

Shallow Water Energy Security Coalition

**Deep Water Concerns Don't Justify
Shallow Water Restrictions**

Declaration of David Hayes
Exhibit C

Shallow Water Rigs at Risk

- 57 marketed shallow water rigs
- ~ 50 rigs may be unable to continue work in next 6 weeks
- 5,000 jobs on rigs alone at risk

GULF OF MEXICO

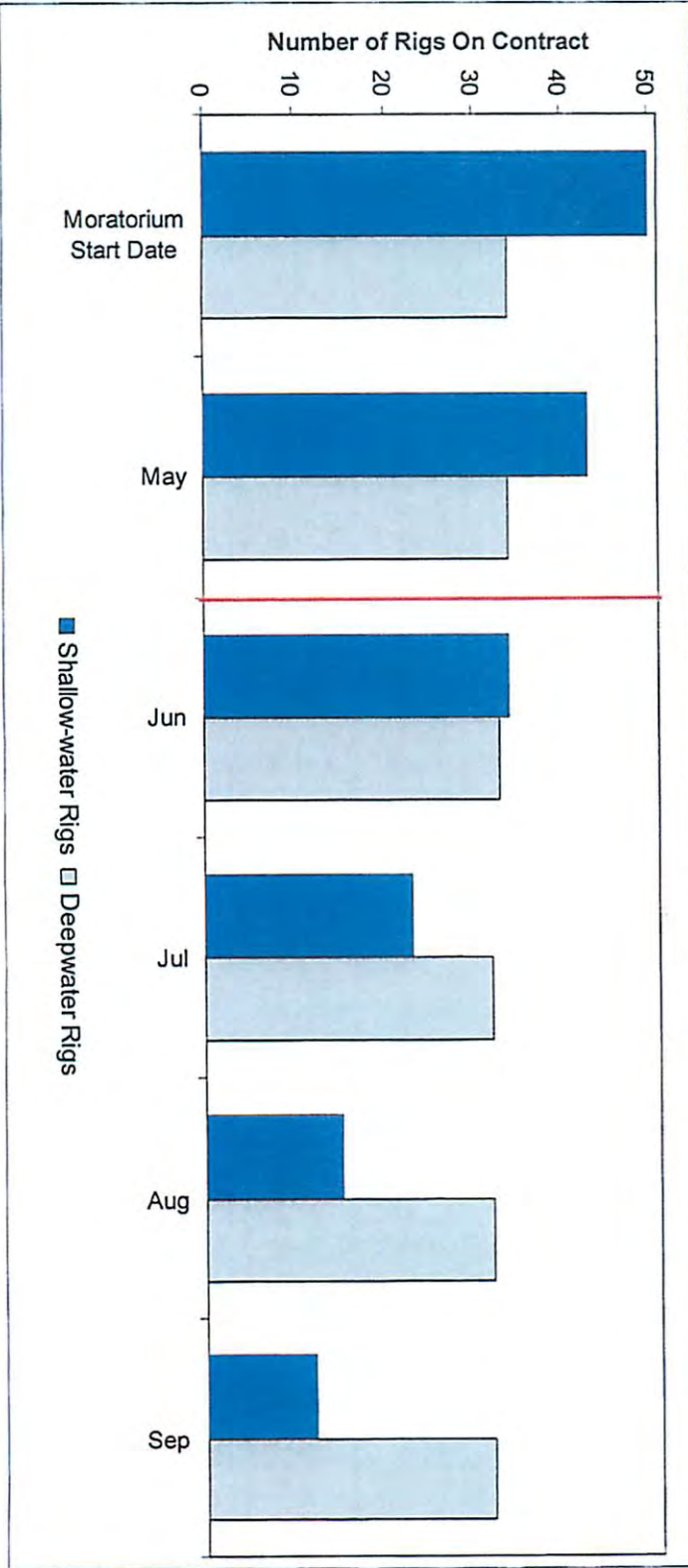


Sources: Rig contracts and location from ODS-Petrodata and Minerals Management Service, headcount per estimate of meeting participants.

