INDEX

		DIRECT/ RE-DIRECT	CROSS/ RE-CROSS	EXAM. BY BOARD/STAFF
1.	Steve Blackburn	19-21		
2.	Richard Nielsen	28-39		39-42

4-12-99

4/13/99 MR

EXHIBITS

EXHIBIT NO. (ITEM NO.)	TITLE (TESTIMONY OF)	OFFERED	RECEIVED
Board Exhibit	Order appointing M. Rogers Hearing Officer	16	16
Exhibit 1 (Item 14)	Well location plat, Well No. 36-09-05, Brookwood Coal Degasification (Steve Blackburn)	21 on Field	21
Exhibit 2 (Item 14)	Location plat, Well No. 36-09-05, Brookwood Coal Degasification (Steve Blackburn)	21 on Field	21
Exhibit 3 (Item 14)	Affidavit of notice (William T. Watson)	18	18
Exhibit 1 (Item 15)	Affidavit of testimony (Joseph F. Smith, Jr.)	21	22
Exhibit 1 (Item 16)	Affidavit of testimony (Eric Hutchens)	22	22
Exhibit 1 (Item 18)	Affidavit of testimony with attachment (Stephen T. Blackburn)	23	23
Exhibit 2 (Item 18)	Affidavit of notice (William T. Watson)	23	23
Exhibit 1 (Item 19)	Affidavit of testimony with attachment (Stephen T. Blackburn)	23	23
Exhibit 2 (Item 19)	Affidavit of notice (William T. Watson)	23	23

EXHIBITS

EXHIBIT NO. (ITEM NO.)	TITLE (TESTIMONY OF)	OFFERED	RECEIVED
Exhibit 1 (Item 20)	Affidavit of testimony (Phillip E. Byrd)	24	25
Exhibit 2 (Item 20)	Affidavit of notice (John Foster Tyra)	24	24
Exhibit 1 (Item 21 & Docket No. 3-3-9917)	Blows per foot graph and chart, State Lease 683 No. 3 Well, NW Dauphin I (Richard Nielsen)	39 sland	39
Exhibit 2 (Item 21 & Docket No. 3-3-9917)	Blows per foot graph and chart, State Lease 796 No. 2, NE Petit Bois Pass (Richard Nielsen)	39	39
Exhibit 3 (Item 21)	Affidavit of notice (Joseph W. Cade)	26	26
Exhibit 4 (Docket No. 3-3-9917)	Affidavit of notice (Joseph W. Cade)	26	26
Exhibit 5 (Item 21 & Docket No. 3-3-9917)	2/18/99 letter to Board from Deptartment of Conservation & Natural Resources (James H. Griggs)	26	26
Exhibit 6 (Item 21 & Docket No. 3-3-9917)	Proof of publication (The Mobile Press Register)	26	26
Exhibit 7 (Item 21 & Docket No. 3-3-9917)	Resume of Richard Nielsen	27	27

EXHIBITS

	EXHIBIT NO.	TITLE (TESTIMONY OF)	OFFERED	RECEIVED
١	(ITEM NO.)	(TESTIMONT OF)	OTTERED	RECEIVED
	Exhibit 1 (Item 6)	Affidavit of testimony (Thomas W. Holley)	45	45
	Exhibit 2 (Item 6)	Affidavit of notice (William T. Watson)	44	45
	Exhibit 3 (Item 6)	12/16/98 letter to Board from Department of Conservation & Natural Resources (James H. Griggs)	45	45
	Exhibit 4 (Item 6)	Copy of proof of publication (The Birmingham News)	46	46
	Exhibit 5 (Item 6)	Copy of proof of publication (The Tuscaloosa News)	46	46
	(Item 6 &	3/3/99 letter to Board (William T. Watson)		
	Docket No. 11-10-988)	(Copy of letter received following original letter in November 10,		ile)
	(Item 6 &	4/6/99 letter to Board (William T. Watson) (Copy of letter received following)	ng Hearing	
	Docket No. 11-10-988)	original letter in November 10,	-	ile)

EXHIBITS (INCORPORATED BY REFERENCE

DESCRIPTION	OFFERED	RECEIVED	
Record relating to	26	26	
Docket No. 9-30-9819			
and Docket No. 9-30-9820			

STATE OIL AND GAS BOARD OF ALABAMA

Tuscaloosa, Alabama

March 3, 1999

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 3rd day of March, 1999.

BEFORE:

	BEFORE:	
	Mr. Marvin Rogers	Attorney
	BOARD	STAFF
	Dr. Donald F. Oltz	Secretary and Supervisor
	Mr. Gary Wilson	Deputy Supervisor
	Mr. Jay Masingill	Assistant Supervisor
	Mr. David E. Bolin	Assistant Supervisor
	Mrs. Janyth Pashin	Assistant Supervisor
	Mr. Richard Hamilton	Engineer
	Mr. Frank Hinkle	Geologist
í		

APPEARANCES

3	NAI	ME	REPRESENTING
4			
5	1.	Joe Cade	The Offshore Group
6		Tuscaloosa, AL	
7			TI 001 C
8	2.	Richard Nielsen	The Offshore Group
9		Houston, TX	
10			
11	3.	John Tyra	Samson
12		Hamilton, AL	
13			
14	4.	Tom Watson	
15		Tuscaloosa, AL	
16			D1 1 W ' 36 (1
17	5.	Steve Blackburn	Black Warrior Methane
18		Birmingham, AL	

(The hearing was convened at 10:05 a.m. on Wednesday, March 3, 1999, at Tuscaloosa, Alabama)

MR. ROGERS: This hearing is in session. Dr. Oltz, have the items to be heard today been properly noticed?

DR. OLTZ: The items to be heard today have been properly noticed. An agenda of the meeting has been transmitted to the recording secretary.

AGENDA

STATE OIL AND GAS BOARD MEETING

MARCH 3 & 5, 1999

The State Oil and Gas Board of Alabama will hold its regular monthly meeting at

10:00 a.m. on Wednesday, March 3, 1999, and Friday, March 5, 1999, in the

Board Room of the State Oil and Gas Board Building, University of Alabama

Campus, Tuscaloosa, Alabama, to consider among other items of business the

22 | 1. DOCKET NO. 1-28-983

following petitions:

Continued petition by LOWRY EXPLORATION, INC., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board of Alabama to establish a new gas field in Marion County, Alabama, to be called the Northwest Aston Branch Field, or such other name as the Board deems appropriate, and to adopt Special Field Rules therefor. The proposed field limits consist of the Northwest Quarter of Section 30, Township 11 South, Range 15 West and the Northeast Quarter of Section 25, Township 11 South, Range 16 West, Marion County, Alabama. The said field limits are underlain by the Carter Sand Gas Pool, said Carter Sand Gas Pool being defined as that interval between 1,264 feet and 1,280 feet as indicated on the Spectral

Density/Dual Spaced Neutron Log for the Leonhardt 30-4 No. 1 Well, Permit No. 11276, located in Marion County, Alabama, and all zones in communication therewith and all productive extensions thereof. Petitioner is requesting well spacing of 320 contiguous acres and the establishment of production allowables.

2. DOCKET NO. 4-8-9814

Continued petition by UNIT MANAGER, CITRONELLE UNIT, Citronelle Field, Mobile County, Alabama, requesting the State Oil and Gas Board to enter an order authorizing the Unit Manager to convert the D-8-7 Well, Permit No. 994, to a fresh water injection well pursuant to Article 3.1.3(d) of the Unit Agreement for the Citronelle Unit and Rule 14 (1)(A) of the Special Field Rules. The D-8-7 Well is located 673.5 feet from the West line and 673.3 feet from the South line of the Southwest Quarter of the Northeast Quarter of Section 8, Township 1 North, Range 2 West, in the Citronelle Unit, Citronelle Field, Mobile County, Alabama.

3. DOCKET NO. 5-13-9817

Continued petition by JN EXPLORATION & PRODUCTION LIMITED PARTNERSHIP, a foreign limited partnership authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to make a determination pursuant to Section 40-20-1(22) and Section 40-20-2(2), Code of Alabama (1975), that the Southeast Frisco City Unit, Monroe County, Alabama, qualifies as a "Qualified Enhanced Recovery Project" as defined in said statutes and to make a determination of the projected annual oil or gas production that could have otherwise been produced without the benefit of the initiation of said Qualified Enhanced Recovery Project.

4. DOCKET NO. 7-13-9811

Continued petition by KWB OIL PROPERTY MANAGEMENT, INC., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board of Alabama to enter an order force pooling, without the imposition of a risk compensation penalty, all tracts and interests in gas produced from a well to be drilled as a wildcat well on a unit consisting of the West Half of Section 11, Township 17 South, Range 14 West, Lamar County, Alabama. This Petition is in accordance with Section 9-17-13, Code of Alabama, (1975), as amended and Rule 400-1-13-.01 of the State Oil and Gas Board of Alabama Administrative Code.

