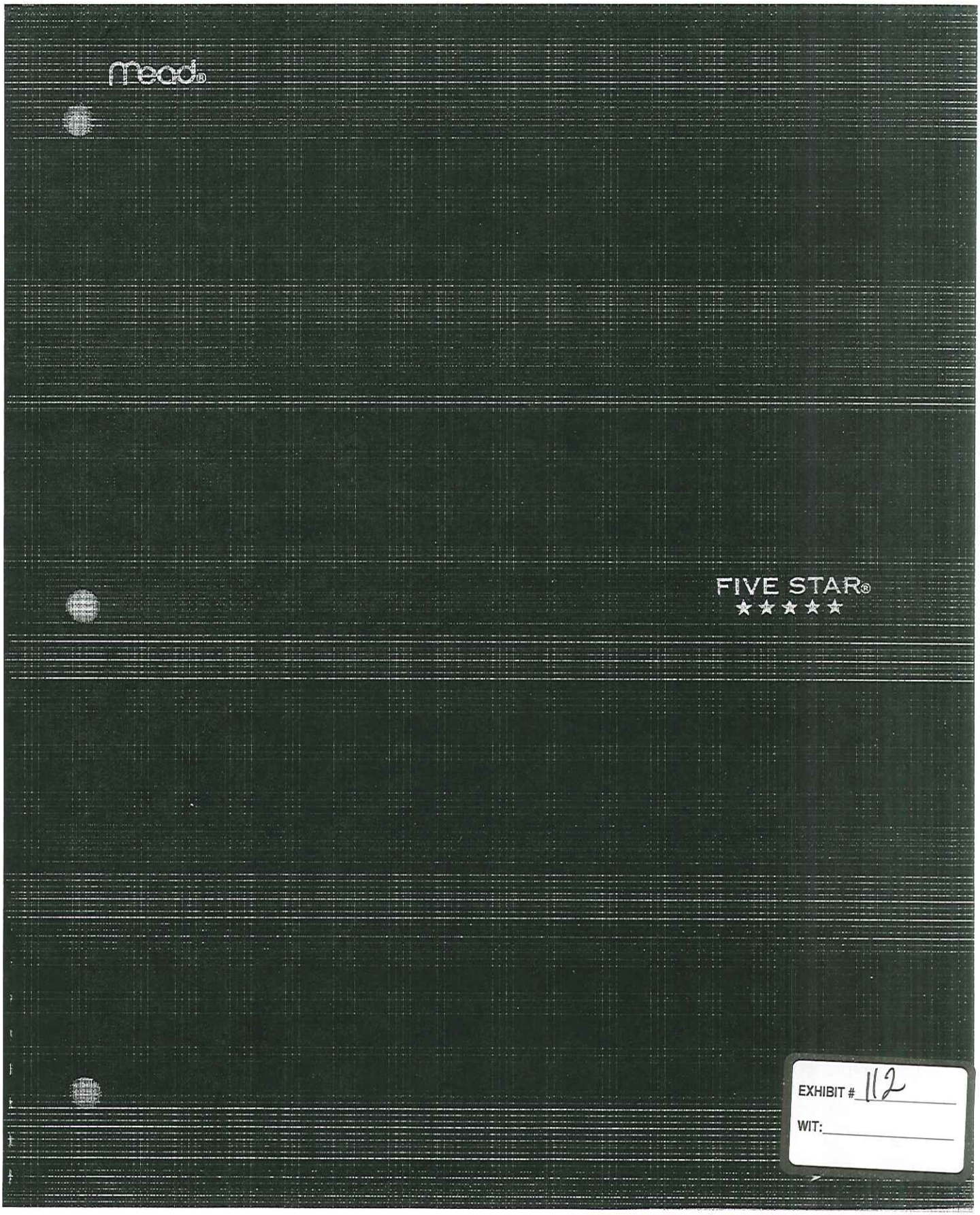
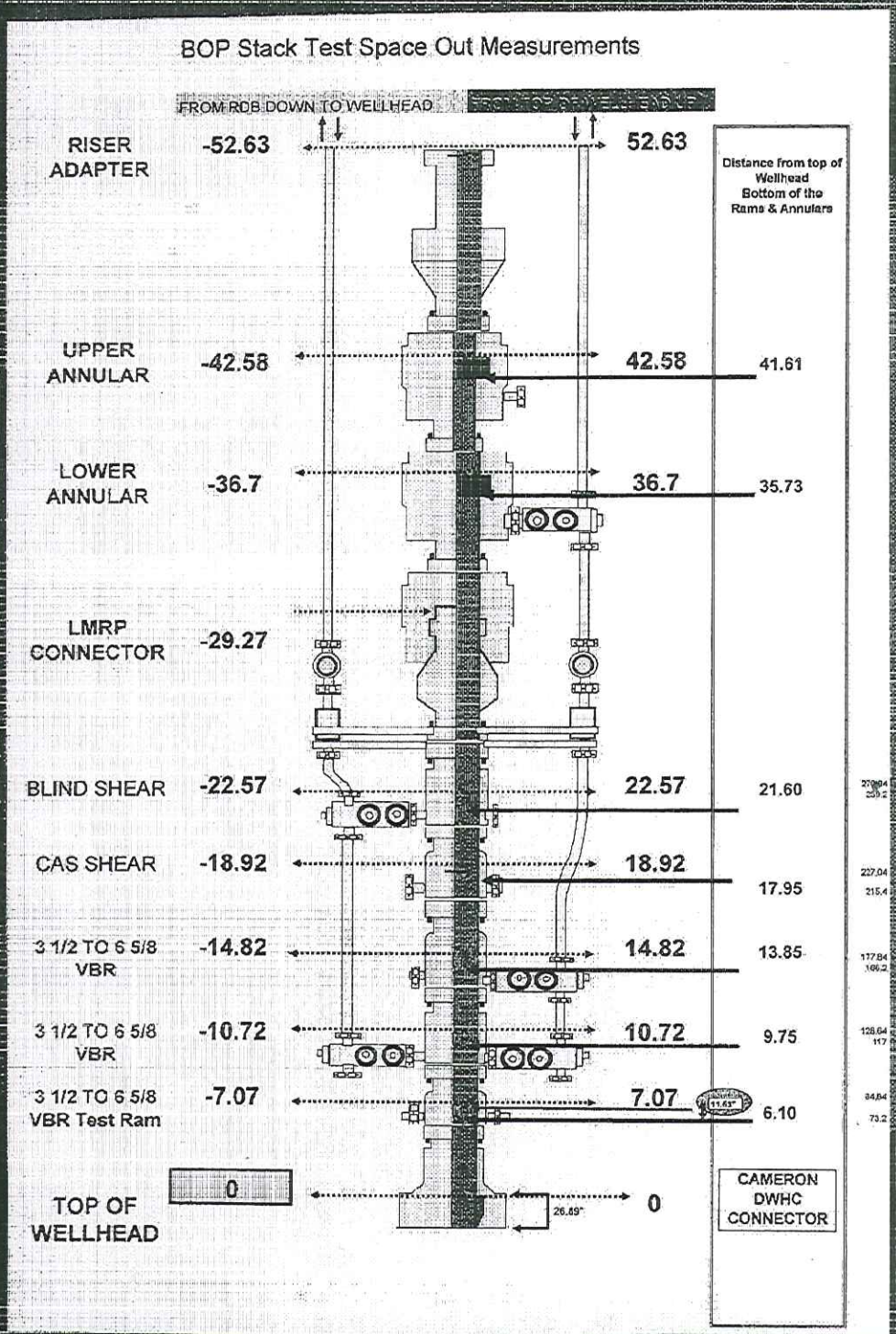