Shallow Water Drilling Rigs Disproportionately Affected

Short-term shallow water contracts decline;
long-term deep water contracts largely unchanged

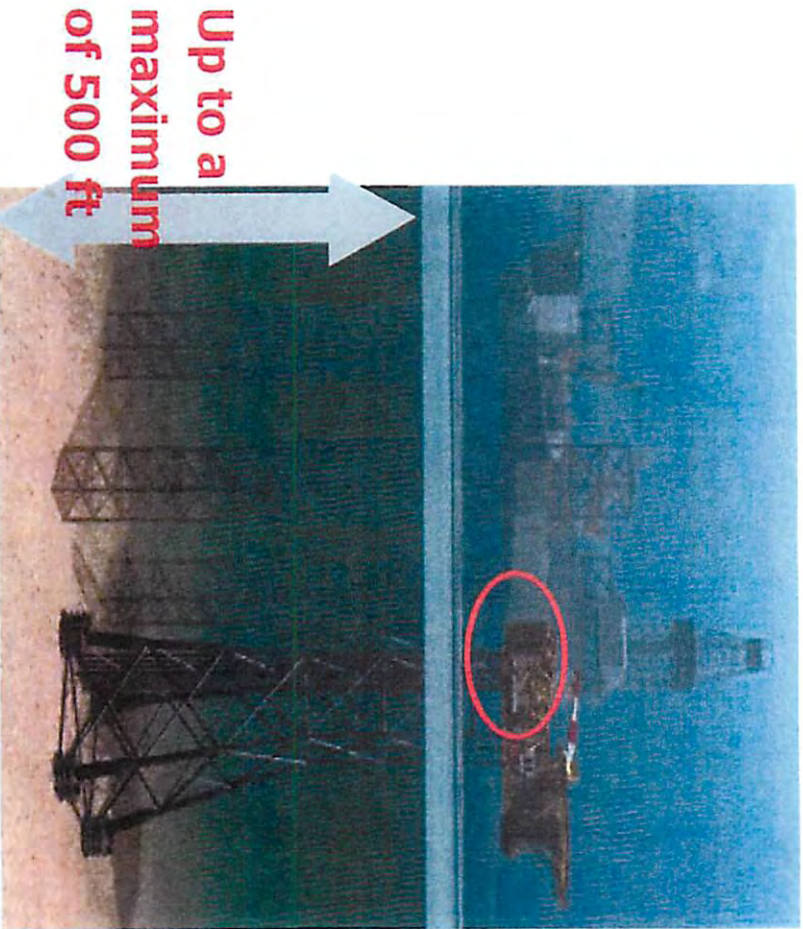
US GOM Rigs On Contract



Source: ODS-Petrodata, Rig Data, and estimates of represented companies as of May 24, 2010. Not all contracted rigs have permits for the entire term of the contract.