5. DOCKET NO. 12-16-987

Continued petition by DE SOTO OIL & GAS, INC., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order amending Rule 7 of the Special Field Rules for the Northwest Smiths Church Field, Escambia County, Alabama, in order to establish permanent allowables for wells completed in said field.

6. DOCKET NO. 12-16-9816

Continued petition by SONAT EXPLORATION COMPANY, a Delaware corporation, authorized to do and doing business in the State of Alabama, requesting the forced pooling, without the imposition of a risk compensation fee, of all tracts and interests in an 80-acre unit consisting of the South Half of the Northwest Quarter of Section 10, Township 18 South, Range 8 West, Tuscaloosa County, Alabama, in the White Oak Creek Coal Degasification Field, pursuant to Section 9-17-13, Code of Alabama (1975), and Rule 400-1-13-.01 of the State Oil and Gas Board of Alabama Administrative Code. An 80-acre unit for the Hallman 10-6-62 Well, Permit No. 10955-C, consisting of the Southeast Quarter of the Northwest Quarter and the Northeast Quarter of the Southwest Quarter of Section 10, Township 18 South, Range 8 West, Tuscaloosa County, Alabama, in the White Oak Creek Coal Degasification Field, was previously force pooled by the Board in Order No. 95-248 issued on November 3, 1995.

7. DOCKET NO. 1-28-994

Continued petition by SONAT EXPLORATION COMPANY, a Delaware corporation, authorized to do and doing business in the State of Alabama, requesting the forced pooling, without the imposition of a risk compensation fee, of all tracts and interests in an 80-acre unit consisting of the North Half of the Southwest Quarter of Section 10, Township 18 South, Range 8 West, Tuscaloosa County, Alabama, in the White Oak Creek Coal Degasification Field, pursuant to Section 9-17-13, Code of Alabama (1975), and Rule 400-1-13-.01 of the State Oil and Gas Board of Alabama Administrative Code.

8. DOCKET NO. 3-3-991

Petition by GURNEE GAS COMPANY, L.L.C., an Alabama limited liability company requesting the Board, pursuant to Sections 9-17-1, et seq. Code of Alabama, (1975) and Rule 400-1-3-.06 of the State Oil and Gas Board of Alabama Administrative Code, to enter an order extending the temporarily abandoned status for the following coal degasification wells located in Shelby and Bibb Counties, Alabama.

GURNEE COAL DEGASIFICATION FIELD – BIBB COUNTY

TOWNSHIP/RANGE	SECTION
T22S, R4W	5, 19, 20
T22S, R5W	13, 23

GURNEE COAL DEGASIFICATION FIELD - SHELBY COUNTY

TOWNSHIP/RANGE	SECTION	
T21S, R3W	5, 17, 20, 31	
T21S, R4W	15, 21, 24, 25, 35, 36	
T22S, R3W	6, 7	
T22S, R4W	1, 4, 10, 11, 12, 14, 15,	
,	16, 21, 22, 23, 24	

The previously established temporarily abandoned status for these wells expires on or about March 5, 1999, and Gurnee Gas Company, L.L.C. is requesting this Board to grant a six (6) month extension beginning March 5, 1999, because said wells have future utility and should not be plugged.

9. DOCKET NO. 3-3-992

Petition by JN EXPLORATION & PRODUCTION LIMITED PARTNERSHIP, a foreign limited partnership authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board (hereinafter "Board") to amend Rule 2 of the Special Field Rules for the Frisco City Field, adopted by Order 87-30, issued on February 28, 1987, as last amended by the Board in Order No. 98-44 issued on the 15th of May, 1998, to amend the name of the Frisco City Sand Oil Pool as presently defined therein to the "North Frisco City Sand Oil Pool of the Frisco City Field" and to add and name a new pool to be defined as the "South Frisco City Sand Oil Pool of the Frisco City Field," which shall be defined as that interval of the Haynesville Formation productive of hydrocarbons in the interval between 12,337 feet MD to 12,373 feet MD on the Compensated Z-Densilog. Compensated Neutron, Gamma-ray log for the Brents Lee 12-7 No. 1 Well, Permit No. 10226-B, located 1,185 feet from the North line and 1,941 feet from the East line of Section 12, Township 5 North, Range 6 East, Monroe County, Alabama. The proposed South Frisco City Sand Oil Pool is a separate and distinct pool from the North Frisco City Sand Oil Pool.

This petition is a companion to petitions bearing Docket No. 3-3-993 and 3-3-994 which seek relief related to such petition.

10. DOCKET NO. 3-3-993

Petition by JN EXPLORATION & PRODUCTION LIMITED PARTNERSHIP, a foreign limited partnership authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board (hereinafter "Board") to enter an order pursuant to Section 9-17-80, et seq. of the Code of Alabama (1975), as amended, approving and establishing a partial fieldwide unit for the South Frisco City Sand Oil Pool of the Frisco City Field, hereinafter more particularly defined and referred to herein as the "Unitized Area," consisting of the following described tracts in Monroe County, Alabama to-wit: The North Half of Section 12, the North Half of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of Section 12; the Northeast Quarter of the Northwest Quarter of the Northwest Quarter of the Southeast Quarter of Section 12; the North Half of the Northwest Quarter of the Northeast Quarter of the Southeast Quarter of Section 12, Township 5 North, Range 6 East, Monroe County, Alabama, and requiring the operating of said Unit Area as a partial fieldwide unit for pressure maintenance, enhanced recovery, development and production of oil, gas, gaseous substances, condensate, distillate and all associated and constituent liquid or liquefiable substances within or produced from the unitized interval in order to prevent waste, to maximize the recovery of the unitized substances, to avoid the drilling of unnecessary wells, and to protect the coequal and correlative rights of interested partied.

The "Unitized Formation" is to be designated as the South Frisco City Sand Oil Pool in the Frisco City Field and shall be construed to mean those strata of the Haynesville Formation productive of hydrocarbons in the interval between 12,337 feet MD to 12,373 feet MD on the Compensated Z-Densilog, Compensated Neutron, Gamma-ray log for the Brents Lee 12-7 No. 1 Well, Permit No. 10226-B, located 1,185 feet from the North line and 1,941 feet from the East line of Section 12, Township 5 North, Range 6 East, Monroe County, Alabama, including those strata which can be correlated therewith. Said pool and proposed unitized area constitutes a separate and distinct oil producing pool in said field, separate and distinct from all other pools in said field.

Petitioner further seeks entry of an order unitizing, pooling and integrating the Unit Area as underlain by the above-described Unitized Formation, into a partial fieldwide unit so as to require all owners or claimants of royalty, overriding royalty, mineral, leasehold and all other leasehold interest within said partial fieldwide unit to unitize, pool, and integrate their interests and develop their lands

or interests within said Unit Area as a partial fieldwide unit. Said petition further seeks to have JN Exploration and Production Limited Partnership designated as Unit Operator of the Unit Area in accordance with the laws of the State of Alabama and seeks an order from the Board approving the "Unit Agreement" and "Unit Operating Agreement.

This petition is a companion to petitions bearing Docket No. 3-3-992 and 3-3-994 which seek relief related to such petition.

11. DOCKET NO. 3-3-994

Petition by JN EXPLORATION & PRODUCTION LIMITED PARTNERSHIP, a foreign limited partnership authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board "(hereinafter "Board") to enter an order amending Rule 1 of the Special Field Rules for the Frisco City Field, adopted by the Board in Order No. 87-30, issued on February 28, 1987, and last amended by Order No. 98-44, issued on the 15th day of May, 1998, so as to add thereto lands described as:

The North Half of the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of Section 12; the Northeast Quarter of the Northwest Quarter of the Southeast Quarter of Section 12; the North Half of the Northwest Quarter of the Northwest Quarter of the Northeast Quarter of Section 12, Township 5 North, Range 6 East, Monroe County, Alabama.

Said acreage to be added to the defined limits of the Frisco City Field constitutes a productive extension of the said Frisco City Field and coincides with the proposed unit area of the proposed Frisco City Oil Unit.

This petition is a companion to petitions bearing Docket Nos. 3-3-993 and 3-3-992 which seek relief related to such petition.

12. DOCKET NO. 3-3-995

Petition by PHILLIPS PETROLEUM COMPANY, a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board of Alabama (the "Board")to enter an order amending Rule 7 relating to "Measurement of Production" and Rule 10 relating to "Use of Meters" of the Special Field Rules for the Chatom Field Unit, Washington County, Alabama, so as to provide for measurement of total combined unit produced hydrocarbons as measured directly and individual well production as allocated from the direct total unit production measurement by the use of periodic well

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tests, and that meters for testing and for measurement of production shall be orifice type or such other metering devices as may be acceptable to the Supervisor.

