let
				18 19	the record show that present are members of the Commission, James Martin, Robert Radabaugh, Barry Lay. Also present is
				20	
				21	counsel, John Gray, and from Staff, Susan Rose. I'd like to place of record as Exhibit 1 a
				2007	copy of the Notice of Hearing along with the Certified Mail
				23	receipts.
				24	(WHEREUPON, said document was
					(minimate) sata accument has
Page 3					Page 5
	INDEX			1	identified as Exhibit No. 1 and
				2	was received in evidence.)
APPLICANT'S WITNESS	SES DIRECT	EXAMINAT	ION	3	CHAIRMAN LAY: Exhibit 2 is a copy of the posting
Lester Ebert	7	19 (Mar		4	to the Secretary of State's website.
	20	20 (Lay 21 (Lay		5	(WHEREUPON, said document was
		21 (Rad	abaugh)	6	identified as Exhibit No. 2 and
Babatunde Ajayi	22	38 (Mar		1	was received in evidence.)
		40 (Lay)	8	CHAIRMAN LAY: Exhibit 3 is a copy of the
Braulio Silva	48	52 (Mar 57 (Rad		10	newspaper legal advertisement.
		59 (Lay		10	(WHEREUPON, said document was
				11 12	identified as Exhibit No. 3 and
				13	Was received in evidence.)
EXHIBITS	Ι	DENTIFIED	RECEIVED		CHAIRMAN LAY: Exhibit 4 is a copy of the objection from Chevron and, also, a withdrawal of their
No. 1 (Notice) No. 2 (Secretary of	State Confirm \	4	4 5	15	objection.
No. 3 (Newspaper No	otice)	5 5 5 5 6	5	16	(WHEREUPON, said document was
No. 4 (Objection/Wi No. 5 (Application)		5 5	5 5 6	17	identified as Exhibit No. 4 and
No. 6 (Force Pool A No. 7 (Casterly Roc	application)	6 10	6 22	18	was received in evidence.)
No. 8 (Amended Exhi	.bit C)	22	22	19	CHAIRMAN LAY: And finally, Exhibit 5 is excerpts
No. 9 (APP Core Uni No. 10 (Toe Extensi	on Proposal)	25 26	43 43	20	from the Application.
No. 11 (Plat of Nea No. 12 (Well Spacin	rest Wells) ig Exempt Sealed)	27 30	43 43	21	(WHEREUPON, said document was
l l l l l l l l l l l l l l l l l l l	,			22	identified as Exhibit No. 5 and
İ				23	was received in evidence.)
I					
				24	CHAIRMAN LAY: And Exhibit 6 is the Force Pooling
Reporter's Certific	ate		70	24	CHAIRMAN LAY: AND EXHIBIT 6 IS THE FORCE POOLING

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Sheet 3 Page 6
                                                                    Page 8
    Application.
                                                                         A
                                                                             I'm a District Landman.
                        (WHEREUPON, said document was
                                                                              How long have you been employed with APP in this
                   identified as Exhibit No. 6 and
                                                                 3 capacity?
                   was received in evidence.)
                                                                             Longer than a year.
              CHAIRMAN LAY: At this time, the Commission will
                                                                             And what are your job responsibilities?
                                                                             I'm responsible for all the contractual
   take appearances.
              MS. ELMORE: Good morning. I'm Beth Elmore with
                                                                    agreements within APP's southern district, mostly Marshall
   Jackson Kelly, appearing on behalf of American Petroleum
                                                                    County, Wetzel, and Green County, PA.
 9 Partners, LLC, with respect to our Application for Pooling
                                                                             And what prior experience did you have working in
10 and Spacing Exception. This morning we are seeking to
                                                                    the industry before becoming employed by American Petroleum
11 force pool the Casterly Rock Southwest Unit because there
                                                                    Partners?
12 is one unleased parcel in this tract.
                                                                             I've had several jobs or positions with
                   We are further seeking an exception to the
                                                                    Chesapeake Energy, Shell, Noble, now APP.
14 3,000 foot spacing requirement for the wells to be drilled
                                                                              Does APP have existing wells in the State of West
15 in this unit and, finally with respect to the toe of the
                                                                    Virginia?
16 well, seeking a variance so that those wells can be drilled 16
                                                                             Yes. The Casterly Rock 1-UH, 2-UH, 3-UH, and
17 within 200 feet of the unit boundaries.
                                                                    5-UH which we're currently drilling.
                   Before we get started, if I could go ahead
                                                                             Okay. Does American Petroleum Partners own real
19 and mark for admission a map showing a depiction of the
                                                                   property in the State of West Virginia?
20 Casterly Rock Southwest Unit and also Amended Exhibits to
                                                                         A
                                                                              Yes.
    our Application which reflect the fact that, since our
                                                                             And does American Petroleum Partners pay real
22 Application was filed, we entered into an arrangement with 22
                                                                   property taxes in the State of West Virginia?
23 Chevron whereby two tracts we're showing as unleased in our 23
                                                                        A
                                                                              Yes.
24 initial Application, we received conveyances of two of
                                                                         Q
                                                                             And are you familiar with the Application for
    Page 7
                                                                    Page 9
                                                                   force pooling and spacing exceptions for the Casterly Rock
 1 those tracts and assignments of leases with respect to two
                                                                   Southwest Unit and the Casterly Rock wells which was filed
 2 of those tracts, which leaves this morning only one
 3 unleased interest to be discussed. So those are the only
                                                                   by APP before the Commission?
                                                                             Yes.
 4 changes made to those exhibits, but we wanted them to be
                                                                        Α
    correct.
                                                                             Did you assist in the preparation of the
                                                                   information included in the Application for the Casterly
                   Our first witness this morning will be Lee
    Ebert, who is employed by American Petroleum Partners.
                                                                    Rock Southwest Unit?
                                                                        A
              CHAIRMAN LAY: Will the court reporter please
                                                                             Yes.
                                                                             West Virginia Code Section 22-C-92 defines an
    swear the witness?
                                                                   Operator as: Any owner of the right to develop, operate
                        (Witness sworn.)
                                                                    and produce oil and gas from a pool and to appropriate the
    THEREUPON came
                       LESTER L. EBERT, IV
                                                                   oil and gas produced therefrom.
    called as a witness by the Applicant herein, being first
                                                                                  To your knowledge, is APP an Operator within
    duly sworn according to law, testified as follows:
                                                                   the definition I just provided to you?
                                                                             Yes.
                        DIRECT EXAMINATION
                                                                16
16
         BY MS. ELMORE:
                                                                             And are you familiar with the wells that APP
17
              Please state your full name for the record.
                                                                   proposes to drill from the Casterly Rock Southwest well pad
18
         A
             Lester L. Ebert, IV.
                                                                    from a land perspective?
19
                                                                             Yes.
             Mr. Ebert, what is your educational background?
20
                                                                             Okay. If you would look at the map which I
              Have a BA in Business Management from University
                                                                   handed out prior to getting started-- I think it was
    of New Orleans, and I have an MBA from same university.
22
                                                                   marked as No. 7. Is that correct? If we would mark it as
             And by whom are you currently employed?
23
                                                               23 7--
             American Petroleum Partners.
24
                                                               24
             And what is your job title?
                                                                                       (WHEREUPON, said document was
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Sheet 4
                Page 10
                                                                     Page 12
                   identified as Exhibit No. 7.)
                                                                         Α
                                                                              Yes.
         BY MS. ELMORE:
                                                                         0
                                                                              And with respect to the wells, did you include
              It's an overview of the wells that American
                                                                 3 the names of all individuals, both leased and unleased, in
    Petroleum Partners proposes to drill from the Casterly Rock
                                                                    the Application that has been submitted to the
   Southwest pad. Would you please identify the well pad or
                                                                    Commissioner?
    tell us how to identify the well pad looking at this plat?
                                                                              Yes.
                                                                         A
              It's the blue, little box there.
                                                                              How many surface tracts are included in the
              Okay. And are there any wells currently situated 8
                                                                    Casterly Rock Southwest Unit as proposed?
    on this well pad?
                                                                              There's 108 surface parcels for a total of 634
 10
              Yes. There are.
                                                                    surface acres.
              Okay. And would those be wells in the Northwest
                                                                              Okay. If you look at the plat that was attached
    and the Northeast Unit?
                                                                    to the Application, do you know how you can identify the
              Yes.
                                                                    tracts that were unleased or partially unleased?
14
              Okay. How many units are currently anticipated
                                                                         Α
                                                                              Yes. On Exhibit 7, it's the green unleased
                                                                15
15 to utilize the Casterly Rock well pad?
                                                                    parcel.
              What's displayed as three.
                                                                16
                                                                              And am I correct that those unleased parcels were
17
              And with respect to the Casterly Rock Southwest
                                                                    shown by hatch marks--
18 Unit, how many acres are included in this unit?
                                                                         A
                                                                19
              Six hundred and thirty-four.
                                                                              --on the submitted plats?
              And how many wells are shown as proposed to be
                                                                              Yes, ma'am.
                                                                21
    drilled at this time from the well pad?
                                                                              Okay. And what is the tract that is shown in
              Seven.
                                                                    green that is unleased at this point in time?
                                                                23
              Going back to the well pad, how large are the
                                                                              Parcel number is 13-14-46.2.
    surface tracts on which the well pad is located?
                                                                              And how much of this tract is included in the
                                                                    Page 13
    Page 11
         A
              So the pad site is on two different parcels.
                                                                   unit itself?
    It's on 183 acre parcel and a 39 acre parcel.
                                                                        A
                                                                              .55370634 net acres.
              Okay. And what will be the size of the well pad
                                                                              Okay. And how many people own an interest in the
    itself?
                                                                   oil and gas underlying this tract?
              Twenty-six acres.
                                                                 5
                                                                        A
                                                                              There was one.
              And the final disturbance at the well pad, the
                                                                              Okay. And how did you determine the ownership of
    final disturbed area?
                                                                   the oil and gas underlying that particular tract?
         A I'm sorry. The twenty-six acres is the disturbed 8
                                                                              We had the title opinion rendered.
    area. The well pad itself is only 2.8 acres.
                                                                              Okay. And the name of the individual vested with
10
              Thank you.
                                                                   ownership in that tract?
11
                                                                              Samuel F. Henry.
              My apologies.
12
              And has APP obtained the necessary surface owner
                                                                             Okay. And with respect to Mr. Henry, did APP
    consents and easements as required by West Virginia law?
                                                                   make contact with him and attempt to lease his interest in
                                                                   the oil and gas estate?
              And has APP leased the oil and gas underlying the 15
                                                                             We did.
    surface tracts on which the wells will be located?
                                                                             And was there any success in negotiating of those
             Yes. APP has leased the oil and gas under the
                                                                   lease with Mr. Henry?
18
                                                                             No. The last attempt was made in November, and
    tract.
19
                                                               19 he was unwilling to lease.
             And so those tracts are fully leased to APP?
20
              Yes, ma'am.
                                                                             Okay. And to be very clear, have you had any
                                                               21 contacts or obtained any knowledge with respect to
              Okay. Has American Petroleum, APP, conducted a
    diligent search of the records to determine the owners of
                                                               22 Mr. Henry since November 20th and, in fact, since the
                                                                   application for this pooling and spacing exception was
   the oil and gas in the proposed unit as well as all
24 adjoining operators?
                                                               24 filed with the Commission?
```

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Sheet 5 Page 14
                                                                    Page 16
              Yes. Mr. Henry passed away in the beginning of
                                                                 1 requirements which grant all unleased owners the right to
    February, February 10th.
                                                                    participate as a working interest owner or to be deemed a
              Okay. And do you have any knowledge whether his
                                                                3 lessor with respect to his or her interest?
    heirs would be opposed to oil and gas development with APP?
                                                                              Yes, ma'am.
              No. We've been in touch with his four heirs, and
                                                                              Does APP have a proposed operating agreement for
    they are not opposed to the development.
                                                                  the well?
              Okay. And would APP intend, if the application
                                                                              We do.
 8 is granted today, to continue to try to work to lease those 8
                                                                             And is it your understanding that under West
 9 interests if that's a possibility?
                                                                   Virginia law, in the event there is a dispute over the
              One hundred percent.
                                                                   Joint Operating Agreement, the Commission would retain
              Okay. And what is the percentage of ownership in 11
                                                                    jurisdiction to resolve any disputes about Joint Operating
12 the unit with respect to tract 13-14-46.2?
                                                                    Agreement terms and costs?
13
              .08733538 percent.
                                                                         Α
                                                                             Yes.
14
              And the application as originally filed with the
                                                                              Okay. Has APP conducted an investigation into
15 Commission included four additional tracts on Exhibit G.
                                                                15 reasonable bonus or royalty amounts payable for Utica/Point
16 These were all referenced as Chevron tracts. The lease
                                                                    Pleasant leases in the vicinity of this unit?
    tracts have all been leased or assigned to APP at this
                                                                            Yes. We've had an investigation done, and the
    point?
                                                                    amounts are, you know--
19
         A
              Yes, ma'am.
                                                                             Tell me what the average bonus amount paid for
              Okay. For the Casterly Rock Southwest Unit, what 20 acre, and what is the average bonus amount paid per acre,
    percentage of acreage in the unit is now under lease at
                                                                   and what is the average royalty payable for Utica-only
    this time?
                                                                22 leases?
                                                                23
         A
              99.912665 percent.
                                                                             Two thousand four hundred twenty-two dollars and
                                                                24 16 percent royalty.
              And are we requesting the Commission enter an
                                                                    Page 17
 1 Order today designating APP as Operator of the proposed
                                                                             Okay. And what is the average bonus amount paid
   4-UH, 5-UH, 7-UH and 9-UH wells?
                                                                   per acre and the average royalty paid for all-depths
                                                                    leases?
              And with respect to the single unleased owner,
                                                                             Right around $4,849.00 and 17.49 percent royalty.
    what was the final, highest offer made for his interest?
                                                                             Does the royalty amount reflect the payment of
                                                                   post-production costs?
             We made him an all-depths offer of $7,000.00 per
    net acre with a 20 percent gross royalty.
                                                                         A
                                                                             Yes.
             Okay. And what was the treatment of
                                                                             How did you-- Tell us what you did to determine
    post-production costs in the leases that were offered?
                                                                    these leasing amounts?
10
              They were gross royalty leases.
                                                                             We just analyzed what we've paid in the area--
             Okay. With respect to the unleased interest in
                                                                11
                                                                             Okay.
12 the Casterly Rock Southwest Unit, do you believe APP made
                                                               12
                                                                             --since the inception of the company.
13
    reasonable efforts to enter into a lease with this owner?
                                                               13
                                                                             Okay. So the bonus offered by APP to Mr. Henry
                                                                   is above the amounts you've indicated is average for
14
             Yes, ma'am.
15
             Does APP have adequate funds to enter into a
                                                                   Utica-only leases and is also greater than the average paid
16 lease or an assignment with the unleased owner on terms
                                                               16 for all-depths--
17
   determined by the Commission?
                                                               17
                                                                        A
                                                                             Yes, ma'am.
18
                                                               18
        A
             Yes.
                                                                             --leases?
                                                               19
             Does APP understand that with force pooling a
                                                                             Yes, ma'am.
                                                               20
   party who is force pooled has the statutory option to
                                                                             Are you aware of any higher amounts paid by other
    participate as a royalty owner or as a working interest
                                                               21
                                                                   operators in the area?
                                                               22
   owner?
                                                                             I'm not.
23
                                                               23
        A
             Yes, ma'am.
                                                                        0
                                                                             Okay. Are the other leases included in the
24
             And is APP willing to comply with the statutory
                                                               24 Casterly Rock Southwest Unit Utica-only leases?
```

```
Sheet 6 Page 18
                                                                    Page 20
              Yeah. Say that again. I'm sorry.
                                                                             It's-- The tract inside of the unit is .55370634
                                                                        A
              Are the other leases included in the Casterly
                                                                   acres.
 3 Rock Southwest Unit Utica-only leases?
                                                                              And that was approximately, if I understood you
              No. No. But a majority of them are Utica
                                                                   correctly, .087 percent of the unit?
    leases.
                                                                              Yes, sir.
                                                                 6
              And APP is requesting today that the Commission
                                                                              COMMISSIONER MARTIN: Thank you.
   set the compensation terms for the unleased owner in the
                                                                                            EXAMINATION
 8 Casterly Rock Southwest Unit who elect to surrender their
                                                                         BY CHAIRMAN LAY:
 9 interest as provided by statute?
                                                                              Okay. I'm confused. The offer that you made the
         A
              Yes.
                                                                   lessor, what was that again?
11
              Okay. In terms of allocation of the revenue from
                                                                             It was $7,000.00 and 20 percent.
12 the wells and the unit to the tracts in the unit, on what
                                                                             Seven thousand dollars per acre?
13 basis would the revenue from the well be allocated?
                                                                             Yes, sir.
              By statute, the revenue will be allocated in
                                                                14
                                                                             And 20 percent royalty?
15 accordance with the surface acreage that each tract
                                                                15
                                                                             Yes, sir.
16 contributes to the unit.
                                                                             And he didn't accept that?
                   Then the royalty with respect to that tract
                                                                             No.
18 or a portion of the tract will be allocated to the royalty
                                                                             CHAIRMAN LAY: Okay.
19 owners in that tract, so calculating partial interest on a
                                                                                  DIRECT EXAMINATION (CONTINUED)
20 pro-rata basis for any royalty interest on a parcel owned
                                                                        BY MS. ELMORE:
21 in common.
                                                                             And just to clarify, that was for Utica only or
              Okay. In your view as a landman, would this unit 22
                                                                   for all depths?
23 recognize the correlative rights of all landowners in the
                                                                             It was for all depths. That was for all depths
                                                                   because, you know, his Marcellus rights were open as well.
    Page 19
                                                                    Page 21
         A
                                                                   We're not going to just limit it to the Utica only when we
              Would it encourage the maximum recovery of oil
                                                                   try to lease. So--
    and gas?
                                                                                           EXAMINATION
              Absolutely.
                                                                        BY CHAIRMAN LAY:
              Would it prevent waste?
                                                                             We've had testimony from other operators that
              Yes, ma'am.
                                                                   they have paid $7,000.00 for Utica and 20 percent royalty.
              And is APP requesting that the Commission enter
                                                                   Are you aware of those -- any of those operators?
   an Order limited to the unit before the Commission such
                                                                             I'm not. We-- You know, typically, operators
    that the Order will not alter any other or future units
                                                                   don't discuss what they pay landowners. I mean,
    approved by the Commission or require the reallocation of
                                                                   collusion's not good.
   production allocated to separately-owned tracts within any
                                                               11
                                                                             CHAIRMAN LAY: Okay. I think that's all the
   other unit?
                                                               12
                                                                   questions.
13
        Α
                                                               13
             Yes.
                                                                                           EXAMINATION
                                                               14
             MS. ELMORE: I have no further questions for
                                                                        BY COMMISSIONER RADABAUGH:
15 Mr. Ebert on land issues. Does the Commission have any
                                                               15
                                                                             One quick one. Post-production costs, I missed
    questions?
                                                                   that when you had gone over it.
17
                                                               17
             CHAIRMAN LAY: Questions from members of the
                                                                             Yeah. It was a gross royalty lease offer.
                                                               18
    Commission?
                                                                             COMMISSIONER RADABAUGH: Thank you.
19
                                                               19
             COMMISSIONER RADABAUGH: Not at this time.
                                                                             CHAIRMAN LAY: Okay.
20
                                                               20
                           EXAMINATION
                                                                             MS. ELMORE: Our next witness will be Babatunde
        BY COMMISSIONER MARTIN:
                                                               21 Ajayi.
        Q Mr. Chairman, I have one. Mr. Ebert, I probably
                                                                                       (Witness excused.)
23 missed it. The tract in question that's owned by the
                                                                             MS. ELMORE: I know we marked for admission into
   Henrys or Mr. Henry's heirs, how many acres was that?
                                                               24 evidence the plat and the amended exhibits. Can we move to
```

```
Sheet 7 Page 22
    have those admitted into evidence?
                                                                    no, we do not have experience producing the wells here.
              CHAIRMAN LAY: Any objection to the exhibits?
                                                                    But we have some experience drilling it. However, the
 3 The plat is marked as Exhibit 7. The amended is Exhibit 8.
                                                                    management team has extensive experience in drilling and
    We'll accept or enter both of those.
                                                                    completing Marcellus and Utica wells in the area.
                        (WHEREUPON, the document
                                                                              And what is your personal experience with these
                   previously identified as
                                                                    types of proposed wells?
                   Exhibit No. 7 was received in evidence.)
                                                                         A I have designed and completed over sixty-five
                        (WHEREUPON, said document was
                                                                    Point Pleasant/Utica wells and over two hundred Marcellus
                   identified as Exhibit No. 8 and
                                                                    wells in the Appalachian Basin.
10
                   was received in evidence.)
                                                                10
                                                                              And what types of wells is APP proposing to drill
                        (Witness sworn.)
                                                                11
                                                                    today?
    THEREUPON came
                                                                              Horizontal wells drilled into the Utica/Point
                          BABATUNDE AJAYI
                                                                    Pleasant.
14 called as a witness by the Applicant herein, being first
                                                                14
                                                                              Are there any other operators who've expressed a
15 duly sworn according to law, testified as follows:
                                                                15
                                                                    desire to operate the proposed wells?
116
                         DIRECT EXAMINATION
                                                                16
17
         BY MS. ELMORE:
                                                                              And can you tell the Commission the estimated
18
              Good morning. Please state your name, your full
                                                                    lateral lengths of the 4, 5, 7 and 9UH wells?
19 name, for the record.
                                                                              Yes. The estimated lateral length of the 4UH
20
              My full name is Babatunde Ajayi.
                                                                    Casterly Rock is 5,617. The Casterly Rock 5UH is 7,648
21
                                                                    feet. The Casterly Rock 7UH is 7,787 feet lateral length.
              Okay. Mr. Ajayi, what is your educational
    background?
                                                                    And the Casterly Rock 9UH is 7,902 feet lateral length.
              I have a Master's degree in petroleum engineering 23
                                                                              Okay. And what are the proposed total depths for
24 from Texas A&M University and a Bachelor's in chemical
                                                                    each of these wells?
                                                                    Page 25
    engineering from Bosphorus University in Istanbul, Turkey.
                                                                         A The total depth for the Casterly Rock 4UH is
              And by whom are you employed?
                                                                   17,347 feet. The total depth for the Casterly Rock 5UH is
              I'm employed by American Petroleum Partners, APP.
                                                                    20,754 feet. For the Casterly Rock 7UH, it is 20,368 feet.
              And what is your job title?
                                                                    And for the Casterly Rock 9UH, it is 19,935 feet.
         A
              My job title is the Vice President of
                                                                              Okay. And are these proposed wells located at
    Completions.
                                                                    least 400 feet from the relevant unit boundaries?
              How long have you been employed in this capacity?
                                                                             No. The wells are located 400 feet from the unit
             A little over two years.
                                                                    boundaries to the west, east and north. However, at the
              And what are your job responsibilities?
                                                                    toes of the wells to the southeast, they are 200 feet away
                                                                    from that boundary.
              I current oversee our Geology, Completions,
    Reservoir and Production Departments along with the
                                                                             Okay. And does APP control the acreage to the
    consultants associated with those departments.
                                                                    south of the toes of each of these wells?
              And what prior experience did you have before
                                                                             Yes. We control 100 percent of the acreage--
    working for APP?
                                                                              Okay.
15
             I have twelve years of experience in the oil and
                                                                             --to the south of the toes.
                                                                16
16 gas industry. Before joining APP, I worked as the Vice
                                                                                        (WHEREUPON, said document was
                                                                17
17 President of Completions at Rice Energy for three years.
                                                                                   identified as Exhibit No. 9.)
                                                                         BY MS. ELMORE:
118 And prior to that, I was a Completions Engineer at Seneca
                                                               19
    Resources and a Production Stimulation Engineer at
                                                                             And I have an exhibit that might be helpful to
                                                               20 the Commission to take a look as we're talking about the
20
    Schlumberger.
                                                                    acreage to the south, if I could hand that out. And if you
             And does APP have experience with the types of
                                                                    could, go ahead and explain what it is that I'm handing out
    wells proposed here today?
             We do not have-- We have not started producing
                                                                   and how that might be helpful.
  any wells, but we have started drilling a few wells. So,
                                                                        A So we currently are talking about the Casterly
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Sheet 8 Page 26
 1 Rock Southwest unit off of the Casterly Rock pad. However,
 2 we are in the next few weeks going to submit a permit for
 3 the King's Landing Northwest unit which is just south of
 4 the Casterly Rock Southwest pad.
                  We do have controlling -- We do control the
 6 acreage on both units that are adjacent to each other, and
 7 we're proposing to have only two hundred feet unit
   boundaries -- distance from the unit boundaries for both
    units.
10
             Where do you anticipate the first perf will be?
11
             The first perforation--
12
                        (WHEREUPON, said document was
13
                  identified as Exhibit No. 10.)
14
         BY MS. ELMORE:
             As you're talking, I'm going to hand out another
16 map which shows the first perf for illustrative purposes.
             I will go into maximizing recoveries of the
18 formation from the acreage. And the first perforation by
19 design will be about 150 feet away from the toe from the
20 end of the well bore itself. This is because of shoot frac 20
21 that we will have. So the first perforation's 150 feet
   away from the end of the lateral.
             How much footage will the frac grow in the
24 direction of minimum stress?
```

Page 28 right now. They're currently drilling, and there's a rig on that pad.

The nearest producing well is the Curry 8H well which is two miles away from the toe of our current proposed wells. The other wells are-- We have APP permitted wells 1.8 miles away. That's the Winterfell pad. We also have the APP permitted Harrenhal

wells a mile away. And we have 3.1 miles away a CNX permitted well.