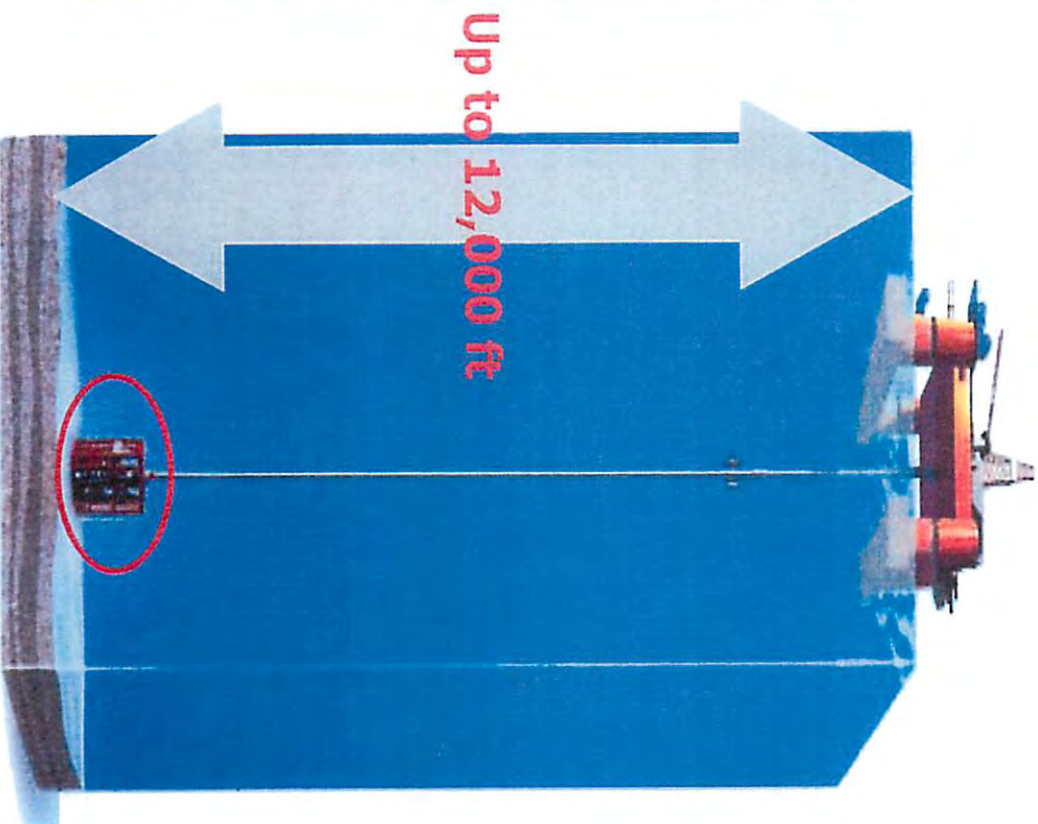
Different Water Depths, Different Risks

Shallow Water



Blow Out Preventer

Deep Water



Some Characteristics of Shallow Water Drilling

Proven, Reliable and Safe

- **Predictable and Mature Reservoirs**
 - 46,011 GOM wells drilled in less than 1,000 feet of water since 1949
 - Extensive, documented well data
- **Clean Natural Gas**
 - Shallow water drilling dominated by natural gas needed for transition to a clean energy economy
- **Smaller, Lower Risk Reservoirs**
- **Critical for Energy Security**
 - According to EIA, since 1997, ~ 22% of U.S. natural gas has been produced in the Gulf of Mexico

Checklist of Key Shallow Water Drilling Factors

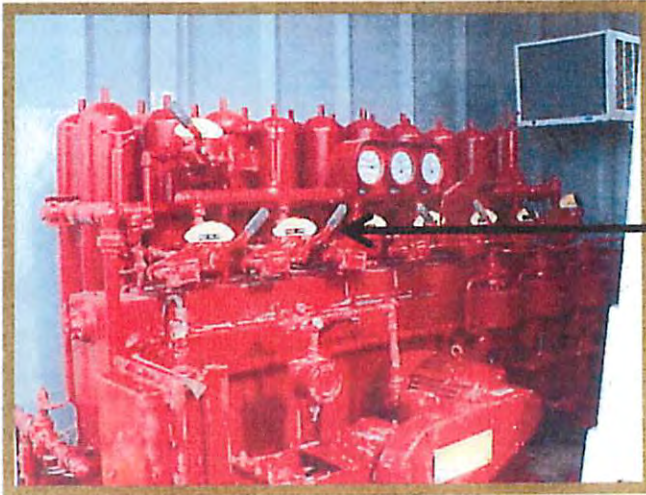
Physical and Operational Factors Make Shallow Water Drilling Safe, Reliable, and Environmentally Sound.

- ✓ Predominantly Natural Gas
- ✓ Known and Predictable Formations
- ✓ Mature Reservoirs
- ✓ Traditional and Proven Well Control Methods
- ✓ BOPs on Surface: allows easy inspection, maintenance, and repair, and places all pressure below the device
- ✓ Manual or Remote Control of BOP
- ✓ Simple Controls
- ✓ No Marine Riser
- ✓ Ambient Temperatures at BOP; unaffected by subsea currents and conditions

