

POST JOB REVIEW

TEMBUNGO BRAVO

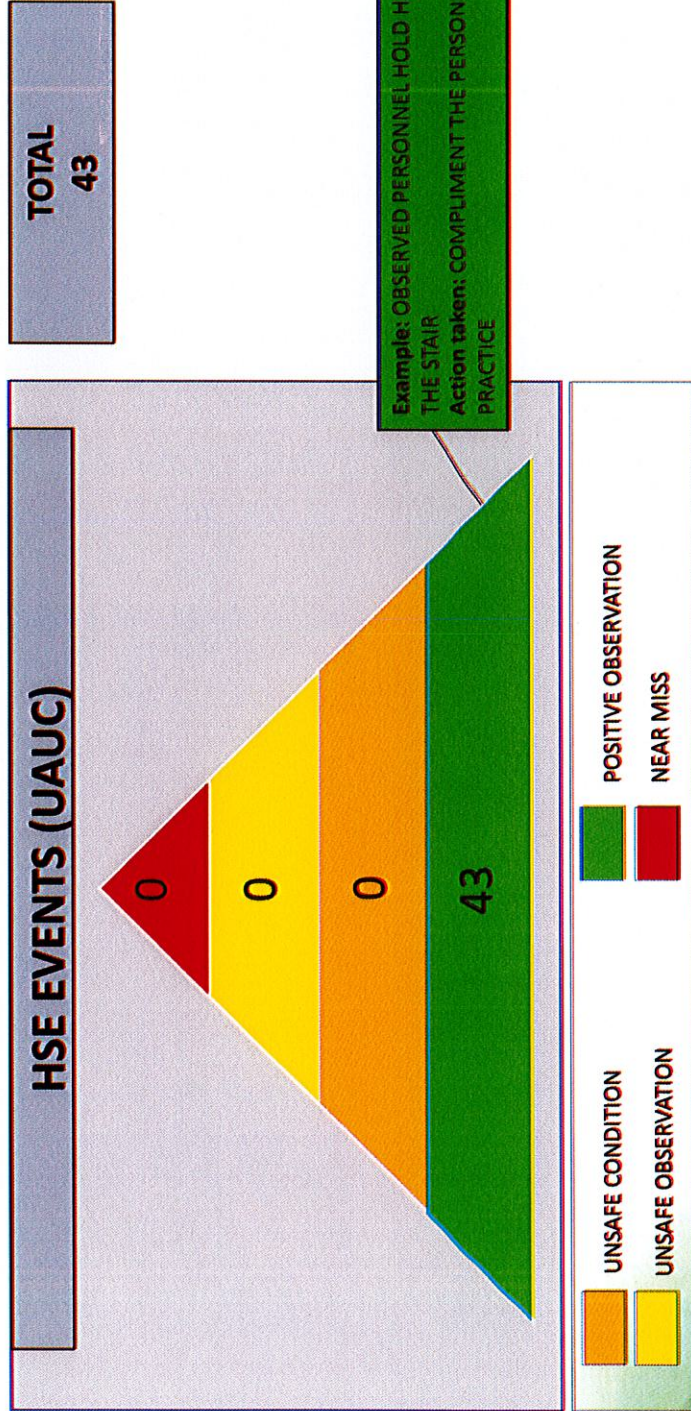
PREPARED BY	REVIEWED BY	APPROVED BY
CLEMENT EMANG	AMRI ZULKIFLI	FARIS FIRDAUS



PRESENTATION OUTLINE

- ✓ HSE & Governance
- ✓ Problem Statement
- ✓ Background
- ✓ Operation Summary
- ✓ Operation Analysis
- ✓ Conclusion

HSE & GOVERNANCE



HSE & GOVERNANCE

- Crew unable to travel and perform boat transfer due to bad weather. MK3 unable to perform boat transfer with Tembungo Alpha/Bravo platform due to high swell.
- Bad and unexpected weather pick up. All mitigation in place to make sure all personnel safety in place prior to any job execution
 - Stop job during high wind and heavy rain.
 - Crew unable to perform lifting during bad weather
 - Slippery floor – PPE including safety boot checked before starting job. Oil absorbent in place.
 - Job Preparation – Toolbox Talk and JHA briefing on each step taken before rig up and rig down.