mead®
FIVE STAR®
★★★★★
EXHIBIT # 112
WIT:


BOP Stack Test Space Out Measurements
FROM RDB DOWN TO WELLHEAD
RISER ADAPTER
-52.63
52.63
Distance from top of Wellhead Bottom of the Rams & Annulars
UPPER ANNULAR
-42.58
42.58
41.61
LOWER ANNULAR
-36.7
36.7
35.73
LMRP CONNECTOR
-29.27
BLIND SHEAR
-22.57
22.57
21.60
CAS SHEAR
-18.92
18.92
17.95
3 1/2 TO 6 5/8 VBR
-14.82
14.82
13.85
3 1/2 TO 6 5/8 VBR
-10.72
10.72
9.75
3 1/2 TO 6 5/8 VBR Test Ram
-7.07
7.07
6.10
0
TOP OF WELLHEAD
0
CAMERON DWHC CONNECTOR

5/1/10

1) Casing Shoe Depth - 18,303'
Total Depth - 18,360'
Rat hole 57'
Casing Size 7" 38# x 9 7/8" 62.8#
mud weight 14.0 PPG
Auto Fill Float collar @ 18,114'
Pore pressure 12.6 PPG
Hole Size 9 7/8" 17,168 - 18,130 - 962'
8 1/2" 18,130 - 18,360 - 230'

2) Casing x open Hole annulus volume.
9 7/8 x 7" = .0476 BPF
8 1/2 x 7" = .0225 BPF

3) What was the Auto Fill set to shear at. took 3600 psi
- was it set in Tower or on the Rig.

