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STATE OIL AND GAS BOARD OF ALABAMA

Tuscaloosa, Alabama

Special Hearing Officer Meeting

June 25, 1991

Testimony and proceedings before a Hearing Officer in the Board Room of the State Oil and Gas Board Building, University of Alabama Campus, Tuscaloosa, Alabama, pursuant to adjournment, on this the 25th day of June, 1991.

BEFORE:

Mr. Marvin Rogers.....Hearing Officer

BOARD STAFF

Dr. Ernest A. Mancini.....Secretary & Supervisor

Mr. Gary Wilson.....Assistant Supervisor

Mr. Jay Masingill.....Assistant Supervisor

Mr. Dave Bolin.....Assistant Supervisor

Mr. Frank Hinkle.....Geologist

Mr. Tom Sexton.....Geologist

Mr. Richard Hamilton.....Petroleum Engineer

(Reported by Jean W. Smith)

APPEARANCES

	NAME	REPRESENTING
1.	Kathy Clayton Birmingham, AL	Taurus
2.	Jack C. Stewart Birmingham, AL	U.S.M.
3.	Jim Sledge Tuscaloosa, AL	Espero & Bay Rock
4.	Tom Watson Tuscaloosa, AL	U. S. Steel Mining & Shell Western
5.	Bryan Delph Houston, TX	SWEPI
6.	George Zimmerman Houston, TX	Shell Western E&P Inc.
7.	Keith Etzel Houston, TX	Shell Western E&P Inc.
8.	Mike Robertson Birmingham, AL	U. S. Steel Mining

PROCEEDINGS

(The hearing was convened at 9 a.m. on Tuesday,
June 25, 1991, at Tuscaloosa, Alabama)

MR. ROGERS: This hearing is in session. It's my understanding that Items 1, 2, and 3, petitions by Pruet Production Company, Docket No. 5-30-911--uh--5-30-9141, and Bay Rock Operating Company, Inc., Docket No. 6-25-911, will be continued to the meeting of the Board on July 12. Is that correct? The next item, the two items to be heard today are Item 4, Docket No. 6-25-912, and--petition by U. S. Steel Mining Co., Inc., and Docket No. 6-25-913, petition by Shell Western E&P Inc. I've been authorized by the Board to conduct this hearing on behalf of the Board as Hearing Officer. Mr. Watson is here representing U. S. Steel Mining Co., Inc. Mr. Watson.

MR. WATSON: Mr. Rogers, I have one witness. I'd like to ask him to stand and state his name and address for the record and have you swear him in, please.

WITNESS: My name is Mike Robertson. I live at 518 Royal Oaks Drive, Birmingham, Alabama.

(Witness was sworn by Mr. Rogers)

MR. WATSON: Mr. Rogers, I have handed up to Mr. Hamilton an affidavit of notice on this item and I have prefiled the publication notices from the three statewide newspapers. I ask that you receive the affidavit and the publications of notice into the record of this hearing.

MR. ROGERS: The affidavits and the publication notice are admitted.

(Whereupon, the affidavit
and publications of notice
were received in evidence)

MR. WATSON: I'll also note at the outset that the Board record copy has some corrections in it which are not in all of the copies I distributed to each member of the staff. I'll point those out as I go through. And handed up in loose-leaf form is a copy of the signed Unit Agreement and Unit Operating and a letter from Mr. Griggs of the State Lands Division, Department of Conservation, that I'll refer to, ask that those be marked at the appropriate time. The petition that I'm asking you to hear this morning and that Mr. Robertson will give testimony to is a joint effort by U. S. Steel Mining Company and