TEMBUNG BRAVO PRE P&A MIT CAMPAIGN



PROBLEM STATEMENT

- The proposed work scope for TBG-BRAVO is to perform MIT logging using MIT24F to inspect the tubing internal condition and integrity by analysing any corrosion, erosion or physical damage prior to Plug and Abandonment.

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[illegible]

OBJECTIVES

- To provide MIT survey to inspect the tubing internal condition and integrity by analysing any corrosion, erosion or physical damage prior to Plug and Abandonment.

RUN SEQUENCE	ACTIVITY	DEPTH (ft.MDTHF)
MIT Survey	To check tubing integrity	3576 ft-MDTHF - SURFACE

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PLE

- condition and damage

DEPTH (ft.MDTHF)

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WELL COMPLETION SCHEMATIC DIAGRAM

[illegible]

- To provide MIT survey to inspect the tubing internal condition and integrity by analysing any corrosion, erosion or physical damage prior to Plug and Abandonment.

RUN SEQUENCE	ACTIVITY	DEPTH (ft.MDTHF)
MIT Survey	To check tubing integrity	8832 ft-MDTHF -- SURFACE

BACKGROUND (B-05)



WELL INFO

WELL	B-05ST1
TUBING SIZE	3-1/2" 9.2 L80 JFE-FOX
CASING SIZE	9-5/8" 47 L80 VAM TOP
MIN ID	2.690" XN NIPPLE @ 10008 ftMDTHF
MAX DEVIATION	77.36 DEG 9482 ftMDTHF

OBJECTIVES

- To provide MIT survey to inspect the tubing internal condition and integrity by analysing any corrosion, erosion or physical damage prior to Plug and Abandonment.

RUN SEQUENCE	ACTIVITY	DEPTH (ft MDTHF)
MIT Survey	To check tubing integrity	7008 ft-MDTHF - SURFACE

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WELL	B-07L
TUBING SIZE	2-7/8" 6.4 LB/TKC 4040 N80
CASING SIZE	9-5/8"
MIN ID	2.205" XN NO-GO NIPPLE @ 7938 #MMDTHF
MAX DEVIATION	42.0 DEG

- condition and damage

RUN SEQUENCE	ACTIVITY	DEPTH (ft.MDTHF)
MIT Survey	To check tubing integrity	7928 ft-MDTHF - SURFACE

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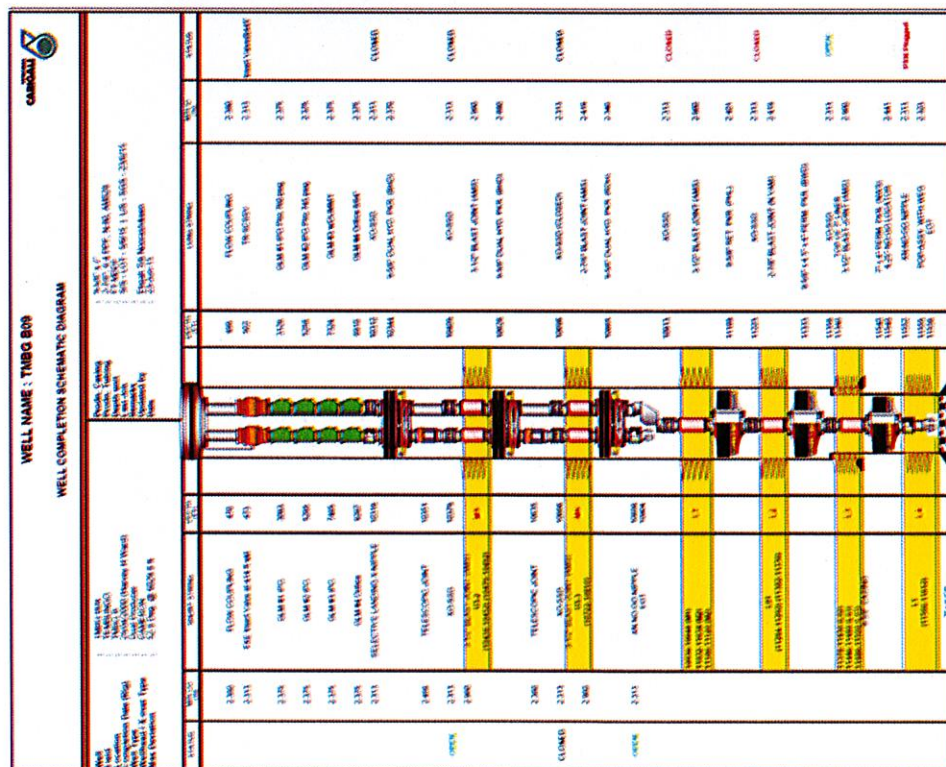
WELL INFO