- Okay. And we are requesting a spacing exception to the 3,000 foot requirement set forth in the regs so that this well could be drilled using 800 feet spacing?

10

13

17

- Okay. Would you tell the Commission what the target formations are for the proposed well and the depth of the target formation?
- The target formation is the Point Pleasant A formation.
- And can you tell the Commission about the characteristics of the Point Pleasant formation, including porosity, total organic carbon and permeability of the formation in the area where these wells will be drilled?
- A The Point Pleasant is an organic rich calcareous 24 shale. It is an unconventional reservoir and its porosity

Page 27

13

17

18

19

20

- The frac itself from our simulations from some microseismic data, we expect that the frac itself would grow 75 feet away from the first perforation.
- And do you believe that you will effectively be 5 able to drain the acreage between the two units, the two proposed units?
 - We believe that we will effectively drain it. However, we also believe that we could get closer to that unit boundary.
 - How far apart are the wells spaced from other permitted wells? Is there something else you wanted to say 11 on that?
- Do you have the chart for the distances. MS. ELMORE: Oh, that would help as well. Yes. 15 I'm going to hand out yet another chart which will help 16 show the distances of the proposed wells from other wells in the vicinity of the Casterly Rock Southwest unit.

(WHEREUPON, said document was identified as Exhibit No. 11.)

BY MS. ELMORE:

- How far apart are the wells spaced from other permitted wells and other wells in the vicinity?
- Yes. We have-- We have other permitted Utica wells on the same pad as the wells we are asking to permit

Page 29

and permeability are so low that it requires hydraulic fracture stimulation to be economically viable.

It has an average porosity of nine percent across the interval and a permeability between 100 and 400 nanodarcies. There is 115 feet between the top of the Trenton and the top of the Point Pleasant. And the Point Pleasant is about 5,000 feet deeper than the Onondaga.

- Are the porosity and permeability numbers for the Point Pleasant/Utica high or low in comparison to wells drilled in typical vertical formation -- drilled vertically in conventional formations in West Virginia?
- With a porosity of nine percent on average across 13 the interval and a permeability of 100 to 400 nanodarcies, 14 this permeability is very low compared to other formations 15 drilled in West Virginia conventionally. And it is considered an unconventional reservoir.
 - And the approximate thickness of the Point Pleasant formation?
 - A hundred and fifteen feet.
- Do you anticipate producing wet gas or dry gas from these wells? 21
 - Dry gas.
- Okay. The Commission requires, as you're aware, 24 3,000 foot spacing for a deep well. Do you believe that's

17

19

23

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Sheet 9 Page 30
23
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```
1 an appropriate spacing for a Point Pleasant well?
            No. We believe the appropriate spacing for a
3 Point Pleasant well should be less than 3,000 foot.
```

Okay. And why is that?

Well, given the very low permeability and 6 relatively low porosity, we will have to hydraulically 7 fracture these wells to produce any economic gas quantities 8 and to maximize our stimulated reservoir contact with the 9 well bore. A 3,000 foot spacing would leave un-stimulated 10 reservoir behind and thus drastically reduce the recovery 11 factor of the gas in play in the reservoir.

Based on your frac modeling and your experience 13 with wells in this formation and in nearby areas with 14 similar characteristics, in your expertise, what would you 15 expect to see for an effective frac length for the Castlery 15 16 Rock Southwest unit?

A We expect the effective frac length--MS. ELMORE: I'm going to hand out -- excuse me 19 -- an exhibit for-- It's a well spacing exhibit that the Commission has seen before, but we would like to introduce it here as well.

> THE WITNESS: --to be 400 feet. (WHEREUPON, said document was identified as Exhibit No. 12.)

```
Page 32
1 half length of 400 foot.
```

Thirdly, we performed a research study on 3 over 600 Utica/Point Pleasant wells in the dry gas Ohio, West Virginia and Pennsylvania, southwest Pennsylvania. We reviewed the production of these wells relative to the well spacing. Of particular interest were four wells drilled at 500 foot spacing, eleven wells drilled at 750 foot spacing and twenty wells drilled at about 1000 foot spacing in Belmont County, Ohio.

A reserve and economic analysis was performed, and the results showed that, as productivity is reviewed on a 640 acre section basis, the recovery of the reserves and gas in place increases as more wells are added to a section. Basically, more reserves are recovered as the wells are spaced closer.

However, as more wells are added, the single well EURs and economics reduce, but the pad level or section level net present value increases to a point of diminishing returns.

In our analysis, at present drilling and completions costs and gas prices, wells spaced at 800 foot 22 spacing have the highest section or unit net present value. 23 It was determined that the primary factors that affect a 24 decision on well spacing is gas pricing and well costs.

Page 31

13

19

BY MS. ELMORE:

Have you performed any formation modeling based on those characteristics to determine what the effective frac or drainage area would be?

Yes. We evaluated our well spacing four different, mutually exclusive ways. First, we performed numerical hydraulic fracture modeling with the results showing an effective fracture half length of 400 feet. 9 This was done by compiling petrophysical and geomechanical 10 information from well logs in the West Virginia panhandle 11 and incorporating this information into a 3D gridded earth model.

Then we introduced our proposed high density 13 14 fracture design and expected pressures. Both a fully 15 numerical wire mesh fracture model and an unconventional |16 fracture model (UFM) were run. And these results show that|16 to West Virginia OGCC in Docket No. 242-231; Antero 17 we expect an average of 400 foot half length from our 18 complex fracture network.

Secondly, we ran a probabilistic 20 semi-analytical rate transient analysis on the production 21 data of a Utica/Point Pleasant well in the West Virginia panhandle. We were able to match the productivity of the 23 well to a 305 foot effective fracture half length in our 24 simulator. These results support our proposed estimated

Page 33

In all scenarios, closer spacing provides more reserves recovery and, consequently, higher royalties 3 for land owners in the section or unit. This study showed that 800 foot spacing would optimize resource recovery per section and maximize the associated economics at current gas prices and at current drilling and completions costs. Fourthly, we reviewed publicly available

studies, microseismic data, presentations done by other operators, and we were able to validate our results of 400 foot effective half lengths.

A sample set of five reports reviewed were: Eclipse Resources' presentation and microseismic data study presented to the West Virginia DEP, Docket No. 247-236; the rate transient analysis in Utica/Point Pleasant wells in 15 West Virginia performed by EQT Production Company presented 17 Resources' microseismic and rate transient analysis 18 presented to the Ohio Department of Natural Resources 19 sourced from public well permit API 34-111-2-4716; Gulfport 20 Energy microseismic study presented to the ODNR sourced 21 from well permit 34-013-02-1151; and Hess Energy 22 microseismic study in Belmont County presented to the ODNR 23 and sourced from public permit API No. 34-059-2-4370.

```
Sheet 10 Page 34
 1 investigating optimum well spacing for our drilling
 2 development and four of the independent research
 3 evaluations performed by APP presented here, as well as
 4 other studies not presented here, have helped us determine
 5 that 800 foot spacing is the optimum well spacing and that
 6 the hydraulic fracture would grow 75 feet from the last
   perforation in the direction of minimum stresses.
             And that's what leads to the request for the 200
   foot variant?
             Yes. It does.
             So just to kind of go back through, the effective 11
   half length along the maximum principal stress was what?
             Four hundred foot effective half length.
             Okay. And the frac spacing along minimum
15 principal stress?
             It is 150 foot from the center of the
   perforations, which in our designs amounts to about 75 feet 17
18 from the last perforation.
             Do you expect to see any communication between
20 the laterals in the proposed unit?
             We expect to see some hydraulic communication
22 during the hydraulic fracturing process. However, we
   expect little or no direct fluid communication between the
24 wells during production.
    Page 35
             With respect to frac height, what was your
  analysis on that?
             Based on the placement of our laterals, we expect
4 the fracture would grow to the top of the Point Pleasant
   formation.
             Does APP have any microseismic in the area or an
   analog to this area?
             We do not personally have microseismic in the
   area, but we do believe and we are aware of microseismic
   data in the Point Pleasant/Utica which we believe are
   analogous to our area in Ohio in Belmont County.
```

So in your view, if these wells are approved as

of oil and gas from the acreage encompassed by this unit?

20 area, the correct spacing of the wells is as you have

24 requested by APP appropriate with respect to the proposed

proposed it, being 800 feet between laterals?

Will it effectively protect the correlative

And based on your best estimate of the drainage

From a geological standpoint, is the spacing

Yes. It will.

rights of the landowners involved?

Yes. It will.

Yes. It is.

15

18

22

```
Page 36
                                                                wells?
                                                                     A
                                                                          Will granting the spacing exception prevent
                                                                waste?
                                                                          Yes. It will.
                                                                          Will the wells provide royalty income as well as
                                                                operating income?
                                                                          Yes.
                                                                          Will the owners obtain their just and equitable
                                                                share of production with respect to the wells?
                                                                          Spacing will encourage the maximum recovery of
                                                                oil and gas?
                                                            14
                                                                     A
                                                            15
                                                                          Does APP anticipate that the proposed wells will
                                                                be economic for APP and for the royalty owners?
                                                                     A
                                                                          Yes.
                                                                          Can you estimate the number of vertical wells
                                                                which would have to be drilled and hydraulically fractured
                                                                in order to produce the amount of oil and gas which you're
                                                                estimating to be recoverable by the proposed wells in the
                                                                Casterly Rock Southwest unit?
                                                                         We would estimate 193 vertical wells would be
                                                            24 required to produce the similar estimated ultimate recovery
                                                                 Page 37
                                                             1 in a similar time period.
                                                                          Okay. Would the estimated cost to drill 193
                                                               vertical wells be more or less than the cost of the
                                                                proposed horizontal wells?
                                                                          The cost to drill that many vertical wells would
                                                                be much more than the cost of the proposed horizontal
                                                                wells. The surface disturbance would also be excessive.
                                                                          Would it be feasible to drill that number of
                                                                wells in this area?
                                                                          It will not be possible to drill all these wells
                                                                given the mining operations that occur in this area.
                                                                          Okay. And how much land would be required to
proposed by APP, would that encourage the maximum recovery
                                                                drill 193 vertical wells assuming that land was available?
                                                                          We would need about 193 acres of land assuming
                                                            15 one-acre pad per vertical well. Again, the surface
                                                            16 disturbance would be excessive, and it would not be
                                                           117
                                                                possible.
                                                            18
                                                                          From a geological point of view, would granting
                                                            19 the application encourage the maximum recovery of oil and
                                                               gas?
                                                                         And you're able to calculate how large an area
                                                            23 you believe the wells would potentially drain?
```

Each well is expected to drain a half length of

```
Sheet 11 Page 38
                                                                   Page 40
 1 400 feet, and it's also shown to grow in height just to the 1
                                                                           Yes. We do. We have coal agreements with the
   top into the Utica.
                                                                  coal companies. However, it also makes it very-- The
             In your opinion, does drilling multiple
                                                                3 development planning in this area is really tough. There's
 4 horizontal wells from a single well pad have a
                                                                   only so many possible locations in Marshall County. I
 5 significantly lower environmental impact and result in less
                                                                   mean, we can count it. That makes it very tough and
 6 disruption to the community and have a beneficial impact on
                                                                   requires that, you know, everyone in the county work
 7 consumer prices, as opposed to drilling each well from a
                                                                   together to maximize the ability to recovery these
 8 different well pad?
                                                                   resources.
        A
             Yes.
                                                                             So the coal companies have already essentially
10
             And if the Commission grants the relief requested 10
                                                                   signed off on your location?
11 and APP is allowed to proceed with development of the wells 11
                                                                            Yes. They have.
   at issue, will APP promote the public policy of the State
                                                                             COMMISSIONER MARTIN: Thank you.
13 of West Virginia, including prevention of waste, protection 13
                                                                                           EXAMINATION
14 of the environment, protection of correlative rights and
                                                                        BY CHATRMAN LAY:
15 maximization of the recovery of oil and gas?
                                                               15
                                                                             Couple questions.
        A
             Yes.
                                                               16
                                                                             Yes, sir.
                                                                        A
             MS. ELMORE: Very good. Questions from the
                                                                             First of all, I don't know that we've marked
   Commission?
                                                                   these as exhibits yet, but the one that shows the distance
             CHAIRMAN LAY: Questions?
                                                                   from other operator wells, and so forth--
             COMMISSIONER RADABAUGH: Not at this time.
                                                               20
                                                                             Yes, sir.
                                                                        A
                           EXAMINATION
                                                                             --comparing that to your lease-- I assume that
22
        BY COMMISSIONER MARTIN:
                                                               22 represents the lease.
                                                               23
             Have a couple, Mr. Chairman. How do you
                                                                             MS. ELMORE: Could you -- That represents. And
   determine frac height? Is that done through modeling?
                                                                  we would like to not have that (indicating) included in the
    Page 39
                                                                   Page 41
            Yes, sir. That was done through modeling, yes.
                                                                   exhibit, I was just informed, that one map that you're
        A
             The modeling showed the growth upwards just to
                                                                   holding in your right hand, if possible.
   the top of the Point Pleasant?
                                                                             CHAIRMAN LAY: This (indicating) one?
             I was actually a little bit surprised by that.
                                                                            MS. ELMORE: That (indicating) one. We presented
  The expectation is that the frac would grow into the Utica.
                                                                   it so that we could show that we controlled the acreage
  However, based on the model I ran and based on the logs
                                                                   position immediately south of the toes of the Casterly Rock
   that we had and the 3D model, it showed that there are
                                                                   wells. But I've been asked if we could keep that one out
8 multiple planes of weaknesses. Because of that, the
                                                                  of the record because it provides a lot of proprietary
9 fracture may terminate at the top of the Point Pleasant.
                                                                   information with respect to development plan.
        Q And the Point Pleasant is the lower portion of
                                                              10
                                                                            CHAIRMAN LAY: No. We will seal it though.
   the Utica. Right?
                                                               11
                                                                            MS. ELMORE: Fair enough.
             Yes. You can look at it that way.
                                                                            CHAIRMAN LAY: Because I have questions about
             I mean, there's still Utica shale above the Point 13
                                                                  this--
   Pleasant?
                                                                            MS. ELMORE: Sure.
15
                                                               15
             Yes. There is extensively.
                                                                            CHAIRMAN LAY: -- and this (indicating).
16
             But not below it?
                                                               16
                                                                            MS. ELMORE: Okay.
17
                                                                            CHAIRMAN LAY: I want it, but we'll seal it.
                                                                            MS. ELMORE: You'll seal it. And if we could
             Did I hear you right that there's a lot of coal
   development in this area?
                                                                  also seal the spacing exception -- exemptions, the blue--
                                                              20
             A lot, all over the place.
                                                                            CHAIRMAN LAY: For one year.
             So how do you address that with the coal
                                                                            MS. ELMORE: Did we agree to two years before,
   entities, the operator and the coal owners, as relates to
                                                                  previously?
   your development? Do you have agreements with them or how
                                                                            THE WITNESS: Yes.
   does that work?
                                                                            MS. ELMORE: Could we--
```

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Sheet 12 Page 42
                                                                    Page 44
         BY CHAIRMAN LAY:
                                                                1 northwesterly direction. I don't know why it's the
              Did we agree to two years? Okay. Two years from 2
                                                                   northeast, but--
   the date of the award.
                                                                        A
                                                                             The location of the pad.
                   On this particular map, you have depicted to 4
                                                                             Okay. There is a section which you purport to
    the southeast of the Casterly Rock unit, it looks like a
                                                                   have under lease that is left out of the northeast unit,
   Permit 05101727. And you have a notation there, SNW Robert
                                                                   and it is also showing a portion that was left logically
    Young. I assume that's an SWN pad and permit?
                                                                   into the Casterly Rock units.
         Α
              Marcellus well.
                                                                                  Is there a specific reason as to why you're
             Marcellus well.
                                                                  not including those and drilling those as a continuation
10
         A
             Yes, sir.
                                                               10 of, obviously, the Casterly Rock unit -- if you control
11
              Okay. So that's a Marcellus well. And you
                                                                   that acreage, why you're not drilling into the same length
    control the Utica acreage--
                                                                   as the other wells in that unit.
                                                                             MS. ELMORE: Could we take just a minute and have
             Yes, sir.
14
             --under that Marcellus--
                                                                   a conversation in order to answer that question fully,
15
             Yes. We do.
                                                               15 'cause I think there might be some land issues involved.
         A
16
              --development? Okay.
                                                                             THE WITNESS: I would actually defer to the
         A
              By working with Southwestern, we have -- we
                                                                   landman.
    control it. Yes.
                                                                                       (WHEREUPON, a discussion was had
                                                                                  off the record.)
                                                               19
             Okay. Alright. So the green are-- Okay. That
   makes more sense.
                                                               20
                                                                             MS. ELMORE: We're ready to go back on the record
             It is.
                                                                   now.
                                                               22
             CHAIRMAN LAY: Alright. That answers that
                                                                        BY CHAIRMAN LAY:
   question for me. Before we go any further, I don't want to 23
                                                                             Okay.
24 get confused. We have three pieces -- four pieces that
                                                                             I hope I will be able to answer your question.
    Page 43
                                                                   Page 45
 1 haven't been included as exhibits. Is that correct? If
                                                                   For what looks like a little bit of a gap in the King's
 2 there's no objections, I will admit the exhibits, and we
                                                                   Landing Northeast well, we do expect to propose another
 3 will agree to seal 9 and 12.
                                                                   lateral from the Casterly Rock Northwest going south.
             COMMISSIONER MARTIN: Mr. Chairman, don't we
                                                                   That's why have that little divot in there. We're working
  already have this (indicating) one in our possession, and
                                                                   to build that unit, however, we also feel confident that we
   is it sealed now?
                                                                   should be able to force pool that.
             MR. GRAY: Yes.
                                                                                  Again, given the lack of surface locations,
 8
             COMMISSIONER MARTIN: Okay. It's Exhibit 12.
                                                                   we are starting out with the low hanging fruit. But in
 9
             CHAIRMAN LAY: Yes. For a period of two years--
                                                                   future, we will come across with more forceful actions.
10
             THE WITNESS: Yes, sir.
                                                                             Okay. My concern is the notch that actually is
             CHAIRMAN LAY: --from the date of the Order, same
                                                                   projected in King's Landing Northeast not be stranded if
                                                                   you've got it under lease.
  time frame. Both documents will be sealed for two years
   from the date of the Order.
                                                               13
                                                                             MR. EBERT: Can I answer that question?
             MS. ELMORE: Thank you.
                                                                             CHAIRMAN LAY: You're obviously still under oath
15
                        (WHEREUPON, the documents
                                                                  if you can answer the question.
16
                  previously identified as Exhibits
                                                                             MR. EBERT: Yeah. We're formulating plans to
17
                  Nos. 9-12 were received in evidence.)
                                                               17
                                                                   drill into that. Right now, it's just not 100 percent
18
        BY CHAIRMAN LAY:
                                                                   concrete at this moment.
             And maybe it's curiosity, but let's go to Exhibit 19
                                                                             CHAIRMAN LAY: It's not your intent to strand
       You're showing proposed, future units on here.
                                                                   that acreage?
21
                                                                             THE WITNESS: No, it's not. No.
             Yes, sir.
22
             You have the King's Landing Northeast?
                                                                             MR. EBERT: Hundred percent not our intent, no.
23
                                                                   No, sir.
24
                                                                             CHAIRMAN LAY: Okay. That's my question. Thank
             Which from all purports is going in a
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APP - 271/256

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Sheet 13 Page 46
                                                                   Page 48
                                                                             CHAIRMAN LAY: Okay. Witness may be excused.
    you.
              THE WITNESS: However, to not do that would
                                                                  You can call your next witness.
 3 require some force pooling. That's kinda my point.
                                                                                       (Witness excused.)
              CHAIRMAN LAY: Okay. That's fine.
                                                                             MS. ELMORE: Our final witness will be Braulio
              MR. EBERT: With the constraints of unitization
                                                                   Silva.
   rights like the 640 pooling and things like that--
                                                                                       (Witness sworn.)
              CHAIRMAN LAY: Are those contractual obligations?
                                                                   THEREUPON came
    Because you can actually go to 720 in a force pool.
                                                                                          BRAULIO SILVA
              MR. EBERT: Well, yes. They are contractual.
                                                                   called as a witness by the Applicant herein, being first
10
              MS. ELMORE: Is that a recent development?
                                                                   duly sworn according to law, testified as follows:
              CHAIRMAN LAY: No. It's always been 640 plus the 11
                                                                                       DIRECT EXAMINATION
   ten percent.
                                                                        BY MS. ELMORE:
              MS. ELMORE: Plus ten percent. I'm sorry.
                                                                             Would you please state your full name for the
              MR. EBERT: Yeah. For the most part, it's
                                                                   record?
15 contractual.
                                                                             Braulio Silva.
              CHAIRMAN LAY: Okay. I mean, if your contractual 16
                                                                             What is your educational background?
   leases are limited to 640's--
                                                                             Bachelor's in petroleum from Texas Tech
                                                                        A
              MR. EBERT: They are. It isn't released.
                                                                   University.
              CHAIRMAN LAY: Alright. But there is a provision 19
                                                                        0
                                                                             By whom are you currently employed?
    that allows you to go to 720.
                                                                             American Petroleum Partners.
              MR. EBERT: Yeah, the ten percent owners.
                                                                             What is your job title?
22
         BY CHAIRMAN LAY:
                                                                             I'm the VP of Drilling.
             I think I grilled you pretty extensively the last 23
                                                                             How long have you been employed in this capacity?
24 time on your presentation, however, I do have some-- I
                                                                             Four and a half years.
                                                                   Page 49
    Page 47
 1 personally have some concerns with 200 foot toe spacing.
                                                                            And what are your job responsibilities?
                                                                            I look over construction, planning and drilling
             Yes, sir.
         Q Given your future development plans, if those
                                                                   for American Petroleum Partners.
 4 hold, I'm comfortable with the 200 feet. And if you do, in
                                                                            What prior professional experience did you have
 5 fact, drill and development the acreage, everybody's
                                                                   before working for American Petroleum Partners?
 6 included. If there's a lap and if there's drainage, you
                                                                        A I worked with EQT for a number of years drilling
    are the drainage party.
                                                                  wells in West Virginia and Pennsylvania. And then I moved
                  If that doesn't happen, if this southern
                                                                  on to develop Majorsville asset for Noble Energy in
    boundary does not happen, I would come back and force you
                                                                  Marshall County, Washington County, PA, and Green County,
10 to include the 200 foot in the unit. My own preference--
                                                               10 PA.
   We haven't voted on that.
                                                                            What is your personal experience with the
                                                               12 proposed wells we are asking the Commission to approve this
12
        A
             Gotcha.
13
                                                              13 morning?
             But do you understand where I'm coming from?
                                                                            I drilled about 200 wells in Pennsylvania, close
14
             Yes, sir. -
15
             MR. EBERT: Hundred percent.
                                                              15 to another 200 wells in West Virginia. In my experience,
                                                              16 mostly Marcellus, obviously, because Utica is fairly new to
16
         BY CHAIRMAN LAY:
17
             I'm not gonna grill you on this again. I think I 17 the area.
18 understand your answers. Although I don't necessarily
                                                                       Q Can you explain how the proposed wells will be
                                                               19 drilled and completed?
   agree with all the science, it's as good as we can
   estimate. How's that?
                                                                            Definitely. We're going to be-- We're actually
                                                              21 currently drilling on the Casterly Rock pad right now. We
21
             Exactly.
                                                              22 are drilling on air down to about 9800 feet TVD where we
             CHAIRMAN LAY: Any other questions from any of
23 the other Commissions?
                                                              23 set our 9-5/8 casing. Then from there, we swap into fluid
24
             COMMISSIONER RADABAUGH: Not at this time, no.
                                                               24 drilling to drill core from lateral to TD.
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APP - 271/256

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Sheet 14 Page 50
                                                                    Page 52
              Does APP have a well site safety program for the
                                                                              Will APP pay severance taxes to the State from
    proposed well?
                                                                    its wells?
                                                                 3
         A
              Yes. We do.
                                                                         A
              Will APP hold regular safety meetings in
                                                                              Will APP pay the property taxes as well?
    connection with its drilling activity?
 6
                                                                 6
              We hold two safety meetings per day, once per
                                                                              Do you believe West Virginia will benefit if the
    tower.
                                                                    Commission grants this application?
              Is APP a bonded operator in the State of West
                                                                              Absolutely.
    Virginia?
                                                                              MS. ELMORE: Very good. I have no further
10
              Yes. We are.
                                                                    questions for Mr. Silva.
11
              Will APP conduct all reclamation required by law
                                                                              CHAIRMAN LAY: Questions from the Commission?
    and all applicable permits following its drilling and
                                                                              COMMISSIONER RADABAUGH: No.
                                                                13
    completion activities?
                                                                                            EXAMINATION
14
                                                                14
              Yes. We will.
                                                                         BY COMMISSIONER MARTIN:
15
              Will APP be a good steward of our environment?
                                                                15
                                                                             I have one thing, Mr. Chairman. I asked the
16
                                                                    earlier witness about the coal.
              From a geological standpoint, do you believe that 17
                                                                             Yes. I can give you a lot more information on
    the proposed wells will be economically successful?
                                                                   that. I manage a lot of the coal relations within the
              One hundred percent.
                                                                    company. Currently, we're talking Murray, CNX. And to the
              And can you explain to the Commission what you
                                                                    north of us, we've got another coal mine in the area.
    believe the estimated reserves will be for the wells to be 21
                                                                                   The way we usually do is we have a CA
    drilled at its proposed unit?
                                                                    agreement with them. They hand over their maps on a GI
              So currently, we estimate the EUR to be about 2.5 23
                                                                    system. We laid out all of those maps on Marshall County
24 billion per thousand feet.
                                                                   around where our acreage is. We start looking for
    Page 51
                                                                    Page 53
              Based on the estimated reserves, have you
                                                                   potential coal pillars where we will be able to drill
    concluded whether the wells would be economic or
                                                                   through the coal mine and be able to get to the Utica
    commercially reasonable as far as production is concerned?
                                                                   vertically.
         A
                                                                                  Once we figure out all of those possible
              And do you believe that they will be economically
                                                                   locations, then we look at topography to make sure we're
    successful?
                                                                    going to be able to build a pad on that potential location.
         A
              Yes.
                                                                   And you know, a lot of them are already taken because most
              Okay. In your opinion, is the size and shape of
                                                                   of them are ridges where people have houses or there might
    the unit a reasonable proximation of the area which will be 9
                                                                   be farms. So there's very few of them that are actually
    efficiently and economically drained by each of the
                                                                10 available or that will match your lease acreage for your
    proposed wells?
                                                                11 development.
12
         A
             Yes.
                                                                                  And then once we locate those potential pad
13
                                                               13 sites, then we go ahead and send surface hole locations and
             Has APP prepared AFE's for the wells?
14
                                                                   coordinates to the coal mines for them to double check
15
              Does APP have adequate funds on hand to drill the 15 those coordinates with their system. If they agree with
    proposed wells?
16
                                                               16 those locations, then they will send us a pre-approval.
17
             Yes.
                                                                                  Then we'll start working on an agreement
        A
18
             Are the wells scheduled for drilling?
                                                               18 between the two companies. We have an agreement that we
             We are currently drilling the three wells to the
                                                               19 write out where we list each one of the surface hole
   north, and we've got one well scheduled to drill to the
                                                               20 locations with the coordinates. And we both agree on
    south as soon as we get permits.
                                                               21 those. That's actually what we have in hand.
             Okay. Will the wells provide royalty income as
                                                                                  I believe it comes with a permit. And if it
                                                               23 doesn't come with the permit, we have it available to
   well as operating income?
24
        A
             Yes.
                                                               24 submit it for every pad. So we do this for every pad that
```

```
Sheet 15
we develop.
pad is?
```

So in this case, are these wells located in an area that's already been mined?