Taurus Exploration, Inc., to unitize a portion of the Oak Grove Coal Degasification Field, consisting of some 4400 acres. The unit that we propose to establish today we have referred to as Unit III of the Oak Grove Coal Degasification Field. In this unit there are two tract owners or two separate interest owners, one being U. S. Steel Mining Company owning 4360 acres, and the State of Alabama owning 40 acres. These being Tracts 1 and 2 respectively. Now, the reason for this proposal and the unitization is to allow these two companies, U. S. Steel Mining Company and Taurus Exploration, Inc., to move forward with their own programs to develop coalbed methane resources in the Oak Grove Coal Degasification Field. We're faced with the statutory mandate that we're to have but one well per drilling unit in this state, and Taurus Exploration has drilled numerous vertical coal degasification wells in the Oak Grove Field. U. S. Steel Mining Company, being in charge of the mining operation in this area, and we have attempted to create a unit that would overlie the majority of the area to be mined, is charged with the responsibility of degasifying the coal using both the horizontal process and the gob well process. Now with those three

processes, vertical, gob, and horizontal, the statute would prohibit but one of those. The unit will allow all three procedures to be employed within this 4400 acres maximizing the recovery of the coalbed methane, preventing waste, and will also protect the coequal and correlative rights of the owners. It's a procedure that--that has afforded us maximum flexibility, and in the petition and in the proposed order, you will note that we are requesting that U. S. Steel Mining Co., Inc., be named unit operator for operations consisting of horizontal and gob wells, and that Taurus Exploration, Inc., be named operator for the vertical well program. Taurus holds a lease from UXS Corporation, the parent, allowing it to degasify coal using the vertical process, vertical coal degasification process. These two companies have worked out their business agreements and that business agreement is evidenced before you in the form of a Unit Operating Agreement and Unit Agreement which both parties have signed. The State of Alabama owns 40 acres in the SE/4 of the NE/4 of Section 4, Township 19 South, Range 6 West, and U. S. Steel Mining Company has a coal mining lease on that 40. There--at--apparently at the present time the coal degasification rights have not been leased, but there is a letter

to you, the letter I referred to from Mr. Griggs, wherein the State of Alabama concurs in the approval of this unit. Mr. Hamilton has the original copy of that letter. And that interest in Tract 2 would be a carried interest for U. S. Steel Mining Company because there are no vertical wells in that. They would only be horizontal or gob wells drilled in that particular tract. Now with that opening comment, or those opening comments, I'll call my first witness, Mike Robertson. Mr. Robertson has never appeared before this Board but I have included in the booklet an affidavit of his qualifications, and I would ask, Mr. Rogers, that he briefly summarize those to you for purposes of qualifying him.

MR. ROBERTSON: I attended the University of Alabama and received a bachelor of science in geology degree in 1978, had one year of postgraduate study in geology at the University of Alabama in 1978 and '79. Since January of 1989, I've been employed as a geologist in the Resource Management Department of UXS Corporation in Fairfield, Alabama. My responsibilities have included assisting in the administration of the corporation's mineral leases, including the Black Warrior Basin area, and providing technical assistance to the U. S. Steel Mining Company.

Prior to my employment at USX, I had 6 1/2 years of petroleum exploration and production experience in the Gulf Coast area.

MR. WATSON: Mr. Robertson, have you prepared exhibits in support of the petition on file here today?

MR. ROBERTSON: Yes, I have.

MR. WATSON: And you're familiar with the petition requesting the formation of Unit III in the Oak Grove Coal Degasification Field?

MR. ROBERTSON: Yes, sir.

MR. WATSON: I tender Mr. Robertson as an expert witness.

MR. ROGERS: He is so recognized.

MIKE ROBERTSON

Appearing as a witness on behalf of Petitioner, U. S. Steel Mining Co., Inc., testified as follows:

DIRECT EXAMINATION

Questions by Mr. Watson:

Q Let's turn if you would, Mr. Robertson, in the booklet of exhibits to Exhibit No. 1. I ask that you tell Mr. Rogers and members of the staff what this exhibit shows.

A This is a field limit map showing a portion of the Oak

Grove Coal Degasification Field and the proposed Oak Grove Field Coal Degasification Unit III in Townships 18 and 19 South, Range 6 West, along with the approximate boundary of the Oak Grove mine.

Q And by approximate boundary, that mine boundary can change at times based on mining conditions, is that the reason you used the word "approximate"?

A Yes, sir.

Q All right, sir. Now we're asking the Board, Mr. Robertson, to unitize an interval of the Pottsville Coal Formation, and your next two exhibits, Exhibits 2 and 3, describe that Pottsville Coal Interval. I'd ask that you, using those two exhibits, please, sir, give us the proposed unitized interval.