WELL	B-09L
TUBING SIZE	2-7/8" 6.4 N80 AMS28
CASING SIZE	9-5/8"
MIN ID	2.313" XN NO-GO NIPPLE @ 11457 HMDTHF
MAX DEVIATION	42.0 DEG

OBJECTIVES

- To provide MIT survey to inspect the tubing internal condition and integrity by analysing any corrosion, erosion or physical damage prior to Plug and Abandonment.

RUN SEQUENCE	ACTIVITY	DEPTH (ft.MDTHF)
MIT Survey	To check tubing integrity	11447 ft-MDTHF - SURFACE



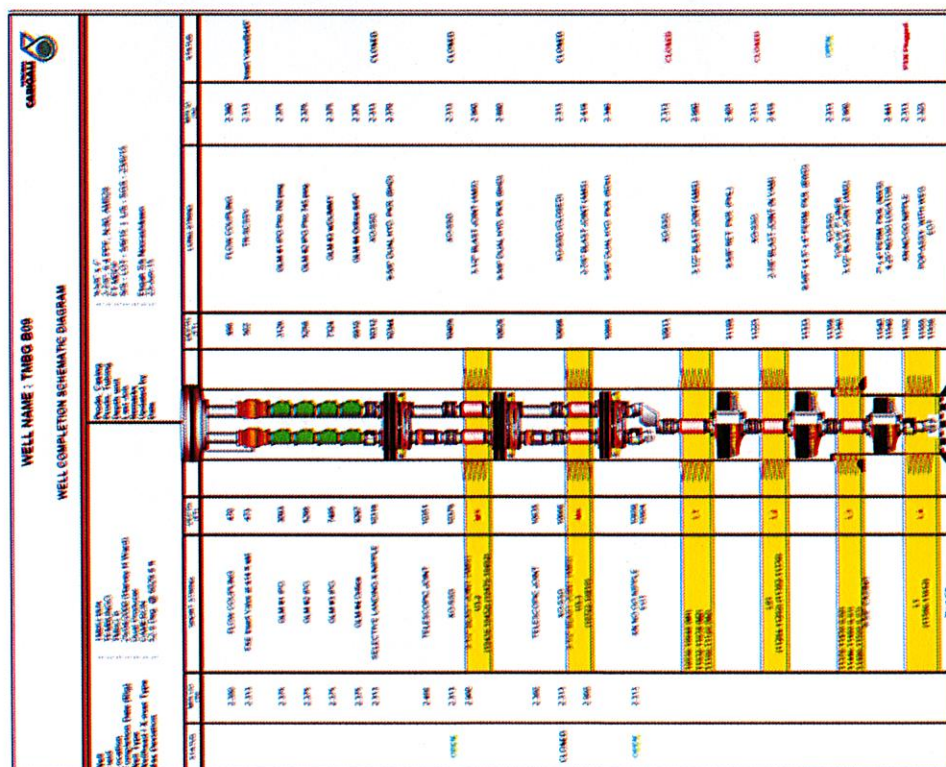
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WELL COMPLETION SCHEMATIC DIAGRAM

WELL	B-09S
TUBING SIZE	2-7/8" 6.4 N80 AMS28
CASING SIZE	9-5/8"
MIN ID	2.313" XN NO-GO NIPPLE @ 10804 #AMDTHF
MAX DEVIATION	42.0 DEG

- To provide MIT survey to inspect the tubing internal condition and integrity by analysing any corrosion, erosion or physical damage prior to Plug and Abandonment.