Page 54

No. So this pad is actually on a solid coal that 4 is being left behind by the coal mine. So the--

So there are plans for it to mine that area, but 7 not that that they're going to leave a pillar where this

No. In this specific case for the Casterly Rock 10 pad, they're mining -- their mine actually stops about 500 11 feet away from us. They're actually leaving a big piece of 11 12 coal around us just because the mine is not getting to 13 where we are.

So, you know, different from where we will 15 drill through coal pillars, where you will drill and then, 16 once they come mining, then you have a potential for that 17 well to fail. Where we are, we're actually on solid coal 18 where they're not planning on coming through, mining nearby 18 19 us at any point.

We do have their development plans. They 21 shared their development plans all the way to 2024. The 22 mines that are going to be mining through there will be, I 23 would say, more than a safe distance from where our pad is. 23 24 So we're not-- We're not drilled through a chain coal

Page 56

1 and to make sure everybody is evacuated before we even drill through the coal, to make sure that there's not going 3 to be a release of water or flood into the mine.

I have done that before when I was at Noble and when I was at EOT. But that's not what we're doing right now.

Right now, we're actually drilling through a solid block of coal that is nowhere near a mine that is being currently mined.

So basically, if it's already been mined, you're locating it well and pillar.

A Yes.

Of course, with confirmation from the coal company.

Uh-huh.

And you're also evacuating the mine when you drill through that pillar?

Yes. If the mine is active, yes. And we've done that before many times. What we do is we tend to do the drilling through shifts, usually on Sundays when the miners leave on Saturday night and then come back on Monday morning. Then we will drill on that time period right there.

There's been cases where I had to wait. You

13

23

1 pillar, which is what they call-- We're actually drilling 2 through a solid block of coal. And we can provide those maps if you need them.

Have you had any cases where you've actually 5 drilled in an area that's already been mined?

What do you do in that case to look into--

So in that case, we'll find the chain coal pillars. Chain coal pillars tend to be fairly small, about 9 10 100 feet by 100 feet. Based on studies that have been done 10 11 in the coal mining industry, you gotta be 56 feet away from 11 12 each one of the edges of that coal chain pillar.

Then what we'll do is we'll locate the wells 13 14 to make sure that we are least 56 feet away from the edges [14 15 of that coal pillar. Then, you know, same thing. We'll go 15 16 ahead and share those coordinates with the coal mine company to make sure that we are in agreeance on where we're going to be drilling through those coal pillars. And 18 19 then we will drill through them.

If the mine is open and currently mining, then that's when we'll have to shut down the mine to be able to drill through the coal pillar.

That's when you get into the OSHA 24 regulations to make sure that the mine is completely sealed 24 Page 57

know, I was ready to drill through the mine on Wednesday and I had to wait until Sunday to be able to drill through it to make sure that it was fully evacuated because of MSHA regulations.

In those cases, were the portions the pillar was in, were those sealed portions of the mine or were those open portions of the mine?

Both. So I drilled through sealed portions of the mines. And in those cases, you really don't need to evacuate the mine because it's sealed. But if it's open, that's when we evacuate the mine.

But in both cases, you're going through pillar?

Both cases, we're going through a pillar. COMMISSIONER MARTIN: Alright. Thank you. EXAMINATION

BY COMMISSIONER RADABAUGH:

What did you say again the size of the pillar is?

Some of them are about 100 by 100 feet. So 100 A by 100, so sometimes you're only able to pull a couple wells on them.

Some of them might be 150 by 150 so that you're only able to pull one row instead of two rows. 23 That's when you get into a lot of that--

