

# **DRILLING FLUID SUMMARY**

**Well: Amungee NW-3H**

**Beetaloo Basin, EP 98**

**Northern Territory Australia**



**Well Spud Date: 25<sup>th</sup> September 2023**

<b>Prepared By (Newpark)</b>	<b>Jason Cremor</b>		
<b>Approved By (Tamboran)</b>			

## CONTENTS

1. Summary of Operations
  - Well Summary
2. Interval Discussions
  - 559mm (22") Hole Section
  - 445mm (17.5") Hole Section
  - 328mm (12¼) Hole Section
  - 215.9mm(8½") Hole Section
  - Post TD
3. Cost Analysis
4. Recommendations & Lessons Learnt
5. Mud Materials Reconciliation
6. Interval Summaries
7. Fluid Properties Summary
8. Fluid Volumes Summary
9. Drilling Fluid Program
10. Daily Mud Reports

## Drilling Fluids End of Well Report

Operator:	<b>Tamboran Resources</b>
Well Name:	<b>Amungee NW-3H</b>
Block No:	<b>EP98</b>

<b>Country:</b>	Australia	<b>Newpark Mud Engineers:</b>	Tom Uruski Nicholas Doust Budi Tjahyono Jason Cremor
<b>Well Description:</b>	Appraisal		
<b>Contractor:</b>	HP		
<b>Rig:</b>	Rig #469		
<b>Well Start Date:</b>	17 <sup>th</sup> September 2023	<b>Project Engineer:</b>	Jason Cremor Christian Dimarco
<b>Well Spud Date:</b>	25 <sup>th</sup> September 2023	<b>GL to RT:</b>	7.64 metres
<b>Well End Date:</b>	13 <sup>th</sup> October 2023	<b>Well TD:</b>	3,837 mMD
<b>Well Final Date:</b>	16 <sup>th</sup> October 2023	<b>Total Meters Drilled:</b>	3,837 metres
<b>Well Days:</b>	30		

Hole Size	Total depth	Casing size	Casing depth	Mud Type	Mud weight (ppg)	Interval Problems	Meters drilled	Days	Cost AUD \$
22"	86m	18 <sup>3</sup> / <sub>8</sub> "	84 m	4% KCl/PVA/Polymer	8.55 – 8.7	N/A	86	3	\$14,691.00
17 <sup>1</sup> / <sub>2</sub> "	283m	9 <sup>5</sup> / <sub>8</sub> "	280 m	4% KCl/PVA/Polymer Water and Hivis sweeps	8.33 - 8.8	Lost Circulation	197	3	\$13,092.50
12 <sup>1</sup> / <sub>4</sub> "	609	9 <sup>5</sup> / <sub>8</sub> "	605 m	Cleandrill HD	9.7-9.8	N/A	326	2	\$28,848.00
8 <sup>1</sup> / <sub>2</sub> "	3,837m	5 <sup>1</sup> / <sub>2</sub> "	3830 m	CleanDrill HD	9.7 – 12.0	Temperature	3,228	13	\$288,923.10
Post TD	m	-	-	NaCl/2% KCl brine	9.5	-	-	3	\$44,648.50

<b>Drilling Fluids Engineers</b>	\$ 108,720.00	<b>Well Engineering Cost</b>	\$108,720.00
		<b>Well Material Cost</b>	\$390,203.10
		<b>Well Equipment Cost</b>	\$TBC
		<b>Total Well Cost</b>	\$498,923.10

# 1. SUMMARY OF OPERATIONS

Tamboran Resources was the operator for the lateral appraisal well Amungee NW-3H situated in the Beetaloo Basin, within EP 98 permit onshore Northern Territory.

The Newpark Drilling Fluid Engineers were mobilised to site on the 23<sup>rd</sup> September 2023.

The water source used for building the mud system was the Amungee S1 / 1H bore:

- Amungee S1
- pH - 7.0
- Total Hardness - 100mg/l
- Chlorides - 320mg/l

The well was spudded at 07:45hr on 25<sup>th</sup> September 2023, using conventional 22" PDC bit and BHA to a depth of 86m. The 22" surface hole was successfully drilled, using 4% KCl/PVA/Polymer mud system. At certain depth of 44m and 75 m, utilised 20 bbl Hi-vis pill to sweep hole and spotted 50 bbl Hi-vis on bottom after two bottoms up circulations prior to tripping out of hole. The 18-<sup>5</sup>/<sub>8</sub>" casing was successfully set and cemented at 84 m.

The 17.5" section was drilled to 283 m MD, utilising salvaged mud from the previous section. Total losses occurred from 95.15 m MD to TD at 283 m. After the losses were experienced the well was drilled with water and hi-viscosity Newzan D sweeps which were pumped every connection. The 13-3/8" casing was run to 280m and cemented in place. No returns were seen during the cement job so top-up cement jobs were required.

The 12-1/4" hole was drilled from 283 to 609 m with a Cleandril HD mud system rather than the planned KCl/Polymer mud system. Cleandril HD salvaged from the Shenandoah-S1 well was conditioned and used on this section. There were no hole issues experienced drilling to section TD and the 9-5/8" casing was run and cemented at 605 m without problems.

The 216mm (8-1/2") hole section was drilled to section TD at 3,837 mMDRT with a CleanDrill HD mud salvaged from the 12-1/4" section.

The well was completed with 5-1/2" casing cemented in place. 9.5 ppg NaCl brine was used to displace the cement.

FlexHP469 rig was released on 16<sup>th</sup> September 2022.

## WELL SUMMARY

Hole Section	Casing Size (In)	Casing Shoe (m)	From (m)	To (m)	Interval (m)	Mud Weight (ppg)
22"	18 <sup>5</sup> / <sub>8</sub>	84	8	85.5	77.5	8.8
17 <sup>1</sup> / <sub>2</sub> "	13 <sup>3</sup> / <sub>8</sub> "	280	86	283	197	8.33-8.8
12 <sup>1</sup> / <sub>4</sub> "	9 <sup>5</sup> / <sub>8</sub> "	605	283	609	326	9.7
8-1/2"	5 <sup>1</sup> / <sub>2</sub> "	3830.49	609	3,837	3228	9.7-12

Hole Section	Section Cost (\$)	Cost / m (\$)	Cost / bbl (\$)	Mud System
22"	14,691.00	170.83	14.45	4% KCl / PVA / Polymer
17 <sup>1</sup> / <sub>2</sub> "	13,092.50	46.26	1.23	4% KCl / PVA / Polymer Water and Hivis sweeps
12 <sup>1</sup> / <sub>4</sub> "	28,848.00	88.49	87.68	CleanDrill HD
8-1/2"	288,923.10	89.51	152.06	CleanDrill HD
Post TD	44,648.50	-	71.55	Mud Maintenance Displacement Brine
<b>Total Material Cost</b>	<b>390,203.10</b>	-	-	

## 2. INTERVAL DISCUSSIONS

### 22" SECTION

<b>HOLE SIZE</b>	:	<b>22"</b>
<b>MUD TYPE</b>	:	<b>4% KCl / PVA / Polymer</b>
<b>INTERVAL</b>	:	<b>18.6 – 85.5mMDRT</b>
<b>CASING</b>	:	<b>18 5/8" at 84 MDRT</b>

Upon arrival at the rig site, the mud laboratory unit was inspected and setup. Then, as per normal procedure, have checked the inventory count and helped in setting out the bounding mats on the lease for the product storage.

A total of 530 bbl of 4% KCL / PHPA / Polymer was prepared, treated with Caustic Soda for pH and allowed to shear whilst rigging up. Inclusive of this volume, 95bbl of unweighted High viscosity Polymer pill was prepared in the event of sweeping the hole from the slug pit. Separately to mixed KCL/polymer mud, 450 bbl of salvaged Cleanrol HD was transferred from the last well and stored in the frac tank.

A 22" Tricone bit / BHA run-in hole and tag at 20 mMD of the 30" conductor. The 30" bottom of the conductor shoe was drilled with water, swept the shoe track with 5 bbl sweeps to remove cement cutting and displaced the hole to KCl/ Polymer mud. The new hole was drilled by utilising homogenous 4%KCL/Polymer mud. Throughout drilling, additions of reserved volume from frac-tank, consisting of NewPac LV 2.5ppb, JK-161 5050 0.5ppb and NewZan D 1.5ppb was maintained. This was to maintain consistency in hole cleaning characteristics and to other fluid's properties.

At early stage of the drilling operations, 300-350 gpm flowrate was utilized to minimize the shaker fluid run off. Then, the pumps were gradually increased to. As the initial fluid make up was consisted of smaller concentration of PHPA ~0.25 ppb, this helped to marginalize and contain the at the shaker pans, hence no surface losses at the shakers were apparent Then, continued to drill the section by staging up the flowrate to 450gpm, 500-550 gpm when still at shallow depths. At 44m depth 20 bbl Hi-vis was implemented to flush the hole before connections. By that stage, the flowrate was increased to 650 gpm and with periodic Hi-vis pills volumes combined, proved to be successful method in instigating the movement and transportation of cuttings while drilling this section. Another 20 bbl of sweep was pumped at 74m depth at which point the flowrate was increased to 700-740 gpm range. Drilling operation continued, applying 650 gpm flowrate and Hi-vis sweeps regime and addition of water to a depth 86m. At this depth and by geology offset well analysis, section's total depth was reached. Upon reaching the section TD, circulated well clean by pumping 2x bottoms up before spotting 50 bbl of Hi-vis on bottom. The trip out operation proved to be smooth with no issue encountered.

The next operation consisted of rigging up and to run in with 18-5/8" casing so the surface casing cement job was performed as per program but with no cement returns observed at the cellar.

## Drilling Fluid

The initial mud build was 540bbl of 4%KCl / PVA / Polymer at 8.7ppg with High viscosity using 1.5 ppb Newzan D. Fluid loss Newpac LV premixes were also used at 2.0ppb concentration to maintain adequate filtration control within the programmed parameters for this section. As drilling started, blended premix with active to form homogeneous KCl / Polymer system, resembling mud parameters of 8.6ppg with YP of 14 and 6-rpm of 8lb/100ft<sup>2</sup> carrying capacities. Viscosifier Newzan D was added to maintain good hole cleaning characteristics.

The shakers were initially dressed with API 80 screens. Although the high flowrate did incur some initial losses, the pitch was adjusted to contain any excessive run off. As the fresh polymers sheared the 3 shakers managed with high flowrates of 650 gpm.

## Typical Drilling Fluid Formulations.

4% KCl / PVA / Polymer	
Idcide-20	0.5 ppb
Caustic Soda	0.2 ppb
KCl	30.5 ppb
NewZan D	1.0 ppb
NewPac LV	1.5 ppb
Jk-161	0.2 ppb

## Density

Mud Property	Programmed Specification	Actual Specification
Mud Weight (ppg)	8.4 – 8.7	8.6 – 8.7

The mud weight specification was 8.6 – 8.7ppg, and average ROP of 17m/hr with instantaneous ROPs as high as 32m/hr being observed. Primarily top sediments and imbedded clay matrix lasted for 60m of the section and remainder consisted of the sandstones towards the bottom section, and no sticky clays were observed. As this section was short in depth, it proved to be relatively easily in maintaining mud density at 8.6-8.7ppg, sands<0.5% sand & maximum 3% Drill Solids at the start of the section to 105m. Then water utilised with sweeps to section TD with.

## Rheological Properties

Mud Property	Programmed Specification	Actual Specification
PV (cP)	ALAP	6 - 8
YP (lbs/100ft <sup>2</sup> )	Subject to 6rpm reading	12 - 14
6 rpm (lbs/100ft <sup>2</sup> )	10 - 14	5 - 7

Newzan D polymer was used as primary additive in controlling the rheology properties.

### API Filtrate

Mud Property	Programmed Specification	Actual Specification
API Filtrate (cc)	<14	11 – 13.5

API Fluid Loss was maintained generally between 14.0 and 12.0cc/30mins with the use of 2.5 ppb NewPac LV.

### pH & Sodium Sulphite Content

Mud Property	Programmed Specification	Actual Specification
pH	9.5 – 10.5	8.5 – 9.5
SO <sub>3</sub> (mg/l)	N/A	N/A

Whilst drilling the pH of the active mud was kept in specification using Soda Ash was used on this or the interval as the Total Hardness of the Bore water was 100mg/l and so there was no need for treatment.

### Solids Control

At surface API 3x80& 1x100 mesh shaker screens were programmed to spud with. Although the shaker losses were higher than desired, they managed to strip well defined interbedded clay cuttings and were easily discarded over to discharge pan to the collection cuttings bin. Some wetter overflow aided with dilution & removal of sand. The ROP of 10-25m/hr and flowrates of >600gpm were maintained as priority, at the sacrifice of mud lost over the shakers.

### Losses

No losses occurred while drilling this section.



## 17 1/2" HOLE SECTION

**HOLE SIZE** : 17 1/2"  
**MUD TYPE** : 4% KCl / PVA / Polymer  
**INTERVAL** : 86 – 283mMDRT  
**CASING** : 13 3/8" at 280mMDRT

Salvaged volume of 573 bbls of KCl/Polymer mud was transferred from the previous 22" section. A 17 1/2" PDC bit with BHA was picked up and RIH. The top of cement was tagged at 65m MDRT and drilled out shoe track and rat hole to 85.5 MDRT. Drilled new 17-1/2" hole from 85.5 to 90 m. The well was then circulated to clean out the cellar. Drill ahead 17.5" hole from 90 to 95.5 m where total losses were experienced. The well was then drilled ahead at 600 gpm, 80 rpm with water and 20 bbls Newzan D hi-vis sweeps every connection. No returns were seen for the entire drilled section from 95.5 m MD.

After reaching TD and circulating the hole there was tight hole on the first stand out. The stand was rotated from 283 to 262 m at section TD. WOB 30- 50, GPM 600, Diff 0, Tq 3-10. Pump 10 bbls havis sweeps and tight hole experienced. It was then decided to increase the flow rate to 800 gpm and multiple bottoms up on strokes were pumped to ensure the hole was clean. A 50 bbls Havis KCl/PHPA/Polymer pill was then spotted on bottom and pipe POOH to surface and L/D BHA.

13-3/8" casing was successfully run to 280 m and cemented in place. There were no returns during the cement job. Although the plug was bumped, the casing was unable to achieve a 1500 psi pressure test. A top-up cement job was later conducted through the annulus.

### Drilling Fluid

This 17 1/2" section was programmed to reuse and drill with the same fluid salvaged from the 22" section. Within 12 m of exiting the shoe, total losses occurred. No LCM was pumped and the well was drilled to section TD with water and hi-vis Newzan D sweeps.

The shakers were dressed with API 80/100 screens.

### Density

Mud Property	Programmed Specification	Actual Specification
Mud Weight (ppg)	8.55– 8.7	8.7-8.8

This section was drilled with salvaged premix mud from previous section, water and sweeps.

### Rheological Properties

Mud Property	Programmed Specification	Actual Specification
PV (cP)	ALAP	11-12
YP (lbs/100ft <sup>2</sup> )	>14	17-18
6 rpm (lbs/100ft <sup>2</sup> )	9 - 12	8

The above properties are the KCl/Polymer mud rheological properties.