RUN SEQUENCE	ACTIVITY	DEPTH (ft.MDTHF)
MIT Survey	To check tubing integrity	10794 ft.MDTHF - SURFACE



OPERATION SUMMARY

PLANNED

WELL	RUN	DESCRIPTION
B02S	1	Perform MIT Logging from 3576 ft-MDTHF to 20 ft-MDTHF
B02L	2	Perform MIT Logging from 7039 ft-MDTHF to 20 ft-MDTHF
B04	3	Perform MIT Logging from 8832 ft-MDTHF to 20 ft-MDTHF
B05	4	Perform MIT Logging from 7008 ft-MDTHF to 20 ft-MDTHF
B07L	5	Perform MIT Logging from 7928 ft-MDTHF to 20 ft-MDTHF
B09L	6	Perform MIT Logging from 11447 ft-MDTHF to 20 ft-MDTHF
B09S	7	Perform MIT Logging from 10794 ft-MDTHF to 20 ft-MDTHF

OPERATION SUMMARY

ACTUAL

Date	Well	Run	Description	Remarks
19/10/2023	B-02S	1	✓ Deleum run TCC but encounter HUD at 3390 ft-MDTHF. Inform WSS. After discussion with WSS/town, decided to run MIT until 10 ft above HUD. New interval for MIT logging is 3380 ft-MDTHF to 20 ft-MDTHF ✓ Perform MIT run from 3380 ft-MDTHF to 20 ft-MDTHF ✓ Toolstring: RS + Swivel + 5ft stem + 3ft stem + KJ + ABM + UMT + CCL + PKJ + PRC + MIT24 + PRC + BUL ✓ RIH to target depth with 120 ft/min, slow at accessories and pick up weight every 1000ft. ✓ Reach target depth. Wait for finger to open. ✓ Log up 30 ft/min ✓ Reach target depth. Wait for finger to close. ✓ POOH to surface ✓ Disconnect tool from slickline toolstring ✓ Disconnect battery ✓ Download data.	COMPLETED

OPERATION SUMMARY

Date	Well	Run	Description	Remarks
21/10/2023	B-02L	-	✓ Deleum perform DP test on well B-02L. DP test failed. Exercise cycle 10x. DP test still failed. ✓ Check return, return=120 ml. ✓ Inform WSS, after discussion decided to run weight bar to check TRSCSSV flapper condition. ✓ Deleum run weight bar until TRSCSSV, lose tension. TRSCSSV confirm half open. ✓ After discussion with WSS, decided to suspend the job.	SUSPENDED
23/10/2023	B-04	2	✓ Deleum run TCC but encounter HUD at 8093 ft-MDTHF. Inform WSS. After discussion with WSS/town, decided to run MIT until 10 ft above HUD. New interval for MIT logging is 8083 ft-MDTHF to 20 ft-MDTHF ✓ Perform MIT run from 8083 ft-MDTHF to 20 ft-MDTHF ✓ Toolstring:RS + Swivel + 5ft stem + 3ft stem + KJ + ABM + UMT + CCL + PKJ + PRC + MIT24 + PRC + BUL ✓ RIH with 120 ft/min, slow at accessories and pick up weight every 1000ft. ✓ Reach depth. Wait for finger to open. ✓ Log up 30 ft/min ✓ Reach depth. Wait for finger to close. ✓ POOH to surface ✓ Disconnect tool from slickline toolstring ✓ Disconnect battery ✓ Download data.	COMPLETED

OPERATION SUMMARY

Date	Well	Run	Description	Remarks
25/10/2023	B-05	3	✓ Deleum run TCC until target depth 6880 ft-MDTHF. All clear. ✓ Perform MIT run from 6880 ft-MDTHF to 20 ft-MDTHF ✓ Toolstring: RS + Swivel + 5ft stem + 3ft stem + KJ + ABM + UMT + PKJ + PKJ + PRC + MIT24 + PRC + BUL ✓ RIH with 120 ft/min, slow at accessories and pick up weight every 1000ft. ✓ Reach depth. Wait for finger to open. ✓ Log up 30 ft/min ✓ Reach depth. Wait for finger to close. ✓ POOH to surface ✓ Disconnect tool from slickline toolstring ✓ Disconnect battery ✓ Download data.	COMPLETE

OPERATION SUMMARY

Date	Well	Run	Description	Remarks
27/10/2023	B-07L	4	✓ Deleum run TCC until target depth 7928 ft-MDTHF. All clear. ✓ Perform MIT run from 7928 ft-MDTHF to 20 ft-MDTHF ✓ Toolstring: RS + Swivel + 5ft stem + 3ft stem + KJ + ABM + UMT + PKJ + PRC + MIT24 + PRC + BUL ✓ RIH with 120 ft/min, slow at accessories and pick up weight every 1000ft. ✓ Reach depth. Wait for finger to open. ✓ Log up 30 ft/min ✓ Reach depth. Wait for finger to close. ✓ POOH to surface ✓ Disconnect tool from slickline toolstring ✓ Disconnect battery ✓ Download data.	COMPLETED

