

JIM MCKAY

BRIAN MOREL 5/10/10 3:30 - 6 PM  
INTERVIEW

- LINER
  - 11 7/8" EARLY : 9 7/8" LINER
  - ORIGINAL ~~11 7/8"~~ 9 7/8" LONG SPIN-DO  
THAT 9 7/8" x 7" WITH SPIN-DO
  - SUCCESSFUL EXPL WELL
  - MODEL W/ BACK UP HES SET BY QUANT &  
GABLIANO.
    - REVIEW OF MODEL. & HYDRO. FALLS < 14.1 PPG
    - 14.0 PPG = 14.17 ESD
    - SAYS 14.14 PPG & : LIMIT AND ESD  
MOD IS GREATER DURING CMT JOB.

FRIDAY - BRIAN BELIEVES MODEL WAS WRONG B/C  
PWD HAD 14.17 <sup>PPG</sup> w/ 14.0 MW BUT  
M-A-L-E HAD 13.95 ESD

- TESS LOOKED INTO MODEL ISSUE, BUT COULDN'T  
FIND ISSUE. RESEARCH CENTER IN CK SAYS  
TEMP PROFILE WAS INCORRECT
- W/ NEW MODEL ~~MAX~~ MAX ESD > 15.0 PPG  
& WOULD LOOSE RETURNS.
- CAN CMT W/ LISTS : LINER & NEEDS TO  
REVIEW LINER OPTION - BTH ON 14TH  
MOC REVIEW - MARK F. BRETT, DAVID SUMS, JOHN GRY  
& GREG WALL,

2

MOC  
IN MEETING 14.4 HYDROSTATIC  
NEXT DAY TO REVIEW W/ ERICK CUNNINGHAM  
BEFORE APPROVING USER

- GREG WALL, BRETT K, CUNNINGHAM,  
QUAN (HES), JESSE
- REVIEW MODEL

- CHANGED TEMP PROFILE NOTICED  
ODD CHANGES.

- NOT REMEMBER TEMP EFFECT BUT  
NOT RIGHT

- MDT DATA W/ TEMPS TO  
CONFIRM MODEL.

- MDT - 14.17 - 14.18 BUT  
JESSE'S MODEL 14.4

- SOMETHING WRONG.

- TURNED OFF COMPRESSIBILITY  
& ADDED 0.17 COMP. TO MW.  
BASED ON MDT.

- NEW MODEL LL ECD  
14.6 - 14.7 MAX ECD ...  
COULD CUT LONG STRING.

- 17.14 PPg DESIGN MINIMUM

How to Reduce ESD?  
 Options: Baseoil or Foam Spacer  
 Models each option

- Base oil < 14.4 ESD BUT NOT AT ECD.

- Press since w/ N<sub>2</sub> turn on & ... Decided  
 to slow rate

- Needed proper centralizers in model (15th model)  
 w/ proper restoring force w/ 70%

15th model stands off.

- Caliper w/ correct cent. (6) 1st 6 JTs  
 centralizers

- 21 = 70% standoff

6 = 70% standoff (not pass)

(14th) (15th)

Centralizers

6 → 21 → 6

↑  
 Travel  
 offshore  
 a meeting w/o  
 Brian

Brett  
 Greg  
 Jesse  
 Mark?

- Couldn't find centralizers  
 for 21 & :

- Final proc. had 31 cent.

