

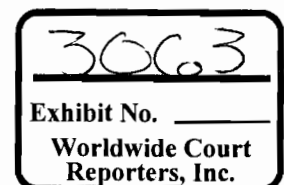
From: Bozeman, Walt  
Sent: Wed Apr 21 14:15:28 2010  
To: Rainey, David I; Ritchie, Bryan; Rooney, Terry C; Vinson, Graham (Pinky); Thorseth, Jay C  
Cc: Epps, David S; Kercho, Debbie A; Gansert, Tanner; Skripnikova, Galina  
Subject: RE: WCD - Updated  
Importance: Normal  
Attachments: WCD plots.ppt

Dave,  
We have updated the earlier WCD calculation with new subsurface parameters from the Macondo team and modeled a flow rate at the sea floor (assuming riser falls) in Prosper with the latest wellbore configuration. All the REs in GoMX participated in this evaluation along with numerous members of the Macondo team.  
We calculate 100,000 BOPD and 300 MMCFPD based on these parameters. This is shown in the attached PowerPoint.  
We have identified several items, however that could impact this rate to keep in consideration.  
Items to lessen flow - formation skin, formation collapse, partial restrictions in the wellbore or at the wellhead,  
Items to increase flow - riser doesn't fall to seabed, catastrophic failure of wellhead allowing flow-up 9 7/8 X 16",  
contributions from up-hole zones,  
Please let us know if we need to provide further explanation or analysis.  
Regards,  
Walt and the GoMX REs  
<<...>>

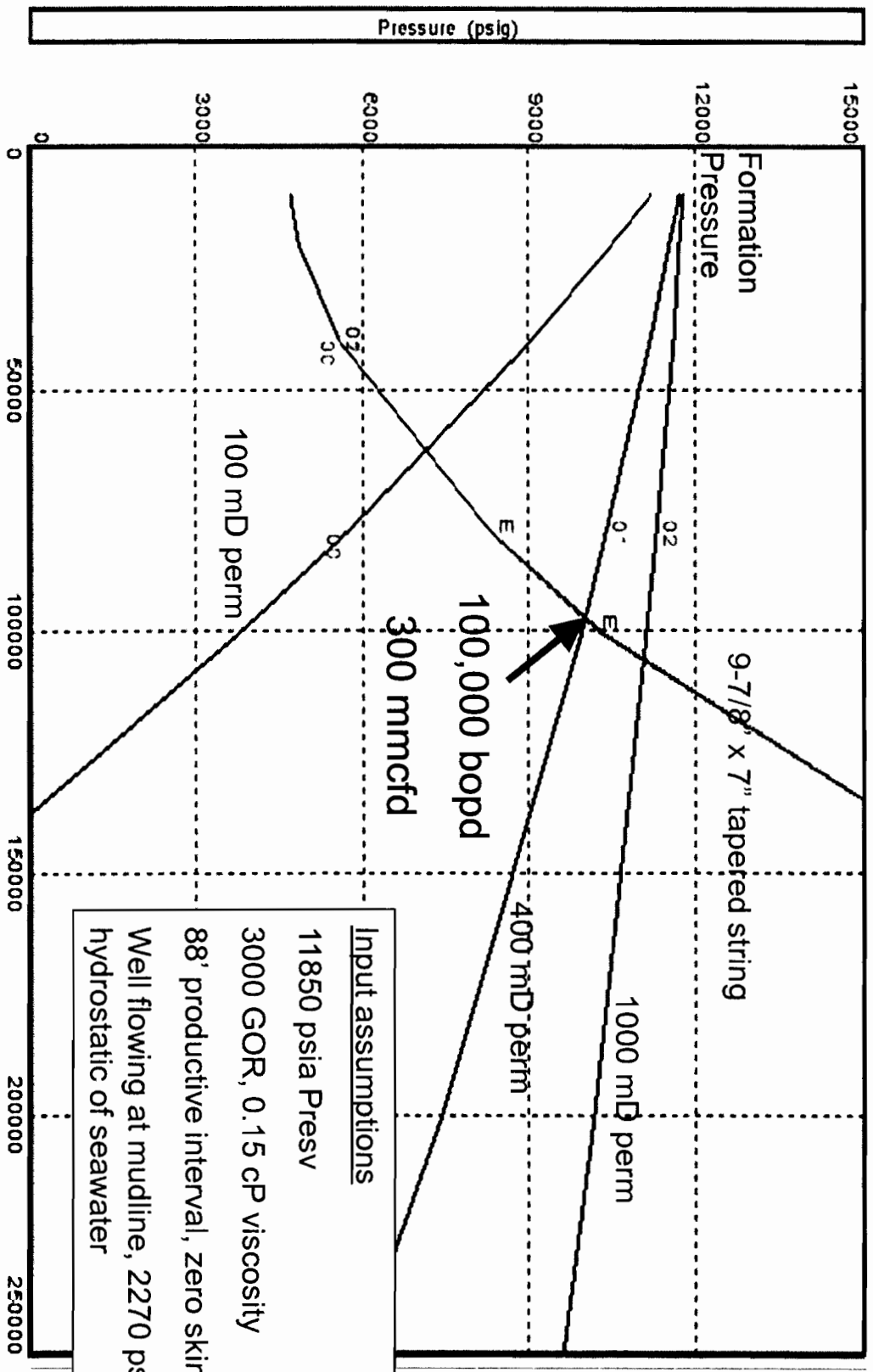
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From: Bozeman, Walt  
Sent: Wednesday, April 21, 2010 6:43 AM  
To: Rainey, David I; Ritchie, Bryan; Rooney, Terry C  
Subject: WCD

Dave,  
We made a preliminary estimate of a new WCD for the wellbore. A rate of 162 mbopd was calculated for the EP. Our new rate (preliminary) is 189 mbopd with the better than expected fluid properties out weighing the post liner setting casing design (this is a smaller well bore configuration than used for the EP calculation).  
The calculation is greatly influenced by the permeability and we are still using our pre-drill estimate in the above calculation. Bryan has Galina et.al. tasked with re-assessing this and a couple other key subsurface parameters. On the calculation side, Tanner is coming in to provide a more sophisticated analysis of the calculation with Prosper software (versus a spreadsheet calculator that I used).  
We expect to report back in a couple hours with an updated assessment.  
Regards,  
Walt  
PS - I am heading home for a shower, my cell number is 281-870-2065



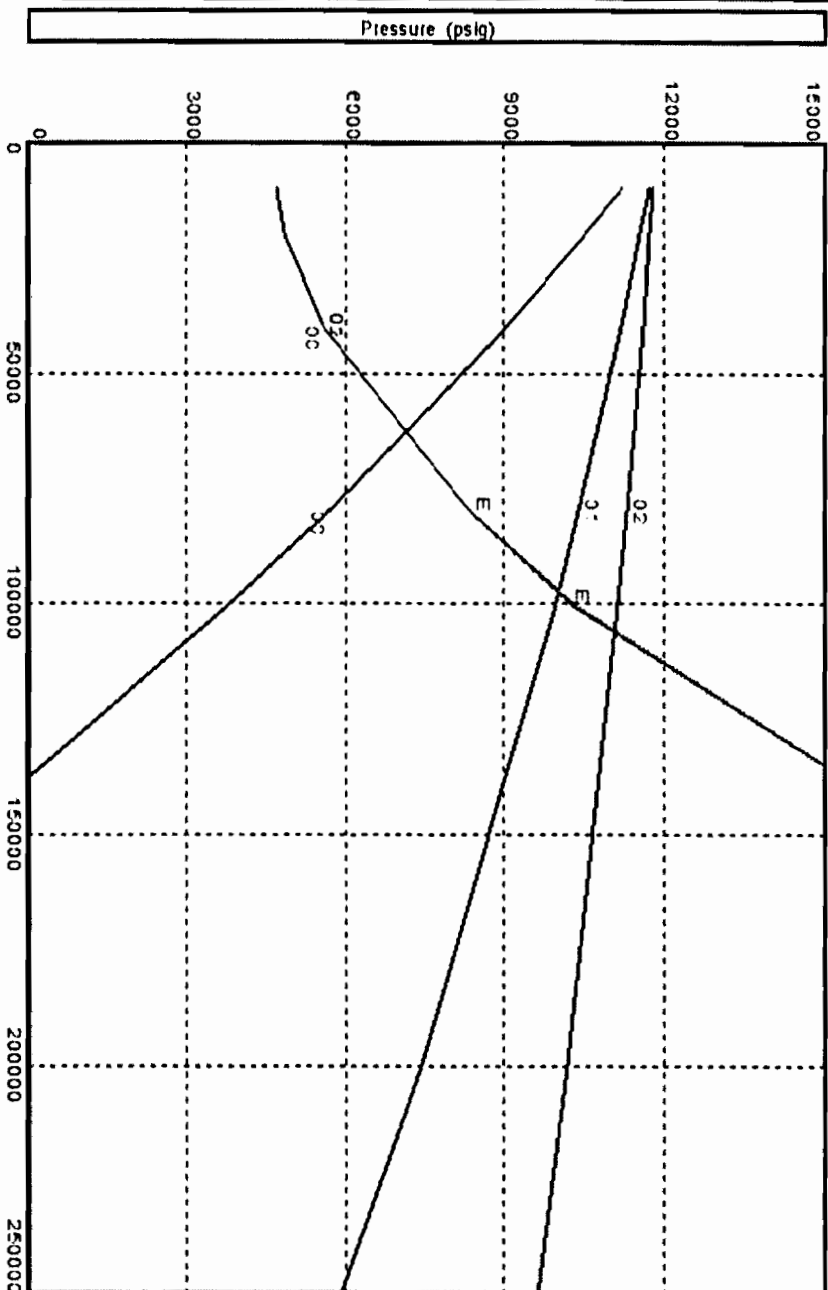
Inflow (IPR) v Outflow (VLP) Curves ( 04/21/10 08:52:32)



Input assumptions  
11850 psia Presv  
3000 GOR, 0.15 cP viscosity  
88' productive interval, zero skin  
Well flowing at mudline, 2270 psia  
hydrostatic of seawater

Liquid Rate (STB/day)

Inflow (IPR) v Outflow (OLP) Curves (04/21/10 08:52:32)



# Variables

1 First Node Pressure (psig)  
2 Reservoir Permeability (mD)

1  
0=2270.00

2  
0=700.00  
1=400.00  
2=700.00

## Liquid Rate (STB/day)

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

Water Cut 0 (Percent)  
Bottom Measured Depth 18200.0 (feet)  
Bottom True Vertical Depth 18290.0 (feet)  
Surface Equipment Correlation Beaggs and Brill  
Vertical Lift Correlation Petroleum Experts  
Solution Node Bottom Node  
Left-Hand Interception Disallow

Inflow Type Single Branch  
Completion Cased Hole  
Gravel Pack No  
Gas Coning No  
Reservoir Model Jones  
M&G Skin Model Enter Skin By Hand  
Relative Permeability No  
Formation PI 125.21 (STB/day/psi)  
Absolute Open Flow (AOF) 416814.1 (STB/day)  
Reservoir Pressure 11850.00 (psig)

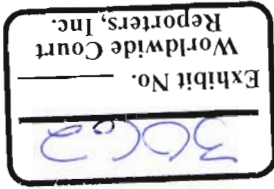
From: Sims, David C  
Sent: Wed Mar 10 15:51:57 2010  
To: Vinson, Graham (Pinky)  
Subject: RE: Macondo  
Importance: Normal

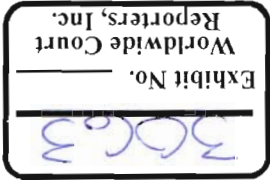
Thanks Pinky. Agree that we need to up our game - all around (D&C and SS) - especially on these wells with no salt. Prior to re-drill of this hole section, let's plan to have a good review of lessons learned and concise plan for going forward.  
David

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From: Vinson, Graham (Pinky)  
Sent: Wednesday, March 10, 2010 9:09 AM  
To: Sims, David C  
Subject: Macondo

Hi David,  
Just wanting to let you know that we the Tiger Team are disappointed in our performance and support of D&C on Macondo. As such, we have all been having "gloves off" conversations over the past few days in looking at the data that was available to us on the past two hole sections and what decisions/inferences could be made / should be made and what communications were/ were not made.  
We have identified a few key areas that we simply have forgotten in terms of lessons learned. This has been a great wake up call for us as a team. We are going to remedy these. The first step to be taken is Bobby Bodek is going to the rig next week to confer with the mudloggers/pore pressure specialists/wellsite geologists to reaffirm roles/responsibilities in terms of data interpretation/communications. We ARE going to get back to our high standards for well delivery in support of D&C from a SS&W perspective.  
Available to discuss in more detail at your request.  
Pinky





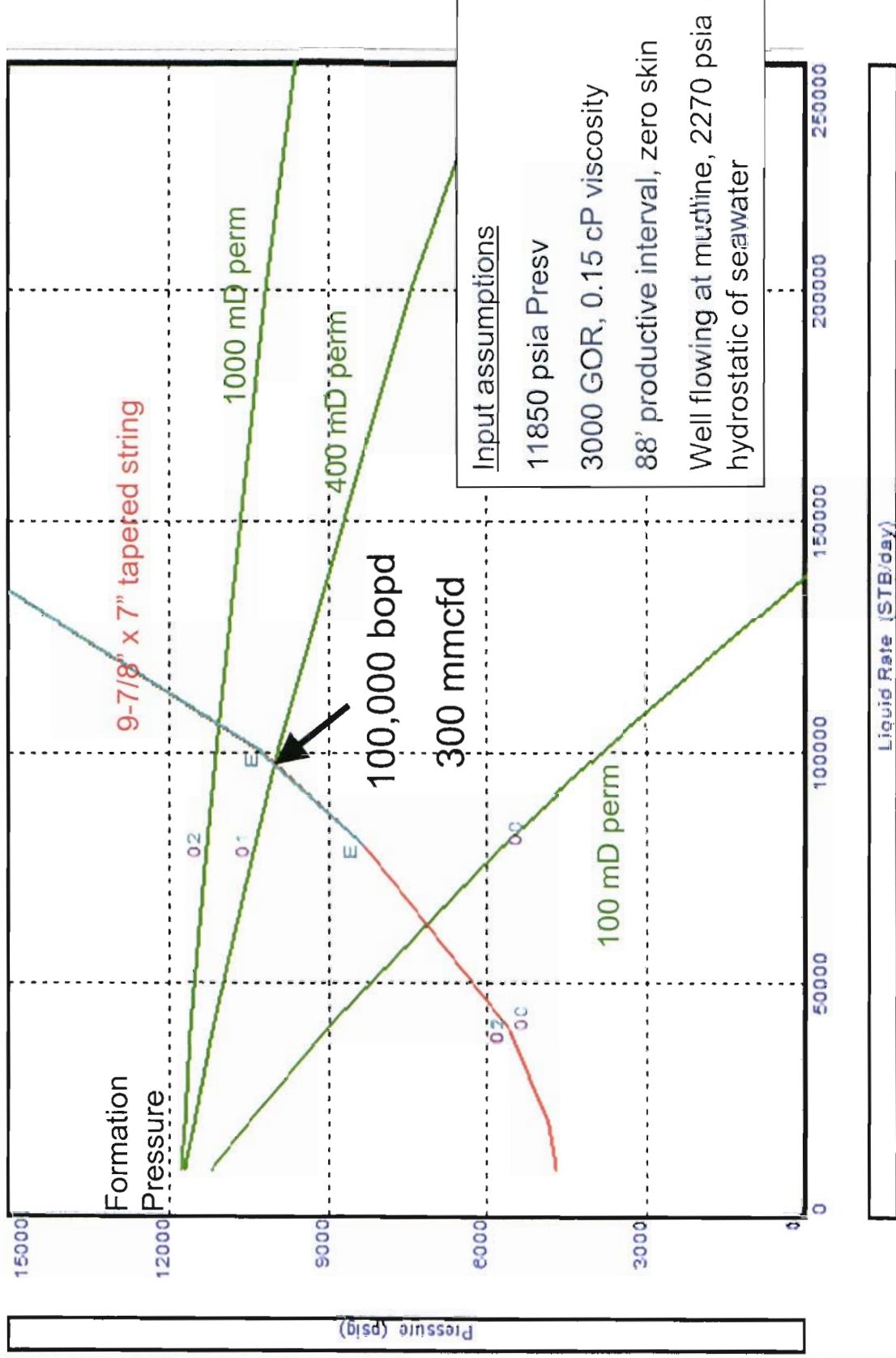
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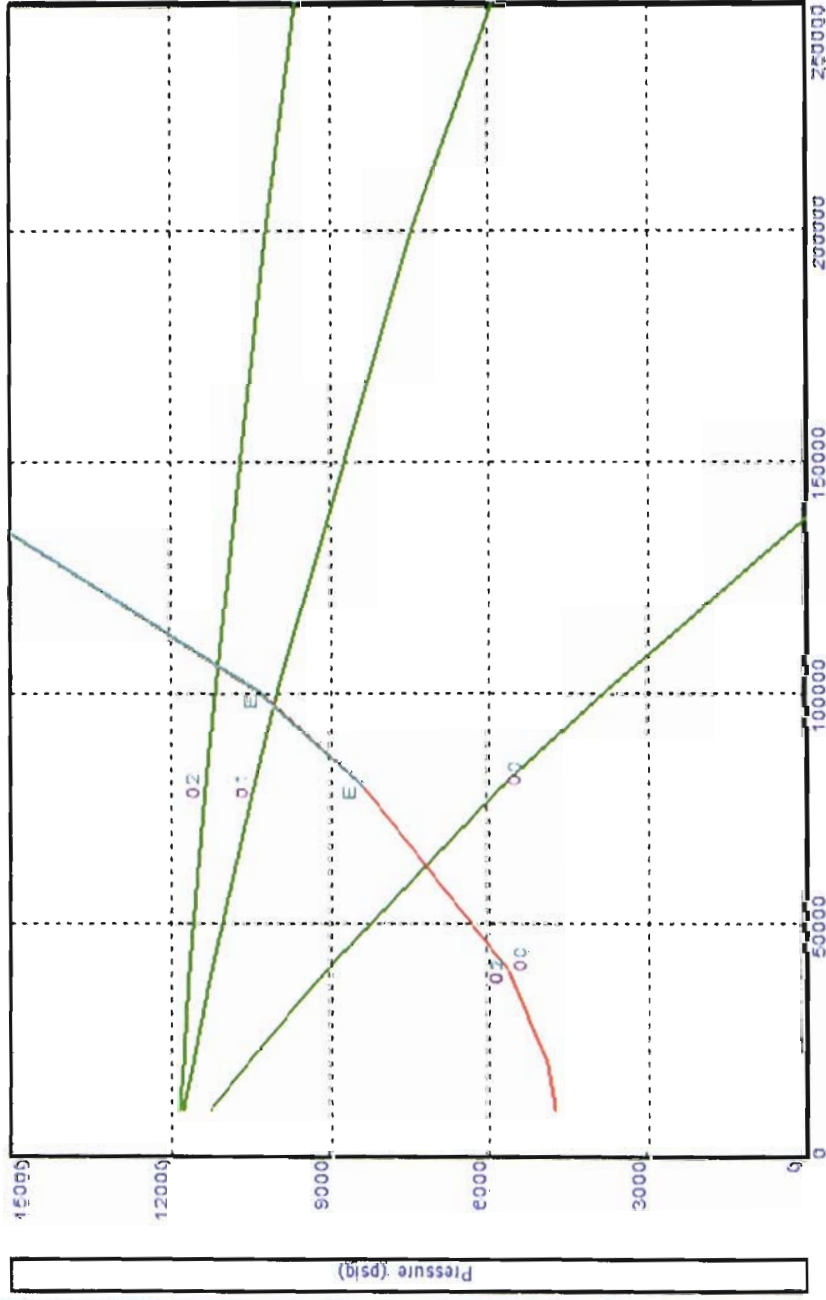
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Variables	
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2: Reservoir Permeability (md)	
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	1=400.00
	2=1000.00

Liquid Rate (STB/day)

PVT Method Black Oil

Fluid Type Tubing

Flow Type Producer

Well Type None

Artificial Lift None

Lift Type

Predicting Pressure and Temperature offshore

Temperature Model Rough Approximation

Company

Field

Location

Well

Water Cut 0 (percent)

Bottom Measured Depth 18200.0 (feet)

Bottom True Vertical Depth 18250.0 (feet)

Surface Equipment Correlation Beggs and Brill

Vertical Lift Correlation Petroleum Experts

Solution Node Bottom Node

Left-Hand Intersection Disallow

Inflow Type Single Branch

Completion Cased Hole

Gravel Pack No

Gas Coning No

Reservoir Model Jones

M&G Skin Model Enter Skin By Hand

Relative Permeability No

Formation PI 155.51 (STB/day/psi)

Absolute Open Flow (AOF) 416814.1 (STB/day)

Reservoir Pressure 11850.00 (psig)

Reservoir Temperature 250.00 (deg F)