LIVING THE LIMIT TOOLBOX

LTL-001.1 (Tangguh.)

WELLSITE PERFORMANCE SUPV ROLES & RESPONSIBILITIES

Rev History		
Rev No.	**Improvement made**	
Rev01		
Rev03	Revised to reflect custom-and-practice on Ensco 108	**27-Jan-08**

CHANGES MADE DUE TO THIS REVISION ARE SHOWN IN RED

Distribution (who gets this procedure and who gets AARs sent to them):

Wellsite team leader	Ensco 108
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Summary

The purpose of this document is to define the roles and responsibilities of the Performance Supervisor role and provide recommendations on how they can be fulfilled.

This applies to bp's activities on the Tangguh project.

The Appendix has details of how the job is done.

1. Organisational Aspects

1.1 Role

The Performance Supervisor is a member of the rig team, whose primary function is to provide Living the Limit support for the rig team at the wellsite.

1.2 Reporting Relationship

Whilst at the wellsite, the Performance Advisor will report to the Drilling Supervisor and maintain regular contact with the office support team, principally the Drilling Engineer.

At least once per day the offshore PA will contact the onshore coordinator

2. Wellsite Operational Responsibilities

2.1 Promote the LTL Philosophy

- Promote enthusiasm, amongst the crews and Service Providers, and raise awareness for the programme. Carry out informal inductions for new personnel who may not know what the role of the Coach is.
- Share information relevant to LTL and operational performance with the Wellsite Team - this can be done at the pre-tour for the core crew and by keeping the notice boards up to date with relevant information.

2.2 Facilitate Enhanced Wellsite Planning & Operations

Performance Advisor will be required to work closely with the drilling contractor personnel.

Our personnel will :

- Co-ordinate Pre-Phase Review Meeting (PPM)
- Assist Drilling Supv in preparation of daily instructions, referring to the WBS, LOG and AARs
- Assist Drilling Supv with Daily Planning Meetings
- Liaise with toolpusher to maintain drilling contractor standard operating procedures and checklists
- Participate in spreading best practice amongst the various crews.
- Conduct post-job washups (toolbox washups) to capture all learning (good and bad)
- Spend as much time outside witnessing operations and offering suggestions

2.4 Track Performance : Work Breakdown Structure and Efficiency Factors

- Be custodian of and update the spreadsheet on a daily basis, ensuring rigour in reporting deviations from the plan.
- Ensure gap analysis drives the discussions on what went well (and is to be repeated in the future) and what did not go well.
- Analyse deviations from the plan (NPT, ILT (Invisible Lost Time) and KILT (Known Invisible Lost Time) and determine the "root cause" behind the deviation.
- Keep Efficiency factors up-to-date and use to promote performance culture
- Post the Time vs. Depth plot (from Work Breakdown Structure). Display on notice board and Coffee Shop board. Briefly highlight any significant performance times at the pre tour meetings.

2.3 Facilitate Enhance Wellsite Learning : AAR and LOG (and Best Practices Guide)

- Take a pro-active role in ensuring that relevant lessons & opportunities are captured from the wellsite team.
- Assist with lessons learnt close out for Rig Specific Issues or as delegated by the Drilling Supv and/or office support team.
- Ensure feedback from Lessons Learned is passed on to the Originator.
- Ensure relevant Lessons Learned are incorporated in Wellsite Operations (a lesson can only be 'Implemented' once it has been embedded into a procedure or system of work – i.e., a lesson has not been forgotten).
- Write reports on non-routine operations e.g. first use of Rotary Steerable systems or Tubing Racks, and feedback to rig/onshore team.

2.6 Assist Ensco with wellsite procedures

It is widely acknowledged that a full set of current procedures are essential for safe and smooth-running operations.

The Performance Advisors will help identify which procedures need updating

Appendix – "Explanation of Day to day Aspects of the job"

1. LTL Awareness – Performance Culture & the Enabling Environment

1.1 Introductions to LTL

Raise awareness of LTL during informal tours of the rig.

Hold informal meetings with personnel who are not familiar with LTL. Slides ("the wellsite briefing pack") are available at the wellsite for use

Emphasise that LTL must not impact on safety or well quality and that the Drilling contractor safety management systems (e.g. STOP, FOCUS) must still be used. LTL is about "making things better". The time savings that come from that are made by getting things right first time, omitting activity altogether and implementing new ideas – NOT by rushing!

Keep up-to-date register of people who have been briefed on LTL.

1.3 Performance Notice Boards

Post relevant material on notice boards..

Keep notice boards up-to-date. with current well and previous well lessons, best practice info, etc., Days versus depth graph and efficiency factors, etc should be up-to-date on notice boards.