OPERATION SUMMARY

Date	Well	Run	Description	Remarks
	B-09L		✓ For well B-09L, After discussion with WSS and town. Decided to split the run due to time constraint. B-09L split into 2 run. 1st run interval from 11447 ft-MDTHF to 5714 ft-MDTHF. 2nd run interval from 5714 ft-MDTHF to 20 ft-MDTHF	-
29/10/2023	B-09L (1 st RUN)	5	✓ Deleum run TCC but encounter HUD at 10361 ft-MDTHF. Inform WSS. After discussion with WSS/town, decided to run MIT until 10 ft above HUD. New interval for MIT logging is 10351 ft-MDTHF to 20 ft-MDTHF ✓ Perform MIT run from 10351 ft-MDTHF to 5100 ft-MDTHF ✓ Toolstring: RS + Swivel + 5ft stem + 3ft stem + KJ + ABM + UMT + PKJ + PKJ + PRC + MIT24 + PRC + BUL ✓ RIH with 120 ft/min, slow at accessories and pick up weight every 1000ft. ✓ Reach 10351 ft-MDTHF. Wait for finger to open. ✓ Log up 30 ft/min to 5100 ft-MDTHF. ✓ Reach 5100 ft-MDTHF. Wait for finger to close. ✓ POOH to surface ✓ Disconnect tool from slickline toolstring ✓ Disconnect battery ✓ Download data.	COMPLETED

OPERATION SUMMARY

Date	Well	Run	Description	Remarks
30/10/2023	B-09L (2 ST RUN)	6	✓ Perform MIT run from 5300 ft-MDTHF to 20 ft-MDTHF ✓ Toolstring: RS + Swivel + 5ft stem + 3ft stem + KJ + ABM + UMT + PKJ + PKJ + PRC + MIT24 + PRC + BUL ✓ RIH with 120 ft/min, slow at accessories and pick up weight every 1000ft. ✓ Reach 5300 ft-MDTHF. Wait for finger to open. ✓ Log up 30 ft/min to 20 ft-MDTHF. ✓ Reach 5300 ft-MDTHF. Wait for finger to close. ✓ POOH to surface ✓ Disconnect tool from slickline toolstring ✓ Disconnect battery ✓ Download data.	COMPLETED
			✓ Suspended due to time constraint. Deleum slickline package rollover to Erb West. ✓ MIT run for B-09S decided to be continue during revisit to Tembungo Bravo.	SUSPENDED

OPERATION SUMMARY DATA QA/QC

- ✓ Successfully achieve all the objectives.
- ✓ Depth control and QC were performed based on TRSCSSV as reference. Minimum ID at the seal bore reading was in between tolerance
- ✓ All fingers working good and fully open throughout the logging and overall log quality is good and interpretable
- ✓ Field Quick Look Report for all completed well shows that the MIT24F detects light to moderate corrosion in the range between 10%-30%
- ✓ There is no possible leak that exceeds 70% of penetration in tubing wall which classified as possible hole in all of the well.

OPERATION ANALYSIS OFFSHORE ACTIVITY SUMMARY (OAS)

DATE	DESCRIPTION
22-Sep-2023	Travel to Tembungo B
23-Sep-2023	WOW,standby due to bad weather
24-Sep-2023	WOW,standby due to bad weather
25-Sep-2023	Standby, Waiting for AHT Bridgewater 130 travel to Tembungo B
26-Sep-2023	Standby, Waiting for FCB MK3 to travel to Tembungo B
27-Sep-2023	Standby, Waiting for FCB MK3 to travel to Tembungo B
28-Sep-2023	Standby, Waiting for FCB MK3 to travel to Tembungo B
29-Sep-2023	Standby, Waiting for FCB MK3 to travel to Tembungo B
30-Sep-2023	WOW,unable to travel to Tembungo B due to bad weather
1-Oct-2023	WOW,unable to travel to Tembungo B due to bad weather
2-Oct-2023	WOW,unable to travel to Tembungo B due to bad weather
3-Oct-2023	Prepare MIT toolstring for well B-02L