Q Well, if it's only 100 by 100--

20

21

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Sheet 16
                 Page 58
                                                                    Page 60
                                                                 1 failed. And the reason why the 9-5/8 failed is because
              --and you gotta stay 56 feet from the edge,
                                                                    apparently they didn't have cement behind their 9-5/8.
    that's--
                                                                              Right.
              Yeah. So--
                                                                              So the ones that are 5-1/2, without getting too
              Do you understand?
                                                                   much into specifics, once that pressure left through 5-1/2,
              Yeah. So those chain pillars, they're about 100
                                                                   that pressure was higher than your burst pressure in your
    by 100 whenever you look at them on a map. Right? Once we 7
                                                                    9-5/8 casing which meant it was going to go directly into
  8 propose the surface hole locations, what they do is they
                                                                   the formation.
  9 leave two of those of those chain pillars connected, two or 9
                                                                             That was my next question.
 10 three of those chain pillars connected.
                                                                        A
                   So whenever you look at it on a map, you
                                                                             Is your 9-5/8 burst pressure sufficient to
12 actually see that they all look the same. And then you'll
                                                                    contain the bottom hole pressure?
13 see the continuation of that chain pillar for a couple
                                                                             Yes. So the burst pressure on our 9-5/8 is about
14 hundred feet.
                                                                   9,000 psi. We cement the whole string from TD to surface.
15
                   We usually plan that ahead with the coal
                                                                   The inspector gets our cementing reports every time we
16 mine. So we tell them this is where we're going to be
                                                                   cement one of our cementing strings to make sure that we
    setting the wells. So they'll go-- First, we look for the 17
                                                                   got cement to surface, which means that the whole entire
18 coal pillar. Right?
                                                                   section is cemented, which basically protects it from an
                   Make sure that we're right on the center of 119
                                                                   event like this.
20 it. Once we-- Once we suggest what coal drill we want to
                                                                             What's your anticipated bottom hole pressure?
    use, then they will make sure the skip one or two coal
                                                                             From the Utica/Point Pleasant, we're going to be
    pillars to make sure that we leave a larger block on there. 22
                                                                   fracing at about 11,500 to 12,500 psi. But the bottom hole
23 But initially, we look for one coal pillar.
                                                                   pressure, once we start flowing, should be around 8,000
              COMMISSIONER RADABAUGH: Okay, okay.
                                                                   psi.
     Page 59
                                                                    Page 61
                            EXAMINATION
                                                                             So your bottom hole pressure is 8,000 psi in the
         BY CHAIRMAN LAY:
                                                                   Point Pleasant?
              Question about your design. You said you were
                                                                             Once we start producing. That is what we're
                                                                        A
    drilling to 98, 100 feet on air setting, 9-5/8 casing.
                                                                   going to expect.
                                                                             Now, are you considering that a flowing pressure
              And your cementing that casing in place?
                                                                   or what--
              Yes, all the way to surface.
                                                                        A
                                                                             Flowing pressure.
              Okay. Then your production string is 5-1/2,
                                                                             --that is the actual max reservoir pressure?
 9
    4-1/2?
                                                                             That's probably going to be flowing pressure in
              Our production string is 5-1/2 inches.
                                                               10
                                                                   the surface.
              5-1/2 inch casing. Are you aware of the recent
                                                               11
                                                                             What is the max bottom hole pressure?
    failure of 5-1/2 casing in Pennsylvania?
                                                               12
                                                                             I will have to go to the reservoir for that.
13
         Α
              Yes.
                                                               13
                                                                             CHAIRMAN LAY: You're still under oath. What's
              With your casing design setting through, are you
                                                                   your--
15 comfortable that you would be able to control a similar
                                                                             MR. EBERT: Our maximum reservoir pressure would
                                                                   be-- I'll have to do a calculation real quick.
16 situation inside your annular space between your 9-5/8 and
17
    your 5-1/2?
                                                                             CHAIRMAN LAY: What's your pour pressure?
118
         A Yes. Our 5-1/2 is actually going to be cemented
                                                                             THE WITNESS: Let me talk to you about that.
19 all the way almost through the Marcellus, which I believe
                                                               19
                                                                             MR. EBERT: We're look at .7 pour pressure, 8,000
20 was not the point or the case in -- with this other
                                                               20
                                                                   psi.
21
    company.
                                                                             CHAIRMAN LAY: Eight thousand psi bottom hole
22
         Q I believe it was. The failure was above the
                                                                   pressure?
23 Marcellus.
                                                               23
                                                                             MR. EBERT: Yes.
24
              Yeah. But they also found out that their 9-5/8
                                                                             CHAIRMAN LAY: And that's the pour pressure, .7?
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```
Sheet 17 Page 62
                                                                   Page 64
              MR. EBERT: Yes. That's slightly over pressure.
                                                                  the end. You said 9,000 pound rated 9-5/8--
         BY CHAIRMAN LAY:
                                                                            MR. AJAYI: Yes.
              Do your drilling plans incorporate any
                                                                3
                                                                             CHAIRMAN LAY: --with the potential of 10,000
   investigation into seismic or other geophysical?
                                                                   pounds bottom hole pressure?
                                                                             MR. AJAYI: Potentially, yes. We do have the
              So we definitely looked at seismic before, and we
   do have a lot of those maps. We don't foresee any faulting
                                                                   5-1/2 rated to 16,510.
   happening in our area.
                                                                             CHAIRMAN LAY: You don't have quite redundancy.
             Okay. That was my question: are there any major 8
                                                                   Are you going to test the shoe on the 9-5/8?
    faults in the area?
                                                                             MR. SILVA: Yeah. What we do is we do a fit test
10
              No, not where we are, not in Marshall County.
                                                                  as soon as we drill out of the 9-5/8, we'll do a fit test
              Okay. And it's your testimony that you believe
                                                               11 right below it. But just to clarify. Our 9-5/8 is
12 that you have a failsafe with your design on your 9-5/8
                                                                  actually a high burst casing, P-110, 43.5 pounds per foot,
13 casing and your design on the 5-1/2 casing and your
                                                               13 which is a little bit higher than all other operators are
   cementing program--
                                                              14 using in the area and even while drilling Utica in West
             Mm-hum.
                                                              15 Virginia.
              --to prevent any repeat of the problem seen in
                                                              116
                                                                                  So we're actually above what they are
   Pennsylvania?
                                                                  currently using. But everybody is around the same rating
             Yes. I honestly couldn't tell you really the
                                                                  for the 9-5/8. What increases your burst is, once you
19 specifics of their failure because, obviously, I don't have 19
                                                                  cement it, having cement behind the 9-5/8 is what keeps it
   that information with me. But we have looked at the case
                                                                  from bursting once you go over that pressure.
   internally already.
                                                                            CHAIRMAN LAY: Right. But you're not going to
             CHAIRMAN LAY: Very good. I think that's all the 22
                                                                  return cement back to your intermediate string, are you?
                                                                            MR. SILVA: The 9-5/8 will have cement all the
   questions I have.
             MS. ELMORE: Very good. That's all that we have. 24 way to surface. Yes, sir.
    Page 63
                                                                   Page 65
             CHAIRMAN LAY: Any other witnesses?
                                                                            CHAIRMAN LAY: Oh, okay. Then I'm good. I
 2
             MS. ELMORE: No other witnesses.
                                                                  misunderstood. I thought you were only going to cement it
 3
             CHAIRMAN LAY: Okay. Would you give us the room?
                                                                  back--
             MS. ELMORE: Sure, absolutely.
                                                                            MR. SILVA: No. So the 5-1/2--
 5
                       (Witness excused.)
                                                                            CHAIRMAN LAY: So you are going to stage it and
                       (WHEREUPON, a brief recess was had.)
                                                                  cement it to surface.
             CHAIRMAN LAY: Let's go back on the record.
                                                                            MR. SILVA: Yeah. The 5-1/2 is different. The
   You're still obviously under oath.
                                                                  5-1/2, usually you don't get cement to surface. But your
             MR. AJAYI: You asked a question about what I
                                                                  9-5/8 is fully cemented to surface.
   expected pour pressures would be for our wells, and after
                                                                            CHAIRMAN LAY: I'm good then. That takes care of
   fully review, we expect it to be somewhere between 9,000
                                                                  my concern. I thought you were going to leave an annular
   and 10,000 psi.
                                                                  space on the 9-5/8.
                                                              113
             CHAIRMAN LAY: Does that change your answer with
                                                                            MR. SILVA: No.
                                                                            CHAIRMAN LAY: Alright. Anything else? Okay.
   regard to your burst pressure on your 9-5/8 casing?
15
             MR. AJAYI: No.
                                                                  That being the case, then do I have a motion?
16
             CHAIRMAN LAY: You still have enough burst
                                                                            COMMISSIONER RADABAUGH: I have a motion,
   pressure rating to contain that pressure?
                                                                  Mr. Chairman. Make a motion to grant American Petroleum
             MR. AJAYI: We expect so. Yes. We will continue 18
                                                                  Partners Operating, LLC, their request to establish a 634
   with the 5-1/8 first. And if that fails, we'll have the
                                                                  acre drilling unit and the pooling of unleased tracts and
   cement behind the 9,000 psi rated 9-5/8.
                                                              20 interests for the Casterly Rock 4UH, 5UH, 7UH and 9UH wells
21
                                                              21 at the bonus rate of $7,000.00 per acre and at a royalty
             CHAIRMAN LAY: Alright. Thank you.
             MS. ELMORE: That was the only clarification. We 22 rate of 20 percent free of all post-production costs at a
                                                              23 price equal to or greater than the contract price paid by a
   just didn't want there to be a misstatement.
24
             CHAIRMAN LAY: Okay. I caught something there at 24 non-affiliate third-party market.
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```
Sheet 18
                 Page 66
                                                                    Page 68
                   APP will provide detailed AFEs to the
                                                                             CHAIRMAN LAY: But at that point, you have a
 2 Commission prior to the commencement of operations of all
                                                                   contractual obligation with the parties, and you don't need
 3 wells. Should a party elect to participate as a working
                                                                  to invoke force pooling.
 4 interest owner, APP will request a supplemental hearing to
                                                                             MS. ELMORE: Okay. So it's not necessary to
 5 establish terms for the participation. This pooling is
                                                                   vacate the Order.
 6 only in the Point Pleasant formation.
                                                                             CHAIRMAN LAY: Necessary to vacate the order if
                   I'd also like to make a motion to grant APP
                                                                   you come to terms. It's no different than if you go
 8 their request for an exception to Rule 39CSR 1.4.2 for the
                                                                   forward with the Order. You've executed a lease. You
 9 drilling of the Casterly Rock 4UH well in Marshall County,
                                                                9 don't have to tell us that you're using the force pool
 10 West Virginia with a spacing of 800 feet between laterals
                                                                   provision that we granted.
11 and 200 feet from the toe to the unit boundary of this well 11
                                                                             MS. ELMORE: Okay, very good. We appreciate it
12 and the others in the unit.
                                                                   very much.
                   But if the southern pad of the lower unit is 13
                                                                             CHAIRMAN LAY: Any other discussion of the
14 not drilled within five years, the unit will be extended to 14
                                                                   motion? Okay. All those in favor, aye. Opposed, nay?
15 include the additional 200 feet with royalty payment
                                                                   Motion carried. Your request is granted. If counsel would
16 adjustments going back to the beginning when the well went
                                                                   be so kind as to prepare a draft Order, circulate it to
    into production. And we agree to seal Exhibits 9 and 12
                                                                   staff and counsel--
18 for a period of two years from the date of the Order.
                                                                             MS. ELMORE: Thanks. I'll do that. On to the
              CHAIRMAN LAY: Do I have a motion?
                                                               19
                                                                   next one.
20
              COMMISSIONER MARTIN: Second.
                                                                             CHAIRMAN LAY: Anything else? I'm sorry.
                                                               21