13. DOCKET NO. 3-3-996

Petition by PHILLIPS PETROLEUM COMPANY, a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board of Alabama (the "Board") to enter an order amending Rule 5 relating to "Measurement of Production" of the Special Field Rules for the Southeast Chatom Field, Washington County, Alabama, so as to require the operator to maintain proper metering devices and such connections thereto as are necessary to measure the total production from the Southeast Chatom Field.

14. DOCKET NO. 3-3-997

Petition by BLACK WARRIOR METHANE CORP., an Alabama corporation, requesting the State Oil and Gas Board to enter an order approving an exceptional location for the proposed 36-9-5 Well to be located in the Northeast Quarter of the Southeast Ouarter of Section 36, Township 19 South, Range 7 West, Tuscaloosa County, Alabama, in Unit IV of the Brookwood Coal Degasification Field. The proposed location of said well will be no closer than 50 feet from the East line and approximately 2,172 feet from the South line of said Section 36 and, as such, is an exception to Rule 18A of the Special Field Rules for the Brookwood Coal Degasification Field. Said Rule states, in part, that all wells shall be located at least 150 feet from every exterior boundary of a Unit Area and the proposed location of the above-described well is only 50 feet from the East line of Unit IV.

15. DOCKET NO. 3-3-998

Petition by FOUR STAR OIL & GAS COMPANY, a subsidiary of Texaco Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order extending the temporarily abandoned status for six (6) months for the following described well in Mobile County, Alabama, in the Hatter's Pond Unit, in accordance with Rule 400-1-3-.06 and Rule 400-1-5-.04(d) of the State Oil and Gas Board of Alabama Administrative Code:

PERMIT NO.	WELL NAME	LOCATION
2735-B-GI-93-1	Hatter's Pond Unit 34-10 #1 Sidetrack	S34, T1S, R1W

The previous temporarily abandoned status for this well expires on March 5, 1999, and Petitioner requests the Board to grant a six (6) month extension beginning March 5, 1999, because said well has future utility and should not be plugged.

16. DOCKET NO. 3-3-999

Petition by PENNSYLVANIA CASTLE ENERGY CORPORATION, a foreign corporation, authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order extending the temporary abandonment status for six (6) months for the following described well in the Deerlick Creek Coal Degasification Field, Tuscaloosa County, Alabama, in accordance with Rule 400-1-3-.06(2) of the State Oil and Gas Board of Alabama Administrative Code:

PERMIT NO	WELL NAME	LOCATION
4166-C	Gulf States Paper Corp. 25-14-18	Section 25, Township 20 South, Range 9 West

The previous temporary abandonment status for this well expires on March 5, 1999, and Pennsylvania Castle Energy Corporation requests that the Board grant a six (6) month extension beginning March 5, 1999, because this well has future utility in Pennsylvania Castle Energy Corporation's coalbed methane operations in Alabama and should not be plugged.

17. DOCKET NO. 3-3-9910

Petition by LEGACY RESOURCES COMPANY, LIMITED PARTNERSHIP, an Indiana limited partnership, authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order pursuant to Sections 9-17-1 through 9-17-32 and 9-17-80 through 9-17-88, Code of Alabama (1975) approving and establishing a partial fieldwide Unit located on portions of Mobile Bay Area Tracts 64, 77A and 78 to be known as the "Saxon Bay Unit," consisting of the hereinafter described "Unit Area" in the Saxon Bay Field, Baldwin County, Alabama, and requiring the operation of said Unit Area as a partial fieldwide Unit for pressure maintenance, enhanced recovery, development and production of oil, gas, gaseous substances, condensate, distillate and all associated and constituent liquid or liquefiable substances within or produced from the Unitized Formation in order to prevent waste, to maximize recovery of the unitized substances, to avoid the drilling of unnecessary wells and to protect the coequal and correlative rights of interested parties and amending the Special Field Rules for the said Field so as to make the Special Field Rules conform to the requirements for a partial fieldwide Unit.

Petitioner is requesting that the Oil and Gas Board require the operation of said Unit as a partial fieldwide Unit for the development and production of hydrocarbons within or produced from the Unitized Formation underlying the Unit Area in order to prevent waste, to maximize the recovery of unitized substances, to avoid the drilling of unnecessary wells, and to protect coequal and correlative rights.

The "Unitized Formation" is to be designated as the North Meyer Sand Gas Pool, of Miocene Age, defined as that interval of the Meyer Sand productive of hydrocarbons in the interval between 1,450 feet measured depth to 1,570 feet measured depth, as indicated on the Induction Log run in the State Lease 615 No. 2 Well, Permit No.11417-OS-72, located in Mobile Bay Area Tract 78, including those strata which can be correlated therewith or such other enlarged interval as may be ordered by the State Oil and Gas Board of Alabama.

The proposed "Unit Area" located on portions of Mobile Bay Area Tracts 64, 77A and 78 described as follows:

Commencing at a point of beginning 2,200.00 feet North and 44.22 feet West from the northeast corner of State Tract 78, Mobile Bay Area, said point having coordinates of X=359,955.78 and Y=107,200.00, (being the true point of beginning and the northeast corner of the proposed production unit); Thence South for a distance of 7,000.00 feet; Thence West for a distance of 12,255.78 feet; Thence South for a distance of 3,700.00 feet; Thence West for a distance of 2,700.00 feet; Thence North for a distance of 2,414.00 feet; Thence North 73 degrees 00 minutes 00 seconds West for a distance of 5,123.89 feet; Thence North for a distance of 4,587.91 feet; Thence East for a distance of 4,900.00 feet; Thence North for a distance of 2,200.00 feet; Thence East for a distance of 14,955.78 feet, back to the true point of beginning comprising 3,233.05 acres, more or less.

The bearings and coordinates are based on the Transverse Mercator Projection-Alabama West Zone.

Petitioner is also requesting that the order approve the Unit Agreement and the Unit Operating Agreement for the proposed partial fieldwide Unit and the amended Special Field Rules providing for unitized operations in conformity with the provisions of said Agreements, and include a finding that the Unit Agreement has been signed or in writing ratified or approved by the owners of more than seventy-five percent (75%) in interest as costs are shared under the terms of the requested

order, and by more than seventy-five percent (75%) in interest of the royalty and overriding royalty owners in the Unit Area, and that the Unit Operating Agreement has been signed or in writing ratified or approved by the owners of more than seventy-five percent (75%) in interest as costs are to be shared under the terms of the requested order.

Petitioner is also requesting that the order unitize, pool and integrate the Unitized Formation underlying the Unit Area into a partial fieldwide Unit and require all owners or claimants of royalty, overriding royalty, mineral, leasehold and all other leasehold or other interests within said partial fieldwide Unit to unitize, pool and integrate their interests and develop their lands or interests within said Unit Area as a partial fieldwide Unit. Petitioner further requests that Legacy Resources Company, Limited Partnership, be designated as Unit Operator in accordance with the laws of the State of Alabama.

This Petition is filed as a companion to petition bearing Docket No. 3-3-9916 requesting an order to add lands to the Saxon Bay Field.

18. DOCKET NO. 3-3-9911

Petition by BLACK WARRIOR METHANE CORPORATION, an Alabama corporation, requesting the State Oil and Gas Board of Alabama to enter an order amending Rule 2 of the Special Field Rules for the Brookwood Coal Degasification Field to add the following described parcels to the field limits of said field:

The Southwest Quarter of the Southeast Quarter of Section 18, Township 19 South, Range 7 West; Tuscaloosa County, Alabama.

This petition is filed as a companion to petition bearing Docket No. 3-3-9912 requesting that Rule 2 of the Special Field Rules for the Oak Grove Coal Degasification Field be amended to delete the above-described parcel from the field limits of said field.

19. DOCKET NO. 3-3-9912

Petition by BLACK WARRIOR METHANE CORPORATION, an Alabama corporation, requesting the State Oil and Gas Board of Alabama to enter an order amending Rule 2 of the Special Field Rules for the Oak Grove Coal Degasification Field to delete the following described parcel from the field limits of said field:

 The Southwest Quarter of the Southeast Quarter of Section 18, Township 19 South, Range 7 West; Tuscaloosa County, Alabama.

This petition is filed as a companion to petition bearing Docket No. 3-3-9911 requesting that Rule 2 of the Special Field Rules for the Brookwood Coal Degasification Field be amended to add the above-described parcel to the field limits of said field.

20. DOCKET NO. 3-3-9913

Petition by SAMSON RESOURCES COMPANY, a foreign corporation, authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board of Alabama to enter an order approving an amendment to Rule 3(b) for the Special Field Rules for the Yellow Creek Gas Field, Lamar County, Alabama, by eliminating the requirement that all wells be located at least 2,000 feet from any other drilling or completed gas well producing from the same gas pool. This request was previously approved by Emergency Order E-99-8 issued on February 8, 1999.