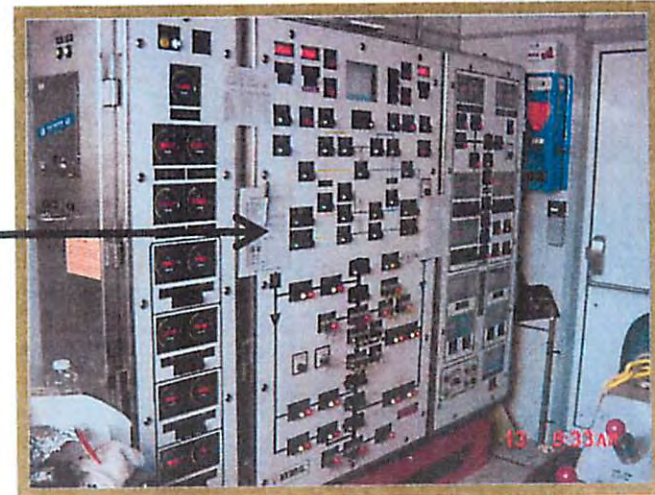
Control Systems

Shallow Water Drilling

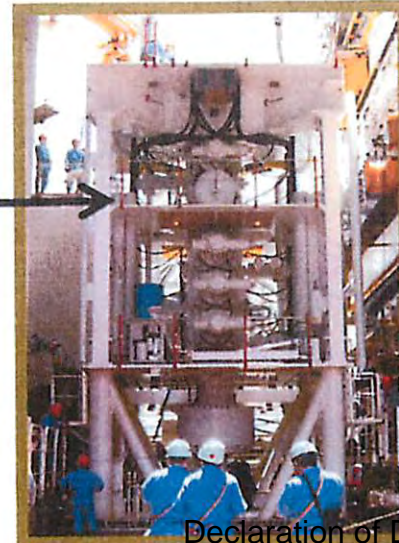
Deep Water Drilling



BOP
Controls



BOP
Stack



Declaration of David Hayes
Exhibit C

Action Requested

During the ongoing safety review process for deep water operations, it is urgent that the Department of Interior immediately resume the process of issuing new drilling permits for shallow water drilling operations.