              CHAIRMAN LAY: Any discussion of the motion?
                                                                             MS. ELMORE: We have one more.
              MS. ELMORE: Any questions about that? If the
                                                               22
                                                                             CHAIRMAN LAY: I know.
                                                               23
    southern pad is not drilled within five years, then--
                                                                             MS. ELMORE: Okay.
              CHAIRMAN LAY: You'll go back and adjust the unit 24
                                                                             CHAIRMAN LAY: Anything else for this record?
                                                                   Page 69
    boundary to 400 feet from the toe and retroactively pay the 1
                                                                   Okay. We'll close the record.
   royalty to those parties.
                                                                                       (WHEREUPON, the proceeding was
              MS. ELMORE: Okay.
                                                                                  adjourned.)
              CHAIRMAN LAY: We're giving you five years.
              MS. ELMORE: Appreciate that. One question for
   the Commission. The interest, the unleased interest of
    Samuel Henry-- If the heirs are willing to enter into a
 8 lease, would it be appropriate to come back and ask the
 9 Commission to vacate that portion of the Order dealing with
10 the force pooling?
                  For example, if they decide to enter into an
12 all-depths lease, would that be -- is that an appropriate
    way for us to proceed?
14
             CHAIRMAN LAY: Contracts trump orders all the
15
   time.
16
             MS. ELMORE: Okay.
17
             CHAIRMAN LAY: I don't think it's necessary.
18
             MS. ELMORE: Okay.
             CHAIRMAN LAY: If you enter into a voluntary
20 lease with the landowners and they grant you rights
21 different than what we just granted, I would hope you would
22 tell them what we granted you, you know, so that they get
   potentially compensated if they do an all-formations lease.
24
             MS. ELMORE: Okay.
```

Sheet 19 Page 70 REPORTER'S CERTIFICATE

STATE OF WEST VIRGINIA, COUNTY OF KANAWHA, to-wit:

I, BONNIE K. WOLFE, Certified Court Reporter and Notary Public of West Virginia, do hereby certify that the foregoing is, to the best of my skill and ability, a true and accurate transcript of all the proceedings as set forth in the caption hereof.

Given under my hand this 3rd day of March, 2019. My commission expires October 21, 2019.

Certified Court Reporter

Bonnie K Walfe

MOTARY PUBLIC OFFICIAL SEAL
BONNIE K WOLFE
State of West Virginia
My Comm. Expires Oct 21, 2019
1211 Ellen Dr South Charleston WV 25303



west virginia department of environmental protection

Oil and Gas Conservation Commission 601 57th Street SE, Charleston, WV 25304 304-926-0499 Ext 1274

Barry K. Lay, Chairman dep.wv.gov

BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE REQUEST BY AMERICAN PETROLEUM PARTNERS OPERATING, LLC FOR AN ORDER FROM THE COMMISSION ESTABLISHING A DRILLING UNIT AND POOLING OF UNLEASED TRACTS AND INTERESTS OF OIL AND GAS OWNERS AND OPERATORS WHO HAVE NOT ENTERED INTO VOLUNTARY AGREEMENTS ALLOWING FOR THE DEVELOPMENT AND OPERATION OF THE WINTERFELL-9UH DRILLING UNIT CONSISTING OF 278.93 ACRES, AND FOR EXCEPTION TO RULE 39CSR 1.4.2 FOR THE PROPOSED WELL WINTERFELL-9UH TO BE LOCATED IN WEBSTER

DOCKET NO. 271 CAUSE NO. 263

NOTICE OF HEARING

AMERICAN PETROLEUM PARTNERS OPERATING, LLC ("APP") has requested the WV Oil and Gas Conservation Commission (OGCC) review and establish a drilling unit for the WINTERFELL-9UH, 278.93 acres, and pooling of unleased tracts and interests of oil and gas owners and operators for the development and operation of the unit in Marshall County, West Virginia, pursuant to Chapter 22C-9-7(b), AND review and approve exception to Rule 39CSR 1.4.2 for the well identified as the WINTERFELL-9UH location.

Evidence and testimony will be presented at the hearing and at the request of American Petroleum Partners, LLC, the hearing has been delayed and scheduled for:

DATE:

DISTRICT, MARSHALL COUNTY, WEST VIRGINIA

February 21, 2019

TIME:

10:00 a.m.

PLACE:

WV Department of Environmental Protection

Oil and Gas Conservation Commission

601 57th Street, SE

Charleston, WV 25304



OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRGINIA

By: Barry K. Lay, Chairman

Dated this 23rd day of January, 2019 at Charleston, West Virginia.

CERTFIED MAIL

American Petroleum Partners Operating, LLC

4600 J. Barry Ct Ste 310

91 7199 9991 7039 1715 5206

Canonsburg PA 15317

Mahatme Hira

2420 McCrearys Ridge Rd

91 7199 9991 7039 1715 5213

Moundsville WV 26041

Chevron U.S.A. Inc.

700 Cherrington Parkway

91 7199 9991 7039 1715 5220

Coraopolis, PA 15108



January 29, 2019

Dear Susan Rose:

The following is in response to your request for proof of delivery on your item with the tracking number: 9171 9999 9170 3917 1552 06.

Item Details

Status:

Delivered, Left with Individual

Status Date / Time:

January 28, 2019, 3:47 pm

Location:

CANONSBURG, PA 15317

Postal Product:

First-Class Mail®

Extra Services:

Certified Mail™

Return Receipt Electronic

Shipment Details

Weight:

5lb, 15.2oz

Recipient Signature

Signature of Recipient:

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004



January 29, 2019

Dear Susan Rose:

The following is in response to your request for proof of delivery on your item with the tracking number: 9171 9999 9170 3917 1552 20.

Item Details

Status:

Delivered, Left with Individual

Status Date / Time:

January 28, 2019, 3:17 pm

Location:

CORAOPOLIS, PA 15108

Postal Product:

First-Class Mail®

Extra Services:

Certified Mail™

Return Receipt Electronic

Shipment Details

Weight:

5lb, 15.5oz

Recipient Signature

Signature of Recipient:

Debrey
Kitron 101 (1) Fee 111 Pay (1), 1

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

USPS Tracking®

FAQs > (https://www.usps.com/faqs/uspstracking-faqs.htm)

Track Another Package +

Tracking Number: 9171999991703917155213

Remove X

This is a reminder to arrange for redelivery of your item before February 9, 2019 or your item will be returned on February 10, 2019. You may arrange redelivery by using the Schedule a Redelivery feature on this page or may pick up the item at the Post Office indicated on the notice.

Delivery Attempt: Action Needed

Reminder to Schedule Redelivery of your item before February 9, 2019

Schedule Redelivery 🗸

Text & Email Updates	~
Schedule Redelivery	~
Return Receipt Electronic	\
Tracking History	^

Feedback

Feedback

Reminder to Schedule Redelivery of your item before February 9, 2019 This is a reminder to arrange for redelivery of your item before February 9, 2019 or your item will be returned on February 10, 2019. You may arrange redelivery by using the Schedule a Redelivery feature on this page or may pick up the item at the Post Office indicated on the notice.

January 26, 2019, 8:00 am Available for Pickup MOUNDSVILLE, WV 26041

January 25, 2019, 8:20 pm
Departed USPS Regional Facility
PITTSBURGH PA DISTRIBUTION CENTER

January 25, 2019, 9:41 am
Arrived at USPS Regional Destination Facility
PITTSBURGH PA DISTRIBUTION CENTER

January 25, 2019, 5:03 am
Departed USPS Regional Facility
CHARLESTON WV PROCESSING CENTER

January 24, 2019, 9:53 pm Arrived at USPS Regional Origin Facility CHARLESTON WV PROCESSING CENTER

January 24, 2019, 8:38 pm Accepted at USPS Origin Facility CHARLESTON, WV 25311

January 24, 2019
Pre-Shipment Info Sent to USPS, USPS Awaiting Item



February 20, 2019

Dear Susan Rose:

The following is in response to your request for proof of delivery on your item with the tracking number: 9171 9999 9170 3917 1552 13.

Item Details

Status:

Delivered, Left with Individual

Status Date / Time:

February 20, 2019, 7:50 am

Location:

MOUNDSVILLE, WV 26041

Postal Product:

First-Class Mail®

Extra Services:

Certified Mail™

Return Receipt Electronic

Shipment Details

Weight:

5lb, 15.8oz

Recipient Signature

Signature of Recipient:

Mod No

Address of Recipient:

3420 M. Lays Kdy

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Rose, Susan W

From:

adlaw@wvsos.com

Sent:

Wednesday, January 23, 2019 10:42 AM

To:

Rose, Susan W

Subject:

Meeting Notice Approval



Secretary of State State Capitol Building Charleston, West Virginia 25305

Mac Warner

Phone: 304-558-8000 877-826-2954

Visit us online: www.wvsos.com

Your meeting notice has been approved.

You may view it online here.

If you have any questions, please contact our office during normal business hours for assistance.





west virginia department of environmental protection

Oil and Gas Conservation Commission 601 57th Street SE, Charleston, WV 25304 304-926-0499 Ext 1274

Barry K. Lay, Chairman dep.wv.gov

January 23, 2019

Moundsville Daily Echo 713 Lafayette Avenue Moundsville, WV 26041

VIA email to: mdsvecho@gmail.com

RE: Class 11 - Legal Advertisement

Docket No. 271-263

Dear Sir:

Please print the enclosed Notice of Hearing AND Plat as a Class 11 legal advertisement in the Moundsville Daily Echo on Monday, January 28 and again on Monday, February 4, and send affidavit of publication and invoice to me at the address above.

If you should have any questions, please call me at 304-926-0499 ext. 1274.

Sincerely,

Susan Rose Administrator

encl:



Rose, Susan W

From:

Charles Walton <mdsvecho@gmail.com>

Sent:

Wednesday, January 23, 2019 1:50 PM

To: Subject:

Rose, Susan W

Re: Class II Legal Ad

Received, thank you.

On Wed, Jan 23, 2019 at 10:24 AM Rose, Susan W < Susan.W.Rose@wv.gov > wrote:

Attached please find a Class II Legal Ad and plat that need published. The plat attached need to be large enough to be legible. Please confirm that you received this email and that the dates for publication are acceptable. Thank you.

Susan Rose

West Virginia Oil and Gas Conservation Commission

601 57th Street SE

Charleston, WV 25304

(304) 926-0499 ext. 1274 (office)

(304) 926-0452 (fax)



(304) 845-2660 P.O. BOX 369 MOUNDSVILLE WEST VIRGINIA 26041

AFFIDAVIT OF PUBLICATION

STATE OF WEST VIRGINIA, COUNTY OF MARSHALL, to wit

Melanie S. Murdock

being first duly sworn upon my

oath, do depose and say:

• that I am Legal Advertising Manager of the MOUNDSVILLE DAILY ECHO, a Republican newspaper;

• that I have been duly authorized to execute this affidavit;

• that such newspaper has been published for over 119 years, Is regularly published afternoons dally except Saturdays and Sundays, for at least fifty weeks during the calendar year, In the municipality of Moundsville, Marshall County, West Virginia.

• that such newspaper is a newspaper of "general circulation" as defined in Art. 3, Chap. 59 of the Code of West Virginia 1931 as amended, within Moundsville and Marshall County;

· that such newspaper averages in length four or more pages, exclusive of any cover, per Issue;

· that such newspaper Is circulated to the general public at a definite price or consideration;

• that such newspaper Is a newspaper to which the general public resorts far passing events of a political, religious, commercial and social nature and for current happenings, announcements, miscellaneous reading matters, advertisements and other notices;

· and that the annexed notice described as follows:

Legal Advertisement

PARTY(ies)

Docket No. 271 / Cause No. 263

NATURE (and agency if heard before one)

CERTIF-BILL TO

Susan Rose WV Oil & Gas Conservation Commission 601 57th Street SE Charleston, WV 25304

WAS PUBLISHED IN-SAID NEWSPAPER AS FOLLOWS

Times

January 28, February 4, 2019

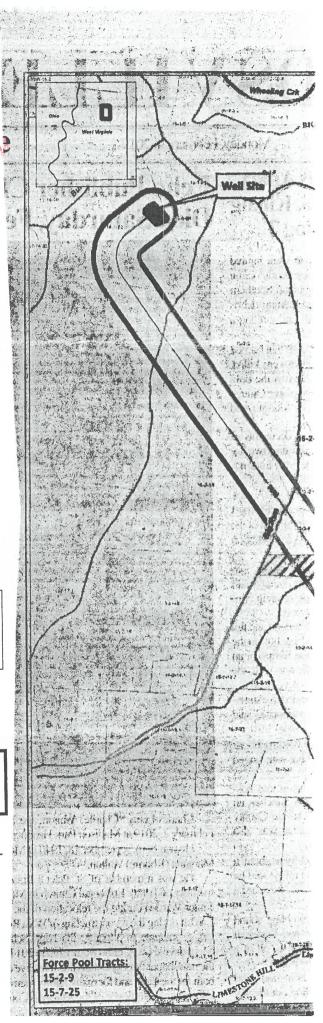
WORDS

PUBLICATION CHARGES

1834.75

\$369.15

(signed) NICTARIZATION PO Boy 369 Moundsville WV 26041 Notary Public



BOOK 0 9 8 5 PAGE 0 0 5 4

West Virginia Oil and Gas Conservation Commission Certificate of Consent and Easement

We, the undersigned, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, being all of the owners of the surface of that certain lot, tract or parcel of land located in Webster District, Marshall County, State of West Virginia, parcels #15-01-21 and 15-01-22, shown on the attached plat or survey, do hereby consent and grant an easement, pursuant to West Virginia Code, Section 22C-9-7(b)(4) and Operating Rule 4.4 of the Rules and Regulations of the West Virginia Oil and Gas Commission, to American Petroleum Partners Operating LLC, its successors or assigns, for the drilling and operation of a deep well(s) for the production of oil, gas and/or other associated hydrocarbons at the location shown on the attached plat or survey.

Executed this 10th day of July	, 2018.	
Deborah S. Whitlatch	Randy Lee Whitlatch	Whitleto
Brenda J. Harris D. Harris	Clay M. Harris	fy
Ronald W. Plants, Trustee of Plants Family Irrevocable Trust Dated October 2, 2008	Carolie M. Plants, Tru Irrevocable Trust Date	M. Plants ustee of Plants Family ed October 2, 2008
James W. Plants		Marshall County Jan Pest, Clerk Instrument 1442729 07/11/2018 @ 02:53:07 FM RIGHT OF WAY W/O CONSIDERAT: Book 985 @ Page 54 Pages Recorded 4 Recording Cost \$ 11.0
INDIVIDUAL ACKNO		Office of Oll and Gas
COMMONWEALTH / STATE OF West Vinginia	⊈ .§	NOV 1 4 2013
COUNTY OF MANSHALL	<u> </u> §	WV Department of Environmental Protection
On this 10th day of July	. 2018. befor	e me, the undersigned officer,
personally appeared Deborah S. Whitlatch and Randy Lee	Whitlatch, wife and hu	sband, personally known to me
(or satisfactorily proven) to be the people whose names are su		
me that Deborah S. Whitlatch and Randy Lee Whitlatch,	wife and hughand ava-	cuted the same for the purposes
therein contained.	whe and husband, exce	
	whe and husband, exec	
In witness thereof, I hereunto set my hand and affixed		

My Commission Expires August 24, 2022

W-HAB-0696-5WA

INDIVIDUAL ACKNOWLEDGMENT

COMMONWEALTH/STATE OF OHIO	§
COUNTY OF MONROS	§
On this day of	cribed to the within instrument, and acknowledged to me
In witness thereof, I hereunto set my hand and affix	ed my official seal.
MY COMMISSION EXPIRES: OFFICIAL SEAL COMMISSIONER FOR WEST VIRGINIA Ricky L. Shuck Sandyville, WV My Commission Expires August 24, 2022	Notary Public & Much

RECEIVED
Office of Cil and Gas

NOV 1 4 2018

WV Department of Environmental Protection

INDIVIDUAL ACKNOWLEDGMENT

COMMONWEALTH/STATE OF West Ving	· ····································
COUNTY OF MARShall	§
On this	e Trustees of the Plants Family Irrevocable Trust Dated prized to do so, executed the foregoing instrument for the
by themselves as Trustees.	
In witness thereof, I hereunto set my hand and affix	red my official seal.
MY COMMISSION EXPIRES: OFFICIAL SEAL COMMISSIONER FOR WEST VIRGINIA Ricky L. Shuck Sandyville, WV My Commission Expires August 24, 2022	Notary Public of L Shurl

RECEIVED
Office of Oil and Gas

NOV 1 4 2018

WV Department of Environmental Frolection

INDIVIDUAL ACKNOWLEDGMENT

COMMONWEALTH STATE OF WEST Vingi	Nia §
COUNTY OF MARShall	§
to me (or satisfactorily proven) to be the person whose nar	, 2018, before me, the undersigned officer, ealing in his sole and separate property, personally known me is subscribed to the within instrument, and acknowledged his sole and separate property, executed the same for the
In witness thereof, I hereunto set my hand and at MY COMMISSION EXPIRES: OFFICIAL SEAL COMMISSIONER FOR WEST VIRGINIA Ricky L. Shuck Sandyville, WV My Commission Expires August 24, 2022	Notary Public J

FECEIVED Office of Oil and Gas NOV 1 4 2018

WV Department of Environmental Frotection

Recorder:

On completion of recordation, please return to: American Petroleum Partners Operating LLC 4600 J. Barry Court, Ste 310 Canonsburg, PA 15317

STATE OF WEST VIRGINIA, MARSHALL COUNTY, SCT.:

I, JAN PEST, Clerk of the County Commission	on of said County, do hereby certify that the annexed writing, bearing
date on the 10th day of Oull , 20	018, was presented for and by me, admitted to record in my office upon
1 1 manad this	with downer Miller MIR at 2 53 n'clock P M

BOOK 0 2 4 2 PAGE 0 0 1 2

ASHLEY FAUINGER AMERICAN PETROLEUM PARTNERS OPERATING LLC 4600 J BARRY COURT STE 310 CANONSBURG PA 15317-5854

CONSENT AND SURFACE USE RELEASE

§

STATE OF WEST VIRGINIA COUNTY OF MARSHALL

WHEREAS, Deborah S. Whitlatch and Randy Lee Whitlatch, wife and husband, whose address is 30 Virginia Oaks Drive, Moundsville, WV 26041, Brenda J. Harris and Clay M. Harris, wife and husband, whose address 45316 State Route 800, Woodfield OH 43793, Ronald W. Plants and Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust Dated October 2, 2008, whose address is 2215 Pine Hill Road, Wheeling, WV 26003 and James W. Plants, a married man dealing in his sole and separate property, whose address is 2502 Hess Avenue, Wheeling, WV 26003, respectively, (hereinafter collectively referred to as "Grantor") and American Petroleum Partners Operating LLC, with an office at 4600 J. Barry Court, Suite 310, Canonsburg, PA 15317 (hereinafter referred to as "Grantee").

WHEREAS, Grantor is vested in and owns fee simple title to the surface and mineral estate for a certain tract or parcel of land located in Webster District, Marshall County, State of West Virginia being further described as Tax Parcel Number: 15-01-22 containing 86.13 acres of land and & 15-01-21 containing 13 acres of land, more or less, being the same tract or parcel of land conveyed to Grantors via Deeds recorded in the Marshall County West Virginia Clerks Office in Deed Book 841 Page 106; Deed Book 707, Page 158 and Will Book 80 Page 279, respectively, together with all contiguous or appurtenant lands currently owned or after acquired by Grantor (hereafter referred to as the "Subject Tract"); and

WHEREAS, Grantor, or their predecessors in title have entered into an oil and gas lease for the Subject Tract along with additional oil and gas interests owned by Grantors dated June 9th, 2009 an Oil & Gas Lease of which was recorded in Deed Book 684, Page 347; Deed Book 684, Page 562 and Deed Book 684, Page 569 of Marshall County, West Virginia (the "Subject Lease"); and

WE, the undersigned, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, being all the owners of the surface of that certain lot, tract or parcel of land located in Webster District, Marshall County, West Virginia, shown on Exhibit "A", do hereby consent and grant an easement, pursuant to West Virginia Code, Section 22C-9-7(b) (4) and Operating Rule 4.4 of the Rules and Regulations of the West Virginia Oil and Gas Conservation Commission, to American Petroleum Partners Operating LLC, its successors and or assigns, for the construction, drilling and continued operation of one or more wells for the production of oil or gas at the location shown on Exhibit "A". Further, in exchange for valuable consideration outlined in a separate order of payment, Grantor further agrees this payment is an all-inclusive payment for damages as a result of normal and customary operations associated with the construction and operation of a well pad and access road. This payment does not include compensation for catastrophic or extraordinary damages.

EXECUTED and effective as of the day of December, 2017.

Brenda J. Harris

By: Ronald William Plants,

James W. Plants

Larolie M. Olanto By: Carolie M. Plants,

As: Trustee

RECEIVED Office of Officind Gas

NOV 1 4 2018

WV Department of Environmental protection WY-MAK-0494/CSWA)

Page 1 of 4

BOOK 0 2 4 2 PAGE 0 0 1 3

GRANTEE
Collin King
Vice President of Finance
INDIVIDUAL ACKNOWLEDGMENT OFFICIAL SEAL MOTARY PUBLIC STATE OF WEST VIRGINIA JOSHUA D MAY
INDIVIDUAL ACKNOWLEDGMENT STATE OF WEST VIRGINIA JOSHUAD MAY Gord Khourey & Turak 510 Tomtinson Avenue
STATE OF Moundsville, West Virginia 26041 My Commission Expires January 28, 2024
COUNTY OF Marshall 5