A Yes, sir. There--there are two type logs here. The first, Exhibit 2, is the coal lithology log for the U. S. Pipe and Foundry Gob Vent Hole 11-2-1. This shows the interval above the Cobb seam, coal seam. And it shows the top of the unitized interval at a depth of 206 feet, and the base of the interval at a depth 446 feet. Exhibit 3 is the coal

lithology log for the U. S. Steel Core Hole No. C-3. It shows the top of the unitized interval at a depth of 171 feet and the base of the unitized interval at a depth of 1846 feet below ground level.

Q All right, sir. And our petition and the order would specify that we would be requesting the Board to include all zones in communication therewith, all productive extensions thereof, and any stringers that might occur within a depth of either 80 feet above or 80 feet below this interval that you've just described, is that right?

A Yes, sir.

Q Exhibits 4, 5, and 6 are logs from wells within the proposed Unit III area, is that correct?

A Yes, sir.

Q All right, sir. I would ask if you would please, starting with Exhibit No. 4, tell us which well this log is on and describe the Pottsville Interval in each of these three exhibits.

A Exhibit 4 is the coal lithology log for the Taurus Exploration coalbed methane well 28-2-139, showing the

unitized interval from the top of the Cobb seam of coal at a depth of 91 feet to the base of the Blue Creek seam at a depth of 1,032 feet. Exhibit 5 is the coal lithology log for the Taurus Exploration coalbed methane well 33-10-110, showing the unitized interval from the top of the Cobb seam at a depth of 134 feet to the base of the Blue Creek seam at a depth of 1103 feet. Exhibit 6 is the coal lithology log for the Taurus Exploration coalbed methane well 15-15-219, showing the unitized interval from the top of the Cobb seam of coal at a depth of 128 feet to the base of the Blue Creek seam at a depth of 1,047 feet. The interval shown on the three Taurus logs fall within the unitized interval shown by the two type section logs we've previously introduced.

Q All right, sir. Now let's look at a cross section of these three wells you've just testified to and that's shown on Exhibit No. 7. Describe that exhibit for us, please, sir.

A Yes, sir. This is a cross section constructed from the--the three Taurus wells and shows the continuous nature of the proposed Unit III area, continuous coal section across the area.

Q So it's your testimony that you see no major separation, no major faulting, that would prevent this area from being treated as a unit and developed as such?

A That is correct.

Q All right, sir. Exhibit 8, tell us what Exhibit 8 is and what it shows, Mr. Robertson.

A Exhibit 8 is a structural contour map showing the elevation of the base of the Blue Creek coal seam. This map was created using data from the U. S. Steel core holes and elevations from the Oak Grove mine workings. The map shows that the base of the Blue Creek seam dips gently to the southeast over most of the area with the dip steepening as you go to the northwest on the flank of the Sequatchie anticline. No major faults are found within the proposed unit area.

Q I believe this Exhibit 8 also shows the location of the U. S. Steel Core Hole C-3 and U. S. Pipe and Foundry Gob Vent Hole 11-1, which are the type logs for the unitized interval as well as the three wells on the cross section, correct?

A That is correct.

Q All right, sir. Your next exhibit is Exhibit 9, an isopach map. Describe what's shown on this exhibit, please, sir.

A Exhibit 9 is an isopach map showing the thickness of the Blue Creek coal seam only, which ranges from slightly less than three feet to slightly more than nine feet thick within the proposed Unit III.

Q All right, sir. Do you have an estimate, Mr. Robertson, of the total coal thickness in Unit III with all of the unitized interval, an average? I know it varies from region to region but do you have an average thickness?

A The average thickness would range--it would be close to 20 feet total.

Q All right, sir. Let's look at Exhibit No. 10, please, sir. Tell us what that exhibit is and what's shown on the exhibit.

A Exhibit 10 shows the existing drilling units within the Oak Grove mine boundary and the proposed Oak Grove Field Coal Degasification Unit III. If the Board grants Unit III, the drilling units that are shown will no longer have any

significance for spacing purposes. However, the operators will be required to honor a 150-foot setback from the Unit III boundaries.