2. Pre-Phase Meetings

(PPM) are critical to success, preparation material should be taken from the LOG, WBS, SIDs, Best Practices guides (where available), detailed drilling procedure, checklists, detailed drilling contractor procedures (where available) and any other sources.

rp^2 will co-ordinate these meetings after consultation with the WSTL, advising required attendees of time and location and preparing the appropriate support data for the specific section being reviewed.

A section does not necessarily mean a phase. All flat times will be a section and things like testing BOPs will be classed as a separate section.

3. Daily Planning Meeting

To be held with Ensco and Service Company reps and should cover planned operations for that day, and status of planning for future operations – service company pre-job checks to be discussed and check lists reviewed.

All check lists for upcoming work should be given to the Toolpusher at the meeting.

These check lists will be then gone over later with yourself and the crew to ensure they have everything in place. Important issues from this meeting to be incorporated by the Toolpusher into the drill crew pre-tour safety meetings.

4. Checklists

These are extremely detailed lists to be used by the drill crew to preplan the day's or upcoming work. These have been used with great success.

5. After Action Review (AAR) – see detailed procedure for more

After each section before any specialised personnel leave, hold the AAR with ALL supervisory staff to get as much information as possible. Try not to go over ¾ hour.

Make sure that all service company personnel involved in that operation are at the meeting.

Get it typed up, checked by the DSV and sent to St. Magnus House ASAP. You will find that it can take up to 2 days to get one off (delay with approval of DSV if work load is high).

AARs have to be issued as soon as possible.

A particular challenge is how to get the range of people involved, when they work different shift patterns and, in the case of Service Companies, may leave almost immediately after the job.

Keep the sent email in the respective folders in Outlook so that it can what has been sent, to whom & when. Set up a structure in Outlook for this.

6. **Lessons & Opportunities Gathering (LOG) – see detailed procedure for more**

This is the key Action tracker, used to ensure that items are logged for follow-up and that they are followed up and closed out as promptly as possible.

It draws input from the AARs, WBSs and informal discussions.

At every opportunity, discuss operations with the wellsite team informally during the day to see if any Lessons & Opportunities can be gathered. This involves walking around, mixing with all personnel, observing tasks, attending toolbox talks, and encouraging the thought process: "Do we need to do this?" – "Can we do it off the critical path?" – "What can we do to half the time it takes, whilst safeguarding safety?"

Where possible, ensure the crew (and Service Co personnel) have a daily forum where they can submit ideas and receive feedback on progress being made on the LOG.

Ensure a full and accurate representation of the facts is captured so that the LOG will be clear to someone who has not been involved in the operation. Separate facts from opinions.

Fill in as many of the columns as possible. If it is unclear what should be entered e.g. who the Action Party and Client Focal point should be, highlight in red and ask a member of the office team.

Ensure that Lessons learned are screened for value and recorded in LOG on a daily basis. It should be sent out by email whenever there is substantial update, with the email text giving a brief summary of the items added.

Ensure that the latest LOG is provided to the Office Team on a regular basis. It is recommended that the master copy is saved on the 'H' drive on the shared CNR server, and e-mailed in until the well is completed. Once the well is finished, the master copy will be transferred to the shared drive and a new spreadsheet set up for the next well.

The LOG is broken down into well sections, to enable it to be fully reviewed prior to each prephase meetings, where all L/L should be discussed not just the outstanding ones. This will double check that the embedding process has taken place.

Ideally it will make reference to every item of NPT and ILT, though it is recognised that this may not always be practical.

A weekly meeting should be held with the onshore team. Performance Advisor is to remind the team of the need for these meetings. However as the process matures we should adopt the "five per day" approach where five items are discussed at the end of the morning call, this will not only keep the LOG as high profile as possible but assist in getting agreement on close out and action parties.

Other items are also closed or rejected or marked for action as a result of this meeting.

After the meeting with the DSV about the LOG (if required), General emails with the LOG attached should be avoided, First contact about an item should be face to face if possible, if not by phone however if you have to send the LOG by mail then it works much better if you filter the LOG for each person (using the Auto-Filter feature in Excel) to make it easier for them. You should avoid asking actioness to put comment directly into the LOG, just ask them to put a couple of lines on an email and you do the input into the LOG.

The long-term Ensco actions from the LOG go into the Ensco Tracker .

7. **Follow up of LOG items**

Stimulate and participate in follow up of rig specific Lessons & Opportunities and liaise with relevant personnel to follow up other Opportunities as required.

Feedback status of LOG to originator and other relevant rig personnel.

8. **Daily meetings**

The WBS should be correct and up to date for this meeting.

Ensure the Days ahead/behind are correct as there were a lot of critical comments thrown in our direction due to the errors that were in the WBS.

Use this to put in a couple of quick items with respect to preplanning and / or the Enabling Environment.

9. WBS

The original is created in town by the drilling and completion engineers. There is a separate procedure to cover how the WBS is used.