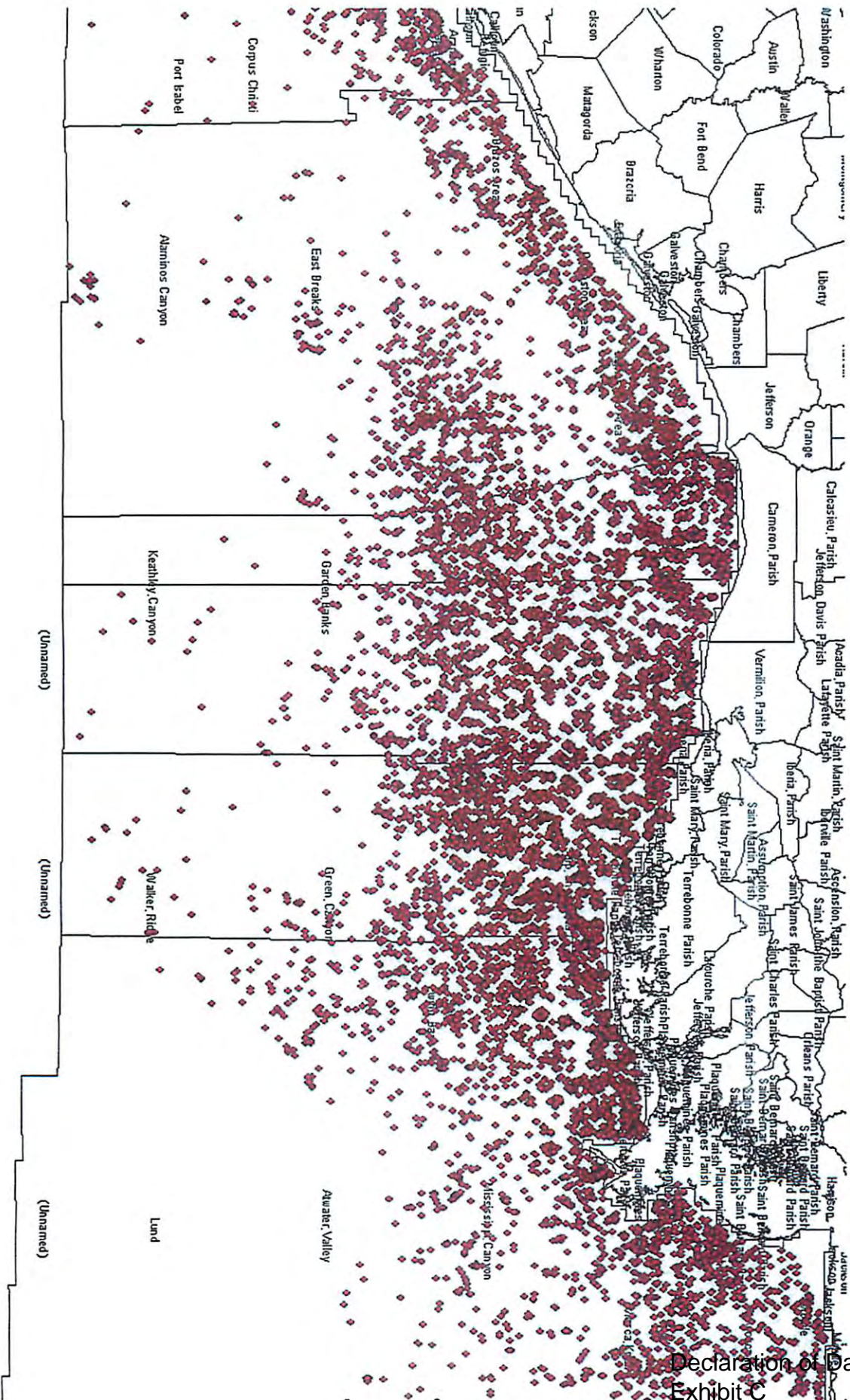
Appendix

Declaration of David Hayes
Exhibit C

Companies Represented

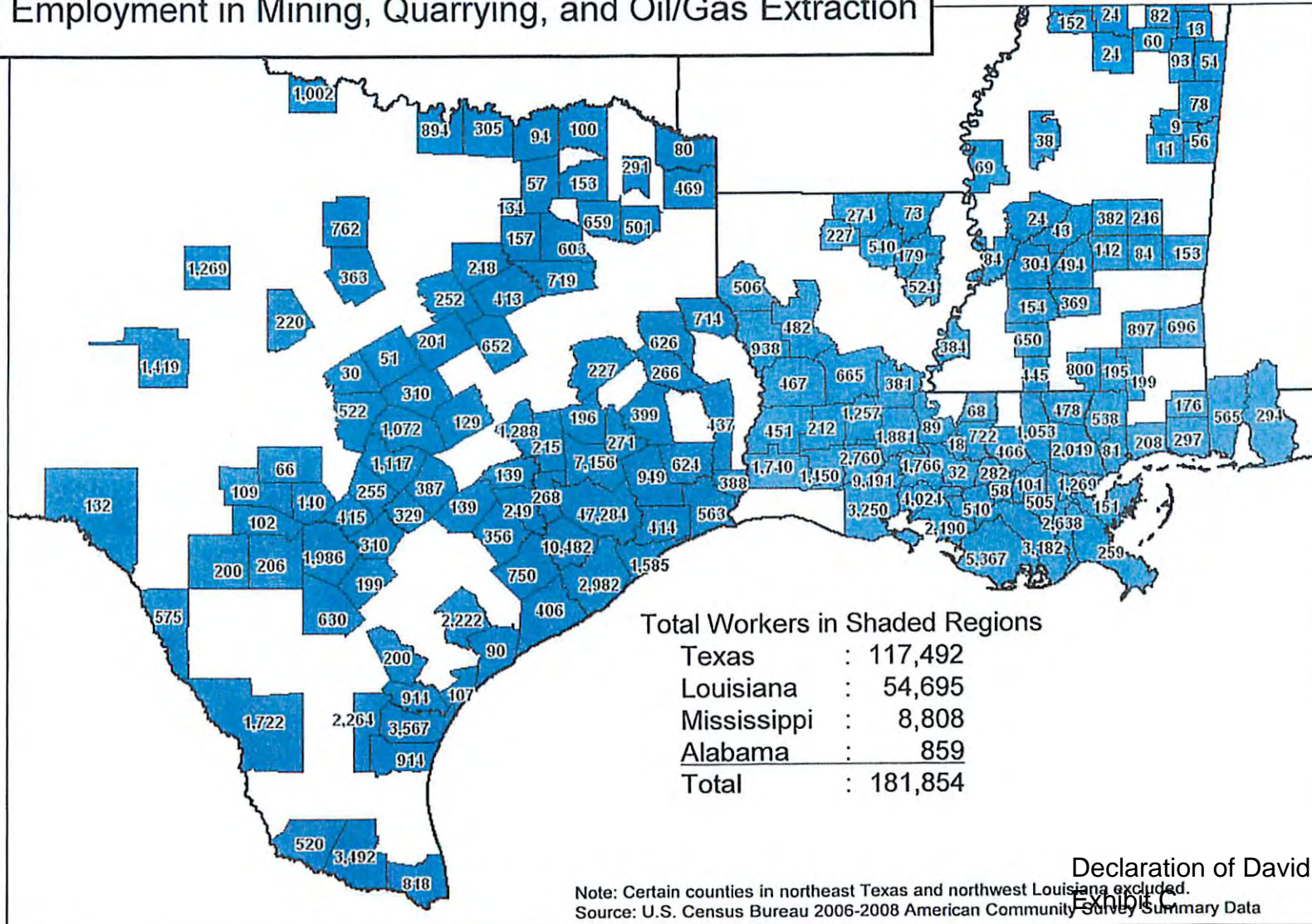
- **Hercules Offshore** is a global provider of offshore contract drilling, liftboat and inland barge drilling services. Hercules operates the largest jackup rig, inland barge and liftboat fleets in the U.S. Gulf of Mexico with 30 jackup rigs and 17 inland barge drilling rigs.
- **Seahawk Drilling** is a leading provider of contract drilling services in the shallow waters of the Gulf of Mexico with a fleet of 20 jackup rigs.
- **Rowan Companies, Inc.** is a major provider of international and domestic contract drilling services. Rowan owns and operates 23 jackup rigs as well as a manufacturing division that produces equipment for the drilling, mining and timber industries. Rowan owns and operates a rig construction shipyard.
- **Ensco** provides offshore drilling services to the petroleum industry around the world, operating 39 jackup rigs and additional drilling vessels.
- **Delta Towing** is a leading provider of tugs, crewboats and barges to the inland and shallow water drilling operators.