DATE	DESCRIPTION
4-Oct-2023	Prepare MIT toolstring for well B-02L
5-Oct-2023	Prepare MIT toolstring for well B-02L
6-Oct-2023	Prepare MIT toolstring for well B-02L
7-Oct-2023	Standby for MIT run on well B-04
8-Oct-2023	Standby for MIT run on well B-04
9-Oct-2023	Standby for MIT run on well B-04
10-Oct-2023	Standby for MIT run on well B-04
11-Oct-2023	Standby for MIT run on well B-04
12-Oct-2023	Standby for MIT run on well B-02S
13-Oct-2023	Standby for MIT run on well B-02S
14-Oct-2023	WOW,standby due to bad weather
15-Oct-2023	WOW,standby due to bad weather
16-Oct-2023	Surface Preparation for MIT run Well B-02S

DATE	DESCRIPTION
7-Oct-2023	Standby for MIT run on well B-04
8-Oct-2023	Standby for MIT run on well B-04
9-Oct-2023	Standby for MIT run on well B-04
10-Oct-2023	Standby for MIT run on well B-04
11-Oct-2023	Standby for MIT run on well B-04
12-Oct-2023	Standby for MIT run on well B-02S
13-Oct-2023	Standby for MIT run on well B-02S
14-Oct-2023	WOW,standby due to bad weather
15-Oct-2023	WOW,standby due to bad weather
16-Oct-2023	Surface Preparation for MIT run Well B-02S
17-Oct-2023	Surface Preparation for MIT run Well B-02S
18-Oct-2023	WOW, standby due to bad weather
19-Oct-2023	MIT run well B-02S

DATE	DESCRIPTION
20-Oct-2023	WOW, standby due to bad weather
21-Oct-2023	Surface Preparation for MIT run Well B-04
22-Oct-2023	Surface Preparation for MIT run Well B-04
23-Oct-2023	MIT run well B-04
24-Oct-2023	Surface Preparation for MIT run Well B-05
25-Oct-2023	MIT run well B-05
26-Oct-2023	Surface Preparation for MIT run Well B-07L
27-Oct-2023	MIT run well B-07L
28-Oct-2023	Surface Preparation for MIT run Well B-09S
29-Oct-2023	1ST RUN MIT well B-09L
30-Oct-2023	2ND RUN MIT well B-09L
31-Oct-2023	Housekeeping and prepare equipment for backload
1-Nov-2023	Housekeeping and prepare equipment for backload
2-Nov-2023	Standby for demob
3-Nov-2023	Demob to KK PORT

OPERATION ANALYSIS

TEMBUNGO BRAVO			
DATE	WELL	MAJOR ACTIVITY	STATUS
22/9/2023 – 3/11/2023	TBG-B02S, TBG-B04, TBG-B-05, TBG-B07L-TBG-09L	• MIT	COMPLETED
22/9/2023 – 3/11/2023	TBG-B-02L, TBG-09S	• MIT	JOB SUSPENDED

HSE	Toolbox Meeting/ Safety Meeting
JPR	Set up Equipment/Housekeeping
SLO	Slickline Operation Time
WRU	Well Rig Up/Down
OPT	Operations Time
CCG	Crew Change/Boat Transfer
WOW	Waiting on Weather
WOP	Waiting on Well Access
MAD	Mob and Demob (to/from field)
SDFN	Shut Down For Night

OPERATION ANALYSIS

DAY/ACTIVITY	WOW	WDE	UDP	EQF	HSE	JPR	SLO	WRU	OPT	CCG	MAD	SDFN
1	0	0	0	0	0	0	0	0	0	0	12	0
2	12	0	0	0	0	0	0	0	0	0	0.5	0
3	9	0	0	0	0	0	0	0	0	0	3.5	0
4	0	0	0	0	0	0	0	0	0	0	12	0
5	0	0	0	0	0	0	0	0	0	0	12	0
6	0	0	0	0	0	0	0	0	0	0	12	0
7	0	0	0	0	0	0	0	0	0	0	12	0
8	0	0	0	0	0	0	0	0	0	0	12	0
9	12	0	0	0	0	0	0	0	0	0	0	0
10	12	0	0	0	0	0	0	0	0	0	0	0
11	12	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	3	8	0	0	0	0	1.5	0
13	0	0	0	0	3	8	0	0	0	0	1.5	0