Things to note :

- Timings in the spreadsheet should exactly match what is seen in on the morning report.
- All relevant columns of the spreadsheet should be filled in – NPT should be explained.
- If the WBS contains "Best of the best" and/or TL times, then these should be updated "as we go along". Eg on VRB-09, if ROP is better than the TL time shown then the TL time should be reset to reflect this.

10. Flat Times

For all operations such as N/U BOPs, N/D BOPs, Test BOPs, m/u BHAs etc, the Performance Advisors should to be up and about witnessing as much as possible, checking they have all the equipment and doing whatever we can to prevent lost time.

Performance Advisors will need to spend a lot of time outside and have to manage their time carefully so nothing is missed. Don't forget most Drilling Contractors have a 16 hr work policy; time planning and transport become critical.

11. Pre-tour meetings

Attend pretour meetings in the coffee shack.

Take a few minutes to paraphrase any key information that may be of use for forthcoming operations or to mention any significant highlights from previous day.

12. Morning ACE call

Participate in Morning Call.

Performance Advisor must be prepared to provide a brief summary of performance and mention the recently-added LOG items.

NOTE – Don't forget that you are representing the Company and as should should conduct yourself professionally at all times during the call, come prepared with diary and any other docs you think may be discussed. Please make sure your standard of dress is of the standard of the client at the least.

13. Efficiency Factors

Efficiency factors are designed to help the wellsite team connect with their performance. They are introduced carefully once the team understands with LTL is about – they show total time for a sub-activity and also convert the net time into an efficiency.

100% Efficiency is equal to the average of the best 2 net times – therefore if a time is entered into the spreadsheet that is better than the previous best two times, the efficiency factor value should be changed accordingly e.g. average the new best two times and manually enter into spreadsheet.

Only the main efficiency factors are displayed on wellsite LTL notice boards at present e.g. rigging up, BOP N/U time..

There is a separate document covering efficiency factors.

14. Days vs. depth

Update personnel with progress versus plan at the morning meeting.

Post on the Notice Board.

Check that the number of days on the well and days ahead / behind AFE ties in with that in morning report and with what the Drilling Engr is carrying.

15. Fortnightly Review of Operations

Write a fortnightly review of operations, including highlights and lowlights, number of AARs written, summary of lessons identified (and value), along with any other discretionary work you are doing. It is essential to promote what we are doing.

16. Optimisation Reports / Learning Bulletin

From time to time it will be necessary to supplement AARs and the LOG with a more detailed report covering one particular item.

Examples would be rigging up an item offline and/or some item that is particularly difficult to explain within the constraints of the LOG and an AAR.

17. Handovers

Prepare clear, written handovers. These should be copied to office based coordinator who may on occasion copy them on to the client and Dave Taylor.

It is best to draft the handover, email it to your relief and phone them to talk it over before they leave home.

A TYPICAL DAY IN THE LIFE OF A PERFORMANCE SUPERVISOR

1. 5.15 am: print morning report (if it's ready).
2. Start work on WBS by converting PDF files to Doc or RTF files so that the information can be cut & pasted into the WBS. Don't forget we require as much detail as is practical on NPT and ILT.

   "Actual ops" should be a good breakdown of the times, but not "war and peace" ; remember that if anyone wants all the details they can get them from the morning report.
3. Go to rig floor & also chat with Night Drilling Supv. Check with Toolpusher on day's activities and preparations for this.
4. Unless required outside, finish WBS & set up laptop and prepare presentation for morning meeting. Send off WBS.
5. 06:00 am : Wellsite morning meeting .. CNR Drilling Supv, Dolphin Supv, Service Co personnel
6. 09:00 am. Morning ACE call to town.
7. If no time earlier then check with Toolpusher on days activities and preparations for this, detailed check lists etc
8. Go to rig floor with check list & speak to Tool Pusher, Drillers & ADs about check list etc. .. though it is even better if the Drilling Supv and/or Toolpusher does this.
9. Speak to service companies about up coming jobs and preparations for such.
10. Spend as much time as possible outside observing and speaking to everyone.
11. Prepare PPMs & AARs for upcoming meetings and let everyone know of these meetings. (If any problem getting people to attend, inform Drilling Supv & Drilling Supt and they will ensure everyone attends).
12. Prepare notes on PPMs and if you have conducted AARs get these typed up first.
13. Attend pre tour meeting at 11:30 hours in coffee shack.
14. Lunch
15. The afternoon is a repeat of the morning.
16. Bring the LOG up to date when you have time and the same goes with chasing it up.
17. Printing off stuff has to be done when time and availability of equipment allows.
18. Bring the network filing system up to date before retiring for the night.
19. Inductions on the Living the Limit ethos, including the "Enabling Environemnt" and "what we do" – There is not time for 2 hr inductions. Do mini-inductions and give little pep talks to the service company reps and rig crews..
20. Attend weekly Safety Meetings.
21. 19:00 Attend Wellsite evening meeting ..