- Last min. change & written  
 by Brian & sent by email

4

(15TH)  
6 → 21 →

- JESSE & BRIAN AGREED THAT MODEL MAY NOT BE ACCURATE w/ CENTRALIZATION.
- BRIAN - LOW RISK w/ LOW DLS & & :  
NOT CENTRALIZED. JOHN & MARK:
  - PAST EXPERIENCE SAYS MODEL IS CONSERVATIVE
- AGREED TO RUN 21
- JOHN GUY TALKED TO DAVID SIMMS.  
& JIMMY CONCERNED ABOUT CLAMP ON CENTRALIZATION  
w/ LONG STRING ACROSS SACK.
  - SPECIAL
    - LOCATED CENTRALIZATION BUT ONLY ABLE TO STOP CENT. & STOP COLLARS ON BOAT.
    - STOP COLLARS ARRIVING AT RUNNING CH.
    - JOHN TALKED TO DAVID SIMMS & DECISION MADE NOT TO RUN 21
    - PLACED CENTR. IN GANGE HOLE TO MAX STANDOFF BASED ON CALIPER DATA.
    - RISK OF GETTING CSG STUCK
    - DUAL STOP RINGS IN MIDDLE
    - WRAP AROUND INTERNAL
    - CLEAN, EPOXY, SET SCREWS, 12 HRS TO SET

5

DISCUSSION ON CENTRALIZATION OF 6?

BRETT  
COMMUNICATED  
TO BRIAN

RISK - POSSIBLE CHANNING INTO 9 7/8 STAGE  
→ & POSSIBLE LIT RETURNS w/ ECD AT STAGE.

- VIEW MODEL NOT ACCURATE B/C VERTICAL WELL

BRIAN - NOT AWARE OF HES GAS FLOW

NEXIN - 6 CENT. , REMAIN STAGE, CORKS CUTTER STAGE  
FLOAT EQUIP -

↓  
BATTEN TO GET TO BTM

- FC - NEXIN , BUT WORTHING SAYS REP GOT INFO.  
AN CRUIS (OP)  
BRIAN KLAUSIN (WORTHING)

- L45 FLOAT w/ CAGED BALL - NORMALLY DRIFT BALL.
- RISK WITH FC? NOT REVIEWED IN RETAIL
- FS USUALLY BUT NOT IN THIS WELL.

- FC OPEN HOLE?
- OPEN HOLE - CLOSING DIVERTOR BEFORE OH →  
ALWAYS UNWELL B/C BALL TAKES TIME.
- RISK OF QUICK CONVERSION

- DISPENSATION FOR ENTIRE WELL ON AUTO FILL. &  
(MOST ALL <sup>6 in</sup> WELLS RTH w/ AUTO FILL OPEN.

- MARK HAFLEY  
MOC ON LONG STRING?

MOC LINER - DECIDES NOT TO PROCEED

MOC LONG STRING - MARK H. & ILLUSTRATED OPTION.

AS ATTACHMENT

- JOURNAL <sup>SPECS</sup> , LOG , TUBING LOG , DRAWING

TALKED ABOUT LONG STRING.

6

Foam CMT Puck? Planned from  
Beginning b/c offsets ISABELLA &  
MARANA narrow PP/FG

- Full 97/6" w/ N<sub>2</sub> CMT
- MOC for TAPERED DESIGN & NOT  
N<sub>2</sub> DESIGN
- IF COULDN'T CMT THEN A LINER.
- N<sub>2</sub> ONLY OPTION REVIEWED &
- CONSIDERED ALTERNATES - ERICK TO REVIEW  
MODEL ~~But it~~
- ERICK INVOLVED IN PHONE CONV.  
w/ N<sub>2</sub> CMT JOB

2 MOC  
14TH

- MARK HAFENY - DAVID SUMM NOT APPROVES  
NOT SURE WHY

DAVID WANTING CHANGES OR ATTACHMENTS.

ERICK MUELLER - FRONT LINE BEYOND 26 281  
MOC PROBLEMS??

- 15TH - BELIEVES MARK HAD ERICK SET UP MOC
- ANDY - WHY INVOLVED? DON'T KNOW WHY.
  - DAVID APPROVES
  - MAY BE FILL IN FOR DAVID RICH
  - JOHN SPRAGG - ETA
  - ~~DAVID RICH~~

7

## N<sub>2</sub> JOB

- BRIGH ON JOB
- OUT FOR
  - CLOWN OUT TRIP, ANY PROBLEMS THEN SWITCH TO LINE
  - ~~18280'~~
  - 18272' - TAGGED UP & WASHED
  - 18280' - WASHED & NO US-OS
  - CBL - 1100 UNIT & CIRC UNTIL 40 UNITS.
  - FLOW CHECK AT BTM, SHOE, PUMPED OUT OF HOLE. NO FLOW
- ~~TO~~ N<sub>2</sub> JOB - WIP CHECKS
  - RUN 7" CBL
- CMT UNIT TO RIG FLOOR - / MANFOLD
- SURFACANT ON UNIT
- ★ - VOL CMT UNIT TO RIG FLOOR - 3 balls B/C HISTORICAL CMT OVER TOLERANCE.
- RUN 7" SINGLES THEN DOUBLES B/C CONTAMINATION
- DOUBLES - GRANULATED IN CONN.
  - DOUBLES CHECKED ALL TORQUES W/ PRO BUCKING UP
  - DOUBLES CHECK TONG CONNECTION? NOT SURE, ALL WASHED
- SAFETY LTB FLOW 9 7/8" & WAIT 2 BALLS NO 9 7/8" CONN PROBLEMS

- BRIAN NOT ON FLOOR FOR HANGER
  - WRAPPED & NOT ABLE TO SEE LEAK ASS.
- 6 5/8 SIDS - 1ST
- 6 5/8 V -
- UPON HOLES - DROPPED BALL BUT NOT CONVERTED
  - ~~NO CTR.~~ DIVERTED
  - STAGES SLOW DROPS 18280 - 18250
  - w/ 5-10 KIPS DOWN
  - PICKED UP BLACK HAWK CMT HEAD
- DECISION TO RHT w/ DIVERTOR OPEN
- R/U N<sub>2</sub> UNIT
- SAFETY MTR. THRU CONVENTION DIV. & ATTEMPTED TO CONVERT FLOATS. NO WATERFALL HAND.
  - ALLOWED HAND FAMILIAR w/ &
  - TO ROCK FEAT ↑ & ↓ AP
- BRIAN CALLED JIMMY GUY & GOT PERMISSION TO GO TO 2200 PSI. ~~CRASHED~~ THEN A CALLED DAVIS. BRIAN CALLED BRIAN CLAUSSIN (WATERFALL). @ 1300 PSI BALL WOULD GO THROUGH w/o CONVERTING FLOAT. PER WATERFALL 6800 PSI MAX
- CONVERTED @ 3440 PSI
  - SOMETHING PLUGGED BUT MAYBE STUCK.
- PRESS MUCH LOWER THAN MODEL.
  - 125 PSI w/ 1 BPM
  - CALLED JIMMY GUY & RECOMMENDED TO GO UP 4 BPM
  - THOUGH THERE MAY BE A LEAK IN DIVERTOR. SHUT ANNUAL, DOWN DP w/ KILL. WATCH RISOR w/ DIVERTOR ABOVE ANNUAL. → OK

LOWER  
TEMPERATURE



9

- SAW RETURNS BACK TO DE-GASER
- THOUGHT THERE WAS AN ISSUE w/ PUMP GAUGES.
- CIRC SMALL VOL TO GET CUTTING ABOVE 9 7/8" LINER. IF NOT BTM UP.
  - DECISION MADE IN CMT MTB.
  - BRIAN TALKED TO WHOLE TEAM BRIAN CALLED.
- PUMP CMT. JOB
  - BRIAN IN RIG FIRM
  - 150 bbl (INCLUDES 20 bbl SPACER)
  - LOE LAMBERT + DON M. - ON CMT UNIT
  - CMT JOB WENT WELL.
  - 1ST DANT TO DIVERTION SOON BUT EXPECTED R/C N<sub>2</sub>
  - DANT HAS A LOT OF SPEED ∴ DIDN'T SEE.
  - GOOD INDICATIONS @ XD
  - DISPLACE w/ CMT UNTIL BOTH PLUGS & SWITCH TO RIG PUMPS.
  - 150 PSI < MODEL BUT ALWAYS < THAN MODEL.
- BTM PLUG 10 bbl AFTER OF PLUG
- 60 PSI LIFT PRESS
- LOE LAMBERT ON CMT UNIT w/ NO FLOW w/ FLOAT CHECKS
- DRILLER SAID NO GASES ON LOSSES ON CMT TUB FOR DRILLER.
- RIG PUMPS 4 bpm
- NO FLOW EXCEPT 1 FINGER ON CMT UNIT

10

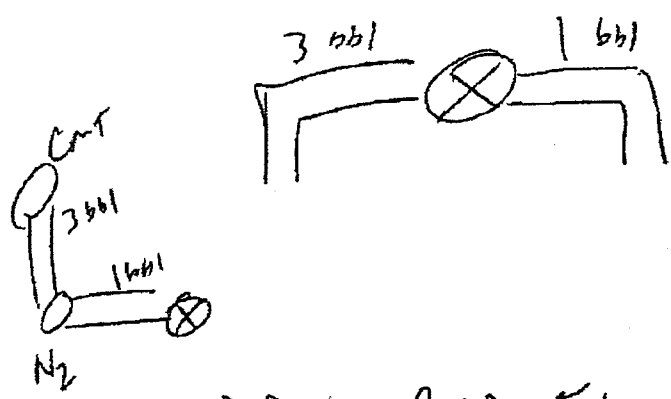
SEN ASS - 4000 PSI PER NEW MANUAL

- ~~10~~ 10 K PSI BED BACK TO 6500 PER APP TEST PRESS.
- DON AT CMT UNIT TO WATCH PRESS.

- 5-10 MIN BUT HOLD 45 MIN B/C WASN'T UNFORTUNATE UNTIL 4 PSI / MIN
- 6-8 PSI / MIN BEFORE BUT KNEW A 2<sup>ND</sup> TEST WAS AN OPTION.

- WENT TO BED. CIG TEST WHILE BRIAN ON HELICOPTER
- DISCUSSION ON HEAVY PILL? YES B/C 16.5 PP IN 46H IN RAT HOLE SO SMALL & POSSIBLE HIGH ECD
- HOW MANY SHOE JOBS REQUIRED? DUAL PLUGS & EXPERIENCE. DUAL PLUGS GOOD NOTATION & SOME STRINGS ARE SINGLE. CONFIDENT ~180' SHOE OK.  
TYPICAL 345TS w/ LARGER CASING
- DISCUSSED PUTTING ~~PLUG~~ <sup>FLATS</sup> ACROSS DAG. & COMPLETIONS SUMP PUMP.
  - IF N<sub>2</sub> IN SHOE HAS TO GO AHEAD
- PROLOGUE 5-10 bbls BEHIND TOP PLUG? BRIAN CLAIMS

11



- DID NOT PUMP 5-10 bbls ~~at~~ before DART.
- CAN'T REMEMBER why they DIDN'T DO IT ~~to do it~~ DISCUSSED
  - IF NO RETURNS & NOT POSSIBLE TO RUN CBL. w/ 5-10 bbls before.
- IF LOT RETURNS THEN CBL.
- WHO DISCUSSED?
  - JOHN - GREG
  - TYPICALLY BOTH KNOW BY PHONE ON CHALK.
  - MINOR - ENGINEERS ONLY DISCUSS
  - MORNING MEETINGS ONLY
- 3 bbls w/ RIG COMMENTS
- MODELS - ENGRS MAY BE EIT
  - REVIEWED MULTIPLE MODEL RESULTS

(2)

- BRIAN RECEIVED MODEL ON APRIL 18TH FOR 18TH NOV
- MULTIPLE FAILS EMAILED
- SUNDAY NIGHT REVIEWED ON M/G  
2/ PRESS RESULTS
- DID NOT NOTICE GAS FLOW POTENTIAL
- 2-3 DAYS ON DESIGN REVIEWS
- LAB RESULTS - 34 HRS > 3000 PSI
- MC 252 #1 - OPTION FOR 97/6"
  - PUT TOGETHER BY MARK HARTLEY
  - BRIAN READ IN MOC REVIEW
  - MAYBE A LATER VERSION OF MARK H.  
PUT TOGETHER ALSO
- J-TUBE & SD PBE NOT ISSUE 4/0  
FLOW BACK NO OTHER OPTION
- BASE OIL HYDROSTATIC
- 13.5 PORE PRESS IN SAND F/ OF AT TD.  
FOR MODEL.
- 10.75"  $\phi$  CONT. BUT MODEL HAS 8.5"  $\phi$
- PLUGGED CENT UP HOLE 18035'
  - CT IN TALLY = CONTINUATION
  - TOP OF JOINT
- CHANNELING - DUE TO LACK OF CONT. IN  
MODEL.

## - NEG TEST

- BASE OIL - WHY CHANGED TO SEA WATER?
- NO ENOUGH FOR ~~SEA~~ WHAT WELL BORE WOULD ACTUALLY SEE. IF STATEMENT IN PROCEEDINGS ALLOWS FOR THIS & ANY OPERATIONS EMAIL WAS SENT.
- INCREASE REDUCE TO SIMULATE UN STRE UNDER BALANCE
- DISCUSSION TO GET CMT PLUG IN MUD? WSL UN HORIZ WANTED SEA WATER FOR BETTER CMT PLUG.
- LONG STRING VS OPEN HOLE CEMENT PLUG  
( UNUSUAL PRODUCTION & EXPL. ~~WAS~~ EXTRACTED
- NEG TEST - NEED HWDP ON COLLARS TO LET LOCK DOWN SLEEVE.
- WHY NOT LOCK RING IN MUD?  
 → ORIGINAL PLAN - LOCK DOWN, THEN SET PLUG & THEN DISPLACE. BUT RISK OF STRINGER SCRATCHING LOCK DOWN SLEEVE COULD BE DAMAGE ON TBT HANGER SEAL SURFACE.

PREVIOUS  
PLAN -  
VH1

M

NEW TEST - SAME AS LAST 3 WELLS

- w/ WATER
- DIFF RIGS DO DIFF WAY DEPENDS ON SIMULATION.
- EASY TO CLEAN OUT LINES w/ SEA WATER
- HOW TO DEFINE SUCCESS OR FAIL TEST? NO FLOW 30 MIN.
- MUD OVER HAS PROBL. FOR DISPLACEMENT.
- WHO OBSERVES? WSC MONITORS FLOW TYPICALLY RETURNS TO CNT UNIT.

FORMA SET + FORMA SET SPACER DECISION?

TYPICALLY  
TANGUEN RUC  
NOT ACTIVATED  
ON X-LINK.

- TALKED ABOUT IT WSC, MUD OVER, BRIAN, LEO (LEAD MUD OVER)
- JON LAOLUE & HURSTON MI
- MI CONTACTING BP REGULATORY w/ BRIAN C.O.J.
- OFFSHORE - SPACER WATER FLUID w/o INTERACTION w/ OBRM w/ 1-2 MG HIGH MW TO FLUSH
- MI SAID NO ISSUES w/ FORMA SET & MI PROCEDURE
- DUAL PURPOSE of SPACER + DUMP EXCESS w/o RISK
- MI PICKED WEIGHT OF FORMA SET
- DISPLACE DURING NOT TEST ABOVE ANNULUS - FLUX
- NO PROBABILITIES KNOWLEDGE SAT 4 WKS

BOP PAPER - 2 PAPERS w/ DIVERTOR NOT SURE WHICH IS IN DIVERTOR.

UP KILL TO DE. GARRON FOR ANNULUS DIV. TEST

15

- 5 ft DEEPER TAG W/ WHD
  - LEAK ON TENSIONER
  - BALLAST ISSUES S/ TOOK TENSIONER OFF LINE.
  - STACK SHOULD HAVE BEEN NOTED  
DIFF.