21. DOCKET NO. 3-3-9914

Petition by THE OFFSHORE GROUP, INC., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order approving a modified well casing program for the 683 No. 3 Well, Permit No. 11528-OS-81, (the "Well") which has been drilled in the Northwest Dauphin Island Field, Mobile County, Alabama. By Board Order No. 98-127, the Board approved a well casing program for the Well with drive casing to a minimum of 200 feet below the mud line and minimum of 1,100 feet of surface casing. The Petitioner is seeking approval of drive casing to a depth of 141 feet below the mud line for the Well due to interference having been encountered by the Petitioner at that depth during the installation of drive casing for the Well.

22. DOCKET NO. 3-6-9637

Continued MOTION BY THE STATE OIL AND GAS BOARD OF ALABAMA to repeal and rescind all rules and regulations of statewide application and to promulgate new rules and regulations of statewide application, provided, however, that Special Field Rules shall not be repealed and rescinded. The rules and regulations of the State Oil and Gas Board are set forth in Rule 400-1-1-.01 et seq. of the State Oil and Gas Board of Alabama Administrative Code. Under this Motion, the State Oil and Gas Board proposes to make substantial changes to regulations governing coalbed methane gas operations, offshore operations, and various other regulations.

23. DOCKET NO. 3-3-9915

MOTION BY THE STATE OIL AND GAS BOARD OF ALABAMA amending the Rules and Regulations Governing the Permitting, Drilling and Production of Coalbed Methane Gas set forth in Rule 400-4-1-.01, et seq. the State Oil and Gas Board of Alabama Administrative Code so as to supplement the current regulations of the State Oil and Gas Board of Alabama governing the protection of drinking water sources during the hydraulic fracturing of coalbed methane gas wells. Section 9-17-1, et seq. of the Code of Alabama (1975) grants the State Oil and Gas Board of Alabama the jurisdiction and authority to regulate oil and gas operations.

DOCKET NO. 3-3-9916

Petition by LEGACY RESOURCES COMPANY, LIMITED PARTNERSHIP, an Indiana limited partnership, requesting the State Oil and Gas Board of Alabama to enter an order amending Rule 1 of the Special Field Rules for the Saxon Bay Field, Baldwin County, Alabama, to add the following described parcels to the field limits of said field:

Commencing at a point of beginning being the NE corner of State Tract 77A, Mobile Bay Area, said point having coordinates of X=345,000.00 and Y=105,000.00, being the true point of beginning at the NE corner of Tract 4 of the proposed Saxon Bay Unit: Thence South for a distance of 6,086.00 feet; Thence North 73 degrees 00 minutes 00 seconds West for a distance of 5,123.89 feet; thence North for a distance of 4,587.91 feet; Thence East for a distance of 4,900.00 feet back to the true point of beginning comprising 600.35 acres, Baldwin County, Alabama.

AND

Commencing at a point of beginning 4,800.00 feet South and 2,700.00 feet East from the NW corner of State Tract 78, Mobile Bay Area, said point having coordinates of X=347,700.00 and Y=100,200.00, (being the true point of beginning and the NE corner of Tract 5 of the proposed Saxon Bay Field): Thence South for a distance of 3,700.00 feet; Thence West for a distance of 2,700.00 feet; Thence East for a distance of 2,700.00 feet, back to the true point of beginning comprising 229.34 acres, Baldwin County, Alabama.

The bearings and coordinates are based on the Transverse Mercator Projection - Alabama West Zone.

This petition is filed as a companion to petition bearing Docket No. 3-3-9910 requesting an order approving and establishing a partial fieldwide Unit to be known as the "Saxon Bay Unit."

DOCKET NO. 3-3-9917

Petition by The Offshore Group, Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order approving a modified well casing program for the State Lease 796 No. 2 Well, Permit No. 11527-OS-80 (the "Well") which has been drilled in the Northeast Petit Bois Pass Unit, Mobile County, Alabama. By Board Order No. 98-128, the Board approved a well casing program for the Well with drive casing to a minimum of 200 feet below the mud line and a minimum of 1100 feet of surface casing. The Petitioner is seeking approval of drive casing to a depth of 134 feet below the mud line for the Well due to interference having been encountered by the Petitioner at that depth during the installation of drive casing for the Well.

Members of the public are invited to attend this meeting and to present to the Board their position concerning these matters. If special accommodations are needed to facilitate attendance or participation in the meeting, please call 205/349-2852, ext. 211.

The public is advised that the Board may promulgate orders concerning a petition which may differ from that requested by the petitioner concerning the lands described in the notice. Pursuant to this hearing, Section 9-17-1 et seq. of the *Code of Alabama* (1975) and the rules and regulations promulgated thereunder, the Board will enter such order or orders as in its judgment may be necessary based upon the evidence presented.

The State Oil and Gas Board was originally established by Act No. 1 of the Legislature of Alabama in the Regular Session of 1945. The applicable law pertaining to the establishment of the Board now appears in Section 9-17-1 et seq. of the *Code of Alabama* (1975), as last amended. The applicable rules pertaining to the conduct of hearings by the Board are found in Rule 400-1-12-.01 et seq. of the State Oil and Gas Board of Alabama Administrative Code.

'The next meeting of the Board will be held at 10:00 a.m. on Wednesday, April 7, 1999, and Friday, April 9, 1999, in the Board Room of the State Oil and Gas Board Building, Tuscaloosa, Alabama. The notices for the April meeting should be filed on or before Monday, March 15, 1999. Petitions, exhibits, affidavits, and proposed orders must be filed on or before Wednesday, March 24 1999. Requests to continue an item or to oppose an item listed on the docket should be received by the Board at least two (2) days prior to the hearing.

Donald F. Oltz Secretary to the Board

MR. ROGERS: I have an order of the State Oil and Gas Board appointing me as Hearing Officer to conduct this hearing on behalf of the Board. The order will be made a part of the record at this time.

(Whereupon, the order was

received into evidence)

MR. ROGERS: The procedure for the meeting is as follows: The Hearing Officer and the staff will hear the uncontested items on the docket today and certain other items. The State Oil and Gas Board will hear the recommendations of the Hearing Officer, contested items, and certain other items beginning at 10:00 a.m. on Friday, March 5, 1999, at the Board's offices in Tuscaloosa, Alabama. I will recommend that the following items be continued: Item 1, Docket No. 1-28-983, petition by Lowry Exploration, Inc.; Item 2, Docket No. 4-8-9814, petition by Unit Manager, Citronelle Unit; Item 3, Docket No. 5-13-9817, petition by JN Exploration & Production Limited Partnership; Item 5, Docket No. 12-16-987, petition by DeSoto Oil and Gas, Inc.; and Item 22, Docket No. 3-6-9637, a motion by the State Oil and Gas Board. Item 8 is a

1	petition by Gurnee Gas Company, L.L.C., Docket No. 3-3-991. I will recommend that that
2	petition be continued with the stipulation that the temporarily abandoned status for the wells be
3	continued until the next regularly scheduled meeting of the Board. Item 4, Docket No.
4	7-13-9811, is a petition by KWB Oil Property Management, Inc. I will recommend that that
5	petition be dismissed without prejudice. The following items are set for hearing by the Oil and
6	Gas Board at the hearing on Friday: Item 9, Docket No. 3-3-992, petition by JN Exploration &
7	Production Limited Partnership; Item 10, Docket No. 3-3-993, petition by JN; Item 11, Docket
8	No. 3-3-994, petition by JN; Item 12, Docket No. 3-3-995, petition by Phillips Petroleum
9	Company; Item 13, Docket No. 3-3-996, petition by Phillips Petroleum; Item 17, Docket No.
10	3-3-9910, petition by Legacy Resources Company, Limited Partnership; Item 23, Docket No.
11	3-3-9915, a motion by the Oil and Gas Board to amend the regulations governing the permitting
12	drilling and production of coalbed methane gas set forth in Rule 400-4-101 et seq. so as to
13	supplement the current regulations governing the protection of drinking water resources during
14	the hydraulic fracturing of coalbed methane gas wells. Docket No. 3-3-9916 is a petition by
15	Legacy Resources Company, Limited Partnership. That is also set for Friday. The first item to
16	be heard today is Item 14, Docket No. 3-3-997A, petition by Black Warrior Methane
17	Corporation.
18	MR. WATSON: Mr. Rogers, I have one witness and would like to have him sworn in,
19	please, sir.
20	MR. ROGERS: Will you state your name and address?

MR. BLACKBURN: Steve Blackburn, Birmingham, Alabama.