4) Cement volumes look enough pumped. Total of 56 BBLS Foamed 16.7-14.3.
Last 6.93 BBLS not Foamed weight 16.74 PPG.

5) mud line @ 5067' DP 6 5/8" @ 4117
5 1/2 @ 7567
3 1/2 @ 8867

6) Form-A-Set spacer 450 BBLS @ 16.0 ppg.

7) Top FC @ 18,114 To Bottom of 3½ @ 8367 = 9747' 14.0 ppg SOBM
9747 x .052 x 14.0 ppg = 7093.81 psi

8367' - 4770' = 3594' of 16.0 ppg spacer = 2990 psi

4770 - surface = 4770' of 14.0 ppg SOBM = 3472 psi
Total 16,209 psi on top of F.C. Just w/ 14.0 ppg = 13,186 psi = 3023.00

8) Top of FC @ 18,114 To Bottom of 3½ @ 8367 = 9747' w/ 14.0 ppg SOBM =
7093.81 psi

8367' - 5067' = 3300' of 8.6 ppg seawater = 1475.76 psi
5067 - 3729' = 1338' of 16.0 ppg spacer = 1113.21 psi
3729 - surface = 3729' of 14.0 ppg SOBM = 2714.71 psi
Total = 12,398.73 = 13.16 ppg @ 18,114'

9) Bottom Hole ps. w/ 14.0 ppg = 13,366 psi

10) Did the Float Hold + was pressure Bleed to 0? what type of flow was coming out when the test was called good.

1) Seawater from 9357' - 1475' - 6892' = 3082.10 psi
   1475 - 98' of 16.0 MW = 1377.

2) Blend Back entered of 84 BBLS During negative test

3) 9 5/8" From 12,487 - 5067' = 7420'
   7" From 18,305 - 12,487' = 5816'

Stack Questions that Need to Be Answered

1) What was Integrity of stack Test Before Incident?

2) Why Annular Failed to close?

3) Why BSR Failed?

4) Why Rov Function Failed?

5) Last Annular change out & Last Ram Redress?

6) When was the Function test of BOP Stack?

7) How much Bop Hyd Fluid was the Rig going through?

- Murry Sepulvado Home [redacted] Rig [redacted] OD III

Cell [redacted]

ASK Murry who 3-party BOP company was on Horizon ? D.D NOT KNOW check w.th Steve Bevan before calling.

Brett Cocales may know 281-366-8899 office

Cement

72 BBLS spacer @ 14.3, 5.26 BBLS class "H" cmt @ 16.74 ppg,

47.75 BBLS Foamed cmt @ 14.5 ppg, 6.93 BBL class "H" cmt @ 16.74

Total cement pumped 59.94 BBLS.

5/2/10

1) Talked To OD III Dispatcher. Murry To call Back Later Today. He is working Nights.

2) Need IADC or D.my Reports From end of Last well To

3) Need Rov D.vi Reports & Video.

4) Need Subsea mat.nance Reports.

5) Need to know if any MMS Dispactions were granted For any Stack Functions.

5) E-mail - me252_Email_Retention@bp.com

6) What was the tension on the Riser at time of the Incident? Was it enough to Lift the LMRP?

7) When was the Last time the EDS was Functioned?

8) Will Dead man Fire when All Surface control systems or Destroyed.

9) Printer \\ BP1HOUIS024\ HOUP0007

10) What type of Annular was Being used

11) How Does the Horizon perform Diverter Functions.

12) Reports needed #3 mobilization
Drilling #80, 82-94, 97-119, 122-124, 127-132, 134, 137-138

13) Report #95 2/24/10 Pilot Leak on yellow pod @ 1 gpm Switch to Blue pod a Leak slowed. (What Function was this pilot Valve Associated with?)