Wells Drilled in Gulf of Mexico



Thousands of Jobs at Risk Along the Gulf Coast

Employment in Mining, Quarrying, and Oil/Gas Extraction



Note: Certain counties in northeast Texas and northwest Louisiana excluded.
 Source: U.S. Census Bureau 2006-2008 American Community Survey Summary Data

Declaration of David Hayes

Significant Economic Impact

Economic Impact of GOM Shallow Water Drilling Moratorium – United States

	1 Month		3 Months		6 Months		9 Months		1 Year	
	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)
Direct	479	\$362.4	1,438	\$1,087.2	2,876	\$2,174.4	4,314	\$3,261.6	5,752	\$4,348.8
Indirect	1,514	\$356.9	4,543	\$1,070.6	9,085	\$2,141.2	13,628	\$3,211.9	18,171	\$4,282.5
Induced	2,181	\$328.2	6,543	\$984.6	13,085	\$1,969.2	19,628	\$2,953.8	26,171	\$3,938.4
Total	4,174	\$1,047.5	12,523	\$3,142.4	25,047	\$6,284.8	37,570	\$9,427.2	50,094	\$12,569.7

Economic Impact of GOM Shallow Water Drilling Moratorium – Louisiana

	1 Month		3 Months		6 Months		9 Months		1 Year	
	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)
Direct	227	\$184.9	681	\$554.7	1,362	\$1,109.4	2,043	\$1,664.2	2,723	\$2,218.9
Indirect	308	\$58.4	923	\$175.3	1,845	\$350.5	2,768	\$525.8	3,691	\$701.1
Induced	263	\$28.9	788	\$86.7	1,575	\$173.4	2,363	\$260.1	3,151	\$346.8
Total	797	\$272.2	2,391	\$816.7	4,782	\$1,633.4	7,174	\$2,450.1	9,565	\$3,266.8

Notes:

- Estimates by The CapAnalysis Group, LLC, an economic consulting affiliate of Howrey LLP.
- Direct revenue impact based on estimate by Shallow Water Energy Security Coalition.
- Job loss and other impacts based on IMPLAN Input/Output model (2007 database). Revenue impacts shown in 2010 dollars.
- Indirect impact represents the cumulative effect of the directly impacted sector's on its suppliers and their impact on their suppliers, etc.
- Induced impact represents the economic activity induced by the expenditures resulting from the changed income and profit produced by the direct and indirect impacts.
- Total impact equals direct plus indirect plus induced impacts.

Declaration of David Hayes
Exhibit C

Significant Economic Impact (cont)

Economic Impact of GOM Shallow Water Drilling Moratorium – Texas

	1 Month		3 Months		6 Months		9 Months		1 Year	
	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)
Direct	43	\$45.7	129	\$137.1	258	\$274.1	387	\$411.2	516	\$548.3
Indirect	77	\$16.6	231	\$49.9	461	\$99.9	692	\$149.8	922	\$199.8
Induced	77	\$10.3	231	\$30.9	463	\$61.8	694	\$92.7	926	\$123.6
Total	197	\$72.6	591	\$217.9	1,182	\$435.8	1,773	\$653.7	2,364	\$871.6

Economic Impact of GOM Shallow Water Drilling Moratorium – Mississippi

	1 Month		3 Months		6 Months		9 Months		1 Year	
	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)	Jobs Lost	Revenue Lost (\$Millions)
Direct	124	\$104.3	372	\$312.8	743	\$625.6	1,115	\$938.4	1,487	\$1,251.2
Indirect	153	\$27.9	459	\$83.6	918	\$167.2	1,376	\$250.8	1,835	\$334.4
Induced	127	\$13.5	380	\$40.4	760	\$80.7	1,140	\$121.1	1,519	\$161.5
Total	403	\$145.6	1,210	\$436.8	2,421	\$873.5	3,631	\$1,310.3	4,841	\$1,747.0

Notes:

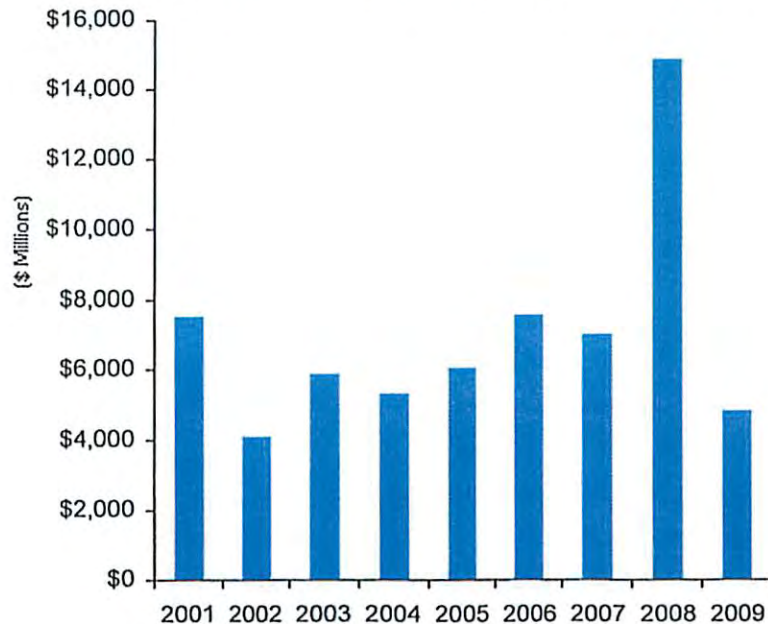
- Estimates by The CapAnalysis Group, LLC, an economic consulting affiliate of Howrey LLP.
- Direct revenue impact based on estimate by Shallow Water Energy Security Coalition.
- Job loss and other impacts based on IMPLAN Input/Output model (2007 database). Revenue impacts shown in 2010 dollars.
- Indirect impact represents the cumulative effect of the directly impacted sector's on its suppliers and their impact on their suppliers, etc.
- Induced impact represents the economic activity induced by the expenditures resulting from the changed income and profit produced by the direct and indirect impacts.
- Total impact equals direct plus indirect plus induced impacts.

Declaration of David Hayes
Exhibit C

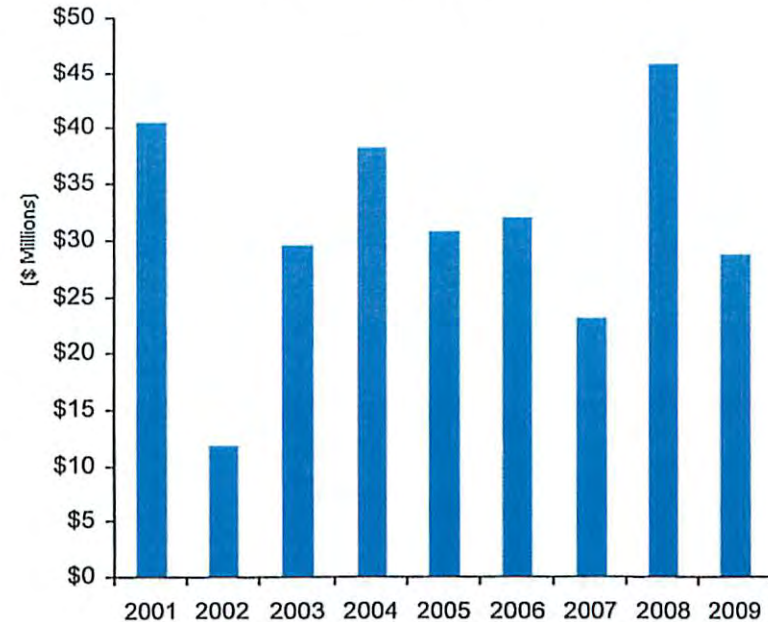
Potential Royalty/Tax Loss

- \$4.9 billion in Federal Revenue was generated from oil and gas leases in the Louisiana Outer Continental Shelf in 2009
- \$29 million in State Revenue was generated from oil and gas leases in the Louisiana Outer Continental Shelf in 2009

LA OCS Historical Federal Revenue



LA OCS State Federal Revenue

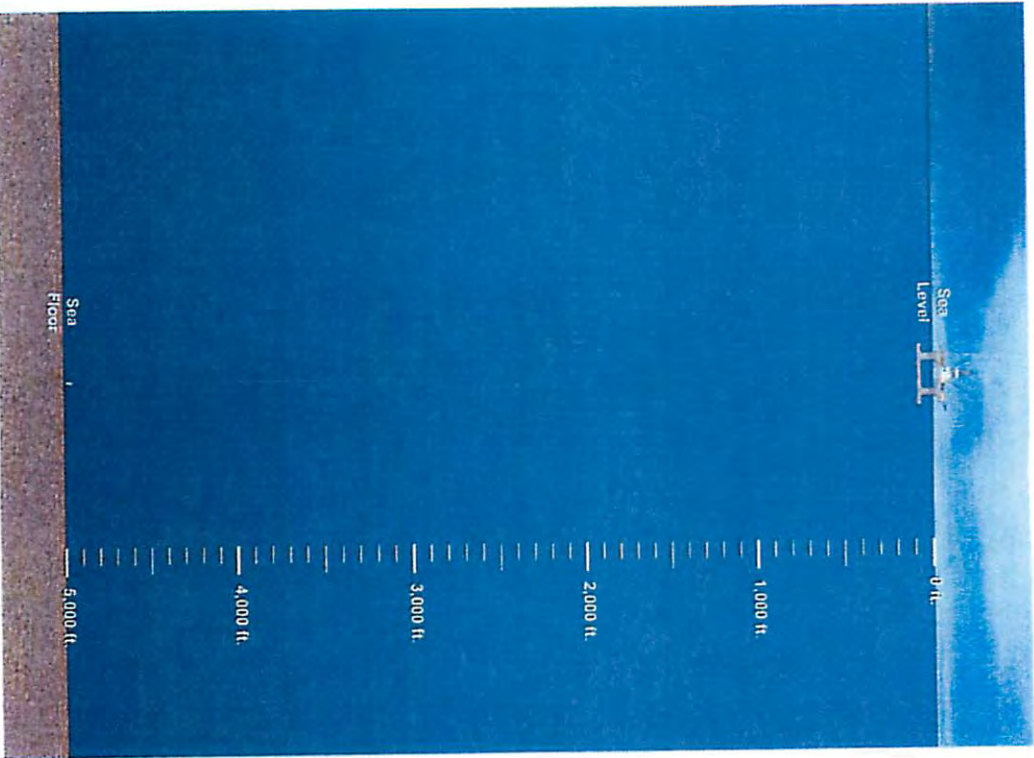


Source: Louisiana Department of Natural Resources

Declaration of David Hayes
Exhibit C

Deep Water Rigs – Subsea BOPs

Subsea BOP deployment shown to scale



Subsea BOP