### API Filtrate

Mud Property	Programmed Specification	Actual Specification
API Filtrate (ml)	<15	9.4-16 ml

Apart from the initial mud in the pits and drilling the first 12 metres out of the shoe the drilling fluid was water/hi-vis sweeps.

### pH

Mud Property	Programmed Specification	Actual Specification
pH	9.0 – 9.5	8.5-9.0

The pH of the drill water was at ~7.0.

### Losses

There were total losses from 95.5 m while drilling to section TD. No returns were seen pumping cement. The 13-3/8" casing required top-up cement jobs after the primary cement job by pumping cement at low pressure down the annulus.

### Solids Control

The shakers were initially dressed with API 80 screens and maintained through to TD.

The NOV big bowl centrifuge was not required.

## 12 1/4" HOLE SECTION

**HOLE SIZE** : 12 1/4"  
**MUD TYPE** : CleanDrill HD  
**INTERVAL** : 283 – 609 mMDRT  
**CASING** : 9 5/8" – 605 mMDRT

After waiting on cement, nipped up BOP diverter system, followed by pressure testing the BOP stack. 12-1/4" BHA was made up and ran in hole. At 250 m the hole was displaced from water to 9.7 ppg Cleandril HD mud. The float collar was tagged at 258 m. The cement was drilled with the Cleandril HD mud system with WOB 5-10klbs, rpm 6—80, flowrate 500-600 gpm.

Three metres of rathole was drilled to 286 m and an FIT was conducted at 286 m to 12.9ppg. 12-1/4" hole was then directionally drilled from 283 m to 609 m MD with Cleandril HD mud system. The hole angle was built by sliding to 15.90 deg inclination at 609 m MD. Total drilling time was 14 hours with an average ROP of 23 m/hr.

At TD the hole was circulated bottoms up 2-times and a 50 bbl hi-vis pill spotted on bottom prior to POOH to run 9-5/8" casing. Said casing was run to bottom without issues (washed the last 7 metres to bottom) and cemented at 605 m MD.

### Drilling Fluid

The original plan as per the mud program was to use the KCl/Polymer mud from the 17-1/2" section. Due to total mud losses, the 17-1/2" hole had to be drilled with water and high-vis sweeps and therefore there was no remaining KCl/Polymer mud that could be salvaged. Subsequently it suggested by the Tamboran fluids advisor to drill this section with Cleandril HD instead of the KCl/Polymer mud. The advantage of this was avoiding the building of a secondary KCL/Polymer fluid that would require displacement and disposal at the end of the 12-1/4" section. Note that previous attempts to convert KCL/Polymer system to calcium chloride system resulted in foaming issues.

There was 720 bbls of Cleandril HD salvaged from the Shenandoah S1/1H well (after being centrifuged) and stored in the frac tanks. The mud weight of this salvaged Cleandril HD was 10.2 ppg. The Cleandril HD for this section was built by diluting the salvaged Cleandril HD 50/50 with drillwater and conditioning with 1 ppb Newzan D, 4 ppb Cleanrol HD and 1% Avaglycol. The final mud weight after conditioning was 9.8 ppg. Further premixes were made with a slightly less ratio of salvaged Cleandril HD to reduce the mud weight to 9.4 ppg for dilution and for controlling the mud weight between 9.6-9.8 ppg.

The active system was cut back with 9.4 ppg once drilling started and maintained at 9.7 ppg for the entire drilling to TD. The NOV big bowl was run at a low feed rate of 30 gpm @ 2500 rpm to help maintain the mud weight. Drillwater was also added to the active system at 4-5 bbls per hour to help control the mud weight.

There was no foaming or aeration experienced drilling this section.

### Density

Mud Property	Programmed Specification	Actual Specification
Mud Weight (ppg)	9.6 – 9.8	9.7-9.8

The mud weight was managed at 9.7 ppg throughout the majority of the section.

### Rheological Properties

Mud Property	Programmed Specification	Actual Specification
PV (cP)	ALAP	9-12
YP (lbs/100ft <sup>2</sup> )	>14	11-28
6 rpm (lbs/100ft <sup>2</sup> )	9 - 12	4-12

The average 6 rpm while drilling was approximately 7 lb/100 ft<sup>2</sup> while the average Yield Point was 11-12 lb/100ft. There was one occasion after addition of a viscous premix where a high rheology was recorded (6 rpm of 12, YP of 28)

### API Filtrate

Mud Property	Programmed Specification	Actual Specification
API Filtrate (ml)	<15	11.2-13.6 ml

Filtrate control was controlled by addition of Cleanrol HD to the premixes.

### pH

Mud Property	Programmed Specification	Actual Specification
pH	9.0 – 9.5	9.5-10.5

The initial pH of the conditioned Cleandril HD was 10.5. As drilling progressed it was allowed to deplete to 9.5.

### Losses

There were no mud losses in this section.

### Solids Control

At the beginning of the section the shakers were initially dressed with API 80 screen at the front and API 100 screens at the rear and maintained through to TD.

The NOV big bowl centrifuge was run for approximately 9 hours at 30 gpm, 2500 rpm. The centrate mud weight was 9.2 ppg. The low feed rate of 30 gpm gpm ensured the mud was held steady at 9.7 ppg rather than stripping out too many solids and causing a mud weight reduction less than 9.6 ppg.

The desilter was run while drilling.

## 8 1/2" HOLE SECTION

**HOLE SIZE** : 8 1/2"  
**MUD TYPE** : CleanDrill HD  
**INTERVAL** : 609 – 3837 mMDRT  
**CASING** : 5.5" at 3830.49m MDRT

After waiting on cement, the casing was successfully pressure tested to 2500 psi. 8-1/2" BHA was made up and RIH. Tagged cement plug at 578 m and drilled out cement/float collar and 3 metres of rat hole to 612 using the Cleandril HD mud from the previous section. Conducted an FIT to 16.1 ppg at 612 m. Commenced drilling ahead 8-1/2" hole building hole angle to 18.86 degrees from 612 m to 1404 m tapping into the Moroak Sandstone where the BHA was pulled to change bit/BHA. Drilling parameters were 600-650 gpm, pipe rpm when not sliding 40 rpm and WOB 34Klbs. Hole cleaning was good through this section even at ROP's at 70-80 m/hr.

Drilling through the Moroak Sandstone is typically slow. The MWD was laid out and the well was drilled 'blind' through the Moroak Sandstone at a record pace with ROP's over 40 m/hr instantaneous. Typical drilling parameters were 650 gpm flowrate, 7-12 Klbs torque and 88 rpm. Hole cleaning was good at these ROPs. The mud was weighted from 10 ppg to 10.6 ppg with calcium chloride and barite prior to POOH at 1753 in the Velkerri Formation.

The MWD and new BHA was made up and RIH. The Moroak Sandstone was logged and surveys taken every 100 m the Moroak Formation. The surveys indicated that the well inclination had dropped from 19.62 to 1.98 degrees at 1757.50 m. The 8-1/2" was directionally drilled from 1753 m to 2089 m MD with an 11 ppg mud weight at low ROPs. At 1865 m the pipe became momentarily stuck when the mud motor stalled while sliding. The standpipe pressure spiked to over 4000 psi indicating it was a pack-off. The pipe was freed by jarring twice and drilling continued to 2089 m MD. At 1876 m 2% of Radiagreen EME Salt was added to the active system to reduce friction factors so that more weight could be transmitted to the bit/BHA while sliding. Drilling continued but with pipe rotation so it was not clear of the impact of the Radiagreen EME Salt, however torque did reduce.

At 2089 m the hole was circulated clean and the pipe POOH to change the bit and BHA to a kick-off assembly. The Moroak Sandstone was logged on the way in and it was determined that the hole angle had dropped from 19 degrees to 1.63 degrees. Drilling progressed with the kick-off BHA building hole angle to 78.93 degrees at 2664 m where the MWD signal failed. The pipe was POOH trouble-free and a rotary steerable assembly made up to drill the section to 90 degrees and to TD @ 3837 m MD.

There was no evidence of caving's or hole instability during drilling. Hole cleaning was good at both the high and low ROP's.

### Drilling Fluid

9.8 ppg Cleandril HD mud from the previous 12-1/4" section was reused for this section. The initial mud weight of Cleanrol HD in the surface pits was 9.8 ppg. Fresh premixes containing a 50/50 blend of salvaged mud from the frac tanks and water was used as the base to mix Cleandril MD until the salvaged mud was used up. Once the salvaged mud in the frac tanks was used new premixes were built using calcium chloride brine as the base for mixing.

The shaker screens were downsized to API 170 for the displacement.

The desilter was run on occasions initially to help control mud weight. The NOV 24" big bowl centrifuge was run intermittently while drilling to maintain mud weight at 9.6 ppg – 9.8 ppg to the base of the Moroak Formation. The centrifuge feed rate was limited to 30 gpm so that a gradual reduction in mud weight could be achieved. The centrifuge was of limited use as the mud weight was mainly contributed by the salinity content and low in solids.

Volume in the Active System was maintained with continuous additions of fresh premixes to control and minimise mud weight. In addition, at times a stream of water at 2-3 bbls was added directly to the active pit to replenish water lost to evaporation.

Additions of 1 ppb magnesium oxide pH buffer and 1 ppb NDFT 325 corrosion inhibitor and 0.1 ppb TrueScav HD were made to premixes to help minimize corrosion potential. pH was run between 8.5 and 9.5 while drilling. As drilling progressed magnesium oxide additions were discontinued as it was thought this could be contributing to the high gel strengths seen later in the previous well. pH subsequently dropped to 8.5. The active system was treated with caustic soda. The caustic soda additions could not increase the pH and it remained at 8.5 for the section, except for the one mud check where a pH of 9 was recorded.

Slugs were made with barite.

Generally the API filtrate was within specification @ 10-12 ml/30 min and was allowed to relax below 14 ml while drilling the Moroak Sandstone to assist with maximizing ROP's. Some direct additions of Cleanrol HD were made initially to reduce the initial fluid loss of the mud. The API fluid loss was reduced to less than 10 ml after drilling through the Moroak Sandstone into the Velkerri Formation shales and siltstones with direct additions of premixes. As the mud temperature increased and the low-end rheology increased, dilution with brine and water increased the API filtrate to over 10 ml but this was treated with CleanTrol HD to reduce back to specification.

The mud weight was increased to 10.6 ppg as per Tamboran instructions prior to exiting the Moroak Sandstone and tripping at 1753 m MD with direct additions of calcium chloride and barite. After the slug was pumped prior to POOH, the mud weight increased to 11 ppg and remained there to 2089 m where the BHA was pulled to change to a build BHA. The mud weight was later raised to 11.3 ppg and 11.6 ppg while drilling the build section. There were no signs of cavings while drilling. The intention of adding some calcium chloride was to increase the salinity from 50,000 mg/l chlorides towards 130,000 mg/l chlorides as the mud was weighted to ensure a low solids mud to help optimise rheology and hydraulics.

The chlorides increased from 45000 mg/l to 110000 mg/l as the mud weight increased through calcium chloride additions.

On the 6/10/2023 at 06:00 it was requested to add a lubricant to the Cleanrol HD mud system to improve the weight transfer to the bit/BHA while sliding in 8.5" hole from ~ 1865 m MD. Radiagreen EME Salt was added to the mud system from approximately 1875 m, with the full complement of 2% by volume in the mud system by 1883 m. After the addition of the lubricant the pipe was rotated so it was difficult to gauge the effectiveness of the treatment in terms of

aiding in weight transfer to the bit while sliding, although there was a noticeable reduction in torque.

A pilot test was conducted prior to adding the 2% Radiagreen EME Salt and the mud checked after a few circulations.

	<b>Active before addition</b>	<b>2% pilot test</b>	<b>Active after addition 2%</b>
Mud Weight (ppg)	11.0	11.0	11.0
600	45	56	60
300	30	40	42
200	24	32	33
100	16	24	24
6	5	9	8
3	4	8	6
10s/10m	4/15	9/24	8/18
PV/YP	15/15	16/24	18/24
API FL	11.8	10	9.8
pH	9	9	9

After the addition of the 2% Radiagreen the mud properties were very similar to the pilot test with a slight increase of low-end rheology. There were no foaming or visible changes to the mud system. There was an increase of funnel viscosity from 48 to 57 second while adding the lubricant. This was short-lived and the funnel viscosity soon returned to 48-49 seconds/qt.

The section to 2089 m MD was predominately drilled in rotary mode with 40 rpm. There was no sliding until approximately 2075 m MD so it was difficult to determine whether the lubricant made a difference, especially considering the low pipe rpm @ 40 rpm.

Note that at 1875 m while adding the lubricant (~ 0.5% in the mud at the time) the pipe became stuck but was freed soon-after after jarring twice. A noticeable increase in standpipe pressure was seen which indicated it may have been a small pack-off.

The initial torque while drilling from 1812 m to 1861 was 18-23K ft.lb. After the addition of the Radiagreen EME Salt the torque appeared to reduce to 12-15 K ft.lb.

As the BHCT increased towards 95 degrees the low-end rheology and gel strengths increased, although the plastic viscosity and top-end rheology remained stable. The gel strength increase may be partly attributed to the Radiagreen EME Salt addition as well as through dehydration of the mud system and the temperature effect on the Cleanrol HD causing it to yield. The mud was treated with 0.4 ppb Desco CF (which was the available product on the rig) to reduce the rheology (Specifically low-end and gel strengths) but it proved to be ineffectual. The most suitable approach was to continue water additions at 3-7 bbls/hr and dilute with calcium chloride brine. As dilution of the mud progressed, the rheology reduced and the mud required additions of Cleanrol HD to lower the API filtrate. The addition of Cleanrol HD actually increased the rheology although after a few



circulations the rheology stabilized. The 10 second and 10 minute gel strength remained high however but the 30 m gel strength was typically non-progressive and similar to the 10 min gel.

As the flowline temperature reached around 70 degrees the low-end mud rheology and yield point continued to increase. The mud was cut back with brine and drillwater additions. CleanTrol HD was added to the mud system but this had the effect of increasing the rheology again. The mud was still shear thinning with only minor increases in the apparent viscosity. The 10 second gel strengths increased but they were still relatively non-progressive with the 30 min gel strength close to the 10 min. Direct additions of CleanTrol HD to the active system were eventually discontinued due to the rheology increase. As a result, the API fluid loss increased to 18.4 ml by TD with a BHCT of 114.6 deg C and a flowline temperature of 84 deg C.

The mud system was generally inhibitive and along with the shakers and centrifuge, able to control LGS% to less than 10% vol. Towards the end of the build section the MBT did increase from 7.5 ppb to 12.5 ppb, which can be attributed to the 'mortar and pestle' effect of cuttings being ground up during the long periods of sliding.

At TD, the hole was circulated 3 times at 160 rpm. There was a noticeable increase in cuttings when drilling rpm increased from 80 to 120 rpm. At TD when circulating the hole clean the rpm increased from 120 to 160 rpm which again resulted in a cuttings load increase and the shakers eventually cleaning up.

There were no downhole losses drilling this section.

The maximum flowline temperature recorded while drilling in this section was ~84°C. The maximum BHCT recorded on the MWD was 114.6 deg C during a survey.