14) Scherie Douglas

5/3/10

Interview with Ronald Sepulvado.
Ronnie Sepulvado 7½ years on Rig 35 years exp.

Current State

1) Do you know of any hydraulic leaks or other issues with the BOP stack? Small Leak in pilot valve. stop who Function was in Block. Any information on the amount of Hydraulic Fluid that was being Delivered to the Rig. NO.

2) Were there any MMS dispensations received on the BOP Stack? Not that I am aware of. Any Function taped out on the control panel? NO

3) Was there any trouble experienced with the riser disconnects in the Past? No Not unless we had Hydrate Problems (Kodiac.)

Operational Procedures

4) Do you have any Photos of the Horizon BOP Panels? NO

5) When was the Last time a BOP Disconnect was Done and For What Reason? Hurrican evac. Any issues? NO

6) ARe the EDS FUNCTION the same at each BOP panel LocaTION? I think so? What are they (EDS 1, 2, 3?) NOT sure.

7) Do you have an updated EDS FUNCTION sheet? No. SUD sec ery may have one.

8) What is the procedure For LiNing up the riser deg assly? the will Line Up to Small Gas Buster + close the Diverter Valves. Take Returns Back to Pits

9) How do you normally have the Diverter Lined up during normal operations. It's in the Drill mode, Packer at Rotary table open. Valves closed to divert, close packer. Both valves pen.

10) Describe the procedures For LiNing up a diverter? Diverter Closed, Both LiNes open Either way.

11) When do you go overboard vs USing degas? When Gas Buster has Been over loaded.

12) DO you knowthe Last time the ROV HOT STAB was USed on the BOP? can't remember ever using when he was he was out there.

12) What method of BOP testing was being used on the Horizon? Digital annimized method. Long test First test of seq. 5 min straight line. If passes, then rest Through seq done Through digital testing. Red Light / Green Light.

13) ~~Is~~ there a third party company that worked with Transocean on the service of the BOP Besides Cameron? No third party co. TOI swat team, comes out. Cameron every know & then.

14) Was the BOP stack pulled during the course of this well? NO. Stacked was pulled once For Failed Ram. Don't Remember which well.

15) When were the annulars Last changed on the BOP stack? this well. TOI use Cameron Replacement eqp Don't know

16) Do you have any information on the modifications (Deadman, etc) that were recently completed on the BOP stack or control system. All changes made would go through the moc not sure of any changes.

Cameron meeting

14:00 - 14:30

VP EHS & Quality — EH manager

David Matthorter — Ed Geday

David Jones Cameron Lawyer.

Current State

1) The BOP & Control system that was installed on the Horizon. were they Cameron designed & manufactured.

2) Are you aware of any Leaks or modifications to the BOP on The Horizon?

3) The BOP control PODs are Cameron, are the other control Devices such as the Deadman, Auto shear + EDS systems also Cameron?

Operational

1) Can you provide a description of the EDS & Deadman Functions on the panel as the Deepwater Horizon Configuration?
   a) Can you provide a detailed Function Description of this Sequence
      - Dependencies for previous sequence completion to continue
      - ✓EDS 1 High pressure Blind Shears close, isolate SMRP
      - ✓EDS 2 casing & Blind Shear close isolate SMRP.
      - Dependencies on Control confirmation FeedBack?

2) If the EDS was initiated and it failed to complete its Sequence, would this prevent the Deadmen from operating?
   System not tied to Sequence if one Function Fails EL Sequence continues

3) Are the EDS operator Functions the same at each Bop control panel location? yes. Need to have power & Comms.

4) Has Cameron recently provided & update EDS Sequence sheet To TOI?

6) Is The cycling of the annulars and rams tracked & recorded in the control system event Logger?

7) Were there any problematic components with the Dw Horizon BOP control system?

7) What are the most common Failure modes or points on the BOP systems?

8) Is There a Facility to install software lockouts on any of the critical Functions & are these automatically removed when a EDS or Deadman sequence is initiated?

9) Can you Provide a description of the Auto Shear sequence & How it works mechanically? When the LMRP is Disconnted in an emergency the Auto Shear will FIRE IF it is Armed It has to Be armed on surface

10) Does the control pod slide valves that operate the Rams & Annular etc. have any interflow problems or sticking problems?

11) Do the control pod Regulators have any range adjustments problems?