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1	(Witness was sworn by Mr. Rogers)
2	MR. WATSON: Mr. Rogers, I have prefiled an affidavit of notice in this matter and
3	would like to have it admitted into the record of this hearing.
4	MR. ROGERS: The affidavit is admitted.
5	(Whereupon, the affidavit was
6	received into evidence)
7	MR. WATSON: Mr. Blackburn, you have appeared before this Board and have on file
8	an affidavit of your qualifications. Is that correct?
9	MR. BLACKBURN: That is correct.
10	MR. WATSON: You are familiar with our petition here today where we are requesting
11	the Board to grant an exception to Rule 18(a) of the Special Field Rules for the Brookwood Coal
12	Degasification Field?
13	MR. BLACKBURN: I am.
14	MR. WATSON: You have prepared two exhibits in support of that request?
15	MR. BLACKBURN: Yes, I did.
16	MR. WATSON: I tender him as an expert witness for giving testimony, Mr. Rogers.
17	MR. ROGERS: He is so recognized.
18	STEVE BLACKBURN
19	Appearing as a witness on behalf of Petitioner, Black Warrior Methane Corporation,
20	testified as follows:

DIRECT EXAMINATION

2	Questions by Mr. Watson:	
3	Q.	If you would, look at your Exhibit No. 1, Mr. Blackburn. Tell Mr. Rogers and the staff
4		what is shown on that exhibit, please, sir.
5	A.	Exhibit No. 1 is the location plat for the application to drill Well 36-9-5. It shows it
6		being 50 feet from the East line of the section and also 50 feet from the unit line and
7		2,165 feet from the South line of Section 36.
8	Q.	This is Unit IV of the Brookwood Coal Degasification Field. Is that correct?
9	A.	That's correct.
10	Q.	This well that you have just described, the 36-9-5 well which is located in the Northeast
11		Quarter of the Southeast Quarter of Section 36, Township 19 South, Range 7 West,
12		Tuscaloosa County, Alabama, at the locations that you have stated, is a gob well. Is that
13		correct?
14	A.	That is correct.
15	Q.	Rule 18(a) of the Special Field Rules of the Brookwood Field require that wells be at
16		least 150 feet from every exterior boundary of the unit area. Let's turn to your Exhibit
17		No. 2. Tell Mr. Rogers and the staff what's shown there, please, sir.
18	A.	Okay. Exhibit No. 2 shows the Well 36-9-5 to be 271 feet from the start panel of that

A. Okay. Exhibit No. 2 shows the Well 36-9-5 to be 271 feet from the start panel of that long wall. The long wall has been mined by Jim Walter Resources. The gob well is directly associated with--gob well production is directly associated with active underground coal mining. Typically the optimum place to put the first gob well is right

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at 200 feet from the start line. If you put it closer than that the local strata does not start breaking up enough to release gas above the coal seams to go into the gob well. If you get too much further than 200 feet away from that start line the mine will get gased out because there is not a gob well in place to take the gas off. Two hundred feet from the start line would put it on the east side of that unit line. This section line--about 221 feet from the start line would be even closer to the section line than the unit line. We felt that we could get by with moving the well an additional 71 feet--or additional enough to get at least 50 feet from that unit line. Basically what we are trying to do is get as far from that unit line as we could and still provide what the mine would have to have to relieve the gas coming in from the collapsed strata resulting from the long-wall mining.

- Q. So this gob well then is being strategically located to improve underground mining conditions by relieving the mine of part of the methane gas liberated from the coal.

 Correct?
- A. That's correct. The coal mine could not operate without some kind of gob well. Now whether that gob well has to be--the gas from that gob well has to be captured and sold or not is what we are here today for. If the Board will grant this exception we will be able to capture this gas and put it in the pipeline and sell it. If it doesn't grant the exception the mine would more than likely be forced to drill a vent hole there and just vent the gas.
- Q. The Special Field Rules for the Brookwood Field recognize the fact that we do have an underground mining situation and we do locate wells to aid and assist in that underground mining. Is that correct?

		Item 15
1	A.	That is correct.
2	Q.	All right, sir.
3		MR. WATSON: Mr. Rogers, I would ask that you receive into the record of this hearing
4	Exhib	its 1 and 2 to the testimony of Mr. Blackburn.
5		MR. ROGERS: The exhibits are admitted.
6		(Whereupon, the exhibits were
7		received into evidence)
8	Q.	Mr. Blackburn, would the granting of this petition prevent "waste" and protect the
9		coequal and correlative rights of the people in Unit IV?
10	A.	It will.
11		MR. WATSON: I tender Mr. Blackburn to you for any questions you have.
12		MR. ROGERS: The staff has no questions. We will review the evidence and make a
13	recommendation to the Board.	
14		MR. WATSON: Thank you.
15		MR. ROGERS: The next item is Item 15, Docket No. 3-3-998, petition by Four Star Oil
16	and G	as Company.
17		MR. WATSON: Mr. Rogers, I have prefiled an affidavit of testimony by Joseph F.
18	Smith	in support of Four Star Oil and Gas' petition to extend the temporary abandonment status
19	of a C	class II UIC permitted well being the Hatter's Pond Unit 34-10 #1 Sidetrack. I would ask
20	that ye	ou admit Mr. Smith's affidavit of testimony into the record of this hearing and make your
21	recom	mendation to the Board based on the testimony contained in that affidavit.

Item 14

Item 15	
Item 16	
Items 18	& 19

MR. ROGERS: The affidavit is admitted.

(Whereupon, the affidavit was

received into evidence)

MR. ROGERS: The staff has no questions. We will review the evidence and make a recommendation to the Board. The next item is Item 16, Docket No. 3-3-999, petition by Pennsylvania Castle Energy Corporation.

MR. WATSON: In this case I have prefiled an affidavit of testimony of Eric Hutchens, Project Manager for PA Castle in the Deerlick Creek Coal Degasification Field. This affidavit of testimony supports PA Castle's petition for extending the TA status of the Gulf States Paper Corporation 25-14-18 well. I would ask that you make Mr. Hutchens' affidavit of testimony a part of the record of this hearing and make your recommendation to the Board based on the testimony contained in that affidavit.

MR. ROGERS: The affidavit of Mr. Hutchens is admitted.

(Whereupon, the affidavit was

received into evidence)

MR. ROGERS: The staff has no questions. We will review the evidence and make a recommendation to the Board. The next item is Item 18, Docket No. 3-3-9911A, petition by Black Warrior Methane Corporation.

MR. WATSON: If you will consolidate docket item numbers 18 and 19, I will present both of those at one time and you can make your recommendation on those, Mr. Rogers.

MR. ROGERS: All right. Those items are consolidated for hearing purposes.

MR. WATSON: I have prefiled affidavits of notice in both of those cases and would ask that you admit those affidavits of notice to record.

MR. ROGERS: The affidavits of notice are admitted.

(Whereupon, the affidavits were received into evidence)

MR. WATSON: I have prefiled affidavits of testimony of Stephen Blackburn who has just appeared here today. His qualifications have been accepted as an expert on previous occasions. These two petitions request amendments to the Special Field Rules, one for the Oak Grove Field and the other for the Brookwood Field. Let me first address the Oak Grove Field which is Docket No. 3-3-9912. We propose in that application to delete a 40-acre parcel from the Oak Grove Coal Degasification Field, that being the Southwest Quarter of the Southeast Quarter of Section 18, Township 19 South, Range 7 West, Tuscaloosa County, Alabama, and to include that same 40-acre parcel in the Brookwood Coal Degasification Field. That's the subject of Docket No. 3-3-9911 to amend Rule 2 of the Brookwood Special Field Rules to add that Southwest Quarter of the Southeast Quarter of Section 18. I would ask that you admit those affidavits of testimony of Mr. Blackburn to the record and make your recommendation to the Board based on the testimony contained in those affidavits.

MR. ROGERS: The affidavits are admitted.

(Whereupon, the affidavits and attachments were received into evidence)

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MR. ROGERS: The staff has no questions. We will make a recommendation to the Board based on the evidence submitted. The next item is Item 20, Docket No. 3-3-9913, petition by Samson Resources Corporation.

MR. TYRA: Mr. Rogers, I'm John Tyra here on behalf of Samson Resources Company. This docket requests that the Special Field Rules for the Yellow Creek Gas Field be amended by eliminating a part of Rule 3(b). Currently the spacing requirement for the Yellow Creek Field is that each well be 660 feet from exterior boundaries of the unit but there is a requirement that the wells be 2,000 feet from the nearest or from any other drilling or completed gas well producing from the same gas pool. Our request will eliminate that 2,000 foot requirement. I have previously filed an affidavit of notice which I would request be made a part of the record at this time.

MR. ROGERS: The affidavit of notice is admitted.

(Whereupon, the affidavit was

received into evidence)

MR. TYRA: I have also prefiled an affidavit of Phillip E. Byrd who is a senior geologist with Samson Resources who has testified before this Board on other occasions. I would request that that affidavit be admitted as well.