Q Also shown on this map is the Unit I and Unit II previously established by this Board in the Oak Grove Coal Degasification Field, is that correct?

A That's correct.

Q This exhibit would also show, would it not, Mr. Robertson, the fact that with the vertical wells already permitted on 40- and 80-acre units without the--uh--uh--implementation of the unit, prohibition to any additional wells in these units as shown?

A Yes, sir.

Q All right, sir. Exhibit 11 is a unit map. Describe what's shown on here, please, sir.

A Exhibit 11 is a--just a larger scale map of the proposed Oak Grove Field Coal Degasification Unit III, which contains approximately 4400 acres. This exhibit will be used to calculate tract participation factors. In Unit III there are two tracts. Tract 1 is U. S. Steel Mining Company

acreage, which includes about 4--4360 acres, and Tract 2 is owned by the State of Alabama and includes 40 acres.

MR. WATSON: Mr. Rogers, for the record, I have marked those on the Board's official copy, marked as Tracts 1 and 2.

MR. ROGERS: All right.

Q Now Mr. Robertson, it's your understanding that the tract participation formula that is proposed and agreed to by the working interest owners and royalty owners would be surface acres over total acres in the unit expressed as a percentage, is that correct?

A That is correct.

Q All right, sir. In your opinion, is that tract participation formula as expressed in the Unit Agreement and Unit Operating Agreement, which I will refer to in just a minute, is that a fair and equitable agreement and does it reflect the relative contribution which each tract is expected to make to total unit production?

A Yes, sir.

Q All right, sir. The final exhibit in the booklet, Mr. Robertson, is Exhibit 12, which is a Form OGB-9. Would you

tell us what's shown on that form, please, sir?

A Yes, sir. The--this is the form for the--OGB-9 for the U. S. Steel Mining Company Horizontal Degas Well LW-11-2A, which lies within the proposed Unit III. This form shows that on September 15, 1990, a 24-hour gas test was run and the well produced 14 MCF of gas. This exhibit is included as evidence that producible gas is present within the proposed unit area.

Q Now Mr. Robertson, I want to go through you in summary--go with you in summary form, if I could, please, sir, the Unit Agreement and Unit Operating Agreement. The Unit Agreement as signed by the royalty and working interest owners defines the unit area as you have described it and the unitized formation as you have described it and the tracts in the unit as you have described them. And it also describes the tract participation, or the unit tract participation factor, factors, as you have described those, being surface acres over total surface acres in the unit expressed as a percentage, is that correct?

A That's correct.

Q In the Unit Agreement attached thereto as Exhibit B, those percentages of ownership are showing U. S. Steel Mining Company as owning 99.0909 percent and the State of Alabama, their interest, as being point--as really being .9091, is that correct?

A That's correct.

Q All right, sir. And is it your testimony that this Unit Agreement as signed by U. S. Steel Mining Company, as signed by USX Corporation, and as signed by Taurus Exploration Company, is a reasonable Unit Agreement expressing all of the requirements contained in the State Oil and Gas Board's rules and regulations concerning unit operations?

A Yes, sir.

Q Is it also your understanding that the Unit Operating Agreement, which is marked as Exhibit C, signed by and between U. S. Steel Mining Company and Taurus Exploration Company as the business agreement for the two, is reasonable and should be approved by this Board as evidencing the approval of these two parties to operate this unit as a single unit within the--within a portion of

the Oak Grove Coal Degasification Field?

A Yes, sir.

Q And you're familiar with the letter that I have introduced, or that I've handed up to the Board, from the Conservation Department and their support of this unit, are you not?

A Yes, sir.

MR. WATSON: Mr. Rogers, I would ask that you receive into evidence to the testimony of Mr. Robertson Exhibits 1 through 12, and I would ask that you mark the Unit Agreement as Exhibit 13, the Unit Operating Agreement as Exhibit 14, and the letter from Mr. Griggs as Exhibit 15.

MR. ROGERS: Those exhibits are admitted.

(Whereupon, the exhibits
were received in evidence)

Q Now Mr. Robertson, in your opinion, if the Board sees fit to grant the petition and establish the unit, would waste be prevented as that term is defined by the oil and gas laws of Alabama and coequal and correlative rights of owners in the unit protected?

A Yes, sir, it would.

MR. WATSON: Mr. Rogers, in the pleadings before you, I think we have met all the requirements for the unit operations, and I would state at the, in concluding this item, that that also includes affirmation of the fact that unit operations as we propose them, the costs for those operations would not exceed the cost of additional recovery of hydrocarbons. And let me ask you this question, Mr. Robertson. By being allowed to utilize the horizontal, the gob, and the vertical program at those points within the proposed Unit III as deemed proper and appropriate by the two operators, Taurus Exploration, Inc., and U. S. Steel Mining, Inc., will we maximize the recovery of coalbed methane gas from this unit?

A Yes, sir, we will.

Q And would the costs incidental to that be excessive or would those costs be reasonable?

A They would be reasonable.

Q All right, sir. And they would not exceed, would they, Mr. Robertson, the additional revenue we would expect to generate from being able to use all three methods?

A No, sir.

MR. WATSON: All right, sir. I tender my witness to you, Mr. Rogers, and members of the staff, for any questions you would have of him or any questions you might have of me of the agreements.

MR. ROGERS: Let's see, I wanted to clarify a couple of things, Mr. Watson. We received two letters. Actually, one was to Dr. Mancini at the Oil and Gas Board and one was to you from Jim Griggs, and both of those letters will be admitted.

(Whereupon, the letters
were received in evidence)

MR. WATSON: All right, sir.

MR. ROGERS: I stated that I'd received--we do have the affidavit--we don't have the proofs of publication in this file. Do you have those, Mr. Watson?

MR. WATSON: I have extra copies, yes, sir.

MR. ROGERS: At least I didn't find them. These proofs of publication are admitted into the record.

(Whereupon, the proofs of
publication were received
in evidence)

MR. WATSON: I might say this, Mr. Rogers, that if the staff, after reviewing the material and in preparing to make your recommendation to the Board and realizing that you will want to review the order that has been submitted following this testimony, it would be beneficial to the working interest owners involved if this unit could be placed in effect on the 1st day of July. That would be possible if the staff would have time to review this material and make a recommendation to the Board. That would--that would make the accounting procedures much easier for both companies. If not, of course the unit would be effective the 1st day of August, given that time. I might point out to you in summary here that you will recall we have had numerous applications filed by the mining company for horizontal and gob wells and we have reached that impasse on several occasions where we have vertical wells already permitted in that particular unit. By approving this expeditiously, we will be able to progress the degasification of the underground mining environment, continuing to provide safety to those workers in the mine, and capturing the maximum amount of coalbed methane gas for sale. So that's all I have at this time unless you have questions of either of us.

MR. ROGERS: One other point I might make. I see there's a representative of Taurus here. Of course, this--this Unit Agreement and the order that the Board would execute would make--would have--would provide for two operators. One would be U. S. Steel Mining Company and the other would be Taurus Exploration, Inc. I suppose for the record we ought to ask that representative does Taurus understand and acknowledge the duties and responsibilities that it's entering into.

MR. WATSON: I would ask Ms. Clayton to come forward. She'd planned to make a statement in support, and I wanted to be sure you were through with us, Mr. Rogers.

MR. ROGERS: All right.

MS. CLAYTON: I'm Kathy Clayton, land manager for Taurus Exploration. We are in support of the proposed Unit No. III of Oak Grove Degasification Field and we are cognizant and aware of our responsibilities as an operator.

MR. ROGERS: All right. Mr. Watson, let's see, do you want to waive this 10-day comment period in order that the order can be signed and approved as soon as possible?

MR. WATSON: Yes, sir. All parties do.

MR. ROGERS: All right. We have no other questions. We'll review the evidence and make a recommendation to the Board, and certainly we'll attempt to have the order approved, assuming everything is in order, by July 1 so it can be effective July 1.

MR. WATSON: Thank you very much.

MR. ROBERTSON: Thank you.

MR. ROGERS: The next item is by Shell Western E&P Inc.

MR. WATSON: Mr. Rogers, I have two witnesses and I'd like to have them sworn. Mr. Delph, if you'd give your name and address for the record, please, sir.