OPERATION ANALYSIS

DAY/ACTIVITY	WOW	WDE	UDP	EQF	HSE	JPR	SLO	WRU	OPT	CCG	MAD	SDFN
14	0	0	0	0	3	8	0	0	0	0	1.5	0
15	0	0	0	0	3	8	0	0	0	0	1.5	0
16	2.5	0	0	0	3	1.5	4	0	0	0	1.5	0
17	2.5	0	0	0	2.5	2.5	3.5	0	0	0	1.5	0
18	0	0	0	0	4.5	6	0	0	0	0	1.5	0
19	0	0	0	0	0	0	0	0	0	0	12	0
20	0	0	0	0	0	0	0	0	0	0	12	0
21	0	0	0	0	0	0	0	0	0	0	12	0
22	0	0	0	0	0	0	0	0	0	0	12	0
23	12	0	0	0	0	0	0	0	0	0	0	0
24	12	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	2	8.5	0	0	0	0	1.5	0
26	0	0	0	0	2	8	0.5	0	0	0	1.5	0

OPERATION ANALYSIS

DAY/ACTIVITY	WOW	WOE	UDP	EQF	HSE	JPR	SLO	WRU	OPT	CCG	MAD	SDFN
27	12	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	2	1	0	0	7.5	0	1.5	0
29	12	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	2.5	8	0	0	0	0	1.5	0
31	0	0	0	0	2.5	3	5	0	0	0	1.5	0
32	0	0	0	0	2	0	0	0	9	0	1	0
33	0	0	0	0	2	4.5	4	0	0	0	1.5	0
34	0	0	0	0	2	0	0	0	9	0	1	0
35	0	0	0	0	2	4.5	4	0	0	0	1.5	0
36	0	0	0	0	1.3	0	0	0	9.8	0	1	0
37	0	0	0	0	2	4.5	4	0	0	0	1.5	0
38	0	0	0	0	3.3	0	0	0	7.8	0	1	0
39	0	0	0	0	1.7	2.5	0	0	6.8	0	1	0

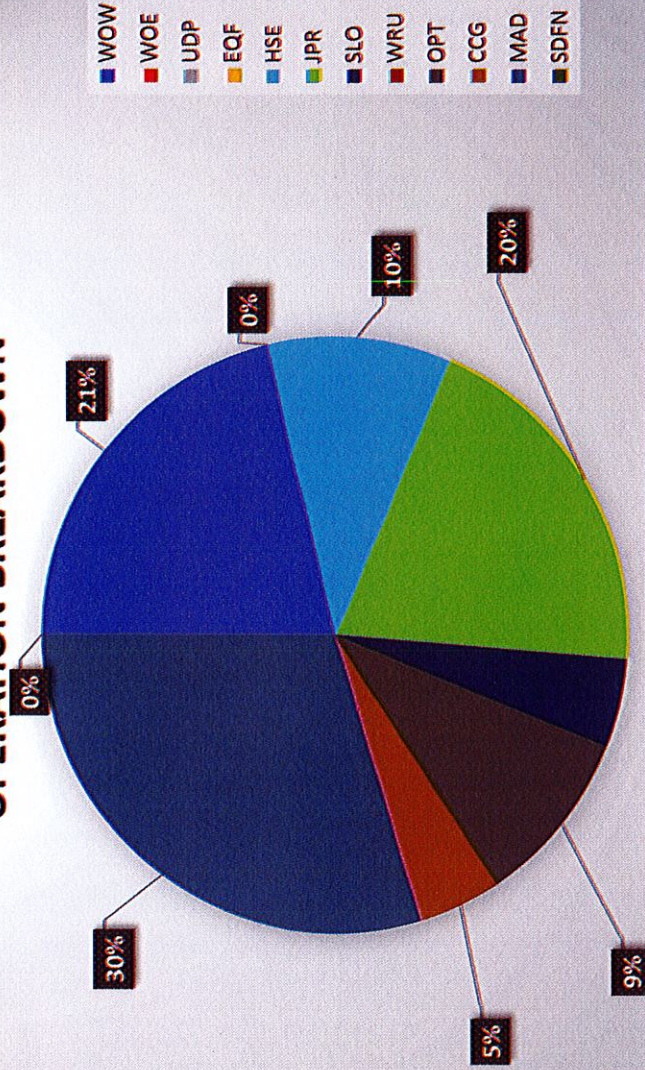
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OPERATION ANALYSIS