On this day of, 2017, before me, the undersigned officer, personally appeared <u>Deborah S. Whitlatch and Randy Lee Whitlatch, wife and husband</u> , personally known to me (or satisfactorily proven) to be the people whose names are subscribed to the within instrument, and acknowledged to me that they executed the same for the purposes therein contained.
In witness thereof, I hereunto set my hand and affixed my official seal.
MY COMMISSION EXPIRES: Jon 28, 2024 Only Commission (Commission
Notary Public
INDIVIDUAL ACKNOWLEDGEMENT STATE OF \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
COUNTY OF Moundsville, West Virginia 26041 My Commission Expires January 28, 2024
On this day of leaves, 2017, before me, the undersigned authority, personally appeared Ronald W. Plants and Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust Dated October 2, 2008, who acknowledged themselves to be the Trustees of The Plants Family Irrevocable Trust Dated October 2, 2008, and that they as such Trustees, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the Irrevocable Trust by themselves as Trustees.
In witness thereof, I hereunto set my hand and affixed my official seal.
MY COMMISSION EXPIRES:
Jon 28, 2024 Notap Public Mag
OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA JOSHUA O MAY Gott Khourey & Turak 510 Torinhson Avenue
STATE OF § Moundsville, West Virginia 26041 My Commission Expires January 28, 2024
COUNTY OF Marchall §
On this day of
In witness thereof, I hereunto set my hand and affixed my official seal.
MY COMMISSION EXPIRES: NOV 1 4 2012
Jan 28,2024 (19/10) 9/10/
Notary Public Employee Opening of
Notary Public Environmental Frederitor

BOOK 0 2 4 2 PAGE 0 0 1 4

INDIVIDUAL ACKNOWLEDGMENT



STATE OF	. §	510 Tomlinson Aver Moundsville, West Virgin My Commission Expires January
COUNTY OF Marshall	. §	The Manufacture of the Manufactu
On this day of	d separate property	, personally known to me (or

In witness thereof, I hereunto set my hand and affixed my official seal.

MY COMMISSION EXPIRES:

Jon 28, 2024

CORPORATE ACKNOWLEDGEMENT

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF WASHINGTON

On this 13th day of Delember 2017, before me, the undersigned officer, personally appeared COLLIN KING, as Vice President of Finance for AMERICAN PETROLEUM PARTNERS OPERATING LLC. A DELAWARE LIMITED LIABILITY COMPANY, personally known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same for the purposes therein contained and on behalf of said corporation.

In witness thereof, I hereunto set my hand and affixed my official seal.

MY COMMISSION EXPIRES:

COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL
Earline Bugay, Notary Public
New Sewickley Twp., Beaver County
My Commission Expires Jan. 23, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Marshall County Jan Pest, Clerk Instrument 1442489 07/03/2018 @ 03:02:57 PM RELEASE Book 242 @ Page 12 Pages Recorded 4

Recording Cost \$

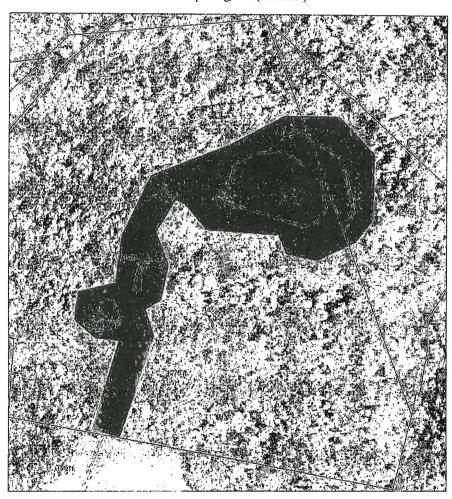
11.00

RECEIVED
Office of Cil and Gas NOV 1 4 2018

WV Department of Environmental Frelection

EXHIBIT "A"

Attached to and made a part of that certain CONSENT AND SURFACE USE RELEASE effective December 2017, by and between Deborah S. Whitlatch and Randy Lee Whitlatch, wife and husband, Brenda J. Harris and Clay M. Harris, wife and husband, Ronald W. Plants and Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust Dated October 2, 2008 and James W. Plants, a married man, dealing in his sole and separate property, (collectively "Granter") and American Petroleum Partners Operating, LLC ("Grantee")



*Estimated disturbance of 17 acres, exact disturbance and location subject to environmental, engineering and safety guidelines.

guiaeiines.

Initials

R.M.P. C.M.P.

Initials

R.M.P. C.M.P.

Initials

P. C. H.

Initials

R.M.P. C.M.P.

Initials

P. M.P. C.M.P.

Initials

P. M.P. C.M.P.

Initials

P. M.P. C.M.P.

Initials

P. M.P. C.M.P.

Initials

STATE OF WEST VIRGINIA, MARSHALL COUNTY, SCT.:

I, JAN PEST, Clerk of the County Commission of said County, do hereby certify that the annexed writing, bearing date on the 11th day of 1000 year, 2017, was presented for and by me, admitted to record in my office upon the above certificate as to the parties therein named this 3rd day of 1018 at 3:00 o'clock for M.



Site Safety Plan

American Petroleum Partners Operating, LLC
Dire Wolf- Winterfell Well Pad
1500 Oxen Drive
Moundsville, WV 26041

June 2018: Version 1

For Submission to
West Virginia Department of Environmental Protection,
Office of Oil and Gas

American Petroleum Partners Operating, LLC

4600 J. Barry Ct

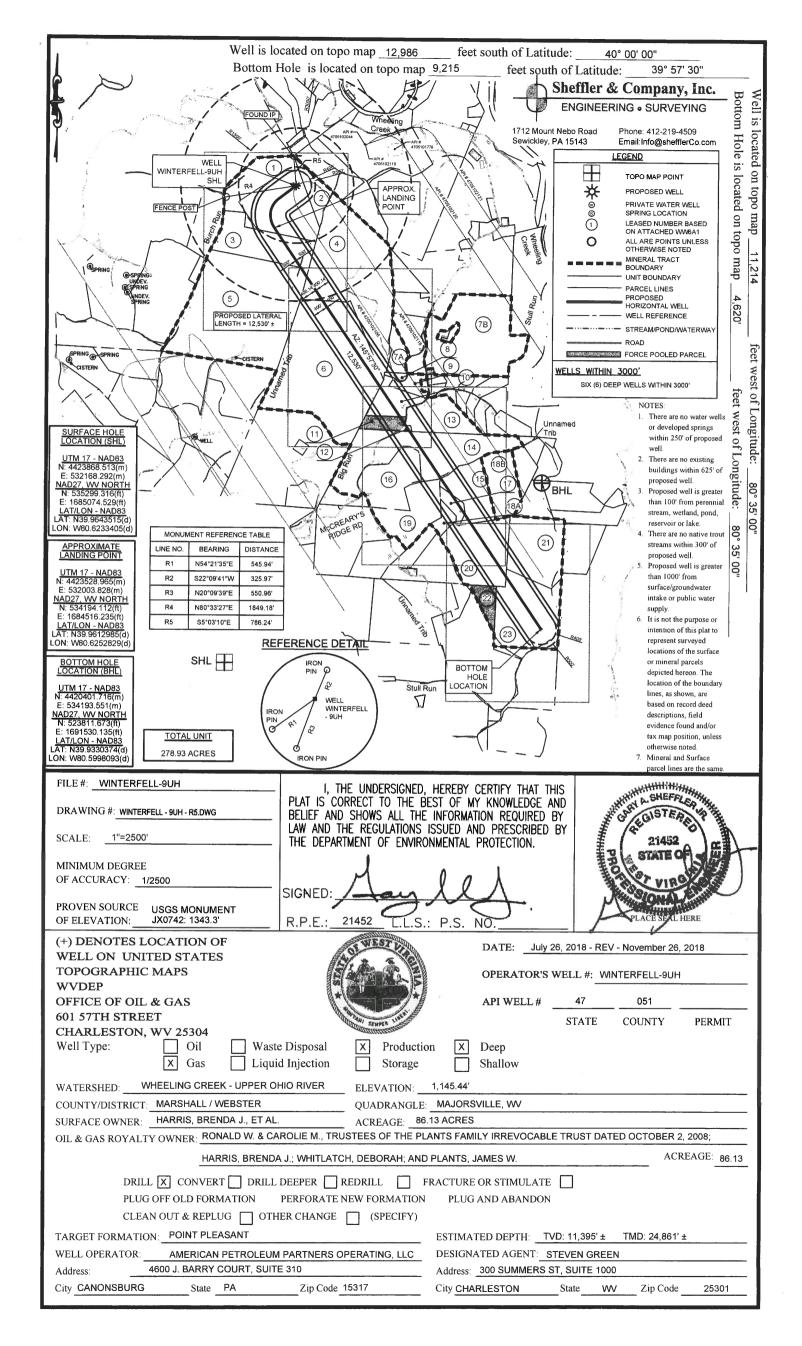
Office of Oil and Gas

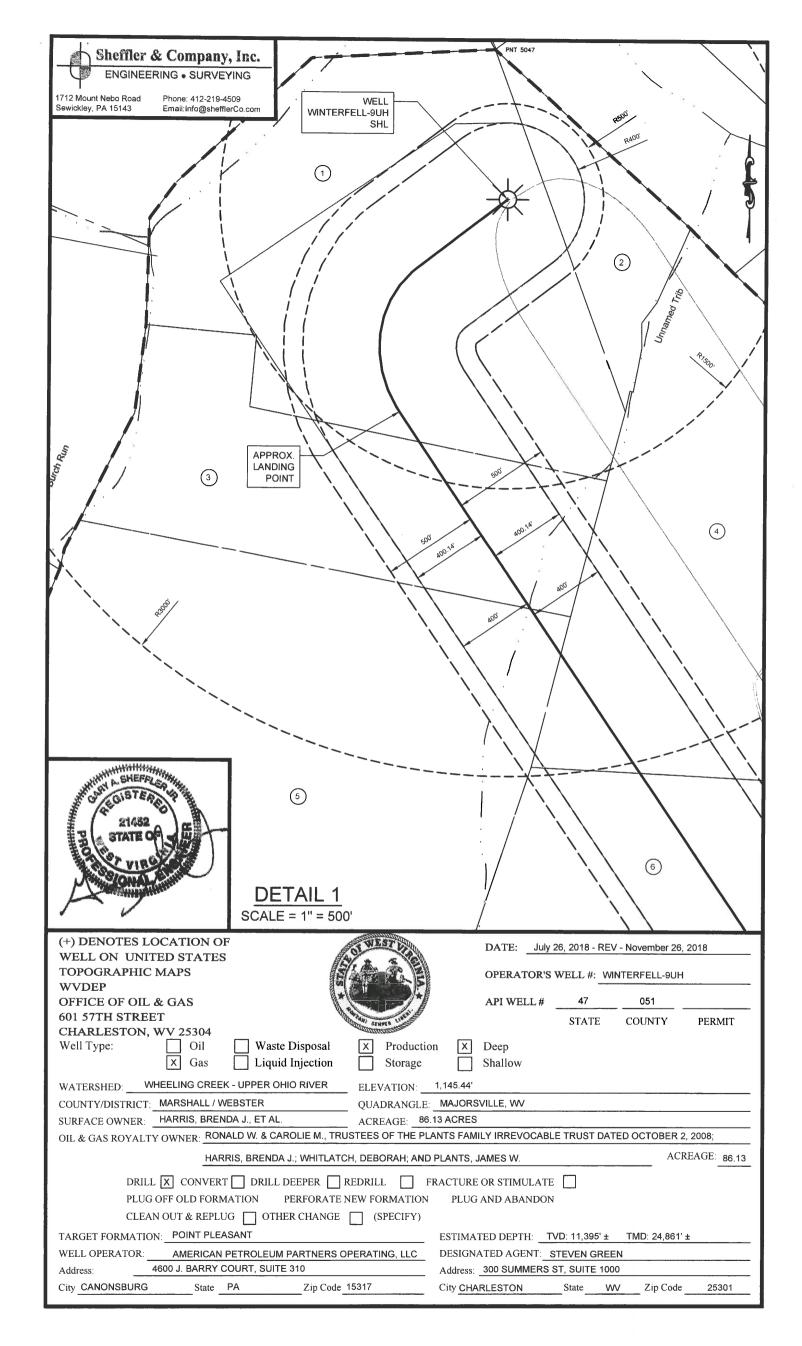
Suite 310

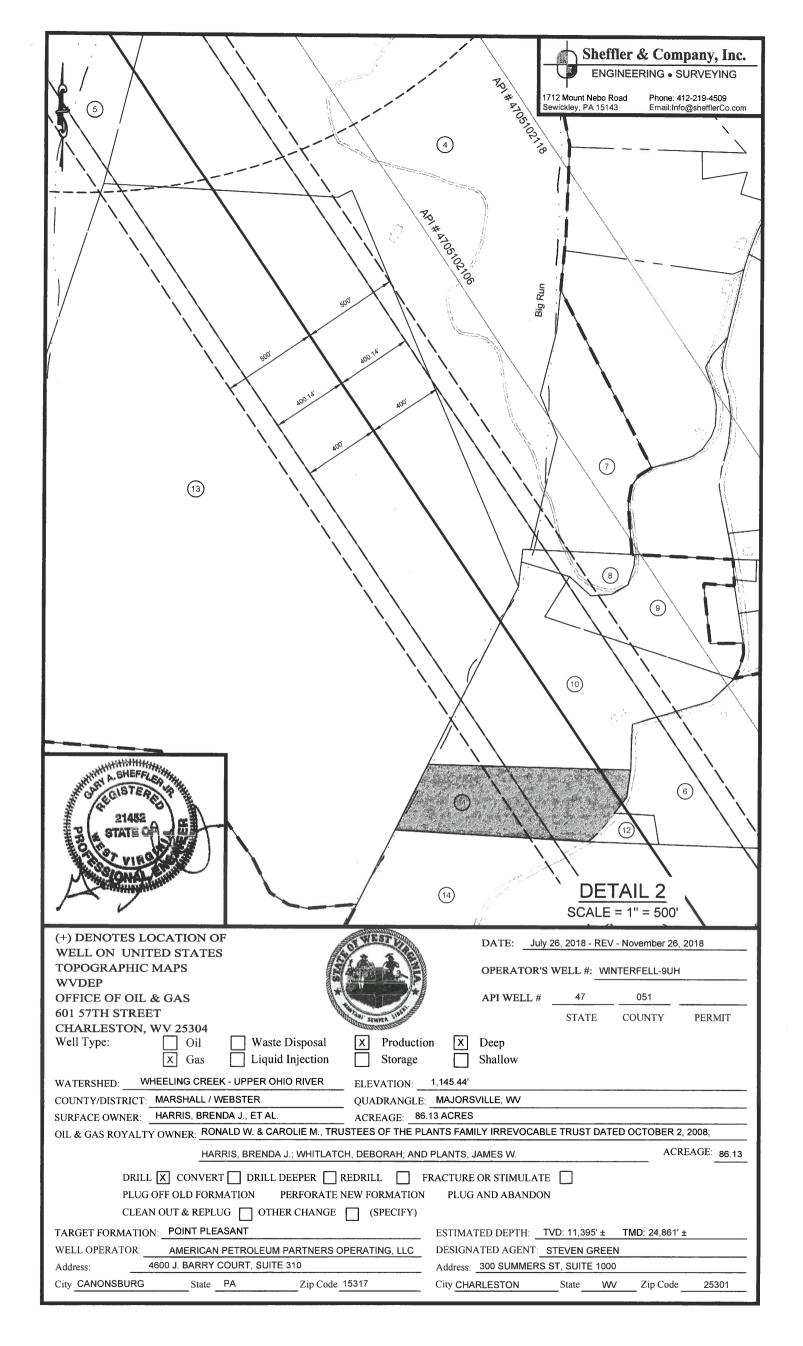
NOV 1 4 2018

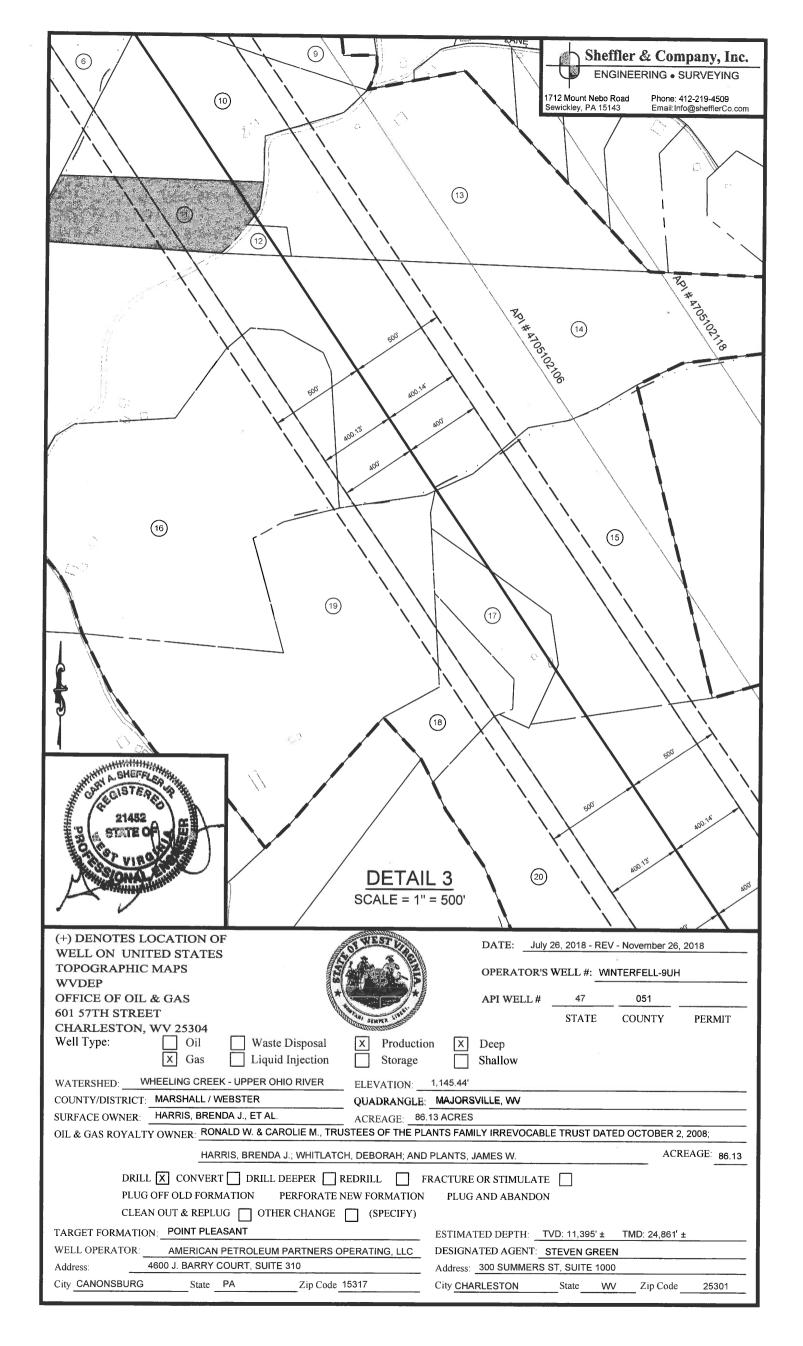
Canonsburg, PA 15317

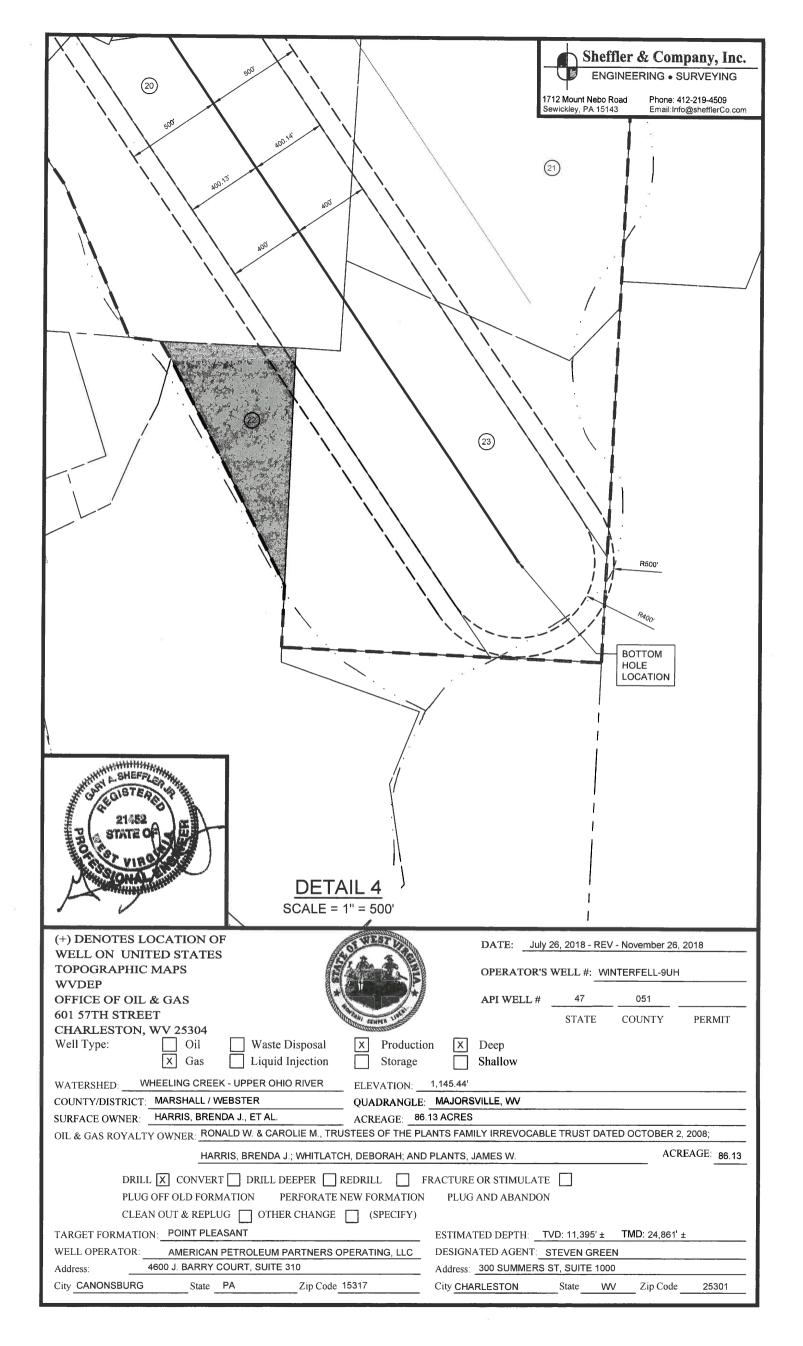
WV Department of Environmental Protection

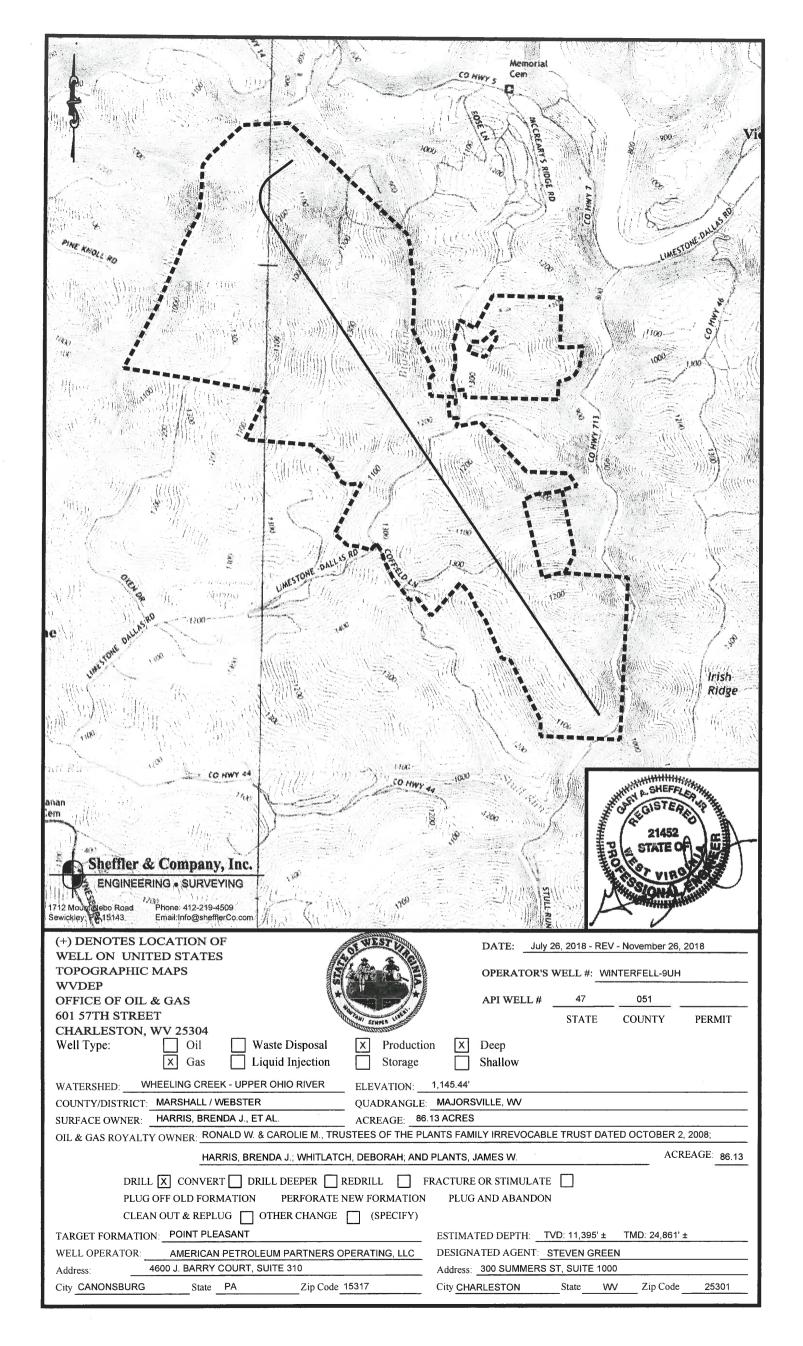












Sheffler & Company, Inc. 1) TAX MAP NO. 15-0001-0022-0000-0000 ASSESSED ACREAGE: 86.13 ACRES 9 9 TAX MAP NO. 15-0002-0008-0002-0000 ASSESSED ACREAGE: 8.00 ACRES **ENGINEERING • SURVEYING** Phone: 412-219-4509 1712 Mount Nebo Road Email:Info@shefflerCo.com Sewickley, PA 15143 SURFACE OWNERS: HARRIS, BRENDA J., ET AL. SURFACE OWNERS: MINERAL OWNERS; BRENDA J. HARRIS, DEBORAH WHITLACH, JAMES W. PLANTS, RONALD W. & CARDLINE M., TRUSTEES OF THE PLANTS FAMILY IRREVOCABLE TRUST DATED OCTOBER 2, 2008 MINERAL OWNERS: 18 TAX MAP NO. P/O 15-0007-0024-0000-0000 ASSESSED ACREAGE: 57.64 ACRES 15-0002-0008-0000-0000 ASSESSED ACREAGE: 19.22 ACRES 2 15-0001-0021-0000-0000 ASSESSED ACREAGE: 13.00 ACRES SURFACE OWNERS: ISKCON NEW MATHURA VRINDABAN, SURFACE OWNERS: ONE WORLD ONE FAMILY NOW, INC. SURFACE OWNERS: HARRIS, BRENDA J., ET AL. MINERAL OWNERS: ISKCON NEW VRINDABAN, INC. MINERAL OWNERS: ONE WORLD ONE FAMILY NOW, INC. MINERAL OWNERS:
BRENDA J. HARRIS, DEBORAH WHITLACH,
JAMES W. PLANTS, RONALD W. & CAROLINE M.,
TRUSTEES OF THE PLANTS FAMILY
IRREVOCABLE TRUST DATED OCTOBER 2, 2008 (19) (9) TAX MAP NO. 15-0002-0007-0022-0000 ASSESSED ACREAGE: 48.766 ACRES 11 TAX MAP NO. 15-0002-0009-0000-0000 ASSESSED ACREAGE: 8.74 ACRES 11 . <u>SURFACE OWNERS:</u> BOCK, THOMAS A, ET UX., AS JOINT TENANTS WITH RIGHT OF SURVIVORSHIP TAX MAP NO. 15-0002-0001-0000-0000 ASSESSED ACREAGE: 56.1 ACRES SURFACE OWNERS: MAHATME, HIRA (A/K/A HIRA MAHATME-HARRIS) MINERAL OWNERS: DAVID S. CAIN, BRENT E. CAIN, HERMAN D. LANTZ, THOMAS A. & PAMELA L. BOCK, THOMAS D. CAIN SURFACE OWNERS: MINERAL OWNERS: MAHATME, HIRA MINERAL OWNERS: APP MINERALS.LLC 12 TAX MAP NO. 15-0002-0010-0000-0000 ASSESSED ACREAGE: 0.94 ACRES 20 (20) TAX MAP NO. 15-0007-0024-0001-0000 ASSESSED ACREAGE: 56.78 ACRES TAX MAP NO. 15-0002-0002-0000-0000 ASSESSED ACREAGE: 132.77 ACRES **(4)** SURFACE OWNERS: BRYANT, CRINIAN SURFACE OWNERS: ECO-VRINDABAN, INC., D/B/A GORAKSHYA-SEVA AND MINERAL OWNERS:
JEANETTE L. LONGWORTH, PATRICIA ANN HARTLEY. ENVIRONMENTAL EDUCATION TRUST OF AMERICA, INC. SURFACE OWNERS: ISKCON NEW MATHURA VRINDABAN LINDA K. & RUSSELL D. CLARKE, RAYMOND P. & MARY ANN HARTLEY, CINDY ANN & WILLIAM P., JR. SOUTH, JERRY W. & BARBARA A. HARTLEY MINERAL OWNERS: MINERAL OWNERS: ECO-VRINDABAN, INC TAX MAP NO. 15-0002-0011-0000-0000 ASSESSED ACREAGE: 29.65 ACRES 21) TAX MAP NO. 15-0006-0011-0000-0000 ASSESSED ACREAGE: 40.00 ACRES TAX MAP NO. 15-0002-0016-0000-0000 ASSESSED ACREAGE: 183.31 ACRES ·(5) SURFACE OWNERS: SEWARD, RALPH J., ET AL. SURFACE OWNERS: MILLER, R. CRAIG, ET UX. SURFACE OWNERS: APP MINERALS,LLC MINERAL OWNERS: RALPH J. & JANE D. SEWARD <u>MINERAL OWNERS:</u> RESOURCE MINERALS HEADWATER I, LP R. CRAIG & DONITA D. MILLER MINERAL OWNERS: APP MINERALS, LLC TAX MAP NO. 15-0002-0013-0000-0000 ASSESSED ACREAGE: 94.04 ACRES TAX MAP NO. 15-0007-0025-0000-000 ASSESSED ACREAGE: 10.00 ACRES 22 15-0002-0015-0000-0000 ASSESSED ACREAGE: 171.32 ACRES SURFACE OWNERS: HARRY B. SNYDER AND ELIZABETH JANE SNYDER, TRUSTEES OF THE SNYDER FAMILY TRUST, DATED DECEMBER 17, 2014 SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX. MINERAL OWNERS; HARRY B. SNYDER AND ELIZABETH JANE SNYDER, TRUSTEES OF THE SNYDER FAMILY TRUST, DATED DECEMBER 17, 2014 (15) TAX MAP NO. 15-0007-0024-0002-0000 ASSESSED ACREAGE: 30.93 ACRES SURFACE OWNERS: ISKCON NEW MATHURA VRINDABAN, 23 TAX MAP NO. 15-0006-0016-0000-0000 ASSESSED ACREAGE: 77.40 ACRES 7 TAX MAP NO. P/O 15-0002-0005-0000-0000 ASSESSED ACREAGE: 113.88 ACRES MINERAL OWNERS: ISKCON NEW VRINDABAN, INC SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX. 16) TAX MAP NO. 15-0002-0013-0001-0000 ASSESSED ACREAGE: 40.21 ACRES SURFACE OWNERS:
ISKCON NEW MATHURA VRINDABAN, MINERAL OWNERS: BETTY GENEVA COFFIELD, WILLIAM E. & BRENDA K. COFFIELD MINERAL OWNERS: ISKCON NEW VRINDABAN, INC. SURFACE OWNERS: PARSONS, THOMAS EVERETT, SR. MINERAL OWNERS: RESOURCE MINERALS HEADWATER I, LP (3) TAX MAP NO. 15-0002-0008-0003-0000 ASSESSED ACREAGE: 2.00 ACRES TAX MAP NO. 15-0007-0024-0003-0000 ASSESSED ACREAGE: 6,65 ACRES SURFACE OWNERS: CLAYTON, JILL, ET AL. MINERAL OWNERS:
ONE WORLD ONE FAMILY NOW, INC. (LIFE ESTATE)
VASUDEVA G. CLAYTON (REMAINDERMAN)
GOVINDA G. CLAYTON (REMAINDERMAN)
JILL CLAYTON (REMAINDERMAN) SURFACE OWNERS: MINERAL OWNERS: HOUSMAN, BRUCE J (+) DENOTES LOCATION OF DATE: _ July 26, 2018 - REV - November 26, 2018 WELL ON UNITED STATES TOPOGRAPHIC MAPS OPERATOR'S WELL #: WINTERFELL-9UH WVDEP API WELL# OFFICE OF OIL & GAS 47 **601 57TH STREET** STATE COUNTY PERMIT CHARLESTON, WV 25304 Well Type: Oil Waste Disposal X Production X Deep X Gas Liquid Injection Storage __ ELEVATION: ___1,145.44' ACREAGE: 86.13 HARRIS, BRENDA J.; WHITLATCH, DEBORAH; AND PLANTS, JAMES W.

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER SURFACE OWNER: HARRIS, BRENDA J., ET AL.

OIL & GAS POYATETAL OIL & GAS ROYALTY OWNER: RONALD W. & CAROLIE M., TRUSTEES OF THE PLANTS FAMILY IRREVOCABLE TRUST DATED OCTOBER 2, 2008; DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,395' ± TMD: 24,861' ± AMERICAN PETROLEUM PARTNERS OPERATING, LLC DESIGNATED AGENT: STEVEN GREEN 4600 J. BARRY COURT, SUITE 310 Address: 300 SUMMERS ST, SUITE 1000 City CANONSBURG State PA Zip Code 15317 City CHARLESTON WV

WW-6B (04/15) 47 05 # 02 1 3 4 API NO. 47-051

OPERATOR WELL NO. Winterfell 9 UH
Well Pad Name: Dire Wolf-Winterfell

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well Operator: American I	Petroleum	Partne	4945212	57	Marshall	Webster	Moundsville		
			Operator	ID	County	District	Quadrangle		
2) Operator's Well Number: W	interfell 9	UH	W	ell Pac	Name: Dire V	Volf-Winte	rfell		
3) Farm Name/Surface Owner:	Brenda J.	Harris,	et al Publ	ic Roa	d Access: McC	Preary's Ri	dge Road (CR 7)		
4) Elevation, current ground:	1145.44'	Ele	evation, pro	posed	post-construction	on: 1130'			
					erground Storag				
Other				•					
(b)If Gas Sha	allow		De	ер	X		/. *		
Но	rizontal <u>×</u>	<u> </u>				- gre	(Z/10		
6) Existing Pad: Yes or No No						o vi			
7) Proposed Target Formation(s Point Pleasant Formation 11,395' /), Depth(s) 130' thick 10,	, Anticij 141 or .89	pated Thick psi per foot /	ness a	nd Expected Promation 11,042 150	essure(s): 0' thick / 10,00	0 psi or .89 psi per foot.		
8) Proposed Total Vertical Depth: 11,395'									
9) Formation at Total Vertical Depth: Point Pleasant									
10) Proposed Total Measured D	epth: 24,	861"				RECE	IVFD		
11) Proposed Horizontal Leg Le	ength: 12,	530'			Of	fice of O	and Gas		
12) Approximate Fresh Water S	trata Depth	ıs:	162'			NOV 1 4	2018		
13) Method to Determine Fresh	Water Dep	ths: N	earest offs	et well	W	V Depan			
14) Approximate Saltwater Dep	ths: Na				Envin	onmenta	Protection		
15) Approximate Coal Seam De	pths: 455'	, 655'					1040013		
16) Approximate Depth to Possi	ble Void (d	coal min	e, karst, otl	er): N	lone anticipated. d	Irilling in pillar	- Mine maps attached.		
17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes X No									
(a) If Yes, provide Mine Info:	Name:	The Ohi	o County Min	e-Murra	y American Energ	y and Consc	olidation Coal Company		
	Depth:	455', 6	355'						
	Seam:	Pittsbu	ırgh #8						
	Owner:	Murray	/ Americar	Energ	gy & Consolida	ation Coal	Company		

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WW-6B (04/15)

API NO. 47- 051

OPERATOR WELL NO. Winterfell 9 UH
Well Pad Name: Dire Wolf-Winterfell

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	New	LS	81.3#	100'	100'	CTS
Fresh Water	20"	New	J-55	94#	730'	730'	15.6ppg to sur 521 sx w/30% OH escess
Coal	13 3/8"	New	J-55	54.5#	1,941'	1,941'	15.2ppg to sur 556 ax W/30% OH Excess
Intermediate	9 5/8"	New	HCP-110	43.5#	9,542'	9,542'	15.4ppg to surf 936 sx w/30% OH excess
Production	5 1/2"	New	HCP-110	23#	24,861'	24,861'	14.8ppg TOC >=200' above 9.625 shoe
Tubing	2 7/8"	New	J-55	6.5#	11,400	11,400'	
Liners							

JUS/18

ТҮРЕ	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	36"		300		Type 1	Lead yield 2.38 tail 521 sx Yield 1.18
Fresh Water	20"	24"	.438	2,110	400	Class A	Lead yield 2.38 Tail 556 sx Yield 1.27
Coal	13 3/8"	17.5"	.380	2,730	688	Class A	Lead Yield 2.38 Tail 556 sx Yield 1.27
Intermediate	9 5/8"	12.375"-12.25"	.395	7,870	3,166	Class A	Lead Yield 1.28 Tail 936 sx Yield 1.28
Production	5 1/2"	8.5"	.361	14,360	11,000	Class H	Lead Yield 1.27 Tail 4714 sx Yield 1.27
Tubing	2 7/8"	5.14"	.217	10,570	8,000		
Liners							

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PACKERS

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Kind:	WV Department of Environmental Protection
Sizes:	Liwion Protection
Depths Set:	

WW-6	3
(10/14)	١

API NO. 47- 051

OPERATOR WELL NO. Winterfell 9 UH

Well Pad Name: Dire Wolf-Winterfell

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill the vertical depth to the Point Pleasant at an estimated total vertical depth of approximately 11,395'. Drill the horizontal leg- stimulate and produce the Utica/ Point Pleasant formation. Should we encounter a unanticipated void we will install a minimum of 20' of casing below the void but not more than 100' below the void, set a basket and grout to surface.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

The stimulation will be in multiple stages divided over the lateral length of the well. Stage spacing is dependent upon engineerig design. Slickwater fracturing technique will be utilized on each stage using sand, water, and chemicals. Our maximum pressure is not to exceed 10,000 lbs.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 36.2 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 9.55 acres
- 23) Describe centralizer placement for each casing string:

Conductor- No centralizers used. Freshwater/Surface- Bow Spring centralizers every 3 joints to 100' from surface. 1st Intermediate - Bow Spring centralizers every 3 joints to 100' from surface. 2nd Intermediate - Bow Spring centralizers every 3 joints to 100' from surface. Production - Rigid bow springs every third joint from KOP to TOC. Rigid every joint to KOP.

24) Describe all cement additives associated with each cement type:

Type 1 to Surface. Surface/Freshwater - 15.6 Class A +2% CaCl, 30% OH Excess Yield =1.18. 1st Intermediate - 15.6 ppg Class A +2% CaCl, 0.25 Lost Circ. 30% Yield =1.27. 2nd Intermediate - 2 Stage cement job with 15.4 ppg Class A lead + additives (antisettling, antifoam, fluid loss retarder, salt, dispersant or 12.0 Class A lead + additives (+/-5% dispersant, 10% light weight additive, 75% fluid loss additive, and 1.15% fluid loss additive, Yield=1.28) 15.4 ppg Class A Tail + additives (+/- fluid loss additive, & .5% light weight additive, Yield 1.28), 0.125#/SK lost circ 30% excess to Surface. Production- 12.5ppg Class H Lead +additives and 14.8 ppg Class H Tail +additives (antisettling, antifoam, antisettling, additives (antisettling, antifoam, antisettling, additives (antisettling, antifoam, antisettling, additives (antisettling, antifoam, antisettling, additives (antisettling, antifoam, antisettling, antifoam, ant

25) Proposed borehole conditioning procedures:

Environmental Protection Conductor - The hole is drilled w/ air and casing is run on air. Apart from insuring hole is clean via air circulation at TD, there are no other conditioning procedures. Freshwater/Surface- The hole is drilled w/air or Freshwater based mud and casing is run on air. Once casing is at setting depth, fill with KCI water circulate a minimum of one hole volume prior to pumping cement. First Intermediate- Drilled on Air. Once casing is at a setting depth, circulate a minimum of one hole volume prior to pumping cement. Second Intermediate - Drilled on air. Fill with salt saturated water once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement. Production- drilled on +/- 14.8ppg SOBM. Once at TD, circulate at max allowable pump rate for at least 6x bottoms up. Once on bottom with casing, circulate minimum of one hole volume prior to pumping cement.

*Note: Attach additional sheets as needed.

WV Department of

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Lateral Targets	Ī	XXX	(1.00 (p.)			71. 10			ng ng ng					200			2.17.00.0												4) (1)									
			<i>3.</i> 6. 7																oli V						5 (6)	1 1												
Land 1130 123					ateral	Curve/	1								- 12.25	10 275							;	17.5"			!	24"			36"		HOLE			_ (
Landing Point 11395 TVD 12331 MD					Rig	Horizontal									Rig	Horizonta								Ton-Hole			100	Ton-Hole			Rig		RIG		(PA	PE	
					BPN	5-1/2" 23#		-							P-110 BTC									13-3/8"			20" 94# J- le 55 BTC				30"81.3# LS					PARTMERS	AMERICAN PETROLEUM	
90.5 degrees	8.5 Hole - Cem	0.511-1-0	Production Casing				Point Pleasant Formation	Utica Shale	Int. Casing	Queenston Shale	Medina Group	Clinton Group	Lockport Dolomite		Salina Group	Oriskany Sandstone	Onondaga Ls	Marcellus Shale	Cherry Valley	Hamilton	Tully LS	Int. Casing	Big Injun	Greenbrier Group	Big Lime	Surf. Casing		Pittsburgh Coal	Sewickley Coal	Conductor			GEOLOGY	Horizontal Well Plan with Cemented Long String			×	
	ented Long Strin						on 11395	11042	9542	9142	8962	8890	8175	7958	7203	6619	6390	6356	6354	6245	6216	1941	1641	1592	1525	730		655	455	100			Top TVD	Plan with (
	g 5-1/2" 2								9542													1941				730				100			WD	Cemen				
12530 ft Lateral Length	3# HCP-1				SOB	5									AIR								1	<u> </u>			}	<u></u>			AIR		MUD	ted Lo				
	10 BPN		OH excess	15%	shoe 4793sx w/	Above 9 625	14.8ppg							OH excess	to surface	15.4ppg						OH excess	556sx w/ 30%	15.2ppg		OH excess	521sx w/ 30%	15.6ppg			To Surface		CEMENT	ong String				
90.5 Inc 325 Az				(10° Build DLS)		MWD	6.75" PDM &						,	lotco every 400ft	12" Air Hammer							Totco at TD	(Mine Approval)	15" Air Hammer	Center Rock		Totco at TD	30" Air Lamon			N/A		DIRECTIONAL	Completion		_	_	DRILL
			, , , , ,	samples (Lateral)	(Curve) 90 ft	ft samples	Mud Logger - 30	AND CORNE							ft samples	Mud Logger - 90										Pilot Well only	Pilot TD in	Cased hole	CBL Log		N/A		LOGS		Marshall Co, WV	Utica Horizontal	Winterfell-9UH	LING WELL PLAN
Total Depth 11395 TVD 24861 TD				450 - 500 GPM	100 - 120 RPM		PDC							1000psi	Test casing to	I						ooobai	Test casing to	diamond gage			bit	Carbide hammer					ВІТЅ		₩	ntal	H	L PLAN
3/11/2/18	8/				Geosteering								Expect Seepage in curve	time drill / KO cement plug.	SOBM, PU Curve BHA,	displace to 12.0ppg	PU cleanout		fic	e (N0	٧	El' Oil I 4	20	ncl)18		ลร	Protect fresh groundwater				Stabilize surface fill/soil		COMMENTS					

Environmental Protection

	Fresh Water Protetoion String.	Compat 133iii	
Allied Material Name		Centent Additives	
CCAC (Class A Common)	dieriai) Type	Additive (Material) Description	CAS#
- Common	Base Cement		2.0
	T .	Grey powder	65997-15-1
CA-100			10043-52-4
	Accelerator	White, flake	7447-40-7
			7732-18-5
			7647-14-5
			_

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WV Department of Environmental Protection

BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE APPLICATION BY AMERICAN PETROLEUM PARTNERS OPERATING, LLC, A DELAWARE LIMITED LIABILITY COMPANY, FOR POOLING AND UNIT OPERATION OF A 278.93 ACRE DEEP WELL UNIT (WINTERFELL SOUTHWEST UNIT) FOR THE PRODUCTION OF OIL AND GAS IN WEBSTER DISTRICT, MARSHALL COUNTY, WEST VIRGINIA AND FOR A SPACING LOCATION EXCEPTION