MR. ROGERS: The affidavit of Mr. Byrd is admitted.

(Whereupon, the affidavit was received into evidence)

MR. TYRA: We will present this matter on the basis of that affidavit.

MR. ROGERS: The staff has no questions. We will review the evidence and make a recommendation to the Board.

MR. TYRA: Thank you.

MR. ROGERS: The next item is Item 21, Docket No. 3-3-9914, petition by The Offshore Group, Inc.

MR. CADE: Thank you, Mr. Rogers. Joe Cade here on behalf of The Offshore Group on Docket Nos. 3-3-9914 as well as 3-3-9917. For hearing purposes I would ask that we consolidate those two items.

MR. ROGERS: That request is granted. Those two items are consolidated for hearing purposes.

MR. CADE: Thank you, Mr. Rogers. By Board Order 98-127 the Board approved the well casing design for the State Lease 683 No. 3 Well in the Northwest Dauphin Island Field with drive casing to 200 feet below the mud line and 1,100 feet of surface casing with a waiver of the requirement for any conductor casing. By Board Order 98-128 the Board approved an identical well casing design for the State Lease 796 No. 2 Well in the Northeast Petit Bois Pass Unit. Both wells have been drilled. The State Lease 683 No. 3 Well is a producer. The State Lease 796 No. 2 Well has been plugged and abandoned. During the drilling of both wells The Offshore Group encountered resistance while installing the drive casing and was unable to reach

1	the full 200 feet depth below the mud line for either well without risking permanent failure of the
2	drive casing. On each occasion The Offshore Group notified the Board's staff and was permitted
3	to leave the drive casing at the depths where the resistance was encountered and complete the
4	drilling of the well subject to coming back before this Board for final approval of the modified
5	well casing design and hence our petitions today. Before we get started I would ask that the
6	following items be offered into the record. First I have prefiled affidavits of notice in support of
7	the petitions as well as a letter from the Department of Conservation showing no opposition. I
8	have a proof of publication from the Mobile Press Register. I would also ask that the entire
9	record from Docket No. 9-30-9819 pertaining to the State Lease 683 No. 3 Well and Docket No.
10	9-30-9820 pertaining to the 796 No. 2 Well be incorporated in support of these two petitions.
11	MR. ROGERS: All of those items are admitted or incorporated.
12	(Whereupon, the affidavits, letter and proof of
13	publication were received into evidence; records
14	relating to Docket Nos. 9-30-9819 and 9-30-9820
15	were incorporated by reference)
16	MR. CADE: Thank you. At this time I would ask that you swear in my witness, Dr.
17	Richard Nielsen.
18	MR. ROGERS: Sir, would you stand and state your name and address?
19	MR. NIELSEN: Richard Nielsen.
20	MR. ROGERS: What's your address?
21	MR. NIELSEN: Houston, Texas.

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(Witness was sworn by Mr. Rogers)

MR. CADE: Mr. Rogers, I have handed up a notarized resume for Dr. Nielsen. I'm going to ask Dr. Nielsen at this time to please go through briefly and describe his educational background and work experience as it may pertain to the matters before the Board under these two docket items.

DR. NIELSEN: My most recent pertinent work experience is I am presently the lead expert witness on a very, very large insurance case in Australia concerning 20 piles that were collapsed. This is for Lloyd's Underwriters in London. These were the world's largest piles, over 2-1/2 meters weighing well over 130 tons that were collapsed during the driving operation. My principal education is in structional engineering though I received a MA in naval architecture and marine engineering from the University of Michigan. I have a Ph.D. in marine structures in Copenhagen. I have operated in the oil and gas business for almost 30 years, principally concerning pipelines—offshore pipelines including putting in pumping platforms offshore and designing all the necessary equipment for compression and pumping and the like. I have been operating as the chief engineer for The Offshore Group, designed their platform, supervised the installation of all the pipelines, and have been very involved in the drilling programs as well.

MR. CADE: Mr. Rogers, I would ask that Dr. Nielsen's resume--his sworn resume be received into the record and would also ask that the Board recognize him as an expert in the field of structural engineering.

MR. ROGERS: He is recognized as an expert.

(Whereupon, the resume was received into evidence)

MR. CADE: Thank you. 1 RICHARD NIELSEN 2 Appearing as a witness on behalf of Petitioner, The Offshore Group, Inc., testified as 3 follows: 4 DIRECT EXAMINATION 5 Questions by Mr. Cade: 6 Dr. Nielsen, if you would, please, explain how you are affiliated with The Offshore 7 Q. Group? 8 In two ways, I have a limited interest in their operations, a 2 1/2 percent interest, in the 9 A. wells as a working partner in the traditional way that is done in the offshore oil and gas 10 business. I work as their chief engineer. I also rent an office from them in their 11 particular location. 12 What role did you play with respect to the drilling of the State Lease 683 No. 3 Well and 13 Q. the State Lease 796 No. 2 Well? 14 I was heavily involved as a consultant in the planning of the wells. I was a consultant 15 when problems arose during the operations including the question of the erection of these 16 piles when the problem occurred offshore. 17 I want to ask you, if you would, to refer to the exhibits that you brought. Right now I Q. 18 want to focus on the 683 No. 3 Well and ask if you can identify when The Offshore

Group began drilling the 683 No. 3 Well.

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Q. Once you got to the 300 blows per foot threshold, what did The Offshore Group do at that 1 2 point? They called Ralph Hellmich and informed him of the problem. I didn't do that but one of 3 A. the other members of The Offshore Group did that. 4 5 Q. What was the Oil and Gas Board's decision at that point-in-time for the 683 No. 3 Well? 6 A. They accepted that the depth was sufficient and authorized us to proceed. If The Offshore Group had continued to drive the casing after meeting this 300 blows per 7 Q. foot threshold, what do you think would have happened to the drive casing? 8 Well, as you can see from the curve even if we had gone up to 600 blows per foot we 9 A. would not have gotten any penetration. The only thing that would have happened was 10 damage to the top of the drive pipe making it unable to sustain for the drilling. 11 12 Q. Did the Board's staff agree with you on that issue? 13 A. Absolutely. 14 Q. Okay. What did the Board tell The Offshore Group to do at that point? 15 A. Continue drilling. The drive casing was then drilled out and we proceeded to cement in 16 the surface casing. 17 Q. So you followed the instructions of the Board at that point. Is that correct? 18 A. Yes, we did. 19 Q. What was the final depth of the drive casing for the 683 No. 3 Well? 20 A. Well, in accordance with the plan that had been submitted to the Oil and Gas Board. 21 Q. All right. I'm referencing right now the drive casing for that well.

1	A.	Oh, the drive casing. Excuse me. Well, its penetrations are 141 feet according to Exhibit
	A.	
2		No. 1.
3	Q.	All right. Was the surface casing run according to the Board's approved design?
4	A.	Yes, it was.
5	Q.	Other than the drive casing being approximately 59 feet shy of the 200 foot depth, was
6		the well drilled and constructed according to the Board's requirements?
7	A.	Yes, it was.
8	Q.	In Board Order 98-127 the Board approved the drive casing depth proposed by The
9		Offshore Group of 200 feet below the mud line. Why did The Offshore Group propose
10		that depth?
11	A.	Well, 200 feet in itself is not a design criteria. We proposed 200 feet because we thought
12		it would take 200 feet to get sufficient resistance for the drive casing, so we have to have
13		200 foot of material on board the drilling vessel.
14	Q.	So, did the fact that the Board had considered that depth as sufficient depth on nearby
15		wells draw into the decision of proposing that to the Board for this well?
16	A.	Yes. We knew that some wells in the vicinity, I think in Mobile Bay, were approved for
17		200 feet.
18	Q.	Knowing what you know now about the resistance you encountered with the drive casing
19		for this well, what would you have proposed to the Board as a criteria for drive casing for
20		this well if you had to do it all over again?

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1	A.	Well, we would say to drive the casing until you had 300 blows per foot which would
2		show you that you had sufficient bearing on the casing followed by a calculation which
3		would show that the pull-out resistance of the casing was sufficient.
4	Q.	So, what is the ultimate goal when setting drive casing to ensure structural integrity for
5		the well?
6	A.	The principal goal is that the pull-out resistance of the pile is sufficient to resist any
7		action of shallow gas.
8	Q.	Have you reviewed Exhibit No. 1 pertaining to the blows per foot and the chart
9		associated with that and performed calculations to satisfy yourself as to the integrity of
10		the well design as it exist now for the 683 No. 3 Well?
11	A.	Yes, I did. I did that at the time that I was first informed of the refusal at 141 feet. It's
12		possible to back calculate the friction value of the soil based on the blows per foot.
13	Q.	Would you describe to the Board and staff what added strength takes place immediately
14		after the driving stops for drive casing?
15	A.	Had we stopped at 75 feet and commenced driving the next day we probably would have
16		found that we would have had refusal at 75 feet because the setup of the soil resistance
17		goes up dramatically after a few hours. That's a well know fact offshore.
18	Q.	So, would that be reflected in Exhibit No. 1 that we have handed up to the Board?
19	A.	No, this was continual driving.

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1	Q.	So, that chart refers to resistance and associated strength immediately during the time of
2		driving but it does not reflect the added strength from the soil setting up around the pipe
3		thereafter?
4	A.	No, it doesn't. That could easily be two or three times what the calculation based on this
5	į	would give us.
6	Q.	Okay. Let's talk about your calculations based on the actual chart that is in evidence
7		right now. Did you satisfy yourself that there would be sufficient strength and integrity
8		of that drive casing with this well design as it exist based on that information?
9	A.	Yes, I did. It is more than sufficient.
10	Q.	Okay. That opinion would be compounded two or three times by virtue of the setting up
11		of the soil around the drive casing?
12	A.	That's correct.
13	Q.	On the 683 No. 3 Well, approximately how much depth is there associated with this, the
14		initial limited resistance and then the final resistance that got to 300 blows per foot? In
15		other words, how much of that drive casing is being held by that resistant soil?
16	A.	Well, actually all of it because even though this shows no resistance or no blows per foot
17		in the first 25 feet, the driving is coming from the weight of the pile itself. One is able to
18		count friction in that first 25 feet as well.
19	Q.	In your opinion as an expert in the field of structural engineering with specific expertise
20		in pile strength, will the 683 No. 3 Well be structurally sound under its present

1		configuration that includes drive casing set to approximately 141 feet below the mud line
2		into this zone of higher resistance?
3	A.	Yes, absolutely.
4	Q.	During the drilling of the State Lease 683 No. 3 Well, did The Offshore Group encounter
5		any near surface hydrocarbons or other hazards?
6	A.	No, we did not.
7	Q.	Has The Offshore Group run seismic in the vicinity of this well?
8	A.	Yes, we have. There is no indication on the seismic.
9	Q.	Of any?
10	A.	Shallow gas.
11	Q.	Okay. Any other near surface hydrocarbons suspected from seismic or any other
12		information you have available to you?
13	A.	No, there is nothing suspicious. That was part of the original application for the well in
14		any case.
15	Q.	Is it your testimony today that the actual drilling of this well confirmed that there are no
16		shallow hazards at this well location?
17	A.	That's correct. It confirmed that there are no shallow hazards at the well location.
18	Q.	This proved that the Oil and Gas Board staff made a sound decision in the heat of the
19		drilling moment, if you will, on that issue?
20	A.	Oh, absolutely.

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1	Q.	In your opinion will production operations associated with this well create any new or
2		different concerns regarding the strength and safety that would not be present during the
3		drilling operations?
4	A.	None that I can see whatsoever.
5	Q.	Are you familiar with the drilling operations associated with the other five or six wells
6		drilled by The Offshore Group in this area?
7	A.	Yes.
8	Q.	Did The Offshore Group encounter any near surface hydrocarbons or other shallow
9		hazards during the drilling of those wells?
10	A.	No.
11	Q.	Now, I want to flip to the 796 No. 2 Well which you testified moments ago has been
12		plugged and abandoned but the exhibit for that will tell us what depth you met the 300
13		blows per foot resistance for the drive casing on that well. Would you go to that exhibit
14		and tell us what that depth was?
15	A.	The depth is 134 feet.
16	Q.	Looking at that exhibit, when did The Offshore Group begin drilling that well?
17	A.	On the 20 th of December, 1998.
18	Q.	At what time of the day?
19	A.	It started at 1:50 a.m.
20	Q.	Okay. Will the drilling costs on that particular well be consistent with your estimate for
21		the 683 No. 3 Well?
	II.	

1	A.	Yes.
2	Q.	Would The Offshore Group's decision on when to drill that well be driven by the same
3		factors that you just testified to with respect to the 683 No. 3 Well?
4	A.	Yes.
5	Q.	So, it's based on rig availability and cost as well?
6	A.	As an example of that, I got called out of bed at 2:00 a.m. on Christmas morning to
7		review the logs of this well. So, most definitely our schedule is being driven by the
8		drilling vessel.
9	Q.	Let's take a look at that exhibit. Tell the Board when The Offshore Group encountered
10		the resistance with the drive casing on the 796 No. 2 Well?
11	A.	The time is 6:35.
12	Q.	A.M.?
13	A.	A.M., yes.
14	Q.	Okay. What did you do when The Offshore Group or what did The Offshore Group do
15		when it encountered this resistance at that time?
16	A.	I was called and consulted and looked at the record similar to this and could see that the
17		cumulative blows per foot were equivalent to the other well. In fact, we had substantial
18		strength from approximately 90 foot down, considerable substantial strength. There was
19		no problem with this as well.
20	Q.	Did The Offshore Group immediately call the Board's staff to report this information?
21	A.	Yes, they did.
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1	Q.	Did the Board's staff again authorize The Offshore Group to complete the drilling of the
2		well under those circumstances?
3	A.	Yes, they did.
4	Q.	Did the drilling of that well encounter any near surface hydrocarbons or other hazards?
5	A.	No, it did not.
6	Q.	So, again the Board's staff's decision was proven to be a sound decision when the well
7		was drilled?
8	A.	That's correct.
9	Q.	Would there have been the same risk of drive casing failure for this well at 300 blows per
10		foot as you testified with respect to the 683 No. 3 Well?
11	A.	Would you repeat that question?
12	Q.	Was there anything different about the drive casing on this well that would have allowed
13		you to go beyond 300 blows per foot without risking failure of that casing?
14	A.	No.
15	Q.	So you ran into basically the exact same set of circumstances on the 796 No. 2 Well as
16		you did on the 683 No. 3 Well with a slight difference in the depth. Is that correct?
17	A.	That's correct.
18	Q.	Once the staff authorized The Offshore Group to complete the drilling of this well did
19		The Offshore Group, in fact, complete the drilling according to the Board's
20		requirements?
21	A.	Yes, they did.

1	Q.	Have you calculated or did at the time the resistance was encountered calculate what the
2		structural integrity of the drive casing would have been had it remained at 134 feet below
3		the mud line, assuming the well was going to be a producer?
4	A.	Yes. Based on the blows per foot at each level, it had sufficient pull-out and bearing
5		resistance.
6	Q.	Was there anything revealed on any seismic in the vicinity of this well or any other
7		information available to The Offshore Group that would have lead you to believe that you
8		could have or may very well have encountered near surface hydrocarbons or other
9		hazards at that point-in-time?
10	A.	No, there was no indication of that from the shallow water seismic we analyzed.
11	Q.	Okay, in fact, after the well was drilled it confirmed that hypothesis.
12	A.	Correct.
13	Q.	Okay. Are you aware of any opposition to these two petitions by the Department of
14		Conservation or anyone else?
15	A.	No, I am not.
16	Q.	Will the granting of these petitions prevent waste, promote the orderly development of
17		hydrocarbons in this area, and protect the coequal and correlative rights of the parties
18		who have an interest in these wells?
19	A.	Yes.

1	Q.	In your opinion will 141 feet of drive casing below the mud line in the State Lease 683
2		No. 3 Well with approximately 1,100 feet of surface casing provide for adequate
3		structural integrity and safety for that well?
4	A.	Absolutely.
5	Q.	In your opinion, assuming the 796 No. 2 well was a producer and had not been plugged
6		and abandoned, would 134 feet of drive casing below the mud line in that well with the
7		other requirements of the Board having been met provide for adequate structural integrity
8		and safety for that well?
9	A.	Yes, it would have.
10		MR. CADE: Mr. Rogers, I would offer our exhibits, one for each petition, as well as the
11	other	items I mentioned earlier. I tender Dr. Nielsen to the staff if you have any questions.
12		MR. ROGERS: All the exhibits are admitted. Dr. Bolin.
13		(Whereupon, the exhibits were
14		received into evidence)
15		RICHARD NIELSEN
16		EXAMINATION BY BOARD/STAFF
17	Quest	tions by Dr. Bolin:
18	Q.	Dr. Nielsen, it's my understanding that you did not have direct conversation with Ralph
19		Hellmich, that it was someone else with The Offshore Group?
20	A.	That's correct.

- Q. To clarify points that you had made, after the individual with The Offshore Group contacted Ralph Hellmich he contacted me on both occasions. The decision that was made and that was returned to The Offshore Group was not an authorization to proceed. It was an agreement—this is something that the staff cannot unilaterally make to override a Board order. The question was were we—was The Offshore Group required to continue driving the pipe. Knowing the fact that if you were at 300 blows per minute then there was a risk of failure but we indicated to The Offshore Group that if they were at those blows that they did not have to continue. We did not authorize them to proceed and it was not the staff's decision to proceed. Do you understand that?
- A. Yes, of course. I heard this from second parties.
- Q. Okay.

MR. CADE: I apologize. I may have used a poor choice of words on that issue and I appreciate the clarification on that.

DR. BOLIN: We didn't feel as a staff that we were in a position--that we were not on location on a Sunday mid-morning to review the records but given the facts as were presented, what was relayed to them was that we were not going to require them to continue driving but they still had to deal with the Board order.

MR. CADE: I think it was understood by The Offshore Group all along that the Board ultimately was going to have to make the decision on this and that's why we are here today.

Thank you for that clarification.

- I understand from your testimony that the Board orders for both wells require the drive pipe to be drilled into 200 feet. You were not able to do that on either well. The difference in the drive pipe depth verses the 200 foot that was approved, is it my understanding that your testimony is that there was no compromise in the safety or in the
- No, there was none. In fact, you can think of it the other way. We could have driven to 200 feet and had a weaker situation. The 200 feet would not have guaranteed necessarily a stronger situation than we ended up with. I mean, if the soil had been weaker and you got down to 200 feet you may have less pull-out resistance than what we actually have.
- Are you aware of any other offshore well in Alabama that has encountered the same
- Do you consider it anything more than just a coincidental circumstance that both wells were commenced on Sunday morning and had the problem at the same time at
- I can assure it's simply the schedule of the drilling vessel. As I just mentioned, we all got hauled out at 2:00 a.m. in the morning--Christmas morning to review the log which has some relation to when we commenced the well, pure happenstance.
- Q. Okay, thanks.

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Questions by Mr. Rogers: 1 I just have one other question along those same lines. Do you know, sir, who actually 2 Q. contacted Ralph Hellmich on behalf of The Offshore Group? I assume it was not you. 3 No. I know on at least one of the occasions it was David Vosbein who is the President of A. 4 The Offshore Group. He's the one who called me on both occasions. I know he told me. 5 I remember him telling me later that he spoke to Ralph Hellmich. I assume that he did it 6 both times but I only know of once that I can recall. 7 MR. CADE: It may have been Mike Canarellis. 8 DR. BOLIN: I can clarify that. Ralph's conversation with me on both Sunday mornings 9 was that David Vosbein had called him on both occasions. 10 What's his title? Is he the President of? Q. 11 President of The Offshore Group. 12 A. MR. ROGERS: Any other questions? The staff will review the evidence and make a 13 recommendation to the Board. 14 MR. CADE: Thank you. 15 MR. ROGERS: We have two other items set for today, Items 6 & 7, petitions by Sonat 16 Exploration Company, Docket Nos. 12-16-9816 and 1-28-994. Mr. Watson. Just as 17 background, those relate to prior petitions heard by the Board by Sonat relating to the 18 reformation of units. 19 MR. WATSON: Mr. Rogers, at the present time you have left the record open on Docket 20

No. 11-10-988. That was a petition by Sonat to reform the Hallman 10-6-62 Well. That record

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2	reforming to see if they had any opposition to this hearingto the Board taking action. We had
3	one party send in a letter that was signed by Marlin Allen Hallman. He signed the letter, the
4	bottom of whichand I'm going to introduce this into the recordsaid I/we oppose the State Oil
5	and Gas Board's approving of Sonat Exploration. He put under his name deceased. That
6	confused all of us. Actually this letter was addressed to Marlin and Ruth Hallman. Mr. Hallman
7	is not deceased as of 4:00 p.m. yesterday. Ruth Hallman is deceased. Probably to make what I
8	have in this letter a part of the record why don't you put me under oath?
9	MR. ROGERS: All right. Mr. Watson, for the record, will you state your name and
10	address?
11	MR. WATSON: Tom Watson, Tuscaloosa, Alabama.
12	(Witness was sworn by Mr. Rogers)
13	MR. ROGERS: Let's see, this relates to the prior petitions by Sonat.
14	MR. WATSON: It relates to 11-10-988.
15	MR. ROGERS: All right.
16	MR. WATSON: Yesterday at 4:00 p.m., Mr. Rogers, I called, after repeated attempts to
17	get someone to answer in the last effort, Mr. Hallman's telephone number in West Blocton. His
18	daughter, Teresa, answered the phone. She indicated that her father was not opposed to Sonat's
19	reformation, that they thought in sending this letter back in that they were supporting this. They
20	are receiving royalties from Sonat and they understand what we are doing. Her father, Mr.
21	Marlin Hallman, is a truck driver and that's the reason I was having trouble getting any response.

was left open in order for Sonat to attempt to contact those owners in the area that we were

response. She happened to be there at this house. I have a letter to you containing those facts. I have also a copy of a letter dated November 20th addressed to Mr. Masingill where I sent copies of the letters that I sent to all the owners in the unit to be reformed informing the Hallman family of our request. I asked that the members of the Hallman family send back to me indications by signing the foot of the letter if they had opposition. That's the only response we had. It was confusing and I hope the letter and my testimony clears that up. There is one additional letter that we received from Peggy B. Workman. She scratched through my letter and said I do not oppose the State Oil and Gas Board's approving. I advised Mr. Masingill on the 20th that not having had anyone return this, I assumed the staff was ready to close the record and make a recommendation to the Board on this issue but we still had this one letter outstanding. I hope that I have clarified that. On today's docket you have Docket No. 12-16-9816 which is a petition to force pool--MR. ROGERS: We need to make a ruling, of course, on those items. What about-let's take a brief recess. (Whereupon, the hearing was recessed for two minutes) MR. ROGERS: The hearing is back in session. Mr. Watson is going to proceed with the force pooling petition by Sonat. MR. WATSON: Docket No. 12-16-9816.

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MR. ROGERS: The hearing is back in session. Mr. Watson is going to proceed with the force pooling petition by Sonat.

MR. WATSON: Docket No. 12-16-9816.

MR. ROGERS: Item 6.

MR. WATSON: I have prefiled an affidavit of notice in that matter. We will make that a part of the record if you will, please. You also have a letter from Mr. Griggs with the

Department of Conservation and Natural Resources saying that the State does not object to the force pooling of a claim of approximately .25 net mineral acres or approximately .31 percent of the unit consisting of the--this is a reformed unit--consisting of the South Half of the Northwest Quarter of Section 10, Township 18 South, Range 8 West, Tuscaloosa County, in the White Oak Creek Coal Degasification Field. I'll hand up the affidavit. This is an affidavit of testimony of Thomas W. Holley who has appeared before this Board and has on file an affidavit of his qualifications as an attorney with land expertise. I ask you to make the affidavit of testimony of Mr. Holley a part of the record of this hearing.

MR. ROGERS: The affidavit of Mr. Holley is admitted.

(Whereupon, the affidavit was received into evidence)

MR. WATSON: That's all I have on that, Mr. Rogers. On the final item that is on your docket today, Docket No. 1-28-994, petition by Sonat for a force pooling of a unit, I would ask that you recommend that that be dismissed. I have a letter and a dismissal order to that effect.

MR. ROGERS: Let me go through that, Mr. Watson. On the force pooling petition by Sonat, Item 6, Docket No. 12-16-9816, we have an affidavit of Mr. Holley, an affidavit by you, Mr. Watson, an affidavit of notice, and a letter in support of the petition, at least no objection, from James Griggs of the Department of Conservation and Natural Resources. All those items are admitted.

(Whereupon, the affidavits and letter were received into evidence)

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1	MR. ROGERS: We have a request that the other Sonat item, Docket No. 1-28-994, be
2	dismissed without prejudice. We will make that recommendation to the Board. One other thing,
3	Tom, I see these publication notices here. Do these need to be admitted into the record? We
4	have copies of publication notices. Why don't we leave the record openlet's admit these.
5	These will be admitted into the record. These are publication notices in the Birmingham News
6	and the Tuscaloosa News.
7	(Whereupon, copies of the proofs of
8	publication were received into evidence)
9	MR. WATSON: That's all we have on those items.
10	MR. ROGERS: We will review the evidence and make a recommendation to the Board
11	on the force pooling. We now have additional evidence on the prior reformation petition by
12	Sonat and we will review that evidence and make a recommendation to the Board.
13	MR. WATSON: I assume the record then is closed on that one.
14	MR. ROGERS: Anything else for the hearing? The hearing is adjourned.
15	(Whereupon the hearing was adjourned at 11:00 a.m.)

REPORTER'S CERTIFICATE

COUNTY OF TUSCALOOSA

STATE OF ALABAMA

I, Rickey Estes, Hearing Reporter in and for the State of Alabama, do hereby certify that

on Wednesday, March 3, 1999, 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; that the foregoing 46 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 kin or counsel to the parties to said cause, nor in any

manner interested in the results thereof.

 Hearing Reporter State of Alabama

Cker Estes