12) Were the Bop accumulators, accumulator isolator valve, & conduit valve package part of the Cameron supplied Hardware? BOP Bottles are for emergency disconnect. check valve Holds pressur in Bottles. not used for any other function.

13) Can you describe what a green & red Light indicator represents on the face of the Bop control panel?
A- what does the Light indication, command issued or command confirmed? Blink until single is sent back.

B- What would the panel be telling the operator if all Lights on the Bop control panel went Red or green.
only function that would be functioned.

Design

1) The Rov intervention Function hardware are supplied By other OEMs & are interconnected with the Bop Functions, Does Cameron approve theses interconnections?

2) Would Bof Rov interconnections changes have to be Approved By Cameron?

3) Would Cameron or TOI Be respons. Ble For redlinning the Drawings that Detail the changes made to the system.

Testing

1) When Cameron installs new applications software in the Bof controlles, What is the procedure For testing & commissioning the changes?

~~2) Would BOP Ram interconnections changes have to~~

2) What was the latest system software upgrades done was this software up to date with the latest Cameron TL BOP software revisions? NONE.

3) How often has Cameron been asked to participate in the Horizon BOP controls testing?

maintenance

1) the Deepwater Horizon BOP is 10 years old, has Cameron been involved in any of the 5 year SPS surveys? yes

2) Is there a third party company that worked with TOI on the service of the BOP Besides Cameron?
Sometimes, TOI Does most of the work.

3) Do you know when the Bop annulars were last change on the Bop stack?

4) Do you have any information on the modification (Deadman, ROV intervention etc) that were recently completed on the Bop stack or control system? What testing was done on the Bop after the modifications?

5) Was Cameron involved when the Bop stack was opened up & inspected prior to the Macondo Well? not sure

6) What are the Cameron recommended testing procedures on the Bop stack & what is the recommended schedule?

2) What if any check could be carried out to prove that the manifold annular pressure regulators, read backs & flow meter read backs were calibrated & Accurated?

3) EDS 1 Blindshears & LMRP Disconnect

EDS 2 Blind Shears, Casing Shears close & LMRP Disconnect

.Dead man Relief modes

2 POT Armed

3) Dead Batteries

4) 100 psi on Accum Bottles

No Results of Data to Deadman system.

If an Function is in Stuck. the Deadman will still close that Function.

What were the Batteries Last Charged on the Horizon. 1 year Life

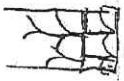
the Rams should be able to center the pipe. 700,000 LBS of Force.

Batteries have a 20 Function cycle.

Deadman & AutoShear share the same Accumulator Bottles

Leak 1) Leak e OUT running a 60gpm rov pump. Back off 4 turns.
at same time trying to shear Fluid was Leaking.
when EDS Fires still Leaking (Leak stops when you Lose supply from
Top side)

Leak 2) Leak side on sequence valve. Down stream side.
Possibly mean at Least one side of shear Rams has closed.



DON V. drinE ADDitional QuesTIONS.
5/7/2010 @ 10:00 AM
Home # [redacted]

1) How Long were you on the HORIZON
Since January 2010 Experience 1971

2) When the Rig Floor called and said mud was coming Blowing out of the Hole what were they closing?
NOT SURE But I think it was the Lower ANNular.

3) When you got to the Bridge what light was Lit. on the control panel? Lower annular, Just about sure.

4) Who Hit the EDS? Night SUBsea hand. Where were you when the button was pushed? Right next to him.

5) When the EDS was hit what D.D you see? I Don't remember, everything appeared to Function, Lights came on received response we were supposed to.

6) D.D all the panel Light up? D.D not see any extra Lights.
Did we get a gallon count? good gallon count.

7) D.O the subsea hand hit both buttons? As I recall yes.

8) How long from the time of closing BOP to EDS? Can't say. Some minutes after, got call to floor, came out to deck aft, mud blowing everywhere, couldn't get to floor, tried to go forward not sure of timefram.

9) How many blast - Heard the first one. after heard a couple more.

10) Where D.O the first blast occur? Starboard, but didn't see anything to be sure, Jus Feeling - I cos on port, wasn't over there.

11) When D.O the lights go out? While making way forward - not sure if right before or after blast I think before but not certain.

12) Where the lights out when you get to the Bridge? I assume those on Bridge were emergency, but deck was all out.
- D.O the emergency gen start? Don't know.