DOCKET NO.	
CASE NO	

APPLICATION FOR POOLING AND SPACING EXCEPTION

NOW COMES AMERICAN PETROLEUM PARTNERS OPERATING, LLC, a Delaware limited liability company ("Applicant") pursuant to *W. Va. Code §22C-9-7(b)* and this Commission's regulations, and gives notice of the intention to direct the bottom of the Winterfell 9UH well away from vertical, and (1) pursuant to *W.Va. C.S.R. §39-1-4.3*, requests an exception to the 3000 foot spacing requirement set forth in *W.Va. C.S.R. §39-1-4.2*, and (2) pursuant to *W. Va. Code §22C-9-7(b)*, requests an order requiring the pooling of oil and gas interests in certain lands for the development and operation of a drilling unit for the Winterfell 9UH well. In support of this Application, the Applicant states as follows:

1. Applicant is a Delaware limited liability company, engaged in the production of oil and gas within the State of West Virginia and is an operator within the meaning of W. Va. Code §22C-9-2(a)(4). The Applicant is a qualified and experienced operator of oil and gas wells, including horizontal wells, in West Virginia. The Applicant's address is:

American Petroleum Partners Operating, LLC 4600 J. Barry Court, Suite 310 Canonsburg, PA 15317

2. Applicant desires to pool interests and form a 278.93 acre unit (the "Unit Area"), drill one (1) deep well in the Utica/Point Pleasant Formation, and operate the well and unit for the production of oil and gas in Webster District, Marshall County, West Virginia, to be known as the Winterfell 9UH well and unit as more particularly described and depicted on the plat identified as *Exhibit A* attached hereto. *Exhibit A* includes a plat drawn to a scale of 1 inch equal to 2,000 feet showing the area involved, prepared by a licensed land surveyor or registered engineer and:

- a. shows the boundaries of the drilling unit;
- b. shows the distances from the proposed deep well location to the nearest outside boundary of the proposed unit;
 - c. shows the acreage of each tract within the drilling unit;
- d. shows the actual proposed or actual location of the Winterfell 9UH well determined by survey, the courses and distances of such location from two (2) permanent points or landmarks on said tracts and the number to be given the deep well;
- e. no completed deep oil and gas wells are located within 1 mile of the proposed Winterfell 9UH well;
- f. shows all wells, including shallow wells and dry and abandoned wells located in the Unit Area, all of which are properly designated by name and known permit numbers.
- 3. Applicant requests a variance to allow it to locate the Winterfell 9UH well within less than 3000 feet of the following wells: Winterfell 5UH, Winterfell 10UH, Castle Black 5UH, Castle Black 7UH, Castle Black 9UH and Castle Black 10UH. Applicant believes such spacing will allow for the most efficient development of the oil and gas within the Unit Area and minimize the potential for waste.
- 4. A topographical map showing the surface topography of the surface location of the Winterfell 9UH well and adjoining areas is attached hereto as *Exhibit B*.
- 5. Applicant has made a diligent effort to determine those who will be directly and immediately affected by the proposed pooling of interests, being oil and gas owners and lessees of record with an interest in the Unit Area, and their names and last known addresses are shown on *Exhibit C*, entitled Affected Owners, attached.
- 6. Exhibit D, entitled Adjoining Operators, shows the names and addresses of unleased mineral owners and lessees of tracts adjacent to the proposed unit.
- 7. Applicant requests that notice of this application be given to the persons listed on *Exhibit C* and *Exhibit D*, and that notice be published and otherwise given as provided by law.
- 8. Applicant is vested with the leasehold for the oil and gas underlying 99.13 acres, more or less, which includes the tract on which the vertical portion of the Winterfell 9UH well will be drilled, by virtue of the following leases: (a) a lease from Gerald Theodore Plants and Barbara Plants, husband and wife, to Chesapeake Appalachia, L.L.C., dated June 9, 2009, and recorded in the Office of the Clerk of the County Commission of Marshall County, West Virginia in Deed Book 684, Page 347; (b) a lease from James Walter Plants, a married man dealing in his sole and separate property, to Chesapeake Appalachia, L.L.C., dated June 9, 2009, and recorded in the aforesaid Clerk's Office in Deed Book 684, Page 569; and (c) a lease from Ronald William Plants and Carolie M. Plants, husband and wife, to Chesapeake Appalachia, L.L.C., dated June 9, 2009, and recorded in the aforesaid Clerk's Office in Deed Book 684, Page

562 (collectively, the "Well Location Lease"), which well will be drilled from the surface of the Well Location Lease, and Applicant has the right to drill vertically and horizontally on the Well Location Lease.

- 9. The Winterfell 9UH well will be drilled vertically from the surface location shown on *Exhibit A*, curve approximately 90 degrees, and continue approximately 12,530' feet horizontally. The Winterfell 9UH well will be completed in the Utica/Point Pleasant Formation. A unit is requested with respect to those depths and formations lying within the Utica/Point Pleasant Formation.
- 10. In addition to, and separate and apart from its lease rights, Applicant has entered into a written consent and easement with the owners of the surface property overlying the Well Location Lease for the drilling of the Winterfell 9UH well within the meaning of *W. Va. Code §22C-9-7(b)(4)* by virtue of a Consent and Surface Use Release from Deborah S. Whitlatch and Randy Lee Whitlatch, wife and husband; Brenda J. Harris and Clay M. Harris, wife and husband; Ronald W. Plants and Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust Dated October 2, 2008; and James W. Plants, a married man dealing in his sole and separate property (collectively, the "Grantor"), dated December 4, 2017, and recorded in the aforesaid Clerk's Office on July 3, 2018, in Release Book 242, Page 12, and a West Virginia Oil and Gas Conservation Commission Certificate of Consent and Easement dated July 10, 2018, from the same Grantor, and recorded in the aforesaid Clerk's Office on July 11, 2018, in Deed Book 985, Page 54, copies of which are attached hereto as *Exhibit E* ("Statutory Consent and Easement").
- 11. The Unit Area is comprised of an area encompassing 23 surface tracts, totaling 278.93 surface acres. The proportional relationship between the surface acreage of the individual tracts, or portions thereof, included within the Unit Area, and the total Unit Area surface acres is as identified on *Exhibit F*, entitled Tract Participation, attached hereto.
- 12. Of the 278.93 acres in the proposed Winterfell Southwest Unit, 3.970658928 acres (being a 1.423522% interest in the Unit Area) are unleased and owned by those identified on *Exhibit G*, entitled Unleased Owners. The persons listed on *Exhibit G* have not agreed to participate in the Winterfell 9UH well.
- 13. The production of oil and gas from the Unit Area can be allocated in such a manner as to ensure the recovery by Applicant and the oil and gas royalty owners and operators of properties in the proposed unit of their just and equitable share of such production.
- 14. An order requiring the unit operation of the Unit Area for the production of oil and gas is reasonably necessary for the protection of correlative rights, prevention of waste and the drilling of unnecessary wells.
 - 15. A verification of this application is attached and incorporated herein.

WHEREFORE, Applicant does hereby respectfully request that:

a. Notice of this Application be published and given to all necessary parties;

- b. This Commission conduct such hearings as are required by law regarding the formation of the unit requested;
- c. The Commission enter an order requiring the unitization of lands as requested herein for the operation of a deep oil and gas well;
- d. The Commission enter an order approving all necessary exceptions to the Commission's rules regarding well location; and
- e. The Commission receive the elections provided by W. Va. Code $\S22C-9-7(b)$, and enter one or more orders as contemplated by law in connection with this application; and
- f. For such further or other relief as this Commission may find just and proper.

AMERICAN PETROLEUM PARTNERS OPERATING, LLC

By Counsel

Elizabeth B. Elmore (State Bar No. 6061)

JACKSON KELLY PLLC

1600 Laidley Tower

P.O. Box 553

Charleston, West Virginia 25322

(304) 340-1258

VERIFICATION

COMMONWEALTH OF PENNSYLVANIA, COUNTY OF WASHINGTON, to wit:

This day personally appeared before me, the undersigned, Mark A. Acree, who being by me first duly sworn, deposes and says that he is the Vice President of Land of American Petroleum Partners Operating, LLC, Applicant in the foregoing Application for Pooling and Spacing Exception; that he has read the foregoing Application and knows the contents thereof pertaining to its claims and allegations; and the facts set forth therein are true, except as to such matters as are stated therein to be upon information and belief; and that insofar as matters are therein stated to be upon information and belief, he believes them to be true.

Mark A. Acree – Vice President of Land

Taken, subscribed and sworn to before me, the undersigned authority, in my said county, on this day of November, 2018.

My commission expires: Apr. 8 2020

Notary Public

[SEAL]

COMMONWEALTH OF PENNSYLVANIA

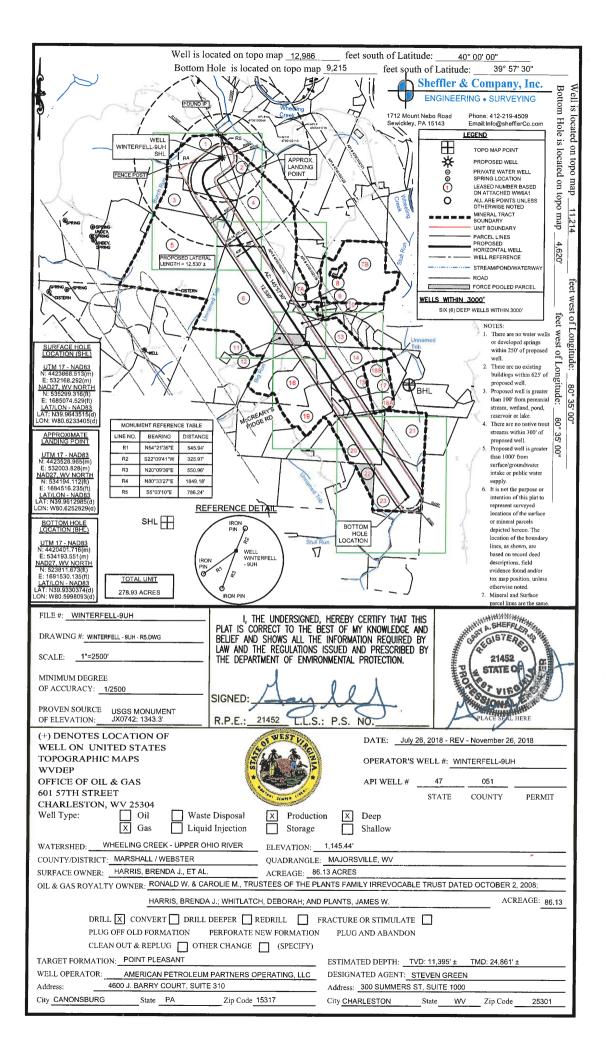
NOTARIAL SEAL

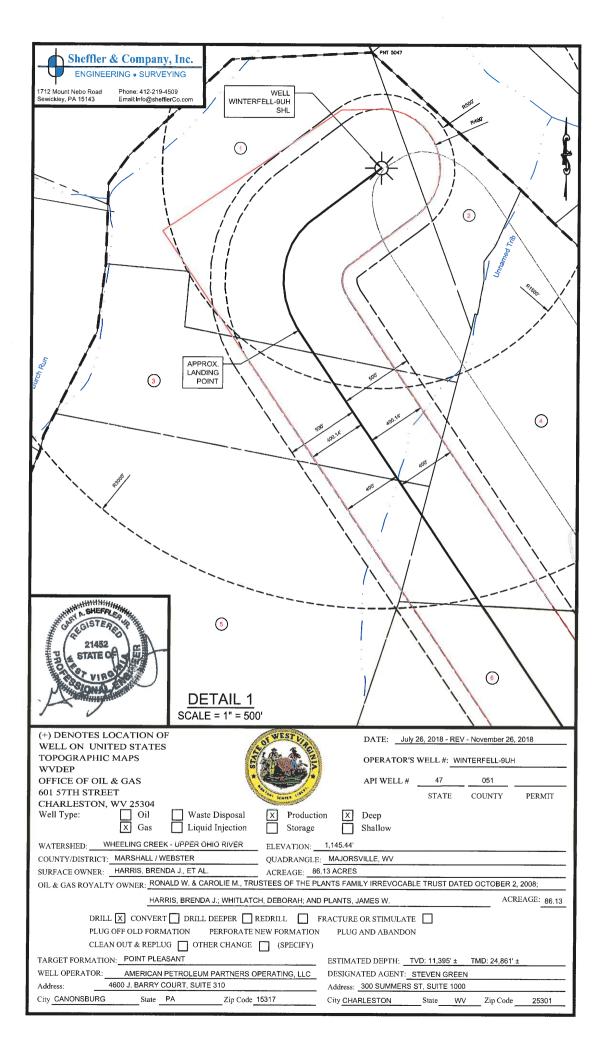
Jeffrey J. Bleicher, Notary Public
Summerhill Twp., Crawford County
My Commission Expires April 8, 2020

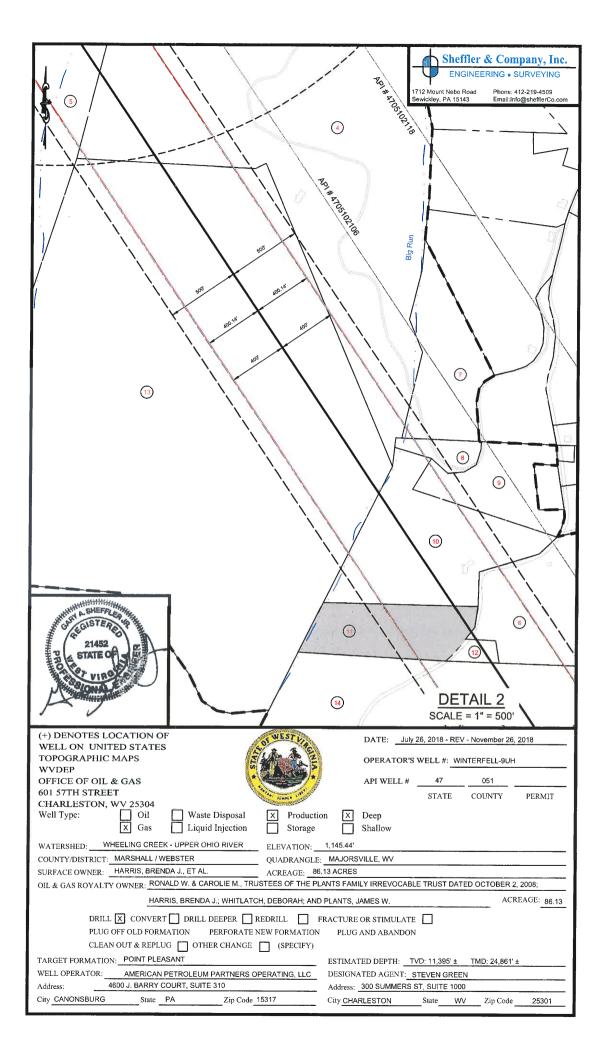
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIE

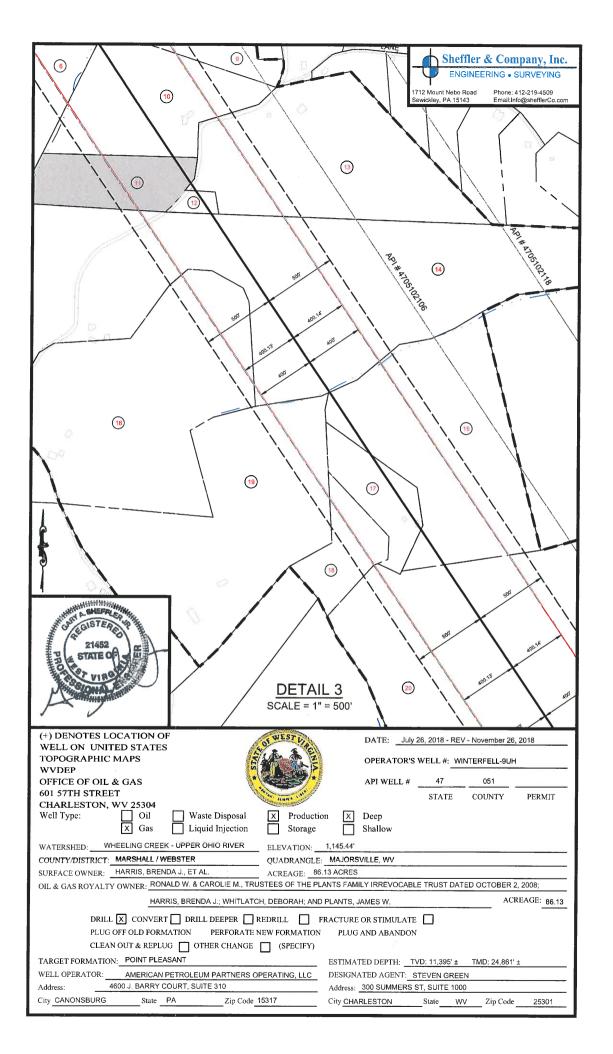
EXHIBIT A TO APPLICATION FOR POOLING PLATS FOR WINTERFELL 9UH WELL

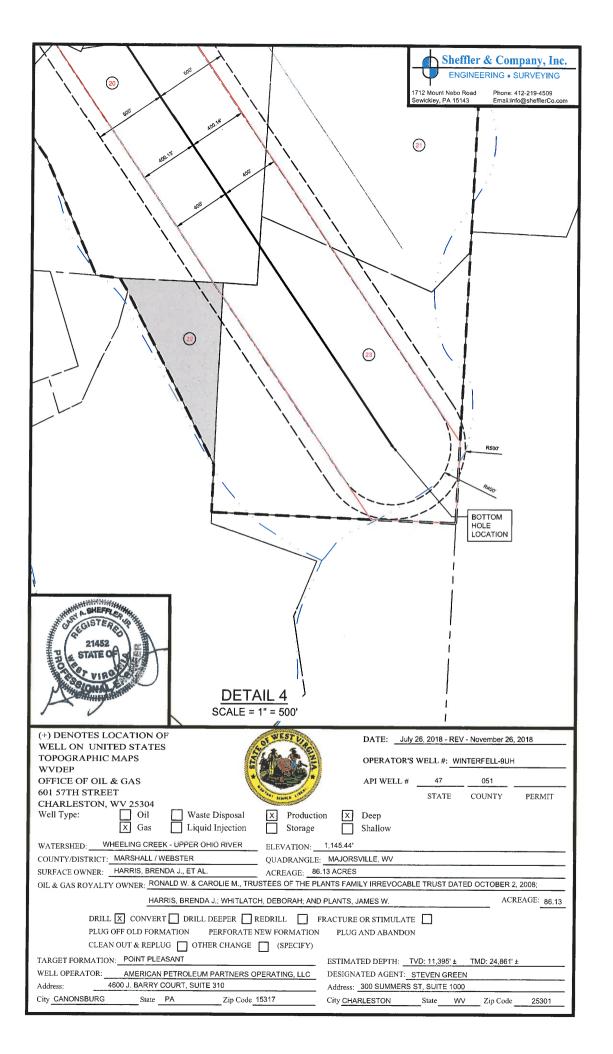
[See attached]











		Sheffler & Company, Inc.
TAX MAP NO.	9 TAX MAP NO. 15-0002-0008-0002-0000	ENGINEERING • SURVEYING
15-0001-0022-0000-0000 ASSESSED ACREAGE: 86.13 ACRES	ASSESSED ACREAGE: 8.00 ACRES	T
SURFACE OWNERS: HARRIS, BRENDA J., ET AL.	SURFACE OWNERS:	Phone: 412-219-4509 1712 Mount Nebo Road Email:Info@shefflerCo.com Sewickley, PA 15143
	CONNOR, LISA M.	Email.inio@snemerco.com Sewickiey, PA 15143
MINERAL OWNERS: BRENDA J. HARRIS, DEBORAH WHITLACH,	MINERAL OWNERS: LISA M. GIESER	
JAMES W. PLANTS, RONALD W. & CAROLINE M., TRUSTEES OF THE PLANTS FAMILY		49
IRREVOCABLE TRUST DATED OCTOBER 2, 2008		TAX MAP NO. P/O 15-0007-0024-0000-0000
	TAX MAP NO.	ASSESSED ACREAGE: 57.64 ACRES
TAX MAP NO. 15-0001-0021-0000-0000	15-0002-0008-0000-0000 ASSESSED ACREAGE: 19.22 ACRES	SURFACE OWNERS:
ASSESSED ACREAGE: 13.00 ACRES	SURFACE OWNERS:	ISKCON NEW MATHURA VRINDABAN, INC.
<u>SURFACE OWNERS:</u> HARRIS, BRENDA J., ET AL.	ONE WORLD ONE FAMILY NOW, INC.	
•	MINERAL OWNERS: ONE WORLD ONE FAMILY NOW, INC.	MINERAL OWNERS: ISKCON NEW VRINDABAN, INC.
MINERAL OWNERS: BRENDA J. HARRIS, DEBORAH WHITLACH, JAMES W. PLANTS, RONALD W. & CAROLINE M.,	ONE WORLD ONE FAMILY NOW, INC.	
JAMES W. PLANTS, RONALD W. & CAROLINE M.,	_	(19) TAX MAP NO.
TRUSTEES OF THE PLANTS FAMILY IRREVOCABLE TRUST DATED OCTOBER 2, 2008	11 TAX MAP NO.	15-0002-0007-0022-0000 ASSESSED ACREAGE: 48.766 ACRES
	15-0002-0009-0000-0000 ASSESSED ACREAGE: 8.74 ACRES	
3 TAX MAP NO.	SURFACE OWNERS:	SURFACE OWNERS: BOCK, THOMAS A, ET UX.,
15-0002-0001-0000-0000 ASSESSED ACREAGE: 56.1 ACRES	SURFACE OWNERS: MAHATME, HIRA (A/K/A HIRA MAHATME-HARRIS)	AS JOINT TENANTS WITH RIGHT OF SURVIVORSHIP
SURFACE OWNERS: APP MINERALS,LLC	MINERAL OWNERS: MAHATME, HIRA	MINERAL OWNERS: DAVID S. CAIN, BRENT E. CAIN, HERMAN D, LANTZ, THOMAS A. & PAMELA L. BOCK, THOMAS D. CAIN
MINERAL OWNERS:	, , , , , , , , , , , , , , , , , , ,	LANTZ, THOMAS A. & PAMELA L. BOCK, THOMAS D. CAIN
APP MINERALS,LLC	TAX MAP NO.	
	15-0002-0010-0000-0000 ASSESSED ACREAGE: 0.94 ACRES	20) TAX MAP NO. 15-0007-0024-0001-0000
		ASSESSED ACREAGE: 56.78 ACRES
TAX MAP NO. 15-0002-0002-0000-0000	SURFACE OWNERS: BRYANT, CRINIAN	SURFACE OWNERS: ECC-VRINDABAN, INC., D/B/A
ASSESSED ACREAGE: 132.77 ACRES		ECC-VRINDABAN, INC., D/B/A GORAKSHYA-SEVA AND
<u>SURFACE OWNERS:</u> ISKCON NEW MATHURA VRINDABAN	MINERAL OWNERS: JEANETTE L. LONGWORTH, PATRICIA ANN HARTLEY LINDA K. & RUSSELL D. CLARKE, RAYMOND P. &	ENVIRONMENTAL EDUCATION TRUST OF AMERICA, INC.
	MART ANN HARTLET, CINDY ANN & WILLIAM P., JR.	
MINERAL OWNERS; AMP FUND III, LP	SOUTH, JERRY W. & BARBARA A. HARTLEY	MINERAL OWNERS: ECO-VRINDABAN, INC.
		mande transfer des de partido,
	TAX MAP NO. 15-0002-0011-0000-0000	@) <u></u>
5 TAX MAP NO.	15-0002-0011-0000-0000 ASSESSED ACREAGE: 29.65 ACRES	TAX MAP NO. 15-0006-0011-0000-0000
15-0002-0016-0000-0000 ASSESSED ACREAGE: 183.31 ACRES	SURFACE OWNERS:	ASSESSED ACREAGE: 40,00 ACRES
	SURFACE OWNERS: SEWARD, RALPH J., ET AL.	SURFACE OWNERS: MILLER, R. CRAIG, ET UX.
SURFACE OWNERS: APP MINERALS,LLC	MINERAL OWNERS: RALPH J. & JANE D. SEWARD	
MINERAL OWNERS:	RALPH J. & JANE D. SEWARD	MINERAL OWNERS: RESOURCE MINERALS HEADWATER I, LP R. CRAIG & DONITA D. MILLER
APP MINERALS, LLC	(14) TAY MAD NO	R. CRAIG & DONITA D. MILLER
	14) TAX MAP NO. 15-0002-0013-0000-0000 ASSESSED ACREAGE: 94.04 ACRES	② TAX MAP NO.
TAX MAP NO. 15-0002-0015-0000-0000		15-0007-0025-0000-000
ASSESSED ACREAGE: 171.32 ACRES	SURFACE OWNERS: BOCK, JEFFERY T.	ASSESSED ACREAGE: 10.00 ACRES
SURFACE OWNERS:		SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX.
SURFACE OWNERS: HARRY B. SNYDER AND ELIZABETH JANE SNYDER, TRUSTEES OF THE SNYDER FAMILY TRUST, DATED DECEMBER 17, 2014	MINERAL OWNERS: JEFFERY T. BOCK,	
TRUST, DATED DECEMBER 17, 2014	SALLY A. HUNTER-BOCK	MINERAL OWNERS: BETTY GENEVA COFFIELD,
MINERAL OWNERS: HARRY B. SNYDER AND ELIZABETH JANE	TAX MAP NO.	WILLIAM E. & BRENDA K. COFFIELD
SNYDER, TRUSTEES OF THE SNYDER FAMILY	15-0007-0024-0002-0000 ASSESSED ACREAGE: 30.93 ACRES	
TRUST, DATED DECEMBER 17, 2014		
	SURFACE OWNERS: ISKCON NEW MATHURA VRINDABAN,	(23) TAX MAP NO.
TAX MAP NO.	INC.	15-0006-0016-0000-0000 ASSESSED ACREAGE: 77.40 ACRES
P/O 15-0002-0005-0000-0000	MINERAL OWNERS: ISKCON NEW VRINDABAN, INC.	
ASSESSED ACREAGE: 113.88 ACRES	ISACON NEW VRINDABAN, INC.	SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX.
<u>SURFACE OWNERS:</u> ISKCON NEW MATHURA VRINDABAN,	TAX MAP NO. 15-0002-0013-0001-0000	MINERAL OWNERS:
INC.	ASSESSED ACREAGE: 40.21 ACRES	BETTY GENEVA COFFIELD, WILLIAM E. & BRENDA K. COFFIELD
MINERAL OWNERS: ISKCON NEW VRINDABAN, INC.	<u>SURFACE OWNERS:</u> PARSONS, THOMAS EVERETT, SR.	THE BOTH OF THE BO
ISKCON NEW VRINDABAN, INC.	PARSONS, THOMAS EVERETT, SR.	
(B) TAY MAD NO	MINERAL OWNERS:	
TAX MAP NO. 15-0002-0008-0003-0000	RESOURCE MINERALS HEADWATER I, LE	*
ASSESSED ACREAGE: 2.00 ACRES	TAX MAP NO.	
SURFACE OWNERS:	15-0007-0024-0003-0000	
CLÄYTON, JILL, ET AL.	ASSESSED ACREAGE: 6,65 ACRES	1
<u>MINERAL OWNERS:</u> ONE WORLD ONE FAMILY NOW, INC. (LIFE ESTATE)	SURFACE OWNERS: HOUSMAN, BRUCE J.	
VASUDEVA G. CLAYTON (REMAINDERMAN)	MINERAL OWNERS:	
GOVINDA G. CLAYTON (REMAINDERMAN) JILL CLAYTON (REMAINDERMAN)	HOUSMAN, BRUCE J.	i i
	- Charles	
(+) DENOTES LOCATION OF	WEST	DATE: July 26, 2018 - REV - November 26, 2018
WELL ON UNITED STATES	10 x 40	
TOPOGRAPHIC MAPS	E LANGE Z	OPERATOR'S WELL #: WINTERFELL-9UH
WVDEP		THITTEN LLL-9011
OFFICE OF OIL & GAS		API WELL# 47 051
601 57TH STREET		
CHARLESTON, WV 25304	Stunia Stunia	STATE COUNTY PERMIT
· —	e Disposal X Production	V Deen
		d '
X Gas Liqu	d Injection Storage	Shallow
WATERSHED: WHEELING CREEK - UPPER O	HIO RIVER ELEVATION: 1,145.4	14'
COUNTY/DISTRICT: MARSHALL / WEBSTER	QUADRANGLE: MAJO	
SURFACE OWNER: HARRIS, BRENDA J., ET AL		
OIL & GAS ROYALTY OWNER: RONALD W. & CA	ROLIE M., TRUSTEES OF THE PLANTS F.	AMILY IRREVOCABLE TRUST DATED OCTOBER 2, 2008;
UADDIC PREVIO	A L-MULTI ATCH DEBODALL AND SLAVE	e lamee w
HARRIS, BREND	A J.; WHITLATCH, DEBORAH; AND PLANT	S, JAMES W. ACREAGE: 86.13
DRILL X CONVERT DELL	DEEPER REDRILL FRACTU	IRE OR STIMULATE
		-
PLUG OFF OLD FORMATION		UG AND ABANDON
CLEAN OUT & REPLUG 🔲 OTH	IER CHANGE (SPECIFY)	
TARGET FORMATION: POINT PLEASANT	FSTIA	MATED DEPTH:TVD: 11,395' ±TMD: 24,861' ± '
		GNATED AGENT: STEVEN GREEN
Address: 4600 J. BARRY COURT, SUIT	Addre.	ss: 300 SUMMERS ST, SUITE 1000
City CANONSBURG State PA	Zip Code 15317 City C	HARLESTON State WV Zip Code 25301
eng state TA		

EXHIBIT B TO APPLICATION FOR POOLING TOPOGRAPHICAL MAP FOR WINTERFELL 9UH WELL

[See attached]

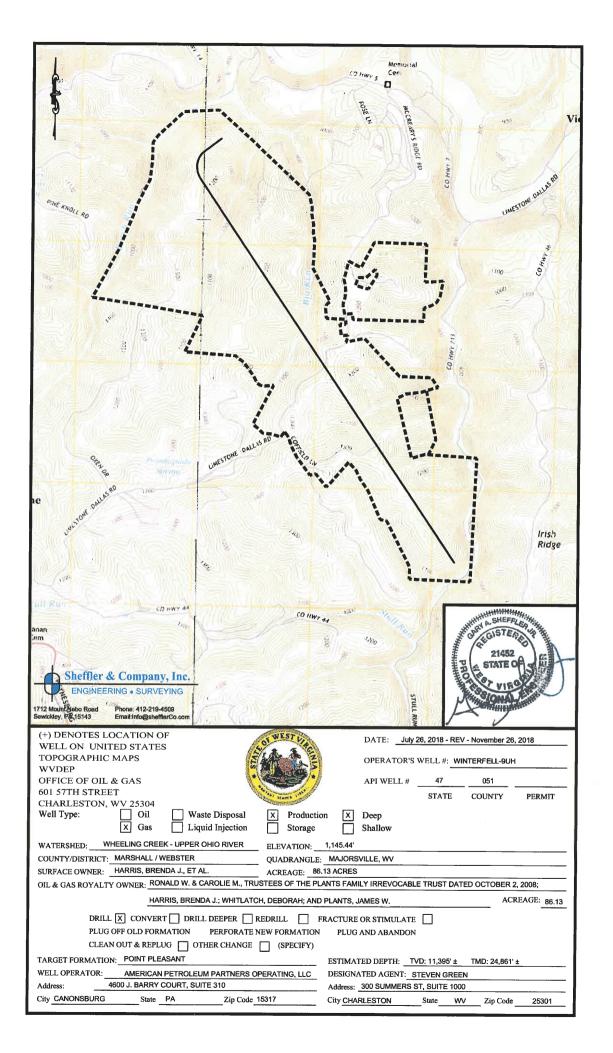


EXHIBIT C TO APPLICATION FOR POOLING Winterfell Southwest - AFFECTED OWNERS

T/M/P	LESSOR/UNLEASED OWNER	ADDRESS	GROSS ASSESSED ACRES	SURVEYED ACRES IN UNIT
15-1-22	Brenda J. Harris	30 Virginia Oaks Dr., Moundsville, WV 26041	86.13	6.865471916
15-1-22	Deborah Whitlatch	30 Virginia Oaks Dr., Moundsville, WV 26041	86.13	6.865471916
15-1-22	James W. Plants	2502 Hess Avenue, Wheeling, WV 26003	86.13	13.73135578
15-1-22	Ronald W. Plants & Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust dated October 2, 2008	2215 Pine Hill RD., Wheeling, WV 26003	86.13	13.73135578
15-2-1	APP Minerals LLC	4600 J. Barry Court, Suite 310 Canonsburg, PA 15317	56.1	17.87223797
15-2-10	Cindy Ann South & William P. South Jr.	438 Juniper Ave., Moundsville, WV 26041	0.942	0.163491262
15-2-10	Jerry W. Hartley & Barbara A. Hartley	513 Poland Run RD., Graysville, PA 15337	0.942	0.163491262
15-2-10	Jeanette L. Longworth	P.O. Box 1111, Moundsville, WV 26041	0.942	0.163491262
15-2-10	Patricia Ann Hartley	192 Cunningham Ln., Moundsville, WV 26041	0.942	0.163491262
15-2-10	Linda K. Clarke & Russell D. Clarke	2500 Kanawha Street, Lot 32, Moundsville, WV 26041	0.942	0.163491262
15-2-10	Raymond P. Hartley & Mary Ann Hartley	1849 Peachtree RD., Naoma, WV 25140	0.942	0.163491262
15-2-11	Ralph J. Seward & Jane D. Seward	2587 McCrearys Ridge RD., Moundsville, WV 26041	30.948	1.014213103
15-2-11	Ralph J. Seward & Jane D. Seward	2587 McCrearys Ridge RD., Moundsville, WV 26041	30.948	4.056852411
15-2-13	Jeffrey T. Bock	2143 McCreary Ridge, Moundsville, WV 26041	94.038	11.25839303
15-2-13	Sally A. Hunter-Bock	17 Locust Grove LN., Wheeling, WV 26003	94.038	11.25839303
15-2-13.1	Resource Minerals Headwater I, LP	11412 Bee Cave Road, Suite 301, Austin, TX 78738	40.207	3.772689996
15-2-15	Harry B. Snyder & Elizabeth J. Snyder, Trustees of the Snyder Family Trust dated December 17, 2014	503 Oakdale Ln., Moundsville, WV 26041	171.52	46.93248798
15-2-16	APP Minerals LLC	4600 J. Barry Court, Suite 310, Canonsburg, PA 15317	183.31	6.545144218
15-2-2	AMP Fund III, LP	225 Ross St, Ste. 301, Pittsburgh, PA 15219	132.77	14.07030337
15-2-2	AMP Fund III, LP	225 Ross St, Ste. 301, Pittsburgh, PA 15219	132.77	1.005021669
15-2-2	AMP Fund III, LP	225 Ross St, Ste. 301, Pittsburgh, PA 15219	132.77	1.005021669
15-2-5	ISKCON New Vrindaban, Inc.	3759 McCrearys Ridge RD, Moundsville, WV 26041	113.88	0.074952518
15-2-8	One World One Family Now, Inc.	2508 McCrearys Ridge RD, Moundsville, WV 26041	19.215	14.69502549
15-2-8.2	Lisa M. Gieser	2702 McCrearys Ridge Rd., Moundsville, WV 26041	8	0.752860723
15-2-8.3	One World One Family Now Inc. (Life Estate)	2508 McCrearys Ridge RD., Moundsville, WV 26041	2	0.323037521

15-2-8.3	Jill Clayton (Remainderman)	3759 McCrearys Ridge RD, NBU 16, Moundsville, WV 26041	2	0
15-2-8.3	Vasudeva G. Clayton (Remainderman)	3759 McCrearys Ridge RD, NBU 16, Moundsville, WV 26041	2	0
15-2-8.3	Govinda G. Clayton (Remainderman)	3759 McCrearys Ridge RD, NBU 16, Moundsville, WV 26041	2	0
15-2-9	Mahatme Hira	2420 McCrearys Ridge RD., Moundsville, WV 26041	8.73	3.897570747
15-6-11	Resource Minerals Headwater I, LP	11006 Hoover Ave. NW Uniontown, OH 44685	40	1.274040076
15-6-11	R. Craig Miller & Donita D. Miller	11412 Bee Cave Road, Suite 301, Austin, TX 78738	40	1.274040076
15-6-16	Betty Geneva Coffield	6764 Waynesburg Pike, Moundsville, WV 26041	77.4	9.446579951
15-6-16	William E. Coffield & Brenda K. Coffield	5347 Waynesburg Pike, Moundsville, WV 26041	77.4	28.33973985
15-7-22	David S. Cain	19 Zitko Terrace, Glen Dale, WV 26038	48.766	0.42573232
15-7-22	Brent E. Cain	201 Baltimore Avenue, Glen Dale, WV 26038	48.766	0.42573232
15-7-22	Herman D. Lantz	403 Fern Lane, Glen Dale, WV 26038	48.766	0.319578676
15-7-22	Thomas A. Bock & Pamela L. Bock	365 Coffield Lane Hill, Moundsville, WV 26041	48.766	1.596775637
15-7-22	Thomas D. Cain	102 Overlook Court St., Clairsville, OH 43950	48.766	0.425731972
15-7-24	ISKCON New Vrindaban, Inc.	3759 McCrearys Ridge RD, Moundsville, WV 26041	42.22	2.190217203
15-7-24.1	ECO-Vrindaban, Inc., dba GEETA	164 Surabhi LN., Wheeling, WV 26003	56.78	29.28985156
15-7-24.2	ISKCON New Vrindaban, Inc.	3759 McCrearys Ridge RD, Moundsville, WV 26041	30.932	14.3169168
15-7-24.3	Bruce J. Housman	RR 1 Box 289B, Moundsville, WV 26041	6.648	6.643450323
15-7-25	Betty Geneva Coffield	6764 Waynesburg Pike, Moundsville, WV 26041	10	0.018264545
15-7-25	William E. Coffield & Brenda K. Coffield	5347 Waynesburg Pike, Moundsville, WV 26041	10	0.054793636
15-1-21	Brenda J. Harris	30 Virginia Oaks Dr., Moundsville, WV 26041	13	0.361741183
15-1-21	Deborah Whitlatch	30 Virginia Oaks Dr., Moundsville, WV 26041	13	0.361741183
15-1-21	James W. Plants	2502 Hess Avenue, Wheeling, WV 26003	13	0.723265365
15-1-21	Ronald W. Plants & Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust dated October 2, 2008	2215 Pine Hill RD., Wheeling, WV 26003	13	0.723265365

Total Unit Area - 278.9202664 Acres

EXHIBIT D TO APPLICATION FOR POOLING Winterfell Southwest - ADJOINING OPERATORS

STATUS:	T/M/D NAME		
LEASED OR NOT LEASED	T/M/P	(Owner, if Unleased, or Lessee, if Leased)	Address
Leased	13-14-19	Chevron U.S.A. Inc.	700 Cherrington Parkway, Coraopolis, PA 15108
Leased		Chevron U.S.A. Inc.	700 Cherrington Parkway, Coraopolis, PA 15108
Leased	13-9-23	SWN Production Company, LLC	10000 Energy Drive, Spring, TX 77389
Leased		Equinor USA Onshore Properties Inc.	6300 Bridge Point Parkway, Bldg. 2, Suite 100, Austin, TX 78730
Leased		SWN Production Company, LLC	10000 Energy Drive, Spring, TX 77389
Leased	15-1-4.1	Equinor USA Onshore Properties Inc.	6300 Bridge Point Parkway, Bldg. 2, Suite 100, Austin, TX 78730
Leased		SWN Production Company, LLC	10000 Energy Drive, Spring, TX 77389
Leased	15-1-5.1	Equinor USA Onshore Properties Inc.	6300 Bridge Point Parkway, Bldg. 2, Suite 100, Austin, TX 78730
Leased		SWN Production Company, LLC	10000 Energy Drive, Spring, TX 77389
Leased	15-6-12	Equinor USA Onshore Properties Inc.	6300 Bridge Point Parkway, Bldg. 2, Suite 100, Austin, TX 78730
Leased		Chevron U.S.A. Inc.	700 Cherrington Parkway, Coraopolis, PA 15108
Leased	15-6-15	SWN Production Company, LLC	10000 Energy Drive, Spring, TX 77389
Leased		Equinor USA Onshore Properties Inc.	6300 Bridge Point Parkway, Bldg. 2, Suite 100, Austin, TX 78730
Leased		SWN Production Company, LLC	10000 Energy Drive, Spring, TX 77389
Leased	15-6-17	Equinor USA Onshore Properties Inc.	6300 Bridge Point Parkway, Bldg. 2, Suite 100, Austin, TX 78730
Leased		Chevron U.S.A. Inc.	700 Cherrington Parkway, Coraopolis, PA 15108
Leased	15-6-17.1	SWN Production Company, LLC	10000 Energy Drive, Spring, TX 77389
Leased		Equinor USA Onshore Properties Inc.	6300 Bridge Point Parkway, Bldg. 2, Suite 100, Austin, TX 78730
Leased	15-7-25	Chevron U.S.A. Inc.	700 Cherrington Parkway, Coraopolis, PA 15108
Leased	15-7-26	Chevron U.S.A. Inc.	700 Cherrington Parkway, Coraopolis, PA 15108
Leased	15-7-26.2	Chevron U.S.A. Inc.	700 Cherrington Parkway, Coraopolis, PA 15108
Leased	15-7-30	Chevron U.S.A. Inc.	700 Cherrington Parkway, Coraopolis, PA 15108
Leased	15-9-11	Chevron U.S.A. Inc.	700 Cherrington Parkway, Coraopolis, PA 15108
Unleased	15-2-9	Mahatme Hira	2420 McCrearys Ridge RD., Moundsville, WV 26041
Leased	15-1-4.3	Melinda Dawn Wiselka	3305 Ward St, Pittsburgh, PA 15213

EXHIBIT E TO APPLICATION FOR POOLING STATUTORY CONSENT AND EASEMENT

BOOK 0242 PAGE 0012

ASHLEY FAVINGER AMERICAN PETROLEUM FARTNERS OPERATING LLC 4600 J BARRY COURT STE 310 CANONSBURG PA 15317-5854

CONSENT AND SURFACE USE RELEASE

STATE OF WEST VIRGINIA

§ § š

COUNTY OF MARSHALL

WHEREAS, Deborah S. Whitlatch and Randy Lee Whitlatch, wife and husband, whose address is 30 Virginia Oaks Drive, Moundsville, WV 26041, Brenda J. Harris and Clay M. Harris, wife and husband, whose address 45316 State Route 800, Woodfield OH 43793, Ronald W. Plants and Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust Dated October 2, 2008, whose address is 2215 Pine Hill Road, Wheeling. WV 26003 and James W. Plants, a married man dealing in his sole and separate property, whose address is 2502 Hess Avenue. Wheeling, WV 26003, respectively. (hereinafter collectively referred to as "Grantor") and American Petroleum Partners Operating LLC, with an office at 4600 J. Barry Court, Suite 310, Canonsburg, PA 15317 (hereinafter referred to as "Grantee").

WHEREAS, Grantor is vested in and owns fee simple title to the surface and mineral estate for a certain tract or parcel of land located in Webster District, Marshall County, State of West Virginia being further described as Tax Parcel Number: 15-01-22 containing 86.13 acres of land and & 15-01-21 containing 13 acres of land, more or less, being the same tract or parcel of land conveyed to Grantors via Deeds recorded in the Marshall County West Virginia Clerks Office in Deed Book 841 Page 106; Deed Book 707, Page 158 and Will Book 80 Page 279, respectively, together with all contiguous or appurtenant lands currently owned or after acquired by Grantor (hereafter referred to as the "Subject Tract"); and

WHEREAS, Grantor, or their predecessors in title have entered into an oil and gas lease for the Subject Tract along with additional oil and gas interests owned by Grantors dated June 9th, 2009 an Oil & Gas Lease of which was recorded in Deed Book 684, Page 347; Deed Book 684, Page 562 and Deed Book 684, Page 569 of Marshall County, West Virginia (the "Subject Lease"); and

WE, the undersigned, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, being all the owners of the surface of that certain lot, tract or parcel of land located in Webster District, Marshall County, West Virginia, shown on Exhibit "A", do hereby consent and grant an easement, pursuant to West Virginia Code, Section 22C-9-7(b) (4) and Operating Rule 4.4 of the Rules and Regulations of the West Virginia Oil and Gas Conservation Commission, to American Petroleum Partners Operating LLC, its successors and or assigns, for the construction, drilling and continued operation of one or more wells for the production of oil or gas at the location shown on Exhibit "A". Further, in exchange for valuable consideration outlined in a separate order of payment, Grantor further agrees this payment is an all-inclusive payment for damages as a result of normal and customary operations associated with the construction and operation of a well pad and access road. This payment does not include compensation for catastrophic or extraordinary damages.

EXECUTED and effective as of the day of December

GRANTOR

By: Ronald William Plants,

By: Carolie M. Plants.

As: Trustee

GRANTEE		
Collin King		
Vice President of Finance		
	INDIVIDUAL ACKNOWLEDGMEN	Control of the Control
STATE OF	§	Situation and the line Situation Average And Situation of Situation and Situation of Situation Annual Situation of Situati
COUNTY OF Marshall		
appeared Deporal S. Williaten	and Randy Lee Whitlatch, wife and he whose names are subscribed to the with purposes therein contained.	Heband nerconally lineaum to men for
In witness thereof, I hereur	nto set my hand and affixed my official sea	d.
MY COMMISSION EXPIRES:	\cap Λ	
200 58, 5029	Josh	$\omega . 0.0 max$
	Notary/Public	
		P. Carlotte
	INDIVIDUAL ACKNOWLEDGEMEN	THE A SECTION OF THE PERSON OF
STATE OF W		Moundskile, West Virginia 2604
COUNTY OF Marshall	§	No Control to an Express Jan 2004
October 2, 2008, who acknowledge October 2, 2008, and that they as suc	Accepted 2017, before me, the Carolic M. Plants. Trustees of the Planted themselves to be the Trustees of The Part Trustees, being authorized to do so, exegent the name of the Irrevocable Trust by their	ts Family Irrevocable Trust Dated Plants Family Irrevocable Trust Dated cuted the foregoing instrument for the
In witness thereof, I hereunt	o set my hand and affixed my official seal	
MY COMMISSION EXPIRES: JON 28, 2024	Notary Public	NO Mag
STATE OF\ \ \ \ /	INDIVIDUAL ACKNOWLEDGMENT	OFFICIAL NEAL NOTATO FUELLO STATE SOCIETY NIGINIA BURG LANY COMMAND A LANG MODELLO WEST VEGICA 2004 My Commission Live Uses a Vegica 2004 My Commission Live Uses and my 27 2004
COUNTY OF Marchall		
On this day of \(\big) Brenda J. Harris and Clay M. Harris	2017. before me, the und ris, wife and husband, personally known d to the within instrument, and acknowledge	to me (or esticiactorily arough) to be
In witness thereof, I hereunto	set my hand and affixed my official seal.	
My Commission Expires:	Λ .1	
Jan 28,2024	Notary Public	Nay

INDIVIDUAL ACKNOWLEDGMENT

-	OFFICIAL SEAL	
11.00	NOTARY PURGIC	
18.2. 3	E STATE OF WEST VIRGINIA	
	D TO A D KAY	
Com	and the state of t	
and the	Avenue Avenue	
1	21 Mountain In this at Verbinus 260	4
	My Commission Call ics Jeruson 28, 20	Ž.
	NO C 13 NOT CAL 1,5 OF	HALL TO THE

STATE OF Washoll \$

In witness thereof, I hereunto set my hand and affixed my official seal.

MY COMMISSION EXPIRES:

Jon 28, 2024

Notary Public

CORPORATE ACKNOWLEDGEMENT

COMMONWEALTH OF PENNSYLVANIA COUNTY OF WASHINGTON

8

On this 13th day of Dtllmbtr, 2017, before me, the undersigned officer, personally appeared COLLIN KING, as Vice President of Finance for AMERICAN PETROLEUM PARTNERS OPERATING LLC, A DELAWARE LIMITED LIABILITY COMPANY, personally known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same for the purposes therein contained and on behalf of said corporation.

In witness thereof, I hereunto set my hand and affixed my official seal.

MY COMMISSION EXPIRES:

(Notary Public

COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL

NOTARIAL SEAL
Earline Bugay, Notary Public
New Sewickley Twp., Beaver County
My Commission Expires Jan. 23, 2020
MEMSER, PERMSYLVANIA ASSOCIATION OF NOTARIES

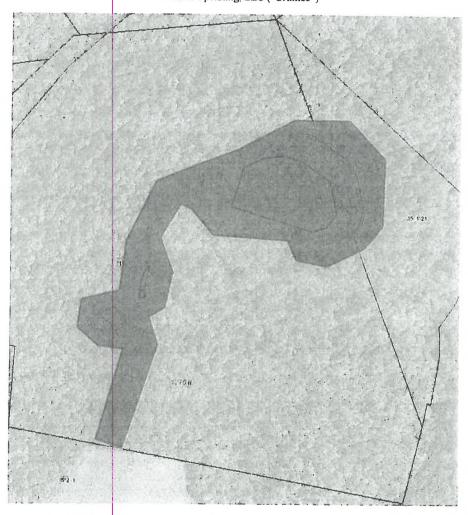
Marshall County Jan Pest, Clerk Instrument 1442499 07/03/2018 @ 03:02:57 PM RELEASE Book 242 @ Page 12 Pages Recorded 4

11.0

Recording Cost \$

EXHIBIT "A"

Attached to and made a part of that certain CONSENT AND SURFACE USE RELEASE effective ..., 2017, by and between Deborah S. Whitlatch and Randy Lee Whitlatch, wife and husband, Brenda J. Harris and Clay M. Harris, wife and husband, Ronald W. Plants and Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust Dated October 2, 2008 and James W. Plants, a married man, dealing in his sole and separate property, (collectively "Grantor") and American Petroleum Partners Operating, LLC ("Grantee")



*Estimated disturbance of 7 acres, exact disturbance and location subject to environmental, engineering and safety guidelines.

Initials

J.W.P.
Initials

R.M.P. C.M.P.
Initials

SH CAH
Initials

STATE OF WEST VIRGINIA, MARSHALL COUNTY, SCT.:

I. JAN PEST, Clerk of the	County Commission	n of said (County, do hereby o	certify that the annexe	d writing, t	bearing
date on the 4th day of 1	ichniber, 20	17, was p	presented for and by	me, admitted to record i	n my office	upon
the above certificate as to the parties	therein named this	Brd	day of Oth Dil.	2018 at 2.0	a niclock	Рм

RANK 0985 PAGE 0054

West Virginia Oil and Gas Conservation Commission Certificate of Consent and Easement

We, the undersigned, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, being all of the owners of the surface of that certain lot, tract or parcel of land located in Webster District, Marshall County, State of West Virginia, parcels #15-01-21 and 15-01-22, shown on the attached plat or survey, do hereby consent and grant an easement, pursuant to West Virginia Code, Section 22C-9-7(b)(4) and Operating Rule 4.4 of the Rules and Regulations of the West Virginia Oil and Gas Commission, to American Petroleum Partners Operating LLC, its successors or assigns, for the drilling and operation of a deep well(s) for the production of oil, gas and/or other associated hydrocarbons at the location shown on the attached plat or survey.

Executed this 10th day of July	,2018.
Deborah S. Whitlatch	Randy Lee Whitlatch
Brenda J. Harris & Harris	Clay M. Harris
Ronald W. Plants, Trustee of Plants Family Irrevocable Trust Dated October 2, 2008	Carolie M. Plants Carolie M. Plants, Trustee of Plants Family Irrevocable Trust Dated October 2, 2008
James W. Plants	Marshall County Jan Pest, Cierv INSCOPET 1662729
	07/11/2018 © 02:53:07 PH RIGHT OF WAY W/O CONSIDERAT Book 985 © Page 54 Pages Red Page 4 Pages Time 04:4
INDIVIDUAL ACKNO	de de
COMMONWEALTH STATE OF West Viagiona	3.8
COUNTY OF MARS A//	_ s _ s
On this 10th day of July	. 2018, before me, the undersigned officer,
personally appeared Deborah S. Whitlatch and Randy Lee W	Whitlatch, wife and husband, personally known to me
(or satisfactorily proven) to be the people whose names are sub	oscribed to the within instrument, and acknowledged to
me that Deborah S. Whitlatch and Randy Lee Whitlatch, w	vife and husband, executed the same for the numoses
therein contained.	, and the purposes
In witness thereof, I hereunto set my hand and affixed	my official seal.
MY COMMISSION EXPIRES:	
OFFICIAL SEAL COMMISSIONER FOR WEST VIRGINIA Ricky L. Shuck Sandyville, WV My Commission Expires August 24, 2022	Rotary Public J. Much

WY-MAB-06-96-DUA

INDIVIDUAL ACKNOWLEDGMENT

COMMONWEALTH/STATE OF OHIO	§
COUNTY OF MONROS	§
On this/O day of day of personally appeared Brenda J. Harris and Clay M. His satisfactorily proven) to be the people whose names are substituted Brenda J. Harris and Clay M. Harris, wife and husba	scribed to the within income
In witness thereof, I hereunto set my hand and affix	red my official seal.
MY COMMISSION EXPIRES: OFFICIAL SEAL C^MMISSIONER FOR WEST VIRGINIA Ricky L. Shuck Sandyville, WV My Commission Expires August 24, 2022	Notary Public & Much

Recorder: On completion of recordation, please return to: American Petroleum Partners Operating LLC 4600 J. Barry Court, Ste 310 Canonsburg, PA 15317

STATE OF WEST VIRGINIA, MARSHALL COUNTY, SCT.:

1	. JAN PEST, O	Clerk of the County	Commission	of said (County, &	lo hereby certi	fy that the ann	exed writing,	bearing
date on	the 100th	day of Oilil	, on	S was n	recented	for and by ma	idmittad ta anna	. d	
ما ما الله	·	a the namina thomain.	somed this	Hh	day of	O. In	. TWP at	5 % o'clock	PM

EXHIBIT F TO APPLICATION FOR POOLING Winterfell Southwest - TRACT PARTICIPATION

Winterfell Southwest - TRACT PARTICIPATION							
OWNER	GROSS ASSESSED ACRES	SURVEYED ACRES IN UNIT	% OF UNIT	T/M/P	DISTRICT	COUNTY	
Brenda J. Harris	86.13	6.865471916	2.461%	15-1-22	Webster	Marshall	
Deborah Whitlatch	86.13	6.865471916	2.461%	15-1-22	Webster	Marshall	
James W. Plants	86.13	13.73135578	4.923%	15-1-22	Webster	Marshall	
Ronald W. Plants & Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust dated October 2, 2008	86.13	13.73135578	4.923%	15-1-22	Webster	Marshall	
APP Minerals LLC	56.1	17.87223797	6.407%	15-2-1	Webster	Marshall	
Cindy Ann South & William P. South, Jr.	0.942	0.163491262	0.059%	15-2-10	Webster	Marshall	
Jerry W. Hartley & Barbara A. Hartley	0.942	0.163491262	0.059%	15-2-10	Webster	Marshall	
Jeanette L. Longworth	0.942	0.163491262	0.059%	15-2-10	Webster	Marshall	
Heirs of Loren E. Hartley (Patricia Ann Hartley, Hope Hartley, Lisa Martin and Michelle Martin)	0.942	0.163491262	0.059%	15-2-10	Webster	Marshall	
Linda K. Clarke & Russell D. Clarke	0.942	0.163491262	0.059%	15-2-10	Webster	Marshall	
Raymond P. Hartley & Mary Ann Hartley	0.942	0.163491262	0.059%	15-2-10	Webster	Marshall	
Ralph J. Seward & Jane D. Seward	30.948	1.014213103	0.364%	15-2-11	Webster	Marshall	
Ralph J. Seward & Jane D. Seward	30.948	4.056852411	1.454%	15-2-11	Webster	Marshall	
Jeffrey T. Bock	94.038	11.25839303	4.036%	15-2-13	Webster	Marshall	
Sally A. Hunter-Bock	94.038	11.25839303	4.036%	15-2-13	Webster	Marshall	
Resource Minerals Headwater I, LP	40.207	3.772689996	1.353%	15-2-13.1	Webster	Marshall	
Harry B. Snyder & Elizabeth J. Snyder, Trustees of the Snyder Family Trust dated December 17, 2014	171.52	46.93248798	16.826%	15-2-15	Webster	Marshall	
APP Minerals LLC	183.31	6.545144218	2.347%	15-2-16	Webster	Marshall	
AMP Fund III, LP	132.77	14.07030337	5.044%	15-2-2	Webster	Marshall	
AMP Fund III, LP	132.77	1.005021669	0.360%	15-2-2	Webster	Marshall	
AMP Fund III, LP	132.77	1.005021669	0.360%	15-2-2	Webster	Marshall	
ISKCON New Vrindaban, Inc.	113.88	0.074952518	0.027%	15-2-5	Webster	Marshall	
One World One Family Now, Inc.	19.215	14.69502549	5.268%	15-2-8	Webster	Marshall	
Lisa M. Gieser	8	0.752860723	0.270%	15-2-8.2	Webster	Marshall	
One World One Family Now Inc. (Life Estate)	2	0.323037521	0.116%	15-2-8.3	Webster	Marshall	
Jill Clayton (Remainderman)	2	0	0.000%	15-2-8.3	Webster	Marshall	
Vasudeva G. Clayton (Remainderman)	2	0	0.000%	15-2-8.3	Webster	Marshall	
Govinda G. Clayton (Remainderman)	2	0	0.000%	15-2-8.3	Webster	Marshall	
Mahatme Hira	8.73	3.897570747	1.397%	15-2-9	Webster	Marshall	

Resource Minerals Headwater I, LP	40	1.274040076	0.457%	15-6-11	Webster	Marshall
R. Craig Miller & Donita D. Miller	40	1.274040076	0.457%	15-6-11	Webster	Marshall
Betty Geneva Coffield	77.4	9.446579951	3.387%	15-6-16	Webster	Marshall
William E. Coffield & Brenda K. Coffield	77.4	28.33973985	10.160%	15-6-16	Webster	Marshall
David S. Cain	48.766	0.42573232	0.153%	15-7-22	Webster	Marshall
Brent E. Cain	48.766	0.42573232	0.153%	15-7-22	Webster	Marshall
Herman D. Lantz	48.766	0.319578676	0.115%	15-7-22	Webster	Marshall
Thomas A. Bock & Pamela L. Bock	48.766	1.596775637	0.572%	15-7-22	Webster	Marshall
Thomas D. Cain	48.766	0.42573232	0.153%	15-7-22	Webster	Marshall
ISKCON New Vrindaban, Inc.	42.22	2.190217203	0.785%	15-7-24	Webster	Marshall
ECO-Vrindaban, Inc., dba GEETA	56.78	29.28985156	10.501%	15-7-24.1	Webster	Marshall
ISKCON - NEW MATHURA VRINDABAN	30.932	14.3169168	5.133%	15-7-24.2	Webster	Marshall
Bruce J. Housman	6.648	6.643450323	2.382%	15-7-24.3	Webster	Marshall
Betty Geneva Coffield	10	0.018264545	0.007%	15-7-25	Webster	Marshall
William E. Coffield & Brenda K. Coffield	10	0.054793636	0.020%	15-7-25	Webster	Marshall
Brenda J. Harris	13	0.361741183	0.130%	15-1-21	Webster	Marshall
Deborah Whitlatch	13	0.361741183	0.130%	15-1-21	Webster	Marshall
James W. Plants	13	0.723265365	0.259%	15-1-21	Webster	Marshall
Ronald W. Plants & Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust dated October 2, 2008	13	0.723265365	0.259%	15-1-21	Webster	Marshall

EXHIBIT G TO APPLICATION FOR POOLING

Winterfell Southwest - UNLEASED OWNERS / THIRD PARTY OPERATORS

T/M/P	GROSS	SURVEYED ACRES	OWNER	OWNERSHIP	NET ACRES IN	
1710171	ASSESSED	IN UNIT	OWNER	% IN UNIT	UNIT	
15-2-9	8.73	3.897570747	Mahatme Hira	1.397329%	3.897570747	
15-7-25	10	0.018264545	Chevron U.S.A. Inc.	0.00054000	0.010364545	
13-7-23	13-7-23	0.016204343	(Betty Geneva Coffield)	0.006548%	0.018264545	
			Chevron U.S.A. Inc.			
15-7-25 10	0.054793636	(William E. Coffield & Brenda K.	0.019644%	0.054793636		
			Coffield)			

Unleased Acres in Unit - 3.970628928 Acres Unleased Ownership % in Unit - 1.423522%

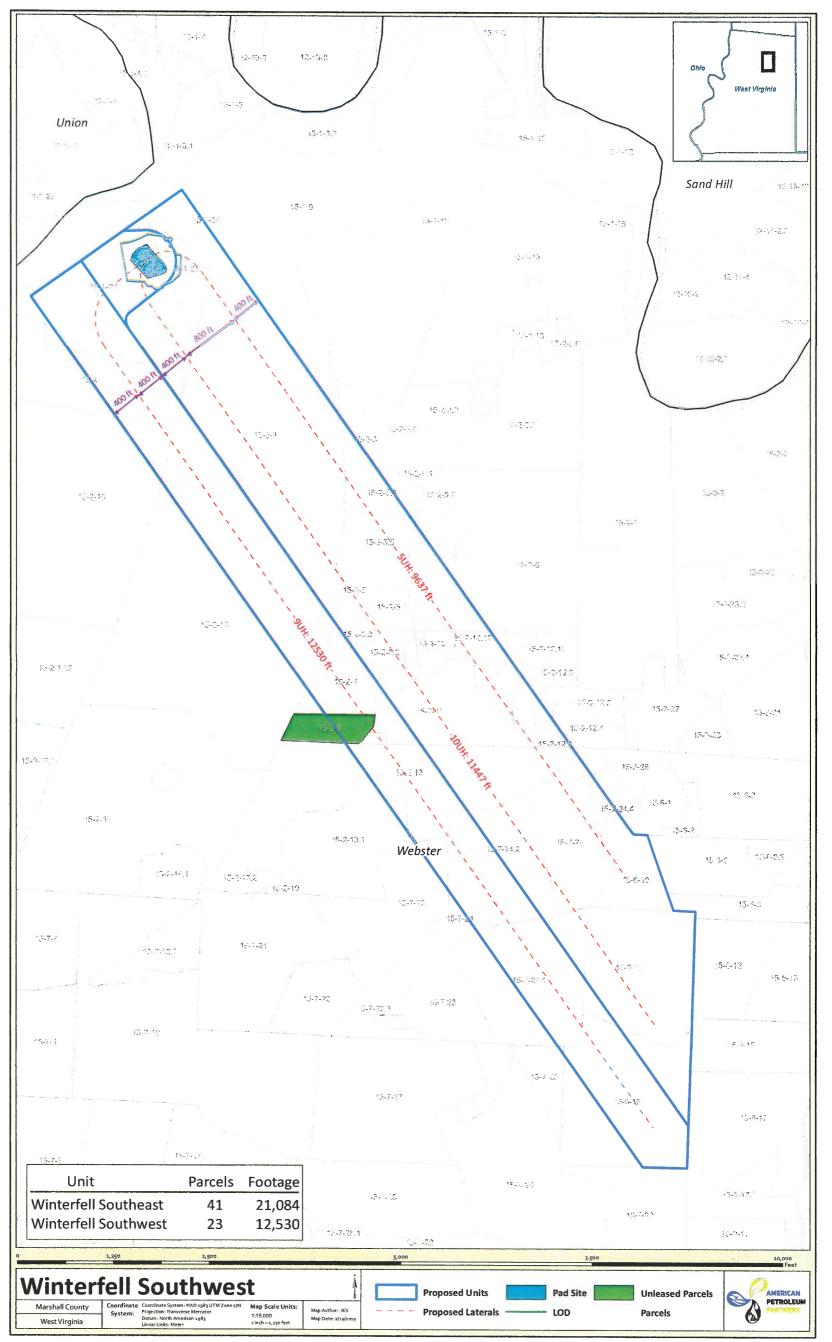
AMENDED EXHIBIT G TO APPLICATION FOR POOLING

Winterfell Southwest - UNLEASED OWNERS / THIRD PARTY OPERATORS

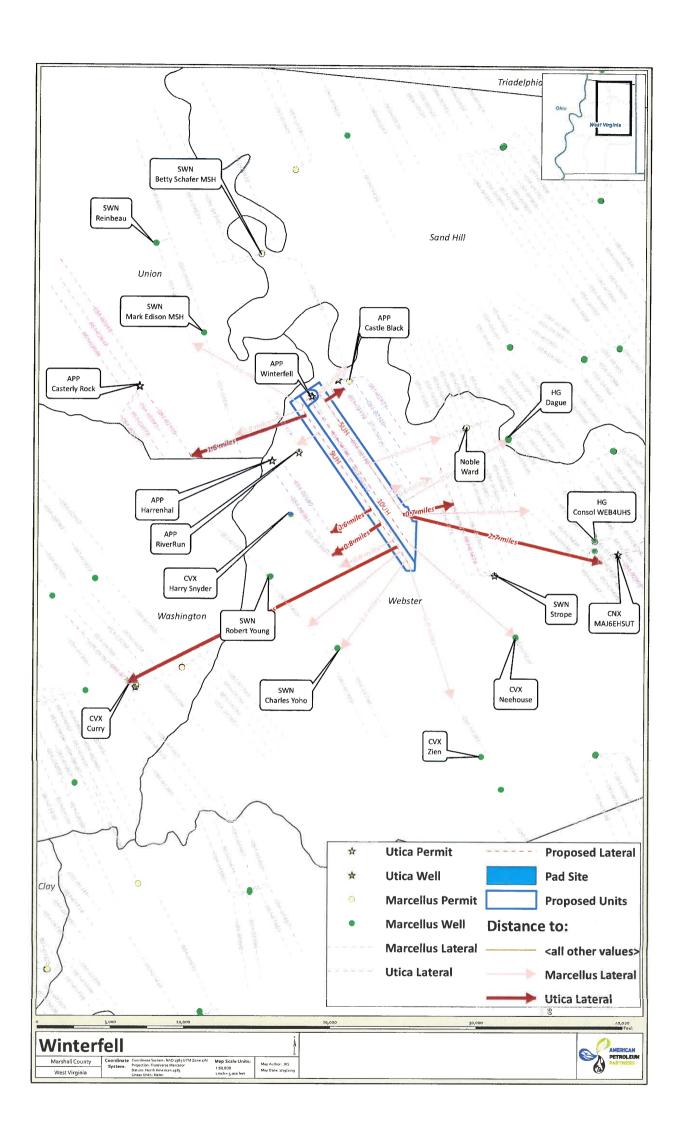
T/M/P	GROSS	SURVEYED ACRES	OWNER	OWNERSHIP	NET ACRES IN
.,,.	ASSESSED	IN UNIT	OVVIVER	% IN UNIT	UNIT
15-2-9	8.73	3.897570747	Mahatme Hira	1.397329%	3.897570747

Unleased Acres in Unit - 3.897570747 Acres Unleased Ownership % in Unit - 1.397329%

Ex. 6



Ex. 7



DOCKET NO. 271 CAUSE NO. 263 & DOCKET NO. 271 CAUSE NO. 256 Date: 2/21/19 Place/Room: DEP

Name	Title	Company	Phone	Fax	E-Mail
Behelmore Julia Sharma	Altimen	Jackson Kelly	304 3401258		ebelmore@ facksonkelly.com
Julia Sharma	GIS/ Fezdat	Jackson Keely	412 508 0481		julia. K. Sharmagnayl.
Ceo Hebert	District Landma	APP	405-626-330	4	Thebert Capp por con
Braulio Stva TUNDE ATAMI	VP. Dvilling	APP	806-445-7	675	losilva@app-lp-com
TUNDE ATAMI	UP. Competous	994	719 0106		tajayi @app-lp.com
					3 3 ((