MR. DELPH: My name is Bryan Delph. I live at 5005 Georgi Lane, in Houston, Texas.

MR. ROGERS: You, sir?

SECOND WITNESS: My name is Keith Etzel. I live at 12362 Westella Drive, Houston, Texas.

(Witnesses were sworn by Mr. Rogers)

MR. WATSON: At the outset, and thank you for your assistance, I'd ask that you receive into the record of this hearing the prefiled publication notices, Mr. Rogers.

MR. ROGERS: The publication notices are admitted.

(Whereupon, the proofs of
publication were received
in evidence)

MR. WATSON: Briefly, let me summarize the position that Shell Western is in this morning in coming to you requesting the establishment of a new field in Bibb County, Alabama. Shell Western E&P Inc. proposes to establish a new coal degasification field and we're suggesting that that field be named the Scottsville Coal Degasification Field, consisting of the--all of Section 29 and the East Half of Section 30 in Township 24 North, Range 9 East, Bibb County, Alabama. Shell proposes to investigate this area and determine from investigations conducted--conducted in this area what operations, if any, they will conduct in the area around this proposed field. We are planning to take two steps in this process, the first of which would be the establishment of a field, followed very closely with the establishment of a unit for the field area. Shell is in the position to come forward and propose this in a timely manner primarily because of the fact that there is but one mineral owner in this area that has leased all of its rights to which Shell will succeed. By having the one mineral owner gives maximum flexibility to the operator in proposing unit operations that would allow wells to be drilled in the unit area at optimum

locations for the study that we will discuss. But as you all know, prior to taking that step, we must establish a field. And in our testimony today, we will go through the basic requirements in establishing the field, and you will hear that we're in the process, even as we speak today, of gathering additional information for the--for submission to the staff for your recommendation to the Board for an order for field rules. Mr. Rogers, it will be necessary because of the fact that we have not completed a core--coring program in this area and subsequently a desorption test, to leave this record open for submission of that data. And I will point that out in--at the appropriate place in our testimony. So with that introduction, let me call my first witness, Mr. Bryan Delph, who has not appeared before you but Mr. Hamilton has an affidavit of his qualifications, and I would ask that he briefly summarize his educational background and work experience.

MR. DELPH: I received my bachelors of science in geology from Indiana State University in 1980 and received a masters of science in geology from Southern Illinois University in 1982. I've been continuously employed by Shell Western Exploration Department since that time, and my past experience includes both

regional exploration and operations work in the Texas Gulf Coast, the Mississippi Salt Basin, and the Black Warrior Basin areas. I'm currently assigned to the unconventional resources group as an exploration project leader for the Austin Chalk, Niobrara, and all coalbed methane projects. I'm also assigned as the co-team leader for the Cahaba Basin evaluation team, which includes the proposed field area. And I'm coordinating all geological, petrophysical, and reservoir studies of that area.

MR. WATSON: And Mr. Delph, you've prepared exhibits in support of our request for the establishment of Special Field Rules?

MR. DELPH: Yes, I have.

MR. WATSON: I tender him as an expert geological witness, Mr. Rogers.

MR. ROGERS: He is so recognized.

BRYAN DELPH

Appearing as a witness on behalf of Petitioner, Shell Western E&P Inc., testified as follows:

DIRECT EXAMINATION

Questions by Mr. Watson:

Q If you would, turn in the pamphlet of exhibits, Mr. Delph,

to Exhibit 1. Tell us what this exhibit is and what's shown on the exhibit, please, sir.

A Exhibit No. 1 is an area map showing the Cahaba Basin and the location of the proposed field outline. The proposed field outline is located in Bibb County, Township 24 North, Range 9 East, and as mentioned previously, contains all of Section 29 and the eastern half of Section 30. Within the proposed field outlines is the Meridian-Gulf States Paper 29-5 well which TD'd in 1990 at a total depth of 5,916 feet. The proposed field outline is approximately 7 miles southwest of the town of West Blocton and 8 miles northwest of the town of Centreville. It is also--it should also be noted that the proposed field outline is approximately 10 miles southwest of the Gurnee Coal Degasification Field, which is presently being operated and developed by McKenzie Methane. Some key geologic features on the map that I'd like to note are the Helena thrust fault, which brings pre-Pennsylvanian rocks to the surface just to the southeast of the proposed field outline; the Birmingham anticline, which lies just to the northwest of the proposed

field outline; and the northern limit of Cretaceous Coastal Plain onlap deposits, which just lies to the southwest of the proposed field outline.

Q All right, sir. And Exhibit 2? Tell us what that is and what it shows.

A Exhibit 2 is a--is a large scale map showing the lease ownership of the proposed field area. Gulf States Paper owns 100 percent of the--of the minerals of the proposed field area, and that is leased 100 percent to Meridian Oil Company. Shell Western E&P has control--contractual rights to the entire acreage.

Q Exhibit 3? Tell us what the exhibit is and what's shown on there, please, sir.

A Exhibit 3 is a subsea structural contour map on the top of the Big Bone coal groups, sometimes referred to as the Wadsworth coal group. There is one subsurface point of control in the map and that is the--uh--the 29-5 well, which encountered the top of the Big Bone coal group at a subsea depth of negative 2116 feet. Also used to construct the map is seismic line 82-NAX-10, which cuts through the northeastern corner of the proposed field area. It should

be noted that the top of the Big Bone coal group dips at a constant 15 degrees from the northwest to the southeast throughout the proposed field outline. Also on this map is a location of a core hole and the status as of this morning of that core hole is that we've drilled to bedrock at 87 feet, negative 87 feet subsurface. We're setting casing and we should continue with the coring program later on this evening or early tomorrow morning.

Q And the well that has been drilled here, the Gulf States Paper 29-5 well, was that well completed as a gas well?

A Meridian attempted to frac and--perf and frac several coal intervals in the well. Due to operational problems, they did not complete the well as a gas well.

MR. WATSON: Mr. Rogers, we would recognize and note for the record the Board's outstanding order on that well that should that well be planned for any production purposes that Shell Western E&P would have to come back before this Board and establish a production unit for that well if they ever intended to produce it. All right, sir. Now we need to describe for the record, please, sir, the Pottsville Coal Interval as you would

propose to include in the Scottsville Coal Degasification Field, and turn to Exhibit 4 and I'd ask that you please describe the interval that we propose to include in the field rules.

A Exhibit 4 is a coal identification log which includes a gamma ray-lithodensity and compensated neutron log suite. The proposed Pottsville Coal Interval is defined on this log as the section between 400 feet and 5700 feet, and includes from--includes the coal groups from bottom to top. the Gould, the Nunnally, the Harkness, the Big Bone, the Coke, the Gholson, the Thompson, and the Yeshic coal groups.

Q All right, sir. And we're asking, if you--if you heard previously, we asked that stringers and--uh--any zones that may be in communication therewith also be included, and in this case we're asking for the same thing in this field, and we're stating that, in the field rules, that the zone you've just described and all zones in communication therewith and all productive extensions thereof, including any coal seam stringers that might occur within a depth of either 100 feet above or below the Pottsville Coal Interval. You are aware of that?

A Yes, sir.

Q And we are asking for that in view of the fluctuation of the coal in this--in this Cahaba Basin, is that correct?

A Yes, sir.

Q All right, sir. Let's turn then in the booklet to Exhibit No. 5 and tell us what's shown on that exhibit, please, sir.

A Exhibit No. 5 is the expected coal thickness as defined on the previous exhibit. The total net feet of coal in seams greater than or equal to 1 foot that we expect to encounter within the proposed field outline is 91 1/2 feet.

Q And how would Shell propose to develop the wells in this new field?

A We propose to develop in multiple seams starting at the bottom and--and working our way up through the coal groups.

Q All right, sir, and your Exhibit 6?

A Exhibit 6 is a general stratigraphic column of the Cahaba Coal Field and it includes all of the coal groups described in the previous two exhibits.

Q All right, sir. And Exhibit 7 is a filler that simply states that the core--coal desorption results will be forthcoming. Would you describe for the record, please, sir, what your plans are in collecting a core and desorbing

that core and reporting that information?

A We propose to continuously core in the core hole that I mentioned earlier to a depth of approximately 1500 feet, at which time we will sample all coals that we encounter in the well and place them in canisters for desorption tests. We--we think that we will have some data forthcoming by the 1st of July.

Q All right. So you would--you would start the desorption process with the shallowest coal encountered in this well that would be gas bearing, is that correct?

A Yes, sir.

Q Run that desorption test and report the results of that test on or before the 1st of July?

A Yes, sir.

Q All right, sir. In connection with this particular exhibit that will be filed, with the record being left open, you are aware of the fact that we have on file a petition with this Board to unitize this area, are you not?

A Yes.

Q And that would come up for hearing before the Board on July 11 or 12, and the information that we're submitting in these

field rules for proof of gas content or gas in the coal would be a part of that hearing, you understand that do you not?

A Yes, sir.

Q And someone would be here from Shell Western E&P to answer any questions that the Board might have on the desorption data that you submit on or before July 1, do you understand that?

A Yes.

Q Now, Mr. Delph, in the field rules that we're requesting the Board to approve for the area that you've described and for the Pottsville Coal Interval that you have typed using your log, we're requesting 40- or 80-acre spacing as is commonplace with coal degasification fields in both the Black Warrior and the Cahaba basins, are we not?

A Yes, sir.

Q With the setbacks for wells drilled in there being, as normally required, 150 feet from every exterior boundary of the drilling unit and 300 feet from every other coal degasification well and 300 feet from the exterior boundary of the field?

A Yes, sir.

Q All right, sir. And the other field rules that we propose for this field are--are based on the precedent set by this Board and on other field rules adopted with some minor modifications, being--those being the Pottsville Interval and the field area, is that correct?

A Yes, sir.

MR. WATSON: Mr. Rogers, I'd ask that you receive into evidence the Exhibits 1 through 6 testified to by Mr. Delph.

MR. ROGERS: The exhibits are admitted.

(Whereupon, the exhibits
were received in evidence)

Q Now Mr. Delph, if the staff recommends, sees fit to recommend adoption of this field to the Board, in your opinion would waste as that term is defined by the oil and gas laws of Alabama be prevented and coequal and correlative rights protected?

A Yes, sir.

MR. WATSON: Mr. Rogers, I'll tender Mr. Delph to you for any questions you may have on his testimony or on the exhibits

that he's submitted.

MR. ROGERS: The staff--the staff has no questions.

MR. WATSON: I would ask then, Mr. Rogers, that you leave the record open for submission of the desorption data, which we will submit to you in affidavit form on or before July 1, is our plan.

MR. ROGERS: The record will remain open for submission of that information.

MR. WATSON: Thank you. That's all we have.

MR. ROGERS: And let's see Mr. Watson, I assume you'd like to waive any 10-day--any type of notice provision?

MR. WATSON: Yes, sir, once you close the record.

MR. ROGERS: All right. Then that--that--any comment period will be waived.

MR. WATSON: All right, sir. Thank you very much.

MR. ROGERS: Thank you. The hearing is adjourned.

(Whereupon, the hearing was adjourned at 9:40 a.m.)

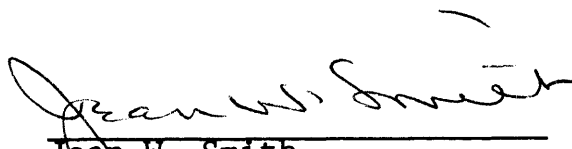
REPORTER'S CERTIFICATE

STATE OF ALABAMA ()

COUNTY OF TUSCALOOSA ()

I, Jean W. Smith, Hearings Reporter in and for the State of Alabama, do hereby certify that on Tuesday, June 25, 1991, in the Board Room of the State Oil and Gas Board Building, University of Alabama Campus, Tuscaloosa, Alabama, I reported the proceedings before a Hearing Officer in Special Session; that the foregoing 35 typewritten pages contain a true and accurate verbatim transcription of said proceedings to the best of my ability, skill, knowledge, and belief.

I further certify that I am neither of kin or counsel to the parties to said cause, nor in any manner interested in the results thereof.



Jean W. Smith
Hearings Reporter
State of Alabama