13) When you get to the Bridge what light the Bop Panel was Red? I think the Lower Annular.

14) Who was Doing the Bleeding OFF of Fluid During the Neg. test? TOI started, But then Bow Kaluza. on Drill pipe side BOB got call. APD had to do it on kill Line - went up and then started to do kill Line.

15) How was we Lined up to Bleed? Choke. To gas Buster To Stripping tank.

16) Did any Fluid get Bleed Back to HalliBurton? 2sets of Lines rigged up, But not sure - Feeling they were Bleeding Back on that Line to HalliBurton. NOT sure of Flow path.

17) Was there a crew change During Neg test? yes

18) When you were on tour any more Bleeding to Be done? No all complete, shut Down.

19) Were their any Leaks in the BOP system? small hydraulic Leak on one of the pods. can't recall which one, should Be on morning Report. Not sure if it cleared up. or trash was causing that is only thing I was aware of.

20) When the EDS was activated Where was gallon count coming From? Don't know, assume on counter.

21) Were any green Lights on the control panel? think some might have been green - Just got a response.

22) While in Drilling mode How was the EDS set up? Don't know.

23) When mud started coming through rotary any orders or smells? no don't recall.

24) Where were the sounds From the explosion coming From? I was on the port side NOT near me.

25) On the Bridge was HPU unit still intact or damaged? Don't know of any damage anywhere.

Horizon BOP Incident team

1) Mark Worsley - SETA subsea systems & ADvisor
2) Ray Fleming - ADvisor & SPU TA subsea controls.
3) Kevin Szafron - SETA Instruments & Protectiv systems.
4) Jim Wetherbee - S&O culture Leader.
5) David Landsell - Hose subsea training.
6) Ted Judice - Gom SP TA Instrument, Control & Communications
7) Gram Mc Neillie - Team Lead.
8) Walter Guillot - BP WSL.

5/10/2010

09:00 BOP team meeting

1) DD III Running Riser
2) Psi inside BOP 3800 psi
3) Will try to install Pressure Recorder in Boost Line.
4) New Information All Rams closed. But well still flowing
5) Junk shot manifold en Route to Location.
6) USCG 2mms Hearing 5/12/2010 Inquary. (BP TOI, Halliburton)
7) Come up with Questions we want to ask TOI & cameron.

5/11/2010

Depth 18,350 mud weight 14.0

.052 x 18,350' x 14.0 = 13,358.8 psi

13,358.8 psi ÷ .052 ÷ 18,350 (TVD) = 14.00 ppg

.75 Under Balance to Formation.

DP

Hyd static psi w/sw @ 8367 = 3741.72 psi

Backside

3718' sw = 2706.70 psi

1,517' 16.0 ppg spacer = 1262.14 psi

3129' sw = 1,399.28 psi

Total = 5368.12 psi - 3741.72 psi = 1626.4 psi U-Tube

18,304 - 8367 = 9937'

.052 x 9937' x 14.0 ppg = 7234.13 psi

Total Hyd = 7234 + 1,399.28 + 1262.14 + 2706.70 = 12,602.25

12,602.25 ÷ .052 ÷ 18,304 = 13.24 ppg

12,602.25 + 772 psi differential = 13,374.25 ÷ .052 ÷ 18,304 = 14.05 ppg

5/11/2010

Morning BOP Team meeting

1) Junk shot manifold on seaBeaQ
2) Minie top Hat will Be tryed today.
3) Bad weather making oil Recovery Hard.
4) Gom site For New updates.
5)

Decision tree meeting

1) EDS DID NOT FUNCTION
2) EDS Rams FUNCTION But DID NOT Seal (LMRP Not Discounted)
3)

5/12/2010

1) call DON Vidrine set up Interview Time
[redacted] time 11:30

2) 09:00 morning BOP team meeting.
1) May 25th USCG Hearing.
2) TOI information on DVD Today.
3) Clean Desk policy.
4) MARK Big update meeting. 15:00

5/12/2010

Time Line meeting

1) Need ROV Footage From when auto shear was cut.

Questions For Dow Vidrine

2) At the time of the negative test when they pumped Down the kill Line did they do that with the Rig pumps? Rig pumps to fill choke closed in a BOP.

3) Where were pressures Being read on the rig Floor? Driller panel, HalliBurton panel on Rig Floor

3) How did he/you know that 60 BBLs had Been Bled OFF the drill pipe? Driller had a Record of Bleed Back.