DAY/ACTIVITY	WOW	WOE	UDP	EQF	HSE	JPR	SLO	WRU	OPT	CCG	MAD	SDFN	TOTAL OVERALL
TOTAL IN HOURS	110.0	0.0	0.0	0.0	53.3	103.5	25.0	0.0	49.9	24.0	154.5	0	520.2
TOTAL IN DAYS	9.17	0.0	0.0	0.0	4.44	8.63	2.1	0.0	4.16	2	12.88	0	43
DAYS PERCENTAGE	21.33%	0.00%	0.00%	0.00%	10.33%	20.07%	4.88%	0.00%	9.67%	4.65%	29.95%	0.00%	100%

OPERATION BREAKDOWN



- HSE Toolbox Meeting/ Safety Meeting
- JPR Set up Equipment/Housekeeping
- SLO Slickline Operation Time
- WRU Well Rig Up/Down
- OPT Operations Time
- CCG Crew Change/Boat Transfer
- WOW Waiting on Weather
- WOP Waiting on Well Access
- MAD Mob and Demob (to/from field)
- SDFN Shut Down For Night

CONCLUSION

HIGHLIGHT

- 100% HSE compliance throughout operations – 100% UAUC submitted throughout operation.
- All crew comply to Health Safety and Environment Rules and participate to all platform HSE program
- Good communication between all parties include PCSB, DIMENSION BID, DELEUM, SOLAR ALERT AND THUNDER CRANE
- Successfully achieved job objectives for B02S, B04, B05, B07L and B09L
- Successfully executed the job efficiently for B09 despite the time constraint

LOWLIGHT

- Most run have to log with new intervals due to HUD
- Unable to complete all well due to time constraint
- Weather is the biggest factor causing time constraint

CONCLUSION LESSON LEARN

- ✓ Unexpected problem like well condition and weather can cause the unproductive time of the operation.
- ✓ Good decision making is a must during operation time to counter any unexpected difficulties.

TEMBUNGO-B CUSTOMER SERVICE SATISFACTORY



NEW DIMENSION (TEMBUNGO-BID)

CUSTOMER SATISFACTION SURVEY

Client: **TEMBUNGO-BID**
 Name: **TEMBUNGO-BID**
 Address: **TEMBUNGO-BID**
 Location (Province): **TEMBUNGO-BID**
 Date & Time: **TEMBUNGO-BID**
 Package: **TEMBUNGO-BID**
 Field Engineer/Supervisor/Technician Operator: **TEMBUNGO-BID**
 (Name/Address/Assistant)
 Others (Please specify): **TEMBUNGO-BID**

Section	Rating	Comments
Service Quality Received Productive Equipment (PPE) Maintenance Housekeeping	4	Good service, everything done on time.
Personal Job Training & Preparation Quality of Work Quality of Job Execution Professionalism of Personnel Communication Technical Knowledge Team Working (Cooperativeness)	4	
Equipment Equipment & Tool Compatibility Inventory System	4	
Technical Support Frequency / Feedback from Team Field Technical Support Delivery of Spare and Back-ups	4	
Response Data Report CMC/CMC Data	4	
Overall Service Performance Does the Service Exceed Expectations? Area of Improvement (If any)	4	

Assigned by: **James M. M. M.**
 Name: **James M. M. M.**
 Signature: **James M. M. M.**
 Date: **11/11/2011**
 Approved by: **James M. M. M.**
 Name: **James M. M. M.**
 Signature: **James M. M. M.**
 Date: **11/11/2011**

Comment / Action Taken / Follow up: **Not required for this.**

Action By: **James M. M. M.**
 Name: **James M. M. M.**
 Signature: **James M. M. M.**
 Date: **11/11/2011**
 Approved by: **James M. M. M.**
 Name: **James M. M. M.**
 Signature: **James M. M. M.**
 Date: **11/11/2011**

Note: Please refer to CSF-01: CSF Rating Level & Description for evaluation

CSF Rating Level: **4**

CSF Description: **Very Satisfactory**

CSF Rating Level: **4**

CSF Description: **Very Satisfactory**

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THANK YOU



Prepared by,



Name: Clement Emang Yusup Ngau

Designation: Junior Field Engineer

Date: 1/1/2024

Verified by,

Verified by,

Name : Faris M. Firdaus

Designation : Field Service Manager

Date :

Name: Mohd Zahir Bin Abdul Manan

Designation: Operation Manager

Date: