

9513

Exhibit No. _____
Worldwide Court
Reporters, Inc.

MAY 11, 2010.

Key Messages

Expected Case:

In the current state a wellhead pressure decrease from 3800 psi to 2270 psi (pressure seafloor) results in a flow rate increase ranging from 15% to 30%

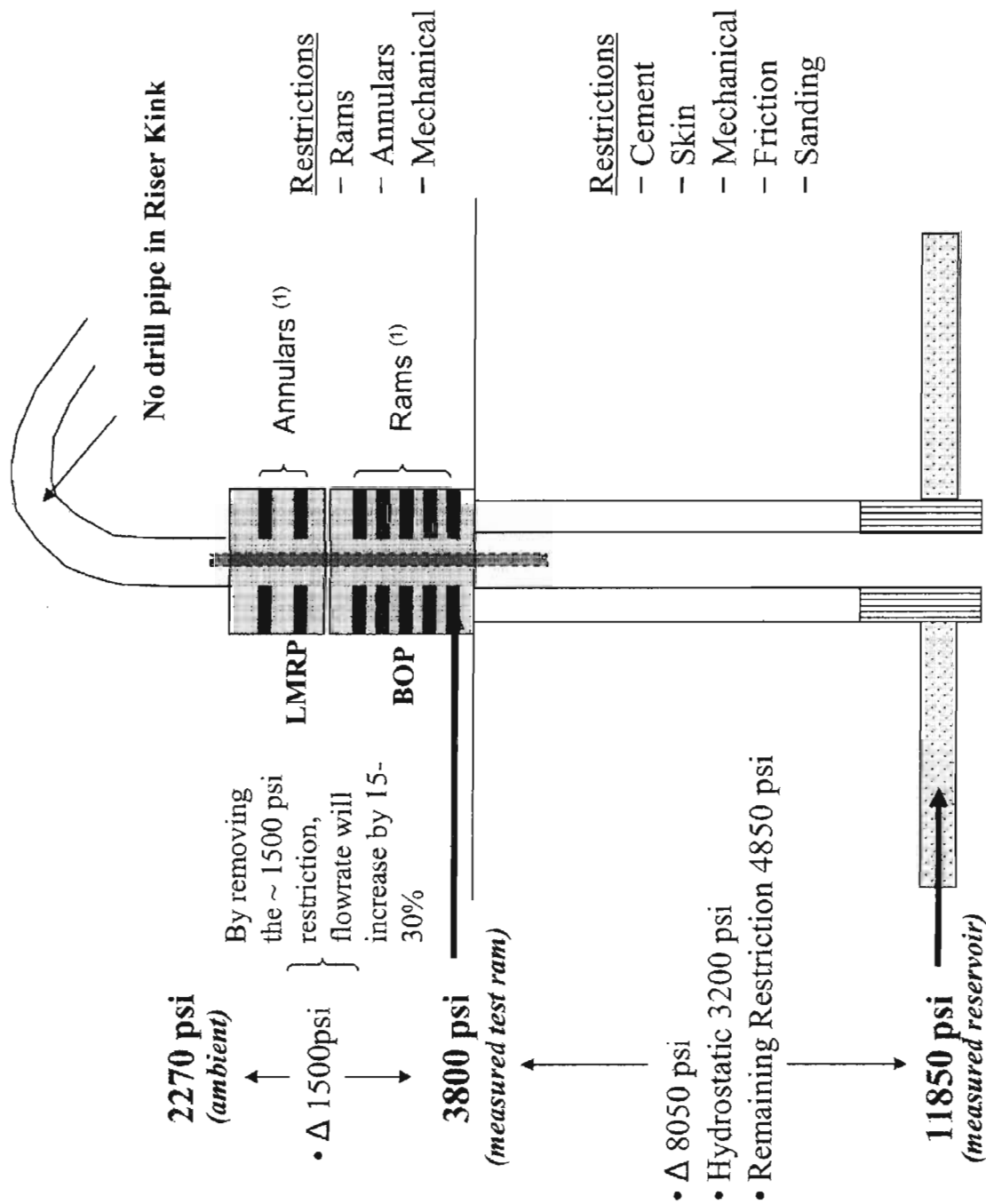
Alternate Case:

If fluid flow is only through the drill pipe – and then the drill pipe is unintentionally removed and flows into the sea (2270 psi):

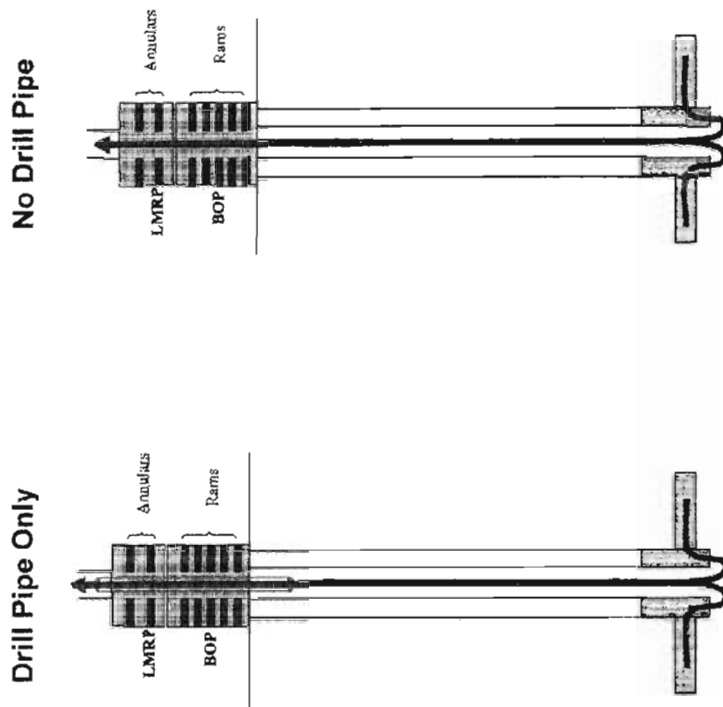
- For flow up the annulus the rate doubles
- For flow inside production casing the rate triples

Note:

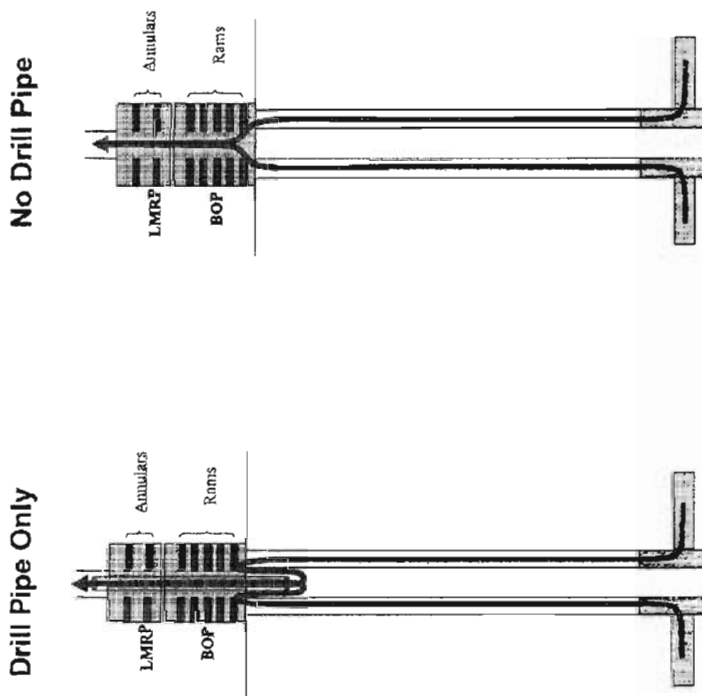
If BOP and wellhead are removed and if we have incorrectly modeled the restrictions – the rate could be as high as ~ 100,000 barrels per day up the casing or 55,000 barrels per day up the annulus (low probability worst cases)



Shoetrack Failure (Casing Flow)



Hanger Failure (Annular Flow)



Maximum Reservoir Exposed, High K

Scenario:

- 88' reservoir exposed
- 300 mD
- 3800 psi at wellhead

	Hanger Failure (Annular Flow)		Shoetrack Failure (Casing Flow)	
	Drill Pipe Only	No Drill Pipe	Drill Pipe Only	No Drill Pipe
Skin 0	24	45	31	82
Skin 10	23	40	28	67
Skin 25	21	34	26	50

Scenario:

- 88' reservoir exposed
- 300 mD
- 2270 psi at wellhead

	Hanger Failure (Annular Flow)		Shoetrack Failure (Casing Flow)	
	Drill Pipe only	No Drill Pipe	Drill Pipe Only	No Drill Pipe
Skin 0	27	52	35	96
Skin 10	26	47	32	79
Skin 25	24	41	29	61

Flow increases by an average of 15% when wellhead pressure drops from 3800 psi to 2270 psi

Partial Reservoir Exposed, Low K

Scenario:

- 44' reservoir exposed
- 170 mD
- 3800 psi at wellhead

	Hanger Failure (Annular Flow)		Shoetrack Failure (Casing Flow)	
	Drill Pipe Only	No Drill Pipe	Drill Pipe Only	No Drill Pipe
Skin 0	21	35	26	53
Skin 10	18	25	20	31
Skin 25	14	17	15	18

Scenario:

- 44' reservoir exposed
- 170 mD
- 2270 psi at wellhead

	Hanger Failure (Annular Flow)		Shoetrack Failure (Casing Flow)	
	Drill Pipe only	No Drill Pipe	Drill Pipe Only	No Drill Pipe
Skin 0	25	42	30	65
Skin 10	21	31	24	39
Skin 25	17	21	18	23

Flow increases by an average of 22% when wellhead pressure drops from 3800 psi to 2270 psi

Ratios

Scenario:

- 88' reservoir
- 300 mD
- 3800 to 2270 psi

	Hanger Failure (Annular Flow)		Shoetrack Failure (Casing Flow)	
	Drill Pipe Only	No Drill Pipe	Drill Pipe Only	No Drill Pipe
Skin 0	1.13	1.16	1.13	1.16
Skin 10	1.14	1.19	1.14	1.18
Skin 25	1.15	1.20	1.15	1.23

Scenario:

- 44' reservoir
- 170 mD
- 3800 to 2270 psi

	Hanger Failure (Annular Flow)		Shoetrack Failure (Casing Flow)	
	Drill Pipe only	No Drill Pipe	Drill Pipe Only	No Drill Pipe
Skin 0	1.15	1.19	1.15	1.22
Skin 10	1.18	1.25	1.18	1.26
Skin 25	1.22	1.28	1.21	1.31

Flow increases by 13-31% when wellhead pressure drops from 3800 psi to 2270 psi

The Case for 5000 bopd at 3800 psi

Hanger Failure – Annular Flow – No Drill Pipe

Permeability 170 mD

Reservoir Thickness 10'

Skin 25

If we drop Pressure to 2270 psi, the flow rate will increase to 6500 bopd (30%)

Hanger Failure– Annular Flow – Drill Pipe Only

Permeability 170 mD

Reservoir Thickness 12'

Skin 25

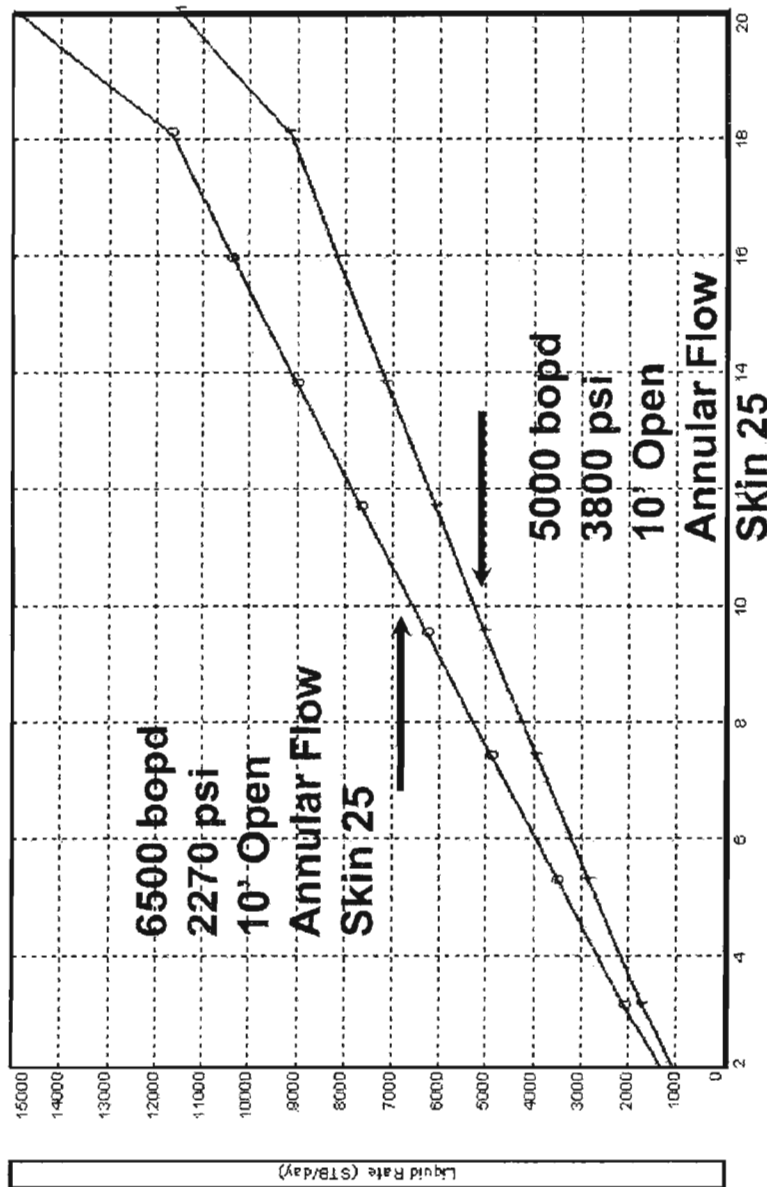
If we drop Pressure to 2270 psi, the flow rate will increase to 6300 bopd (26%)

Appendix

Sensitivity Plot (C:\Petex Files\Technical Service\Gold Deepwater\Macondo\May 04 2010\Original\A1.Out)

Finish Main Annotate Scales Labels Replot Output Colours Options Variables Help

Sensitivity plot - Skin = 25 (10/05/2010 - 18:38:23)



First Node Pressure
(psig)
Curve 0 = 2270 Curve 1 = 3800

Reservoir Thickness (feet)

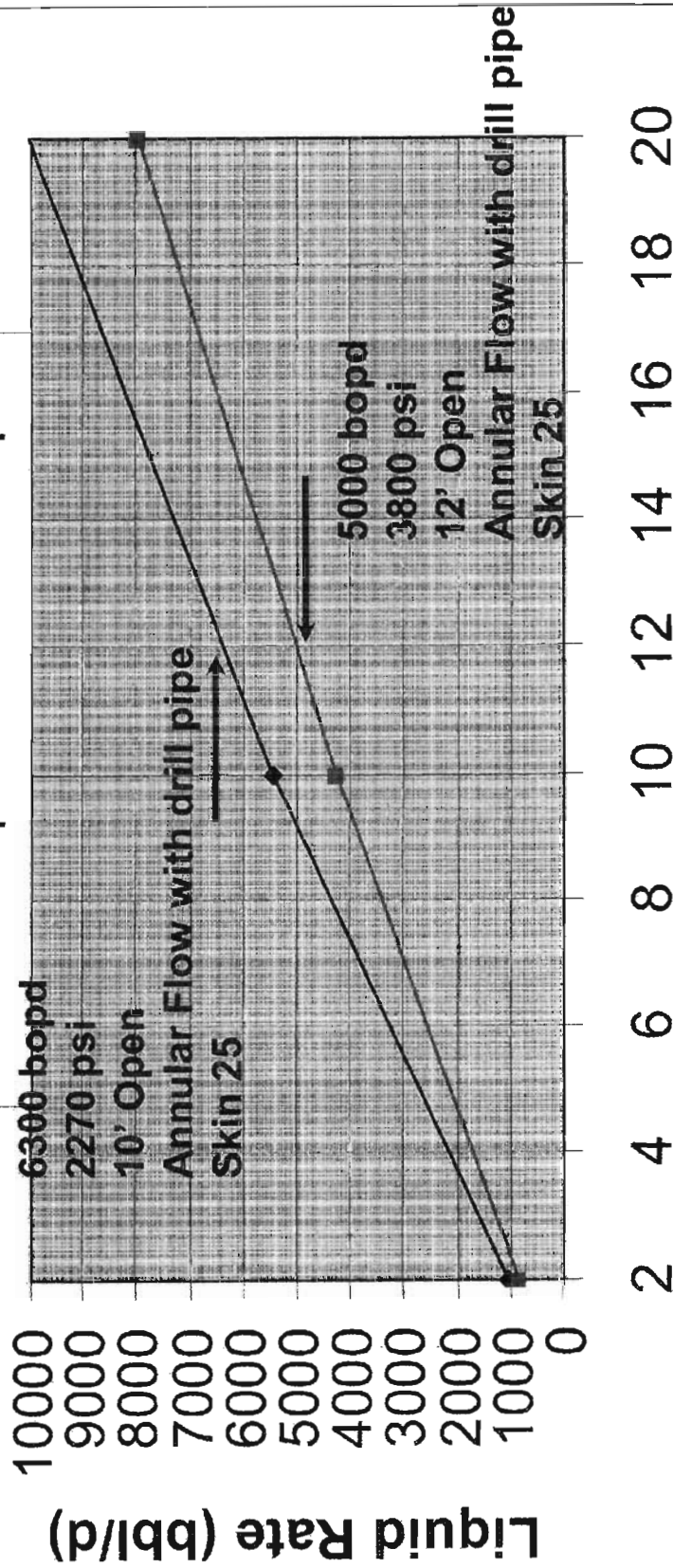
Bottom Measured Depth 18300.0 (feet)
Bottom True Vertical Depth 18280.0 (feet)
Surface Equipment Correlation Beggs and Billi
Vertical Lift Correlation Petroleum Experts 2
First Node 1 Xmas Tree 4089.0 (feet)
Last Node 10 Tubing 18300.0 (feet)

PVT Method Black Oil
Fluid Oil
Flow Type Annular
Well Type Producer
Artificial Lift None
Lift Type
Predicting Pressure and Temperature (offshore)
Temperature Model Rough Approximation
Company
Field
Location
Well

Inflow Type Single Branch
Completion Cased Hole
Sand Control None
Gas Coning No
Reservoir Model Darcy
M&G Skin Model Enter Skin By Hand
Compaction Permeability Reduction Model No
Relative Permeability No
Formation PI 11.27 (STB/day)
Absolute Open Flow (AOF) 416814.1 (STB/day)

Annular Flow with Drill Pipe (A2)

—◆— 2270 psi —■— 3800 psi



Reservoir Thickness (ft)

FAQ

What gives you confidence in your understanding of the data?

- We know:
 - the pressure beneath the BOP
 - Reservoir: properties, fluid characteristics, pressure, depths
 - current state of the BOP
 - geometries in the well
- with this data we can anticipate the expected range of rates

Will Hydrates form?

- Hydrates are not expected to be a problem either in the well or in the BOPs