4) Does he or Do you know where this Fluid went - trip tank - mud pits - cement unit.? HalliBurton I NOT sure How much. Right Before the Ng test.

5) ~~It~~ was said that 3-4 BBLs was Bled OFF the kill Line - Can you confirm that number + How? Bleed choke To Zero ½ BBL

c) Was he/you on the Rig Floor at the end of the negative test - Does he/you know if the pressure was equalised across the BOP
No sure. Talkin Tv

D) If he/you could Recall his conversation with Jason Anderson - Did he say he was closing the Diverter or closing the Annular? Annular (Diverter Returns)?

e) What time did the crews change out in the evening?
Mid Night. Toolpusher change @ 18:00.
Mud eng change

5/13/10
09:00 morning DOP meeting.
1) No updates on Response.
2) Cut Flex Hoses off LMRP

258258

6/14/2010

VTS_01_1.VOB

Mill 37 Dis 01 Dive 485_487 04-22-10.09-17 to 4-23-2010 15:33

BOP operations, Survey Grid Patterns.

cutting Auto shear Rod From 07:36 - 07:42 4/22/2010

List of Reports TOI would Be sending IN every Day

BOP morning Meeting

1) Pre Flight checks (ROV operations)

2) what Do we know about

TOI contract

Article # 17 safety

18 Performance of work

19 Records to Be Furnished By

5/15/2010

1) Set up Interview with Lee Lambert WSLF

- Home - [redacted]
- Cell - [redacted]

Called @ 09:00 Left message on cell phone Set up For 10.00 Am 5/17

Time Line Review

1) ADD BOP Function cycles
2) Need ROV Video From MMX Chevet.
3)

BOP meeting

1) Power point Presation For questions
2) History of mid-matiana
3) Histor of ROV port For Pipe Rams (closing Test Rams)
4) Real time Data Logger For BOP
5) LMRP connector Still Locked Leaking possible Ring Seal.
6) Dead man not a Requirment !!!!
7) Drawings ##

HRBS-M65-U01-H7102	(Gas Handler manifold Future
H7103	Gas Handler control Future Item)
H7105	Gas Buster / mini Trip Tank
H7107	Vent Line / ~~choke~~ Line To
H7110	Top vent Line

5/17/2010

Interview with Lee Lambert

Home [redacted] Cell [redacted]

1) Was a procedure for the neg test sent from the office? NO Not that I saw.

2) How much time was spent planning the negative test calculations / Rig up / Job assignments? Very Little

3) Were their any concearns about performing a negative @ 8300'. explained to me that this is were the csg pkr would be set and had better look with plugs in water.

4) Do you know what Functions were Leaking on the BOP's. Sub sea hand said they were going to change the yellow pod on the next Job.

5) the spacer that was pumped who ordered it? We had this spacer so we used it Don't know who ordered it

6) During Neg to D:D Annular Leak? yes Filled Back side with 20 bbls I think. From where not sure think the trip tank.

5/17/2010

7) Who was running the neg test? toolpusher + WSL.

8) How were the lines rig up for the neg test? had a cement stand with side entry sub + two TIW valves. top Drive was screw into DP.

9) How was pressure being monitored? DP pressure was on the HalliBurton monitor. kill+choke line pressure was being monitored on choke panel.

10) Who gave instructions to Bleed off pressure? not sure

11) How was ~~press~~ fluid being bleed back monitored.? At HalliBurton unit + PVT system.

12) Where was the DP psi being bleed back to? HalliBurton unit. How much? At least 25 BBLs. Needed to Dump one of the displacement tanks.

13) Were three problems with the BOP's.? on the Boat Senior TP said Driller called him + said well was coming in and was having a hard time shutting the well in.

5/17/2010

14) Did you take to anyone else on the Boat? the captain asked him about the ESD he said when the Subsea was pushed all he saw was Red Lights. ESD may have not worked.

Up Date From meeting Grant had with Randy Taylor.

1) Need Information on missed Bop test
2) modification, By Who's When.
3) Bop testing How Far Back Do we go?

Information Requested 5/17/2010 @ 18:18

1) Dims HINDC Reports F/Jan-1 2005 - present
2) Any Trees issued to the Horizon By the MMS during this period
3) Any Bop test records
4) Any Dispensations/waivers issued For Bop testing in this time period

5/18/2010

morning meeting

1) twiny 2000 BPD capture
2) Bop testing on DDII
3) Samples of Choke & Kill installed For top kill.
4) MOC or MODS ToI Directed & Designed.

5/19/2010

BOP team morning meeting

1) Good Progress with top kill.
2) a Lot more gas than expected.
3) maintenance, testing, mods, Time Line

5/20/2010

BOP meeting

25,000 people

2.2 KM Beach

60% Recovered

Yellow Pod Being Recvd.

employment Viretaction [redacted] Jerry Jervis

5/21/2010

BOP morning meeting

1) 5000 BPD To Drill Ship
2) Dispersant EPA Questioning
3) take a Day off this weekend

23# spacer

$\frac{351.86 - 30.25}{1029.4} = .3121$ BPF x 66 = 20.59 BBL

$\frac{76.86 - 30.25}{1029.4} =$

194 psi differential.

168' = 7153

28.14

BOP meeting 5/25

1) Pressure testing
2) 6000 BPD

3) top kill on-going

7" csg TO 6½ = .0323 BPF

6⅛ csg TO 8⅜ = .0701 BPF

18,350' x .052 x 14.0 = ~~25.0~~ 13,358 psi 2236.

18,350 - 5000 = 13,350 ; 11,107 psi 11.0 16.5 #/seawater

12,458 psi 12.0

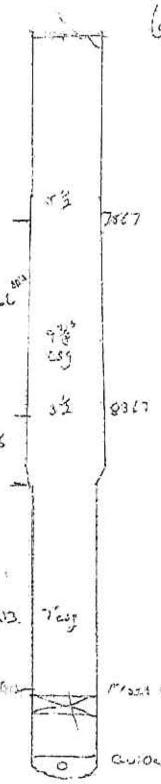
13,536 psi ~~13.5~~ w/o sea water

4119' 6⅝

5½ 4½

MLB 5067'

Run 15½ ID



M/L. Surface
5067 x .052 x 8.6 ppg = 2265

(w/16.5) 11,396 psi + 2265 psi = 13,661 psi
Hyd w/ 16.5 & SW

5067 - 18,350' = 13,283'

13,283' x .052 x 14.0 ppg = 9670 psi

5067' x .052 x 14.0 ppg = 3688 psi

Hyd. Need => 13,358.78 psi

From ML to TD

13,283 x .052 x 16.0 = 11,051 psi

16.5 11,396 psi

17.0

17.5

18.0 12,432 psi

18.5 12,778 psi

19.0 = 13,123 psi

✓ 19.5 = 13,468 psi

(Well needs to be killed with a static mud weight)

9⅝" 62.8# ID 8.593

12,485 - 5067' = 7418'

Cap .0718 BPF

.0718 x 7418' = 532.61

Total Vol. of Csg = 745 bbls.

7" 32# ID 6.143

18,300 - 12,485 = 5815'

Cap .3665 x 5815' = 213.31 bbls

TD 18,303

well under Balanced @ 20.52 (not realized until 21:31 - 39)

1) 21:00 hrs pit gain prior to shear test. Unnoticed.
2) 21:08 spacer to surface (test spacer)
3) 21:14 continued pumping Dumping overboard.
4) 21.20 E2 ell Senior toolpusher talks to Jason Anderson about my test w/ DK. It won't be much longer before spacer back.
5) Boullion (Weatherford) 21:00-21:30 Anderson called to Rig floor
6) 21:30 Rig pumps shut Down
7) DP pressure increases from 1240 - 1750 psi in 4 minutes 21:30 - 21:34

$9\frac{7}{8}" \times 5\frac{1}{2}$

$\frac{13.92 - 25}{1029.4} = .0475$ BPF $= 2500' \times .0475 = 118$ BBLS

$\frac{13.92 \times 3\frac{1}{2}}{1029.4} = \frac{13.92 - 12.25}{1029.4} = .0559$ BPF $\times 900 = 48$ BBLS

Riser

$19\frac{1}{2} \times 6\frac{5}{8}"$ $\frac{380 - 43.85}{1029.4} = .3266$ BPF $\times 4117' = 1344$ BBLS

.34486 BPF $\times 1000$ 344.86 BBLS Riser = 1688.81

$9\frac{7}{8} = 295.67$ BBLS

Total $9\frac{7}{8}$ cgo = 461 BBLS

Riser + stack