A carbide was pumped at TD and the hole was found to be 5.6% over gauge.

#### **Typical Premix Fluid Formulation**

Mix Order	Product	Concentration
1	Mix Water	As Required
2	9.2 - 10.6 ppg CaCl <sub>2</sub> brine	As Required
3	Idcide G50	0.1
4	CleanTrol HD	4
5	TrueScav D	0.1
6	Newzan D	1.5-2
7	Avaglyco LC	1% (3.5 ppb)
8	Omyacarb 2/5	5
9	Magnesium Oxide	1



## Density

Mud Property	Programmed Specification	Actual Specification
Mud Weight (ppg)	9.6 – 11.4	9.75 – 12.0

The initial mud weight of the salvaged CleanDrill HD mud from the 12-1/4" section was 9.75 ppg. The mud weight was maintained between 9.7 – 10.0 ppg to the base of the Moroak Sandstone. The mud was then weighed up with barite to 10.6 ppg as directed by Tamboran OCR after drilling out of the base of the Moroak Sandstone. The mud weight was progressively raised again to 11.6 and allowed to increase to 12.0 ppg to TD. The mud weight increases were achieved with barite additions along with a higher concentration of calcium chloride in premixes to reduce barite requirements. Minimal Omyacarb was used in the mud system on this well.

## Rheological Properties

Mud Property	Programmed Specification	Actual Specification
PV (cP)	ALAP	12-23
YP (lbs/100ft <sup>2</sup> )	Subject to 6 rpm	16-52
6 rpm (lbs/100ft <sup>2</sup> ) @ 49°C	7 - 9	6-44

The 6rpm reading was maintained at 6-8 lb/100ft<sup>2</sup> for the majority of the section. Plastic viscosity was within the range and low for the entire section demonstrating the shear thinning characteristics of the mud. As the flowline temperature increased to ~ 65-70 deg C the mud rheology (6rpm and Yield point) began to increase, most likely due to the CleanTrol HD. Water at 3 - 7 bbl/hr was added to the mud system but the rheology continued to climb. Gel strengths were high for the 10 second gel but they were non-progressive with the 10m and 30 m being close to the 10 second gel.

## API Filtrate

Mud Property	Programmed Specification	Actual Specification
API Filtrate (ml)	10 -12	6.4 – 18.4

Fluid loss was controlled by addition of CleanTrol HD. The initial API fluid loss was ~12 ml and this was allowed to remain while drilling through the Moroak Sandstone to help improve ROP. Once through the Moroak the API filtrate was slowly decreased to 6.2 ml at 2380 m. As the BHCT increased it became very difficult to maintain the API fluid loss within specification and it slowly increased with the increasing BHCT and flowline temperature. The mud was treated with additional CleanTrol HD but this increased the rheology so additions were moderated.

## CaCl<sub>2</sub> Content

Mud Property	Programmed Specification	Actual
Chlorides	No specification	42,000 – 113,000 mg/L

The chloride content was not specified in the mud program. The actual chloride content was dictated by the amount of 10.6 ppg CaCl<sub>2</sub> brine added to the premix which was a factor of the required mud weight. The chloride content started low as the mud weight was low at 9.6 ppg. As more new CleanDrill HD premix was incorporated into the active system and the mud weight was progressively raised via heavier premixes and barite additions, the chlorides increased to 100,000 mg/l. Towards the end of the section it was recommended to limit the chlorides at 100,000 mg/l to provide more free water for the CleanTrol HD and polymers so a lower concentration of calcium chloride was used in the premixes and barite used to weight up to the required rate.

Water at 3 - 7 bbls/hr was added to the active system regularly to counter evaporation of the water phase as the flowline temperature increased so there was no noticeable increase in chlorides as the mud temperature increased.

The cuttings were generally very fine and non-discrete. However, based on the low and stable MBT of less than 12.5 ppb reactive clays for most of the section they were not very dispersive.

#### pH & pH buffer Content

Mud Property	Programmed Specification	Actual
pH	8.5 – 9.5	8.5-9.5

The pH was maintained within programmed specification using ~1 ppb Magnesium Oxide and some additions lime to the active system. As drilling progressed it was recommended to add 2 sxs of lime each day to treat any carbonates. As the temperature increased it was recommended to discontinue additions of magnesium oxide for caustic soda. Caustic soda was never able to reach the target pH of 9.

#### Solids Control

H&P Rig 469 has 3 x Brandt King Cobra shakers. For drilling out the shoe track and 3 m of rat hole, the shakers were dressed with API 140. As drilling progressed the screens were gradually fined-up to 4 x API 170 screens. Finally, as the mud heated up and prior to drilling the lateral section, the shakers were dressed with 2 x API 200 and 1 x API 200/ API 170 screens. The shakers were easily able to handle the 560 gpm flowrate. The screen consumption on the King Cobras was low and only a couple of API 200 screens were required to be changed out.

The sand content was low throughout the section with the maximum value recorded 0.25 %

The big bowl was used intermittently to maintain the mud weight. As the mud system was low solids and predominately built with brine with some/barite as weight increased, the cut point was low at 0.3-0.7 ppg the average parameters for the centrifuge were 2500 rpm and 30-100 gpm throughput rate. When drilling the lateral section the centrifuge was run for 2 hours but this resulted in aeration of the mud system so it was subsequently turned off. The centrifuge was run on another occasion for a 6 hour period and no aeration was seen so potentially the aeration was from another source.

#### Losses

No distinguishable downhole losses occurred in the 8-1/2" section

## Post TD

Wash & Ream out from TD back to 2098 mMD with tight spots noted on the trip out were @ 3423, 3386, 3303, 3254, 2843, 2595, 2521, 2396.

Wash & Ream F/2098 T/1950 mMD @ 10ft/min. Circulate while working string 4 x B/U. Large amount of splintery caving observed at surface. Flow Check – Static. Pump SLUG, POOH F/1950 T/1582 mMD. Flow Check – Static. POOH to shoe – Static. L/D BHA & R/U casing running equip. RIH 5 ½” casing to 825 mMD. Troubleshoot Drill Quip computer. Resume running casing fill every 10 joints to 1090 mMD. Trip in hole to 3815 fill every 20 joints. P/U landing joint and land casing. Break circulation with 220 GPM for first B/U then increase pump rate to 300GPM. Addition of 1ppb Desco CF as per cementers requirement.

Following tripping out, pulled out wear bushing and prepared to rig up tools to RIH with 5.5” csg. The running in with 5.5” casing proved to be a smooth and trouble-free operation. The 5.5” casing was landed at 3830.49 m. The well was circulated, and the mud system was treated with 1.0ppb of Desco CF thinning additive to reduce mud rheology prior to commencement with the cementing operation.

A total of 400bbl of NaCl/2% KCl brine treated with corrosion inhibitor, biocide and oxygen scavenger was prepared and stored in the frac tank to displace the cement.

The cement job consisted of 100 bbls of spacer, 148.4 bbls of lead slurry, 165.3 of intermediate slurry, 339.2 bbls of tail slurry, 10 bbls of spacer followed by 264 bbls of 9.5 ppg NaCl/2% KCl brine. During cementing, observed all cement spacer and approximately 22bbls of cement returns to surface with no downhole losses. The plug was bumped and the casing pressure tested successfully.

The left over mud was discarded into the sump and no mud was salvaged as the rig was to be stacked over the wet season.

Amungee NW 3H well was suspended, and HP469 rig was released on September 16, 2023, at 2400 hrs.

### 3. COST ANALYSIS

Costs	22" Section	Dilution Rates	22" Section
PROGRAMMED	\$ 30,083.00	PROGRAMMED	1.2
<b>ACTUAL</b>	<b>\$ 14,691.00</b>	<b>ACTUAL</b>	<b>0.49</b>
VARIANCE (\$)	-\$15,392.		
VARIANCE (%)	-51.1 %		

The 22" Section hole was drilled for \$ 14,691.00 which was 51.17% under budget. The mud cost per meter was \$170.83, a result from applying lessons learned from the previous well.

Costs	17 ½" Section	Dilution Rates	17 ½" Section
PROGRAMMED	\$ 26,819.00	PROGRAMMED	N/A (losses anticipated)
<b>ACTUAL</b>	<b>\$ 13,092.50</b>	<b>ACTUAL</b>	<b>N/A (total losses)</b>
VARIANCE (\$)	-\$13,726.50		
VARIANCE (%)	-51.1 %		

The 17½" hole was drilled utilizing with previous section salvaged 975 bbl KCL/Polymer mud. However, as encountered down hole loss, this necessitated to build additional premix volume of 10,322 bbl. Therefore, this extra volume built, at a time of total losses and returns for most of the section, equated to being under the budgeted price cost at -51.1% range. The mud cost per meter was \$46.26, which includes high viscosity sweeps used whilst drilling with water when total losses.

Costs	12 ¼" Section	Dilution Rates	12 ¼" Section
PROGRAMMED	\$ 24,502.00	PROGRAMMED	0.8 bbl/m
<b>ACTUAL</b>	<b>\$ 28,848.00</b>	<b>ACTUAL</b>	<b>0.83 bbl/m</b>
VARIANCE (\$)	\$33,672.00		
VARIANCE (%)	137.4 %		

The 12 ¼" section was drilled for \$28,848.00 which was predictably higher to the range of 17.74% over the budgeted amount. The reason for this was the pivot to use the CaCl<sub>2</sub> based CleanDrill HD mud for the 12 ¼" section to not build a new system of KCL/Polymer mud for such a small section and then discard to the following section.

Costs	8½" Lateral	Dilution Rates	8½" Lateral
PROGRAMMED	\$ 550,829.00	PROGRAMMED	0.6 bbl/m
<b>ACTUAL</b>	<b>\$ 288,923.10</b>	<b>ACTUAL</b>	<b>0.38 bbl/m</b>
VARIANCE (\$)	\$ 261,905.90		
VARIANCE (%)	-47.55%		

The 8 ½" lateral hole was drilled for \$288,923.10, which was 47.55% under the programmed budget. The main contributing factor for the save was the ability to recycle fluid from previous well and sections. Secondly, running the fluid with a lower dilution rate to programmed due to limited ability to dump/dilute resulted in less fluid being required to be built.

Costs	Post TD
PROGRAMMED	\$ 9,645.00
<b>ACTUAL</b>	<b>\$ 44,648.50</b>

Post TD cost \$44,648.50 included chemical for building cement spacers and post TD treatments like Desco CF that was not included in the programmed cost.

### Total Drilling Fluid Costs

Amungee NW 3H Total Drilling Fluid Costs	
DRILLING	\$ 345,554.60
POST TD	\$ 44,648.50
PROGRAMMED	\$ 641,877.00
<b>ACTUAL TOTAL</b>	<b>\$ 390,203.10</b>
VARIANCE (\$)	- \$ 251,674.90
VARIANCE (%)	- 39.21%

**Overall, Amungee NW 3H** was drilled and completed using drilling fluids for the total amount \$390,203.10, which was 39.2% under the forecast buuget.

## 4. RECOMMENDATIONS & LESSONS LEARNED

### 17 1/2" Section

- Total lost circulation occurred around 10 m out of the 13-3/8" casing shoe. No returns were seen to section TD or during the cement job. It may be worth investigating a cheaper bentonite/PAC based mud for top-hole which may provide an improved potential to reduce lost circulation.

### 12 1/4" Section

- This system was drilled with a Cleanrol HD mud system rather than the planned KCl/Polymer mud system. Since there was no KCl/polymer remaining from the 17-1/2" section due to total lost circulation it was decided to use the Cleandril HD system which could be re-used for the 8-1/2" section and would save disposing of excess KCl/Polymer mud at the end of this section. There were no hole issues drilling with the Cleandril HD mud system so consider drilling with this system in the 12-1/4" on future wells.
- This well did not have a sump so Coho were employed to transport/pump the cuttings from the cuttings skip/corral to the waste pit. A lot of water is consumed slurrying the cuttings so that they can be pumped. For the larger hole sizes such as 12-1/4" it was difficult for Coho to keep up with the cuttings load. It may be worthwhile installing dryer shakers after the rig shakers so the cuttings can be moved by a backhoe.

### 8-1/2" Section

- There were 4 x 400 bbl frac tanks available for this section. Two frac tanks were used to store Cleandril HD mud from the Shenandoah-S1 well while a 3<sup>rd</sup> tank was used to store calcium chloride brine. It is recommended to have these 4 tanks available for future wells, particularly if a series of wells is drilled so that mud can be salvaged and stored in addition to keeping a dedicated tank for mixing brine.
- Suction Pit #3 was isolated from the active system so that it could be used as a reserve pit. This was very beneficial as it provided an extra 100 bbls of reserve mud storage. It was particularly useful for cementing the casing as 120-150 bbls of spacer was required and this could be mixed in the slug pit and stored in the slug and suction #3 pits.
- While the isolation of the suction #3 is beneficial, new premix can still only be mixed in the slug pit. It would be recommended to modify the pipe work so that mud can be mixed in both the slug and suction #3 pit.
- The active system on rig 469 acts as one whole tank, the sand trap and Backflow tank flows like a settling tank, but every other pit is equalised through a pipe on the bottom. It would be favorable to have the pits separate or adjustable skimmers (or flowline) installed to ensure more settling occurs and tanks can be operated independently of each other.

- On this rig a short system can be run between the slug pit and Sandtrap using a diesel pump and hoses. A short system was not required on this well however it could be on future wells on this rig. The short system is limited and required extra personnel to monitor volumes. Only 300 gpm could be achieved with the short system that was set up.
- Maximum surface temperature recorded was 84 deg C. Additions of water at 3-7 bbl/hr were made most days while drilling to replace water lost to evaporation. This ensured the rheology of the mud system was stable with low-top end values and PV to TD.
- The Brandt Cobra shakers worked efficiently. We were able to run two shakers with API 200 screens and 1 shaker with API 200/170 screens in the latter part of the 8.5" section. Screen consumption was only minimal throughout this section.
- Radiagreen EME Salt was added to the mud system at 2% by volume. Pilot testing was conducted prior to the addition. The lubricant was added to help improve the weight transfer to the bit while sliding. There was a noticeable reduction in torque after the addition of the lubricant however the rig went to rotation after lubricant addition so there is no conclusion if it assisted with sliding. Noticeably there was no negative impact to the drilling fluid with the addition of the lubricant in the field addition.
- The main impact of the Radiagreen EME Salt on the mud system was an increase in low-end rheology (6 rpm) and gel strengths. This needs to be considered for future additions of Radiagreen EME Salt.
- When adding the Radiagreen EME Salt it is recommended to avoid simultaneous additions of lubricant and barite to mud system. Commercial lubricants are filming amines engineered to adhere to both the drill string and well bore wall, thus providing the required lubricity and torque/friction reduction. Adding lubricant while weighting up system, prior to water wetting of barite, allows for filming of the barite particles, further impeding the water wetting process.
- Addition of 2 sacks of lime each day assisted with ensuring carbonates and any bicarbonates were controlled.
- As the mud rheology increased, additions of magnesium oxide were discontinued. It was felt that magnesium oxide additions may contribute to an increased rheology.
- The NOV big bowl centrifuge was positioned next to the solids control tanks so centrate was able to flow back to the mud system by gravity. It is recommended that it is placed in the same location for future wells.
- The NOV centrifuge was typically ran at 30 gpm and 2500 rpm so that the mud weight was not reduced too much i.e. it was run like a 14" centrifuge. Conceivably a 14" centrifuge or 2 x 14" centrifuge with barite recovery mode would work just as well as big bowl centrifuge. The NOV big bowl centrifuge is great for cutting mud weights down at the end of the well but needs to be run with lower performance while drilling.



- The centrifuge was hooked up with 2 x 4" discharge hoses instead of a 6" hose. Towards TD the mud rheology increased making it difficult to pump the centrate through the 2 x 4" hoses. The 4" hoses were subsequently replaced with a 6" discharge hose. It is recommended to ensure a 6" hose is available.
- It is advantageous to build 10.6 ppg brine early to allow the exothermic reaction to take place and let it cool before mud is mixed. On this well we didn't always have personnel available to mix brine so only 400 bbls could be premixed before drilling. However having the brine already mixed was advantageous when mixing premixes as it saved a lot of time and effort. It is recommended for future wells to spend the time to mix enough calcium chloride brine at the start of the section, albeit with limited mixing and reserve pits on this rig it is difficult to mix brine while drilling.
- CleanTrol HD additions which is the primary fluid loss agent increased the rheology of the mud. It is recommended to look at alternate high temperature fluid loss agents as it is difficult to finding the balance between lowering fluid loss and lowering rheology, particularly as the BHCT increased to over 90 deg.
- A corrosion ring was run in the 8-1/2" BHA. After 120 hours exposure the corrosion rate as measured at 2.23 lb/ft<sup>2</sup> per year which indicates the corrosion control program in place is effective. Anything of 2 lb/100ft<sup>2</sup> or less is considered acceptable.
- There is a higher risk of flash setting of the cement if it is contaminated with the calcium chloride based mud as calcium chloride is an accelerator. This meant that more spacer was required to separate the mud from the cement. The cement spacers were prepared and stored in the rig tanks on this well. On the Shenandoah-S1 well the spacers were mixed in the slug pit and transferred to the cementers frac tanks for storage. In future it would be best if the cementers continue to use their frac tanks to store and pump spacer.
- The mud lab did not have running water for this well nor Shenandoah S1. It is important that the mud lab is positioned closer to the water source so that we can be connected to water to aid in cleaning our equipment after mud checks.
- The surface mud temperature reached as high as 84 deg C. For health and safety reasons it is recommended to employ a mud cooler on future campaigns.
- Treatment to the mud system was delayed due to lack of manpower on most occasions while drilling in the lateral section due to crews having to constantly repair mud pumps. This impacted on the fluid performance and longevity. A dedicated derrickman/mixing assistant be used for future operations.
- The mud tank configuration on H&P is not built to run a water based mud requiring constant additions and premix's. A stand-alone premix mud tank ~400bbls, 2 – 3 compartments with agitators and gun lines is recommended for future operations. Currently the only premix tank available onsite is the 100bbls (75bbl useable with dead volume and capacity to not overflow) SLUG tank. This is not practical to be constantly mixing small batches in a stop/start manner. A single 400bbl tank could also be utilized to build cement spacers and displacement fluid at one time.



- Magnesium oxide was discontinued in the lateral sections as per the Tamboran fluid advisors recommendation. Magnesium oxide acts as a buffer and thermal stabilizer so it needs to be evaluated on why the additions were stopped. Caustic soda was never able to increase the pH to the recommended 9.
- The cement spacer is weighted with 275 ppb calcium carbonate. It is extremely difficult and time consuming to mix the calcium carbonate into the viscous cement spacer. On the 5.5" casing cement job, the calcium carbonate (Omyacarb 2) was eventually replaced with barite which mixed in fast and easily. Should calcium carbonate be mandatory then a coarser grind such as Circal Y is recommended as this should mix easier than the 2-micron Omyacarb. Alternatively, barite could be utilized for future spacers.

## 5. MUD MATERIALS RECONCILIATION

Well Amungee NW 3H

Total Weight : 393.92 Tonnes

Product	Size	Packaging Type	Starting Amount (Units)	Trf. From Prev. Well (Units)	Value Trf. From Prev. Well (\$)	Received from Stores (Units)	Value Received from Stores (\$)	Returned To Stores (Units)	Trf from another Rig (Units)	Nett Quantity Issued (Units)	Value Nett Quantity Issued (\$)	Damaged (Units)	Damaged Value (\$)	Total Used (Units)	Total Used Value (\$)	Transfer Quantity (Units)	Unit Price (\$)	Transfer Value (\$)
Alpine Spotting Beads	50 lb					252	\$61,740.00			252	\$61,740.00					252	\$245.00	\$61,740.00
Ancor 1 (190 Ltr)	190 Ltr					24	\$36,768.00			24	\$36,768.00			2	\$3,064.00	22	\$1,532.00	\$33,704.00
AvaGlyco LC	208 Ltr			31	\$27,869.00	56	\$50,344.00			87	\$78,213.00			38	\$34,162.00	49	\$899.00	\$44,051.00
Barite BB 1.5MT	1500 Kg			14	\$11,459.00	51	\$41,743.50	1		64	\$52,384.00			14	\$11,459.00	50	\$818.50	\$40,925.00
Barite BB 1.5MT - Darwin	1500 Kg			11	\$12,666.50	42	\$48,363.00			53	\$61,029.50			53	\$61,029.50		\$1,151.50	
CaCl2 - Prills - bb	1000 Kg			33	\$39,600.00	162	\$194,400.00			195	\$234,000.00			61	\$73,200.00	134	\$1,200.00	\$160,800.00
Caustic Soda	25 Kg	Drum		10	\$745.00	32	\$2,384.00			42	\$3,129.00			16	\$1,192.00	26	\$74.50	\$1,937.00
Citric Acid	25 Kg	Sack		50	\$7,150.00	88	\$12,584.00			138	\$19,734.00			2	\$286.00	136	\$143.00	\$19,448.00
CleanTrol HD	22.7 Kg			229	\$37,785.00	600	\$99,000.00			829	\$136,785.00			271	\$44,715.00	558	\$165.00	\$92,070.00
DEFOAM AP 400	25 Ltr			18	\$3,330.00	32	\$5,920.00			50	\$9,250.00			35	\$6,475.00	15	\$185.00	\$2,775.00
Desco CF	25 lb			16	\$2,320.00	69	\$10,005.00			85	\$12,325.00			53	\$7,685.00	32	\$145.00	\$4,640.00
Dynafiber AP Fine	11.34 Kg			246	\$7,011.00					246	\$7,011.00					246	\$28.50	\$7,011.00
Dynafiber AP Medium	11.34 Kg			288	\$8,208.00					288	\$8,208.00			5	\$142.50	283	\$28.50	\$8,065.50
Dynafibre AP Coarse	11.34 Kg			48	\$1,368.00					48	\$1,368.00					48	\$28.50	\$1,368.00
Idcide-G50	20 Ltr			16	\$2,224.00	64	\$8,896.00			80	\$11,120.00			33	\$4,587.00	47	\$139.00	\$6,533.00
JK-161 LV	25 Kg			85	\$8,075.00					85	\$8,075.00			1	\$95.00	84	\$95.00	\$7,980.00
KCL (L)	1000 Kg	Bulk Bag		1	\$1,765.50	30	\$52,965.00			31	\$54,730.50			8	\$14,124.00	23	\$1,765.50	\$40,606.50
Lime 25 Kg	25 Kg			38	\$931.00					38	\$931.00			26	\$637.00	12	\$24.50	\$294.00
Magnesium Oxide	20 Kg	Sack		238	\$8,211.00	136	\$4,692.00			374	\$12,903.00			45	\$1,552.50	329	\$34.50	\$11,350.50
NDFT 325	208 Ltr			7	\$20,265.00					7	\$20,265.00			7	\$20,265.00		\$2,895.00	
NewPac LV 25 Kg	25 Kg			100	\$12,850.00	80	\$10,280.00			180	\$23,130.00			25	\$3,212.50	155	\$128.50	\$19,917.50
NewSeal 25	25 Kg			80	\$14,440.00	39	\$7,039.50			119	\$21,479.50					119	\$180.50	\$21,479.50
NewZan D	25 Kg			83	\$25,771.50	240	\$74,520.00			323	\$100,291.50			77	\$23,908.50	246	\$310.50	\$76,383.00
Omyacarb 2 (bb)	1000 Kg			19	\$17,195.00	56	\$50,680.00			75	\$67,875.00			11	\$9,955.00	64	\$905.00	\$57,920.00
Omyacarb 5 (bb)	1000 Kg			2	\$1,675.00	16	\$13,400.00			18	\$15,075.00					18	\$837.50	\$15,075.00
Radiagreen EME	175 Ltr			20	\$42,500.00	20	\$42,500.00	8		32	\$68,000.00			22	\$46,750.00	10	\$2,125.00	\$21,250.00
Salt 1000 Kg BB	1000 Kg			4	\$2,400.00	10	\$6,000.00			14	\$8,400.00			13	\$7,800.00	1	\$600.00	\$600.00
SAPP	25 Kg	Sack		48	\$2,817.60					48	\$2,817.60					48	\$58.70	\$2,817.60
Soda Ash	25 Kg	Sack				48	\$2,016.00			48	\$2,016.00					48	\$42.00	\$2,016.00
Sodium Bicarbonate	25 Kg	Sack		64	\$2,560.00					64	\$2,560.00			19	\$760.00	45	\$40.00	\$1,800.00
Sugar	25 Kg	Sack		37	\$1,665.00					37	\$1,665.00			16	\$720.00	21	\$45.00	\$945.00
TEA (230 KG)	230 Kg			22	\$25,885.20					22	\$25,885.20			1	\$1,176.60	21	\$1,176.60	\$24,708.60
TrueScav HD	25 Kg			23	\$5,750.00	40	\$10,000.00			63	\$15,750.00			45	\$11,250.00	18	\$250.00	\$4,500.00
Zinc Oxide 25 Kg	25 Kg			21	\$4,935.00					21	\$4,935.00					21	\$235.00	\$4,935.00
					\$361,427.30		\$846,240.00				\$1,189,848.80		\$0.00		\$390,203.10			\$799,645.70

22''

## 22" Section

Key Interval Data		Volume Reconcile		Volume Accounting	
Initial Depth (m)	0	Recd From Prev Section	0	Surface Loss (bbls)	42
Final Depth (m)	86	Received Volume	450	Sub-Surface Loss (bbls)	0
Interval Depth (m)	86	Total Built/Added	567	<b>Total Loss</b>	<b>42</b>
		BackLoad Volume	0	Total Dilution Factor (bbl /	0.49
		<b>Nett Volume</b>	<b>1017</b>	Surface Dil Factor (bbl / m)	0.49
<b>Cost Analysis</b>		<b>Losses</b>		<b>CUMULATIVE FLUID BUILT</b>	
Currency	AUD	Shakers	42	Premix drill water	550 bbl
Section SBM Cost	-	Centrifuge	0	Chemical Volume added	17 bbl
Section Materials Cost	\$14,691.00	Other SCE	0	Sump recycled water	bbl
Total Section Cost	\$14,691.00	Discharged	0	Seawater	bbl
Programmed Cost	\$30,083.00	Other	0	Other Received on Rig	bbl
		Down Hole/Behind Casing	0	Other Built	bbl
		Seepage/Lost Circulation	0	Whole Mud Backloaded	bbl
Mud Cost Per (m) Drilled	\$170.83	<b>Total Volume Lost</b>	<b>42</b>	Whole Mud Received	450 bbl
Mud Cost Per bbl	\$14.45	<b>Final Volume</b>	<b>975</b>		

## Products

Products Utilised	Unit Size	Unit Cost	Initial Units	Units Received	Units Damaged	Units Used	Returned To Stores	Units Remaining	Total Cost
KCL (L)	1000 Kg	\$1,765.50	31	0	0	4	0	27	\$7,062.00
NewZan D	25 Kg	\$310.50	323	0	0	10	0	313	\$3,105.00
Barite BB 1.5MT	1500 Kg	\$818.50	15	0	0	2	0	13	\$1,637.00
NewPac LV 25 Kg	25 Kg	\$128.50	180	0	0	11	0	169	\$1,413.50
JK-161 LV	25 Kg	\$95.00	85	0	0	8	0	77	\$760.00
TrueScav HD	25 Kg	\$250.00	63	0	0	2	0	61	\$500.00
Icdide-G50	20 Ltr	\$139.00	80	0	0	1	0	79	\$139.00
Caustic Soda	25 Kg	\$74.50	42	0	0	1	0	41	\$74.50
									\$14,691.00

**17 1/2"**

## Interval Summary

## Tamboran Resources

Amunqee NW 3H

### 17 1/2" Section

Key Interval Data		Volume Reconcile		Volume Accounting	
Initial Depth (m)	0	Recd From Prev Section	975	Surface Loss (bbls)	40
Final Depth (m)	283	Received Volume	320	Sub-Surface Loss (bbls)	10337
Interval Depth (m)	283	Total Built/Added	10322	<b>Total Loss</b>	<b>10377</b>
		BackLoad Volume	0	Total Dilution Factor (bbl /	36.67
		<b>Nett Volume</b>	<b>11617</b>	Surface Dil Factor (bbl / m)	0.14
<b>Cost Analysis</b>		<b>Losses</b>		<b>CUMULATIVE FLUID BUILT</b>	
Currency	AUD	Shakers	40	Premix drill water	10310 bbl
Section SBM Cost	-	Centrifuge	0	Chemical Volume added	12 bbl
Section Materials Cost	\$13,092.50	Other SCE	0	Sump recycled water	bbl
Total Section Cost	\$13,092.50	Discharged	0	Seawater	bbl
Programmed Cost	\$26,819.00	Other	0	Other Received on Rig	bbl
		Down Hole/Behind Casing	0	Other Built	bbl
		Seepage/Lost Circulation	10337	Whole Mud Backloaded	bbl
Mud Cost Per (m) Drilled	\$46.26	<b>Total Volume Lost</b>	<b>10377</b>	Whole Mud Received	320 bbl
Mud Cost Per bbl	\$1.23	<b>Final Volume</b>	<b>1240</b>		

## Products

[illegible]

**12 1/4"**

## Interval Summary

## Tamboran Resources

## Amunqee NW 3H

### 12 1/4" Section

Key Interval Data		Volume Reconcile		Volume Accounting	
Initial Depth (m)	283	Recd From Prev Section	0	Surface Loss (bbls)	269
Final Depth (m)	609	Received Volume	0	Sub-Surface Loss (bbls)	0
Interval Depth (m)	326	Total Built/Added	329	<b>Total Loss</b>	<b>269</b>
		BackLoad Volume	0	Total Dilution Factor (bbl /	0.83
		<b>Nett Volume</b>	<b>329</b>	Surface Dil Factor (bbl / m)	0.83
<b>Cost Analysis</b>		<b>Losses</b>		<b>CUMULATIVE FLUID BUILT</b>	
Currency	AUD	Shakers	133	Premix drill water	310 bbl
Section SBM Cost	-	Centrifuge	23	Chemical Volume added	19 bbl
Section Materials Cost	\$28,848.00	Other SCE	113	Sump recycled water	bbl
Total Section Cost	\$28,848.00	Discharged	0	Seawater	bbl
Programmed Cost	\$24,502.00	Other	0	Other Received on Rig	bbl
		Down Hole/Behind Casing	0	Other Built	bbl
		Seepage/Lost Circulation	0	Whole Mud Backloaded	bbl
Mud Cost Per (m) Drilled	\$88.49	Total Volume Lost	269	Whole Mud Received	bbl
Mud Cost Per bbl	\$87.68	Final Volume	60		

## Products

[illegible]

### Interval Summary

Tamboran Resources		Amungee NW 3H		8 1/2" Section	
<b>Key Interval Data</b>		<b>Volume Reconcile</b>		<b>Volume Accounting</b>	
Initial Depth (m)	609	Read From Prev Section	780	Surface Loss (bbls)	1224
Final Depth (m)	3837	Received Volume	0	Sub-Surface Loss (bbls)	7
Interval Depth (m)	3228	Total Built/Added	1900	<b>Total Loss</b>	<b>1231</b>
		BackLoad Volume	0	Total Dilution Factor (bbl /	0.38
		<b>Nett Volume</b>	<b>2680</b>	Surface Dil Factor (bbl / m)	0.38
<b>Cost Analysis</b>		<b>Losses</b>		<b>CUMULATIVE FLUID BUILT</b>	
Currency	AUD	Shakers	690	Premix drill water	1534 bbl
Section SBM Cost	-	Centrifuge	164	Chemical Volume added	366 bbl
Section Materials Cost	\$288,923.10	Other SCE	119	Sump recycled water	bbl
Total Section Cost	\$288,923.10	Discharged	70	Seawater	bbl
Programmed Cost	\$550,829.00	Other	182	Other Received on Rig	bbl
		Down Hole/Behind Casing	0	Other Built	bbl
		Seepage/Lost Circulation	7	Whole Mud Backloaded	bbl
Mud Cost Per (m) Drilled	\$89.51	<b>Total Volume Lost</b>	<b>1232</b>	Whole Mud Received	bbl
Mud Cost Per bbl	\$152.06	<b>Final Volume</b>	<b>1448</b>		

[illegible]



[illegible]







Operator: Tamboran Resources  
 Well : Amungee NW-3H  
 Rig : H & P 4469  
 Spud : 25<sup>th</sup> September 2023



## WBM Fluid Properties Summary

Tamboran Resources

Amungee NW 3H

Date	Day	Mud Type	Temp.	Depth	Weight	Rheology					Fluid Loss Data			Solids							Water Phase Chemistry																	
						Vis	PV	YP	LSRV	6 RPM	10Sec	10Min	API	Cake	HPHT	Salt	HGS	LGS	Bent	Drilled Solids	Water	Oil	Sand	Polymer / Gelsol	MBT	pH	Pm	Pf	Mf	Cl-	CA++	SO3	K+	KCl	K2CO3	K2SO4	PHPA / PVA	
																%	%	%	ppb	%	%	%	%	%	ppb													
12-Oct-23	20	CleanTrol HD	78°C	3232	11.8	54	19	35	23	25	26	29	10.1	1		5.9		20.1		20.1	71.1		0.15	2.7	12.5	8.5	0.1	0.05	1.15	105000			0					
		CleanTrol HD	80°C	3413	11.75		23	45	35	35	39	42	10.2	1		6.3	3.2	12.9		12.9	74.5		0.1	3		9	0.14	0.05	1.75	112000			0					
		CleanTrol HD	80°C	3556	11.9	64	17	46	36	36	36	36	15.4	2		6.3	3.4	13.6		13.6	73.6		0.1	3	12.5	8.5	0.15	0.05	1.25	112500			0					
		CleanTrol HD	81°C	3650	11.8	62	18	39	31	31	30	30	13.1	2		5.6	3.5	13.4		13.4	74.4		0.1	3	12.5	8.5	0.1	0.05	1.3	100000			0					
13-Oct-23	21	CleanTrol HD	83°C	3782	11.8	57	22	52	42	44	40	37	16.8	3		5.8	2.7	14.8		14.8	74.9		0.1	1.7	12.5	8.5	0.1	0.05	1.2	102000			0					
		CleanTrol HD	84°C	3837	11.95	53	19	52	41	41	37	37	18.4	3		5.9	3.1	15.1		15.1	74.1		0.1	1.7	12.5	8.5	0.11	0.05	1.15	105000			0					
14-Oct-23	22	CleanTrol HD		3837	11.95		21	51	40	42	38	38	18.6	3		5.9	3.1	15.1		15.1	74.1		0.1	1.7	12.5	8.5	0.11	0.05	1.15	105000			0					
		CleanTrol HD		3837	11.95		21	51	40	42	38	38	18.0	3		5.9	3.1	15.1		15.1	74.1		0.1	1.7	12.5	8.5	0.1	0.05	1.1	104000			0					
15-Oct-23	23	CleanTrol HD		3837	12	55	18	41	29	29	29	29	18.6	3		5.9	3.1	15.5		15.5	73.8		0.1	1.7	12.5	8.5	0.1	0.05	1.12	105000			0					
		CleanTrol HD		3837	11.95	58	18	41	29	29	29	30	18.2	3		5.9	3.1	15.1		15.1	74.1		0.1	1.7	12.5	8.5	0.1	0.05	1.15	105000			0					
16-Oct-23	24	CleanTrol HD	49°C	3837	11.8	59	21	30	27	27	27	30	15.1	2		5.9	3.1	14.0		14.0	75.5		0.1	1.5	12.5	8.5	0.1	0.05	1.2	105000			0					
		Displacement Brine		3837	9.5											0.0		8.8		8.8	91.2											0						

## 8. FLUID VOLUMES SUMMARY

OPERATOR: Tamboran Resources

WELL NAME: Amungee NW 3H

Date	Midnight Depth	Depth Drilled	Cumil Depth Drilled	Previous Final Volume	Whole Mud Transfers		ADDITIONS			Daily Added	Hole Volume	MUD VOLUME							MUD LOSSES												Total Daily Losses	Daily Loss/m	Cumm Losses	Cumm Loss/m	Final Volume
																			SURFACE						SUB-SURFACE										
					Received	Blended	Chem	Drill & Sea Water	Sump & Other			Mud in Hole	Oil Vol (Hole)	Pits	ResV	Store	Total Surface Volume	Total Mud Volume	Shakers	Desander/Desilter	Cluge	Cleaner /Dryer	Disch	Trip	Other	Lost Circ	Left in Hole/Csg	Seepage	Other						
24/09/2023	0	0	0	0	450	0	12	522	0	534	0	0	0	377	607	0	984	984	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	984	
25/09/2023	86	86	86	984	0	0	5	28	0	33	133	124	0	339	512	53	904	1028	42	0	0	0	0	0	0	0	0	0	0	0	42	0.49	42	0.5	975
26/09/2023	86	86	172	975	320	0	12	113	0	125	87	87	0	403	890	0	1293	1380	40	0	0	0	0	0	0	0	0	0	0	40	0.47	82	0.5	1380	
27/09/2023	283	197	369	1380	0	0	0	9897	0	9897	279	279	0	377	746	55	1178	1457	0	0	0	0	0	0	0	9875	0	0	0	9875	50.13	9957	27.0	1402	
28/09/2023	283	0	369	1402	0	0	0	300	0	300	139	117	0	377	746	0	1123	1240	0	0	0	0	0	0	0	462	0	0	0	462	0	10419	28.2	1240	
29/09/2023	373	90	459	720	0	0	12	190	0	202	182	139	0	312	356	0	668	807	68	47	0	0	0	0	0	0	0	0	0	115	1.28	10534	22.9	807	
30/09/2023	609	236	695	807	0	0	7	120	0	127	291	256	0	383	141	90	614	870	65	66	23	0	0	0	0	0	0	0	0	154	0.65	10688	15.4	780	
1/10/2023	609	0	695	780	0	0	59	301	0	360	146	122	0	446	572	0	1018	1140	0	0	0	0	0	0	0	0	0	0	0	0	0	10688	15.4	1140	
2/10/2023	1243	634	1329	1140	0	0	16	170	0	186	292	252	0	396	517	0	913	1165	85	67	9	0	0	0	0	0	0	0	0	161	0.25	10849	8.2	1165	
3/10/2023	1426	183	1512	1166	0	0	10	50	0	60	334	283	0	425	403	0	828	1111	79	0	36	0	0	0	0	0	0	0	0	115	0.63	10964	7.3	1111	
4/10/2023	1753	327	1839	1111	0	0	35	65	0	100	410	347	0	407	439	0	846	1193	13	0	5	0	0	0	0	0	0	0	0	18	0.06	10982	6.0	1193	
5/10/2023	1815	62	1901	1193	0	0	6	16	0	22	424	355	0	470	361	0	831	1186	29	0	0	0	0	0	0	0	0	0	0	29	0.47	11011	5.8	1186	
6/10/2023	2080	265	2166	1186	0	0	33	20	0	53	485	410	0	440	370	0	810	1220	0	0	19	0	0	0	0	0	0	0	0	19	0.07	11030	5.1	1220	
7/10/2023	2220	140	2306	1220	0	0	15	80	0	75	517	426	0	443	325	0	768	1194	101	0	0	0	0	0	0	0	0	0	0	101	0.72	11131	4.8	1194	
8/10/2023	2441	221	2527	1194	0	0	65	170	0	235	568	472	0	478	336	0	814	1286	73	0	0	0	70	0	0	0	0	0	0	143	0.65	11274	4.5	1286	
9/10/2023	2664	223	2750	1286	0	0	53	90	0	143	620	520	0	478	292	0	770	1290	57	52	30	0	0	0	0	0	0	0	0	139	0.62	11413	4.2	1290	
10/10/2023	2767	103	2853	1290	0	0	8	27	0	35	643	576	0	539	204	0	743	1319	6	0	0	0	0	0	0	0	0	0	0	6	0.06	11419	4.0	1319	
11/10/2023	3170	403	3256	1319	0	0	30	237	0	267	736	659	0	556	178	0	734	1393	104	0	17	0	0	0	72	0	0	0	0	193	0.48	11612	3.6	1393	
12/10/2023	3701	531	3787	1393	0	0	17	228	0	245	859	769	0	466	173	0	639	1408	108	0	48	0	0	0	72	0	0	2	0	230	0.43	11842	3.1	1408	
13/10/2023	3837	136	3923	1408	0	0	19	100	0	119	890	851	0	432	166	0	598	1449	35	0	0	0	0	0	38	0	0	5	0	78	0.57	11920	3.0	1449	
14/10/2023	3837	0	3923	1449	0	0	15	0	0	15	890	859	0	473	118	0	591	1450	0	0	0	0	14	0	0	0	0	0	0	14	0	11934	3.0	1450	
15/10/2023	3837	0	3923	1450	0	0	32	520	0	552	898	789	0	536	589	0	1125	1914	0	0	0	0	88	0	0	0	0	0	0	88	0	12022	3.1	1914	
16/10/2023	3837	0	3923	1914	0	0	57	0	0	57	262	262	0	0	0	0	0	262	0	0	0	0	1709	0	0	0	0	0	0	1709	0	13731	3.5	262	
SECTION:	3923				770	0	516	13224	0	13742	10085	8954	0						905	232	187	0	1881	0	182	10337	0	7	0	13731	3.50				

Figures In Red Not Able To Be Calculated Correctly Due To Division By Zero

## **9. DRILLING FLUIDS PROGRAM**



## **Tamboran Resources**

*Technical Proposal for*

## **Amungee NW 3H Drilling Fluid Program**

**tamboran**  
RESOURCES

## Drilling Fluids Program

for

## Tamboran Resources

Well Type

## Amungee NW 3H Drilling Fluid Program

Copies	Distribution
1	Newpark Fluid Systems
2	Tamboran Resources

### Newpark

<b>Issued by:</b> <b>Project Manager</b>	Jason Cremor	Sign	Date
<b>Approved by:</b> <b>Operations Manager</b>	Paul Baker	Sign	Date

### Tamboran Resources

<b>Checked by:</b> Drilling Engineer	Name	Sign	Date
<b>Verified by:</b> (if applicable)	Name	Sign	Date
<b>Approved by:</b>	Name	Sign	Date

Rev.	Date	Reason
0	22 <sup>nd</sup> August 2023	Final



## TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>3</b>
<b>INTRODUCTION</b> .....	<b>4</b>
<b>COST ANALYSIS</b> .....	<b>5</b>
<b>WELL DETAIL</b> .....	<b>6</b>
<i>Graphical Overview</i> .....	6
<i>Well Design and Mud Parameters</i> .....	7
<i>Key Product Functions</i> .....	8
<b>INTERVAL DESCRIPTION</b> .....	<b>9</b>
<i>22" Surface Section – 85 m</i> .....	9
<b>INTERVAL DESCRIPTION</b> .....	<b>13</b>
<i>17 ½" Section: 85 – 280 mMD</i> .....	13
<b>INTERVAL DESCRIPTION</b> .....	<b>17</b>
<i>12 ¼" Section: 280 – 600 mMD</i> .....	17
<b>INTERVAL DESCRIPTION</b> .....	<b>21</b>
<i>8 ½" Section: 600 – 4388 mMD</i> .....	21
<i>Pit Management Plan to start the 8 ½" Section</i> .....	22
<b>INTERVAL DESCRIPTION</b> .....	<b>29</b>
<i>8 ½" Completion Section:</i> .....	29
<i>Pit Management Plan for brine displacement Operations</i> .....	29
<b>ATTACHED PROCEDURES</b> .....	<b>31</b>
<i>Operational Procedure attached</i> .....	32

## INTRODUCTION

Amungee NW 3H is a horizontal well planned to be drilled subsequent to SS 1-1H utilising H&P 469.

The following technical program was produced based on the information provided in the drilling program. This technical discussion is an overview of our technical recommendations that may be refined after the drilling program has been finalized.

This Fluids Program is related to the supply of Drilling Fluids Services to Tamboran Resources for the Amungee NW 3H well operations in Australia.

The mud program has been prepared considering the expected MD as below:

Hole Section	Expected MD (m)	Mud System
22"	85	KCl / PHPA / Polymer
17 ½"	280	KCl / PHPA / Polymer
12 ¼"	600	KCl / PHPA / Polymer
8 ½"	4388	CleanDrill HD™
Completion	-	Inhibited KCl/NaCl Brine

For the upper 22" section we have proposed the Potassium Chloride (KCl) / PHPA / Polymer to spud the well and to drill until total losses are encountered. If severe to total losses will be experienced while drilling this section, the sacrificial fluid to be used to fill up the well will be any additional KCl / PHPA / Polymer Mud already built and a drill water and Hi-Vis Sweep system through to TD. The focus of this section will be to maintain inhibition and hole stability until the loss zone is encountered.

The 17 ½" & 12 ¼" sections will be drilled with the same Potassium Chloride (KCl) / PHPA / Polymer system utilising any salvaged fluid from the previous section.

While drilling the 12 ¼" section the MW will be increase to 9.8 ppg for hole stability. The borehole strengthening/stability will be enhanced with a sweeping program made by the utilization of Dynafiber AP (F, M, C grade) & Calcium Carbonate.

The 8 ½" horizontal section will be drilled with the recovered CleanDrill HD™ system from SS 1-1H well utilising CleanTrol HD as the main fluid loss control additive & weighted up with Calcium Chloride to 10.6 ppg then additionally with Calcium Carbonate and Barite. A mixing process is included in this drilling fluids program and can be tailored to suit the equipment available on location. Mud Weight will be increased from 9.8 ppg to 10.6 – 11.4 ppg once past the Moroak SST. Refer to the Drilling Program and the Tamboran WSM prior to any MW increases.

In the event of a well control situation, Calcium Carbonate in 1.0 MT bulk bags will be available in addition to 1.5 MT bulk bags of Barite.

The density for the inhibited packer fluid, CaCl<sub>2</sub> brine is 9.4 ppg.

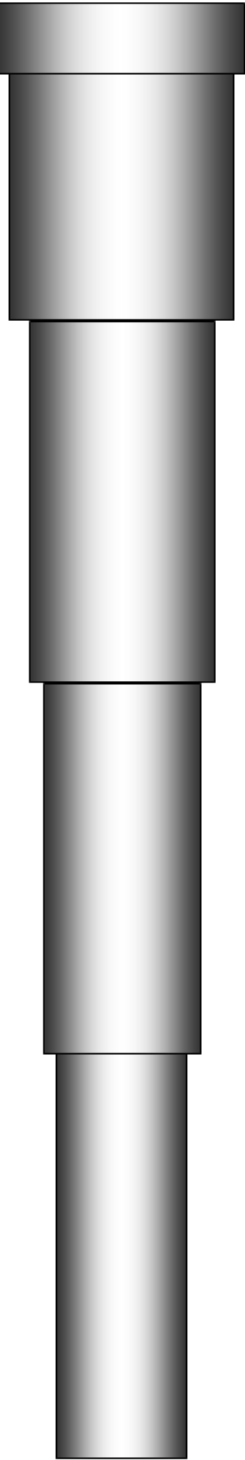
## COST ANALYSIS

Hole Size (in)	Metres Drilled (mMD)	Volume Required / Dilution (bbls)	Interval Cost (AUD\$)	Cost / Metre (AUD\$)	Cost / bbl (AUD\$)	bbls / Metre Used
22"	85	408 / TBC	\$30,083.00	\$353.92	\$73.74	1.2
17 ½"	195	971 / 190	\$26,819.00	\$137.53	\$27.62	1.0
12 ¼"	320	1047 / 256	\$24,502.00	\$76.57	\$23.41	0.8
8 ½"	3788	3795 / 2273	\$550,829.00	\$145.41	\$145.16	0.6
Post TD	-	500	\$9,645.00	-	-	-
<b>Total Well Cost</b>				<b>\$641,877.00</b>		



## WELL DETAIL

### Graphical Overview

Casing Size	Hole size	Casing Profile	Drilling challenges	Mud Type	Depth (mMDRT)	MW (ppg)
30" CP			Pre-installed	-		
18 5/8"	22" Bit			-	85	8.34-8.66
13 3/8" CSG	17 1/2"		Total losses  Drill Blind  Aquifer	KCl /PVA / Polymer	280	8.34-8.66
9 5/8" CSG	12 1/4"		Reactive Formations  Differential Sticking	KCl /PVA / Polymer	600	9.6 - 9.8
5 1/2"	8 1/2"		Tight hole Well bore instability Low ROP  Hole cleaning  Balooning  High torque & drag	CleanDrill HD	1355  1675  TD 4388	Pre Moroak - 9.6 - 9.8 Moroak - 9.6 - 9.8 Post Moroak - 10.6 - 11.4

## Well Design and Mud Parameters

MUD PARAMETERS	U.M.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Bit diameter	in	22"	17 ½"	12 ¼"	8 ½"	Completion Brine
Interval (MD)	m-m	0 - 85	85- 280	280 - 600	600 - 4388	4388
Metreage	m	85	195	320	3788	4388
CSG	in	18 ¾	13 ¾"	9 ⅝"	-	
Max Deviation angle	°	N/A	N/A	N/A	90	90
Expected BHST	°C	30	36	60	118 - 150	150
Type of fluid	-	KCl / PHPA / Polymer	KCl / PHPA / Polymer	KCl / PHPA / Polymer	CleanDrill HD™	KCl / NaCl Brine
Density	ppg	8.34 - 8.66	8.34 - 8.66	9.6 - 9.8	9.6 - 9.8 to base of Moroak SST 10.6 – 11.4 Post Moroak SST	9.4
Marsh Viscosity	sec/l	6 rpm dependent	6 rpm dependent	6 rpm dependent	6 rpm dependent	-
PV	cP	ALAP	ALAP	ALAP	ALAP	-
Yield Point	lb/100ft²	>14	>14	>14	Subject to 6rpm	-
6 rpm readings	lb/100ft²	>15	12 - 17	9 - 12	7 - 9	-
Gel 10 sec.	lb/100ft²	Non-Progressive	Non-Progressive	Non-Progressive	Non-Progressive	-
Gel 10 min	lb/100ft²	Non-Progressive	Non-Progressive	Non-Progressive	Non-Progressive	-
API Filtrate	cm³/30'	≤ 15.0	≤ 15.0	≤ 12.0	10 - 12	-
pH	-	8.5 – 9.5	8.5 – 9.5	8.5 – 9.5	8.5 – 9.5	-
LGS (drilled solids)	% Vol	≤ 3	≤ 3	≤ 3	≤ 3	-
MBT	ppb	< 10	< 10	≤ 10	≤ 5	-

## Key Product Functions

Product	Function
TrueScav HD™	Oxygen Scavenger
NewPac LV™	Filtration Control Agent
PHPA DLMW	Encapsulator
Idcide G50	Biocide
Potassium Chloride	Shale Inhibitor
Calcium Chloride	Weighting Agent / Shale Inhibitor
NewZan D™	Viscosifier
CleanTrol HD™	Filtration Control Agent
Magnesium Oxide	pH buffer
NDFT 325	Corrosion Inhibitor
TEA	High Temperature Stabiliser
Calcium Carbonate	Weighting/Bridging Agent
Avaglyco LC	Shale Inhibitor
Barite	Weighting agent
TrueScav HD	Oxygen Scavenger
Radiagreen EME	Lubricant
Ancor 1	Corrosion Inhibitor
Avagraph / Newseal 25	Graphite Lubricant
Alpine Spotting Beads	Solid Lubricant

## INTERVAL DESCRIPTION

### 22" Surface Section – 85 m

#### Spud Operational procedures

Drill Water QC: The mix water should be tested, and the properties recorded on the first daily mud report in the Comments Section.

Tests to be Performed	Quality Requirements		
Chloride Test	Chloride (mg/L)	=	1500 max
Total Hardness Test	Total Hardness (mg/L)	=	400 max
Calcium Hardness Test	Calcium Hardness (mg/L)	=	400 max

Soda ash will be used to raise the pH to ~9.5 and sodium bicarbonate to reduce any hardness to below 400 mg/l prior any fluid being mixed.

Prior to spud the Mud Engineer will consult with Derrickman and walk through the surface system layout and mixing equipment and a clear and concise pit management plan will be put in place.

A 30" conductor will be set in place prior to rig arriving on location. Drill out the conductor cement with water prior to displacing to KCl / PHPA / Polymer fluid.

### 22" Hole Section Risk and Mitigation

Operation	Risk / Consequence	Mitigation / Contingency
Spudding well – Undifferentiated sediments	Annulus cuttings overload. Reactive clays, tight hole, caving and bridging.	Optimize rheological profile, inhibition properties, monitor solids control equipment efficiency to maximize cuttings removal.
Drilling Top Springs Limestone – Anthony Lagoon / Gum Ridge Formation	Total loss zone.	Maintain mud tank volumes and tracking. Pre-plan bulk transfer of drill water if drilling blind.
Drilling Reactive Formation	Reactive clays.	Optimize Potassium Ion, PHPA encapsulator concentration to maximize inhibition. Minimize fluid invasion reducing API filtrate loss.

**NOTE: Test transfer rate of drill water into active system prior to spud.**

The 22" section will be drilled with the KCl / PHPA / Polymer system initially with 4% KCl for inhibition, PHPA DLMW as the primary encapsulator and NewPac LV as filtration control agent.

The rheological parameters will be maintained with the addition of NewZan D to ensure optimal hole cleaning and drill solids transport.

Mud Maintenance: It is recommended to conduct mud maintenance through pre-mixes or offline. Never mix directly in suction tanks to avoid SPP fluctuations. Preferably transfer volume in the mixing tank and bled the same volume back in over 1-2 circulations after completing the required treatment.

The mud weight must be maintained ALAP maximizing the rigs solids control equipment to reduce any dump & dilute regime were possible during this section. If mud weight needs to be increased, use Calcium Carbonate or Barite for this section.

The centrifuge's need to be operational and available to use as and when required to assist in controlling any mud weight increases that might be encountered whilst drilling the section.

Closely monitor the cuttings quality and integrity at the shakers for any signs of wellbore instability and/or poor inhibition. Adjust inhibition / encapsulation package as required.

Monitor and dump sand trap as required i.e., on connections or surveys. Care must be taken when dumping the sand trap and must only be carried out after the Driller & Mud Loggers have been informed.

Regular NewZan D sweeps (20 – 30 bbl per stand) can be pumped to monitor hole cleaning and to help improve rheological properties of the circulating system if required.

Heavy / total losses have been encountered while drilling offset wells. If total losses are encountered Tamboran DSV / DE will confirm if drilling is to proceed blind pumping drill water and high viscosity sweeps. A sweep regime will be implemented, typically a minimum of 30bbl high viscosity sweep every 30 meters drilled. Spotting 10 – 20 bbl of a high viscosity pill across the BHA prior to connections will mitigate the chances of cuttings settling to the bottom. High viscosity sweeps will be prepared by viscosifying (with ~ 2.0 ppb Newzan D) any remaining KCl / PHPA / Polymer mud. Any remaining dry stock of this mud system can be mixed for inhibiting the sweeps.

The well profile is vertical for this section until the 18 ½" casing depth of 85 mMD.

Confirm with Tamboran DSV if a high viscosity sweep is required at TD, using a 30 - 50 bbl Hi-Vis sweep and pump a water flush behind to ensure cuttings are properly transported back into loss zone. Continue to circulate until hole is deemed clean and free of cuttings prior to pulling out of hole (if returns are present).



Maintain a pit management plan to complete the 22" section, conduct the cement job (including any spacers).

With the assumption of total losses in this section the 18 5/8" casing cement job will be displaced with water.

Barite in 1.5 MT bulk bags will be stored in a tautliner trailer on location if required for well control to increase the active system by 0.5ppg should Kill operations take place.

**NOTE: Slug pills for bit trips can be prepared if required with barite.**

## 22" Mud Parameters –

MUD PARAMETERS	U.M.	Phase 1
Bit diameter	in	22"
Interval (MD)	m-m	0 - 85
Metreage	m	85
CSG	in	18 5/8
Max Deviation angle	°	N/A
Expected BHST	°C	30
Type of fluid	-	KCl / PHPA / Polymer
Density	ppg	8.34 - 8.66
Marsh Viscosity	sec/l	6 rpm dependent
PV	cP	ALAP
Yield Point	lb/100ft <sup>2</sup>	>14
6 rpm readings	lb/100ft <sup>2</sup>	>15
Gel 10 sec.	lb/100ft <sup>2</sup>	Non-Progressive
Gel 10 min	lb/100ft <sup>2</sup>	Non-Progressive
API Filtrate	cm <sup>3</sup> /30'	≤ 15.0
pH	-	8.5 – 9.5
LGS (drilled solids)	% Vol	≤ 3
MBT	ppb	< 10

## 22" Mud volume

Mud Volumes	Bbls
Surface volume	250
Open Hole	139
Dilution	100
<b>Total Mud to build</b>	<b>800 (TBC – Losses)</b>

## 22" Mud formulation and estimated consumption

Products	Package	Conc. [ppb]	Quantity
Soda Ash	25	0.25	5
Caustic Soda	25	0.10	4
KCl	1000	14.20	8
NewPac LV	25	2.00	32
NewZan D	25	1.50	26
PHPA DLMW	25	1.00	18
TrueScav HD	25	0.10	4
Idcide G50	20	0.10	4

**NOTE: advise MudLoggers if Lubricant is used**

### Mix 100 bbls KCl / PHPA /Polymer premix @ 8.6 ppg

Mix Order	Product	Concentration ppb	Quantity
1	Water	319	~91 bbls
2	Caustic Soda	0.1	¼ pail
3	Soda Ash	0.25	½ sack
4	Idcide-G50	0.1	1 pail
5	KCl	14.2	⅔ bb
6	NewPac LV	2.0	4 sacks
7	NewZan D	1.5	3 sacks
8	PHPA DLMW	1.0	2 sacks
8	TrueScav HD	0.3	1 sack

Cementing spacer:

Products	Package	Conc. [ppb]	Quantity
Barite	KG	TBC	9,850 kg

**NOTE: Loss mitigation decision tree is included in Annex C – LCM Decision Tree.**

**22" section - Discuss with the Tamboran DSV if losses will be addressed with LCM prior to treating.**



## INTERVAL DESCRIPTION

### 17 ½" Section: 85 – 280 mMD

#### Operational procedures

The 17 ½" section will be drilled with the KCl / PHPA / Polymer system initially with 4% KCl for inhibition, PHPA DLMW as the primary encapsulator and NewPac LV as filtration control agent.

The rheological parameters will be maintained with the addition of NewZan D to ensure optimal hole cleaning and drill solids transport.

#### 17 ½" Hole Section Risk and Mitigation

Operation	Risk / Consequence	Mitigation / Contingency
Drilling	Total loss zone.	Maintain mud tank volumes and tracking. Pre-plan bulk transfer of drill water if drilling blind.
Drilling Reactive Formation	Reactive clays.	Optimize Potassium Ion, PHPA encapsulator concentration to maximize inhibition. Minimize fluid invasion reducing API filtrate loss.

### **Mud Maintenance:**

It is recommended to conduct mud maintenance through pre-mixes or offline. Never mix directly in suction tanks to avoid TAMBORAN fluctuations. Preferably transfer volume in the mixing tank and bled the same volume back in over 1-2 circulations after completing the required treatment.

The mud weight must be maintained ALAP maximizing the rigs solids control equipment to reduce any dump & dilute regime were possible during this section.

The centrifuge's need to be operational and available to use as and when required to assist in controlling any mud weight increases that might be encountered whilst drilling the section.

Closely monitor the cuttings quality and integrity at the shakers for any signs of wellbore instability and/or poor inhibition. Adjust inhibition / encapsulation package as required.

Monitor and dump sand trap as required i.e., on connections or surveys. Care must be taken when dumping the sand trap and must only be carried out after the Driller & Mud Loggers have been informed.

Regular NewZan D sweeps (20 – 30 bbl per stand) can be pumped to monitor hole cleaning and to help improve rheological properties of the circulating system if required.

Heavy / total losses have been encountered while drilling offset wells. If total losses are encountered Tamboran DSV / DE will confirm if drilling is to proceed blind pumping drill water and high viscosity sweeps. A sweep regime will be implemented, typically a minimum of 30bbl high viscosity sweep every 30 meters drilled. Spotting 10 – 20 bbl of a high viscosity pill across the BHA prior to connections will mitigate the chances of cuttings settling to the bottom. High viscosity sweeps will be prepared by viscosifying (with ~ 2.0 ppb Newzan D) any remaining KCl / PHPA / Polymer mud. Any remaining dry stock of this mud system can be mixed for inhibiting the sweeps.

The well profile is vertical for this section until the 13 ⅝" casing depth of 280 mMD.

Confirm with Tamboran DSV if a high viscosity sweep is required at TD, using a 30 - 50 bbl Hi-Vis sweep and pump a water flush behind to ensure cuttings are properly transported back into loss zone. Continue to circulate until hole is deemed clean and free of cuttings prior to pulling out of hole (if returns are present).

Maintain a pit management plan to complete the 17 ½" section, conduct the cement job (including any spacers). With the assumption of total losses in this section the 13 ⅝" casing cement job will be displaced with water.

Barite in 1.5 MT bulk bags will be stored in a tautliner trailer on location if required for well control to increase the active system by 0.5 ppg should Kill operations take place.

NOTE: Slug pills for bit trips can be prepared if required with barite.

## 17 ½" Mud Parameters

MUD PARAMETERS	U.M.	Phase 2
Bit diameter	in	17 ½"
Interval (MD)	m-m	85 - 280
Metreage	m	195
CSG	in	13 ⅜"
Max Deviation angle	°	N/A
Expected BHST	°C	36
Type of fluid	-	KCl / PHPA / Polymer
Density	ppg	8.34 - 8.66
Marsh Viscosity	sec/l	6 rpm dependent
PV	cP	ALAP
Yield Point	lb/100ft <sup>2</sup>	>14
6 rpm readings	lb/100ft <sup>2</sup>	12 - 17
Gel 10 sec.	lb/100ft <sup>2</sup>	Non-Progressive
Gel 10 min	lb/100ft <sup>2</sup>	Non-Progressive
API Filtrate	cm <sup>3</sup> /30'	≤ 15.0
pH	-	8.5 – 9.5
LGS (drilled solids)	% Vol	≤ 3
MBT	ppb	< 10

### 17 ½" Mud formulation

**NOTE: advise MudLoggers if Lubricant is used**

**Mix 100 bbls KCl / PHPA /Polymer premix @ 8.6 ppg**

Mix Order	Product	Concentration ppb	Quantity
1	Water	319	~91 bbls
2	Caustic Soda	0.1	¼ pail
3	Soda Ash	0.25	½ sack
4	Idcide-G50	0.1	1 pail
5	KCl	14.2	⅔ bb
6	NewPac LV	2.0	4 sacks
7	NewZan D	1.5	3 sacks
8	PHPA DLMW	1.0	2 sacks
8	TrueScav HD	0.3	1 sack

### 17 ½" Mud volume -

Mud Volumes	Bbls
Surface volume	500
Open Hole	186
Dilution	190
<b>Total Mud to build</b>	<b>647</b>

Cementing spacer:

Products	Package	Conc. [ppb]	Quantity
Barite	KG	TBC	10,855 kg

## INTERVAL DESCRIPTION

### 12 ¼" Section: 280 – 600 mMD

#### Operational procedures

The 12 ¼" section will be drilled with the KCl / PHPA / Polymer system initially with 4% KCl for inhibition, PHPA DLMW as the primary encapsulator and NewPac LV as filtration control agent.

The rheological parameters will be maintained with the addition of NewZan D to ensure optimal hole cleaning and drill solids transport.

#### 12 ¼" Hole Section Risk and Mitigation

Operation	Risk / Consequence	Mitigation / Contingency
Drilling	Reactive clays, Hole instability, steering difficulties, differential pressure.	Add wellbore strengthening material (Dynafiber AP F and CaCO <sub>3</sub> ), maintain or increase inhibition properties. Add Avaglyco LC if required (up to 3% by vol). Reduce API filtrate.
Drilling	Mud weight fluctuations	Weight up with finished brine to allow for homogenous adjustment to the circulating system. All addition to occur over multiple full fluid system circulations.

#### Mud Maintenance:

**NOTE: advise MudLoggers if Lubricant is used.**

It is recommended to conduct mud maintenance through pre-mixes or offline. Never mix directly in suction tanks to avoid SPP fluctuations. Preferably transfer volume in the mixing tank and bled the same volume back in over 1-2 circulations after completing the required treatment.

The mud weight must be maintained ALAP maximizing the rigs solids control equipment to reduce any dump & dilute regime were possible during this section.

The centrifuge's need to be operational and available to use as and when required to assist in controlling any mud weight increases that might be encountered whilst drilling the section.

Closely monitor the cuttings quality and integrity at the shakers for any signs of wellbore instability and/or poor inhibition. Adjust inhibition / encapsulation package as required.



Monitor and dump sand trap as required i.e., on connections or surveys. Care must be taken when dumping the sand trap and must only be carried out after the Driller & Mud Loggers have been informed.

Regular NewZan D sweeps (20 – 30 bbl per stand) can be pumped to monitor hole cleaning and to help improve rheological properties of the circulating system if required.

If total losses are encountered Tamboran DSV / DE will confirm if drilling is to proceed blind pumping drill water and high viscosity sweeps. A sweep regime will be implemented, typically a minimum of 30bbl high viscosity sweep every 30 meters drilled. Spotting 10 – 20 bbl of a high viscosity pill across the BHA prior to connections will mitigate the chances of cuttings settling to the bottom. High viscosity sweeps will be prepared by viscosifying (with ~ 2.0 ppb Newzan D) any remaining KCl / PHPA / Polymer mud. Any remaining dry stock of this mud system can be mixed for inhibiting the sweeps. The LCM will also help creating a tough thin filter cake and minimize fluid invasion. For downhole losses please consult the LCM Decision Tree.

Confirm with Tamboran DSV if a high viscosity sweep is required at TD, using a 30 - 50 bbl Hi-Vis sweep and pump a water flush behind to ensure cuttings are properly transported back into loss zone. Continue to circulate until hole is deemed clean and free of cuttings prior to pulling out of hole (if returns are present).

Maintain a pit management plan to complete the 12 ¼" section, conduct the cement job (including any spacers), meanwhile preparing offline Calcium Chloride brine (see 8 ½" section). The 9 ⅝" casing cement job will be displaced with water.

Barite in 1.5 MT bulk bags will be stored in a tautliner trailer on location if required for well control to increase the active system by 0.5 ppg should Kill operations take place.

Solids Control - Managing the solids control equipment is essential to maintain the mud weight and low drilled solids (< 3.0 %) as per drilling program. All controls must be used to avoid the gradual increase in mud weight from drilled solids. Mud Engineer will monitor LGS/DS content and advise when to operate the centrifuge to optimise keeping LGS/DS build up to a minimum whilst trying to retain LCM concentration as close to programmed specification, if used.

Shaker Screen selection and monitoring will be critical to ensure the LCM concentration is maintained in the system as practically as possible as some depletion will occur over the shakers. The centrifuge/s on location must be used to control and maintain MW at programmed specification.

At TD sweep the hole clean with a 20-40 bbl Hi Vis sweep and continue to circulate until hole is deemed clean and free of cuttings prior to pulling out of hole. Discuss with Tamboran DSV if required to spot 30 – 50 bbl high viscosity pill on bottom before POOH BHA for casing run.

**NOTE:** *Slug pills for bit trips can be prepared with barite*

## 12 ¼" Mud Parameters

MUD PARAMETERS	U.M.	Phase 3
Bit diameter	in	12 ¼"
Interval (MD)	m-m	280 - 600
Metreage	m	320
CSG	in	9 ⅝"
Max Deviation angle	°	N/A
Expected BHST	°C	60
Type of fluid	-	KCl / PHPA / Polymer
Density	ppg	9.6 - 9.8
Marsh Viscosity	sec/l	6 rpm dependent
PV	cP	ALAP
Yield Point	lb/100ft <sup>2</sup>	>14
6 rpm readings	lb/100ft <sup>2</sup>	9 - 12
Gel 10 sec.	lb/100ft <sup>2</sup>	Non-Progressive
Gel 10 min	lb/100ft <sup>2</sup>	Non-Progressive
API Filtrate	cm <sup>3</sup> /30'	≤ 12.0
pH	-	8.5 – 9.5
LGS (drilled solids)	% Vol	≤ 3
MBT	ppb	≤ 10



**12 ¼" Mud volume -**

<b>Mud Volumes</b>	<b>Bbls</b>
Surface volume	500
13 ⅜" CSG volume	138
Open Hole	153
Dilution	256
<b>Total Mud to build up</b>	<b>0</b>

Cementing spacer:

<b>Products</b>	<b>Package</b>	<b>Conc. [ppb]</b>	<b>Quantity</b>
Barite	kg	TBC	12,000 kg

## INTERVAL DESCRIPTION

### 8 ½" Section: 600 – 4388 mMD

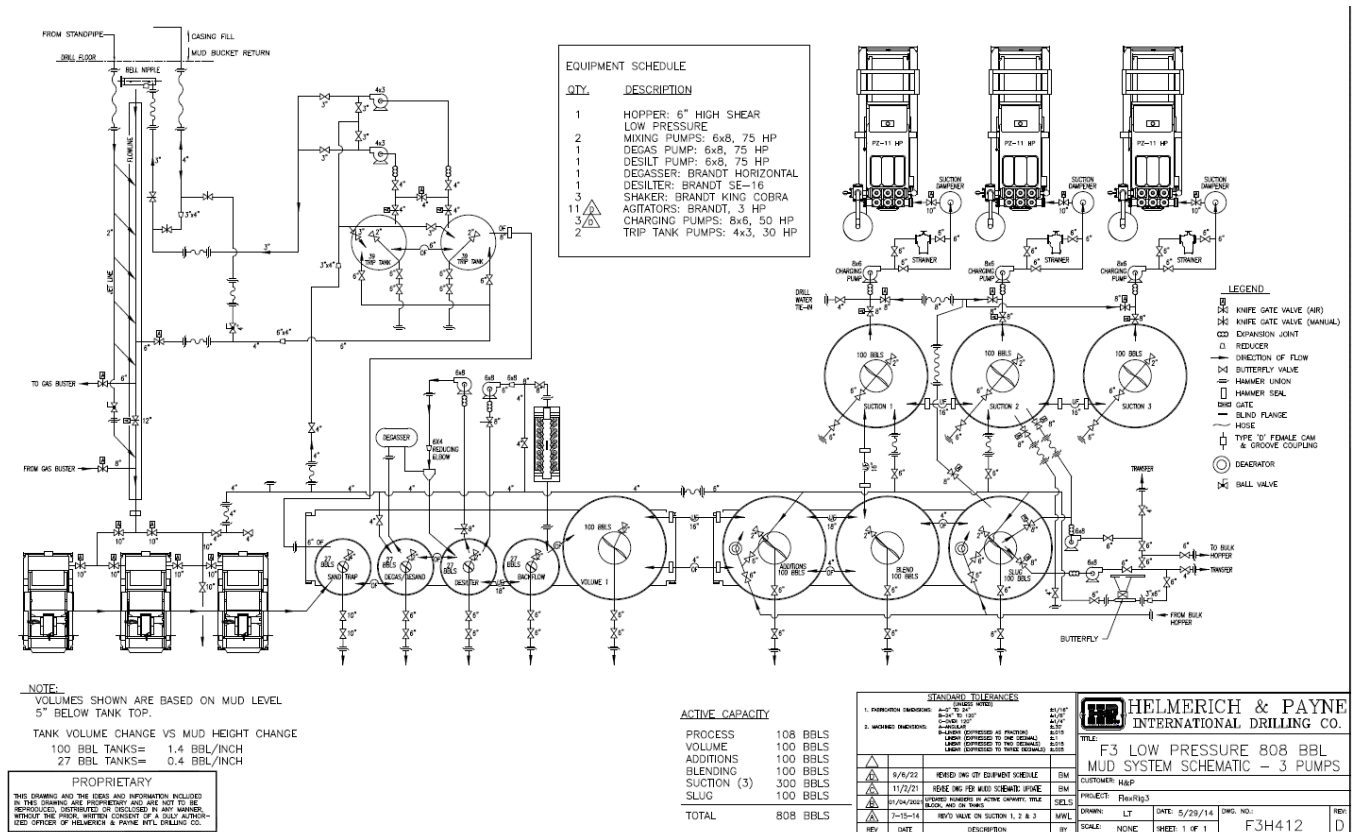
#### Operational procedures

CleanDrill HD volume will be built to drill the 8 ½" section. If available, Recycled CleanDrill HD fluid can be used as a base for premix volume. The mud properties will be adjusted to program specification prior to drilling out the shoe. Mud weight of the surface volume should be maintained at minimum 9.6 ppg and increased to 10.6ppg minimum post Moroak by using Calcium Chloride brine, Calcium Carbonate and Barite.

#### 8 ½" Hole Section Risk and Mitigation

Operation	Risk / Consequence	Mitigation / Contingency
Drilling	Differential sticking, tight hole.	Maximize inhibition properties
Drilling General	Downhole losses.	Refer to LCM decision tree.
Drilling General	High Temperature, burning polymers, insufficient API FL and YP.	Additional Polymer stabilisers and use of HT polymer (PolyDrill)
Drilling Moroak Formation	Low ROP, Hard & Abrasive	Minimise LGS concentration,
Drilling	Hole Instability. Ballooning.	Monitor shakers for change in cuttings, cavings and return flow.

Rig Tank Layout diagram. Larger Scale attached at Appendix #4.



## Pit Management Plan to start the 8 ½" Section

### Rig Tanks usable volumes

Sand Trap:	27 bbl
Desander tank:	27 bbl
Desilter tank:	27 bbl
Backflow tank:	27 bbl
Volume #1:	100 bbl
Additions:	100 bbl
Blend:	100 bbl
Slug 1:	100 bbl
Suction #1:	100 bbl
Suction #2:	100 bbl
Suction #3:	100 bbl

### Additional tanks

Frac #1:	450 bbl
Frac #2:	450 bbl

Preparing CaCl<sub>2</sub> brine should commence well in advance when operations permit.  
In offline mixing tanks.

**OPTION 1**

- a. mix CaCl<sub>2</sub> brine volume at a concentrated level to achieve mud weight of 10.6 ppg.

**Drilling out**

Drill out cement on the full CleanDrill HD System. CleanTrol HD - will be utilized as the main fluid loss control agent for the 8 ½" section.

Pre-treat this surface volume against cement contamination by the addition of Sodium Bicarbonate prior to drilling out the shoe if required.

Drill out the 9 ⅝" shoe and new formation circulate active system until an even mud weight in / out is recorded prior to performing FIT/LOT.

MW is planned to be increase while drilling with the addition of a "spike fluid" as per instruction from TAMBORAN WSM & DE. Confirm depth/MW target prior to drilling out shoe.

Whilst drilling ahead the mud weight will be maintained using a combination of Calcium Chloride and Calcium Carbonate. CleanTrol HD will provide fluid loss control through this section in addition to being the main viscosifier, API fluid loss will be maintained at 10.0 – 12.0 mls/30 min.

Claystone inhibition will be maintained with Calcium Chloride and Avaglyco LC.

At TD sweep the hole clean with a 25-50 bbl Hi Vis Pill and continue to circulate until hole is deemed clean and free of cuttings prior to pulling out of hole.

Discuss with Tamboran DSV if required to spot 30 – 50 bbl high viscosity pills on bottom before POOH / wiper trips.

**NOTE: Slug pills for tripping can be prepared with barite**

**Mud Maintenance**

***Maintain API fluid loss ≤12.0 ml/30 min to minimize fluid invasion and the risk of differential sticking until advised by Tamboran to tighten post Maroak.***

**Mud density:** The mud weight at the start of the section will be 9.6 ppg and will be maintained using a combination of CaCl<sub>2</sub> and Calcium Carbonate as the main weighting agents. There will be a requirement to increase the mud weight to between 10.6 - 11.4 ppg past the Moroak SST. In that case CaCl<sub>2</sub> will be used to 10.6 ppg, CaCO<sub>3</sub> and Barite will be used to make the final increase thereafter. The Tamboran Drilling DSV will advise of any mud weigh increases.

Ensure the Tamboran Geologist and MWD Engineers are informed that the system will be pre-treated with Calcium Carbonate from the start of the section.

Hole Cleaning: The 6 rpm specifications will ensure optimum hole cleaning through this section. If required H-vis sweeps (25 – 50 bbl) can be used to provide any additional hole cleaning.

Differential Sticking and Wellbore Condition: The drilling fluid will have ~23ppb CaCO<sub>3</sub> as a weighting / bridging agent. This combined with addition of Avaglyco LC will reduce the likelihood of differential sticking.

Temperature - Maintaining Magnesium Oxide (3.0 ppb) and TEA (3.5 ppb) will aid in both temperature stability of polymers and pH buffering in the CleanDrill HD™ system. If available, please make a note of the BHCT (°C) on the DMR. Note: maintain minimal treatment of TEA in the active system and pilot test all additions. Increase in pH from TEA addition has previously caused increased rheology and loss of fluid loss integrity.

CO<sub>2</sub>: monitor pH, Pf & Mf and rheological parameters and coordinate with mud loggers for any CO<sub>2</sub> contamination. Corrosion inhibitor NDFT 325/Ancor 1 is programed into the drilling fluid at 1.4 ppb. TrueScav HD will be used as oxygen scavenger in the circulating volume.

Torque & Drag – An environmentally safe, low cloud point glycol-based additive Avaglyco LC, increases cuttings hardness and decreases mud dilution. It improves lubrication, thereby reducing stuck pipe incidence and enhancing penetration rates. Can be added into the CleanDrill HD™ system between 1.0 – 3.0% v/v.

Lubricant Options – Pilot testing and approval from Tamboran is required prior to any lubricant treatments.

Radiagreen EME (Salt) will be available for the 8 ½” section. Treatments of 1.0 - 3.0% v/v.

Avagraph/Newseal 25 is a graphite based, solid lubricant and can be added directly into the active system and may also be added to the system prior to running casing to improve mud lubricity and facilitate the operation. Typical treatment of ~3.5ppb.

Alpine Spotting Beads are a spherical co-polymer bead. Additions can be 2 – 6ppb while drilling up to 8 – 12ppb for casing running operations.

Hole instability - Review MW with Tamboran Resources DSV - increase mud weight with Calcium Carbonate & Barite if required.

Losses The mud system will include graded Calcium Carbonate (~23 ppb based on programmed formulation), which will aid in controlling minor seepage losses. Proactive pre-treatment of the active system with cellulosic LCM will aid in controlling initial losses. Once drilling commences, maintain ~1.5 ppb each NDFT grades 376 (Dynafliber AP Fine) and 377 (Dynafliber AP Medium). Furthermore, if seepage becomes evident, consider pumping sweeps/spotting pills of 10 – 15 bbl of up to 25 ppb (combination of NDFT 376 and 377) LCM – first discuss with TAMBORAN DSV, Geologist and DD/MWD prior to pumping. The LCM will also help creating a tough thin filter cake and minimize fluid invasion. For downhole losses please consult the LCM Decision Tree.



Solids Control - Managing the solids control equipment is essential to maintain the mud weight as per drilling program. All controls must be used to avoid the gradual increase in mud weight. Mud Engineer will monitor LGS/DS (<3.0%) content and advise when to operate the centrifuge to optimise keeping LGS/DS to a minimum whilst trying to retain LCM concentration as close to programmed specification, if used.

Shaker Screen selection and monitoring will be critical to ensure the LCM concentration is maintained in the system as practically as possible as some depletion will occur over the shakers. The centrifuge/s on location must be used to control and maintain MW at programmed specification.

Desco Chrome Free Deflocculant can be utilised to reduce the Rheology of the drilling fluid if required. Note: Consult PDS and perform pilot testing prior to any application of rheology modifiers. Obtain Tamboran approval prior to active system treatment.

**8 ½" Mud Parameters**

MUD PARAMETERS	U.M.	Phase 4
Bit diameter	in	<b>8 ½"</b>
Interval (MD)	m-m	600 - 4388
Metreage	m	3788
CSG	in	-
Max Deviation angle	°	90
Expected BHST	°C	118 - 150
Type of fluid	-	CleanDrill HD™
Density	ppg	9.6 - 9.8 to base of Moroak SST 10.6 – 11.4 Post Moroak SST
Marsh Viscosity	sec/l	6 rpm dependent
PV	cP	ALAP
Yield Point	lb/100ft <sup>2</sup>	Subject to 6rpm
6 rpm readings	lb/100ft <sup>2</sup>	7 - 9
Gel 10 sec.	lb/100ft <sup>2</sup>	Non-Progressive
Gel 10 min	lb/100ft <sup>2</sup>	Non-Progressive
API Filtrate	cm <sup>3</sup> /30'	10 - 12
pH	-	8.5 – 9.5
LGS (drilled solids)	% Vol	≤ 3
MBT	ppb	≤ 5

**8 ½" Mud volume**

Mud Volumes	Bbls
Surface volume	500
9 5/8" CSG volume	149
Open Hole	873
Dilution	2273
<b>Total Mud to build up</b>	<b>3795</b>



**Mix 100 bbls CleanDrill HD premix @ 10.6 ppg – 8 ½”section**

Mix Order	Product	Concentration	Quantity
1	Calcium Chloride Brine	@ 10.6 ppg	95 bbls
2	Idcide-G50	0.1 ppb	½ pail
3	CleanTrol HD	4.0 ppb	1 sack
4	NewZan D	1.0 ppb	1 ½ sacks
5	Avaglyco LC	3.5 ppb (1%)	1 ½ drums
6	Omyacarb 2	36.0 ppb	1 ½ bb
7	Omyacarb 5	12.0 ppb	¾ bb
8	MagOx	1.0 ppb	2 sacks
9	NDFT 325 /Ancor 1	1.4 ppb	¾ drum
10	TrueScav HD	0.1 ppb	½ Sack
11	TEA	3.5 ppb	150L

***Prior to POOH, consideration to dosing the circulating system with HT stabilisers prior to bit trips and POOH – for example 5 sx Magox and 100 Ltr TEA into the system.***

**NOTE: Slug pills for tripping can be prepared with barite**

***Maintain API fluid loss 10.0 - 12.0 ml/30 min to minimize fluid invasion and the risk of differential sticking while allowing for sufficient spurt loss to assist with ROP.***

*Mix 100 bbl CleanDrill HD premix @ 11.4 ppg – 8 ½” section.*

Mix Order	Product	Concentration	Quantity
1	Calcium Chloride Brine	@ 10.6ppg	~92 bbls
2	Idcide-G50	0.2 ppb	½ pail
3	CleanTrol HD	4.0 ppb	1 sack
4	NewZan D	1.0 ppb	1 ½ sacks
5	Avaglyco LC	3.5 ppb (1%)	1 ½ drums
6	Omyacarb 2	40.0 ppb	1 ¾ bb
7	Omyacarb 5	12.0 ppb	1 bb
8	MagOx	3.0 ppb	5 ½” sacks
9	NDFT 325/Ancor 1	1.4 ppb	¾ drum
10	TrueScav HD	0.25 ppb	½ Sack
11	TEA	3.5 ppb	159L
12	Barite	38 ppb	1 ¼ bb

## INTERVAL DESCRIPTION

### 8 ½" Completion Section:

#### Pit Management Plan for brine displacement Operations

##### Packer Fluid

The Packer fluid density will be 9.4 ppg using KCl / NaCl and inhibited with 1.0 ppb NDFT-325/Ancor-1 corrosion inhibitor, 0.5 ppb biocide, 0.2 ppb oxygen scavenger.

The total fluid volume required for this is 500 bbls. The packer fluid will need to be displaced down the tubing with 9.4 ppg brine inhibited with biocide and oxygen scavenger.

For this operation the mixing procedure will be as follow:

- prepare 500 bbls of KCl / NaCl brine @ 9.4 ppg.
- add 0.5 ppb biocide.
- add the 1.0 ppb of corrosion inhibitor.
- add the 1.0 ppb TrueScav HD only when ready to pump the packer fluid.

##### **Pit Management**

- Build Inhibited Brine in 1 frac tank (ensure clean and treated with Biocide prior to mixing)
- Build and pump downhole either directly or via Pill Tank.
- All displacement will be taken back to 2<sup>nd</sup> Frac tank, Active Tanks or discharged.

##### **Completion fluid volume**

Volumes	Bbls
9.4 ppg KCl / NaCl Brine	500
<b>Total Mud to build up</b>	<b>500</b>

##### **Completion formulations**

###### Inhibited Packer Fluid

Formulation	ppb
Freshwater	340
KCl	7.1
NaCl	65.0
TrueScav HD	0.2
NDFT 325 / Ancor-1	1.0
Idcide G50	0.5
Properties	
Density	9.4 ppg

### Completion estimated consumption

Products	Package	Conc. [ppb]	Quantity
KCl	1000 kg bulk bag	7.1	2 BB
NaCl	1000 kg bulk bag	65.0	16 BB
TrueScav HD	25 kg sack	0.5	5 sacks
NDFT 325 / Ancor-1	200 lt drum	1.0	1 ¼ drum
Idcide G50	20 lt pail	0.5	6 pails

Cementing spacer: 5.5 Production Casing

Products	Package	Conc. [ppb]	Quantity
Barite	kg	TBC	-

## ATTACHED PROCEDURES

### Potential Problems & Solutions

**Mud Weight:** Controlling mud weight: increase the mud weight (with calcium chloride brine) in a timely manner to ensure the correct mud weight is achieved by depth to provide an overbalance. **IT IS CRITICAL THAT ANY PROPOSED MUD WEIGHT INCREASE IS APPROVED BY THE TAMBORAN DSV.**

**High ROP** – is unlikely, therefore the risk of poor hole cleaning / pack-off is a low risk however there is possible differential sticking risk. It is not recommended to pump Hi-Vis Pills, as this may 'shock' the hole and cause a pack-off. Circulate until the hole is considered clean, prior to making a bit trip or @ T.D. prior to casing. Maintain and manage good drilling practices, sweep practices, TD displacement and good tripping practices. Discuss with TAMBORAN DSV prior to pumping any Hi-Vis Sweeps during high ROP drilling.

**Wellbore Instability / Cavings:** Borehole instability is possible if the mud weight is not maintained at the correct weight. Monitor for cavings and signs of packing off.

**Reactive Formations:** Monitor cuttings for adequate inhibition and adjust concentrations of Calcium Chloride, Avaglyco LC, PHPA DLMW (17 ½") to suit hole conditions if required.

**Lost Circulation:** Potential losses will be treated with various grades of cellulosic and calcium carbonate products that will be available on site.

Consult LCM decision tree for more severe losses. Depending on the loss rate specialized LCM can be pumped as a pill 40ppb or as 15 - 20bbl sweeps (at 15-25ppb). The Tamboran Resources DSV should be consulted prior to mixing. Prior to pumping, the mud pump screens should be removed and the MWD engineer should be informed.

**Stuck Pipe Prevention:** – Ensure mud weights and fluid loss levels stay within programmed levels. In formations where differential sticking is expected advise the driller to let you know if he has any indications of sticking on connections etc. Immediately consider decreasing the mud weight and fluid loss if this is the case. Another time when differential sticking may occur is during well control operations – always consider improving the fluid loss during weight ups. If differential sticking does occur always discuss reducing the mud weight immediately with the TAMBORAN DSV and fluid coordinator. The spotting fluid of choice for WBM is a mixture of SAPP and Citric acid, this works by dissolving carbonates and polymers whilst drying and cracking clays.

### **CITRIC ACID / SAPP PILL**

A Citric Acid / SAPP low pH pill can be spotted across the stuck zone. Ideally this must be done as soon as possible as the key to success in freeing the pipe is in minimising the time between becoming stuck and the pill being spotted. Once the pill has been spotted sufficient time (15 – 30 mins) must be allowed for it to soak whilst working the pipe.

The purpose of using a combination of Citric Acid and SAPP is that the Citric Acid will attack the filter cake and the SAPP will disperse it.

#### Mixing Requirements

1. 50 - 100 bbls of base fluid
2. 40 lb / bbl Citric Acid
3. 3 - 5 lb / bbl SAPP

The pill can be diverted in a separate tank once circulated out and treated with soda ash to increase the pH to ~7 before disposing.

#### **TopSpot pill - TBC**

This is usually spotted around the BHA at the depth where the drill pipes/BHA are suspected to be differentially stuck to break down the filter cake and release them:

Add in the pill tank or the small tanks available:

- 24 bbls brine already mixed at the desired density
- 1 IBC of TopSpot form the top of the tank, do not use the hopper to avoid excessive foaming
- TopSpot will blend into the brine without any mechanical agitation.
- Spot the pill around the BHA and let it soak for at least 6-8 hours and then try to free the pipes.
- Pill can be caught back at surface in a separate tank for re-use or disposal.

#### **Operational Procedure attached**

Annex A – Calcium Chloride Brine Table

Annex B - LCM Decision Tree

Annex C – CaCl<sub>2</sub> Lessons Learnt

Annex D – Tank Layout



[illegible]



Date	23/09/2023	Section name	22" Section			
Report	1	Report Depth m		MDBRT		TVDBRT
Rig Name / #	469	Prev Report Depth m	0	MDBRT		TVDBRT
Mud Ops start date		Daily metres drilled	0	Report time	23:59 Hr	
Spud date		Section metres drilled	0	Avg ROP	0.0	m/hour
RT-Seabed/Ground m		Report time activity	Rig up			

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Greg Porter	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE					DEPTHS/CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE (")		0	0	0	0	0	0.00	Riser Length	m	HOLE VOL	MUD INHOLE	PUMP SIZE		CIRCULATION PRESS		
		0	0	0	0	0				0	x	Inches	psi			
DRILL PIPE SIZE (")	TYPE	LENGTH						Conductor @	0 m	Active Pits	Reserve Pits	PUMP MODEL	% EFFICIENCY	SURFACE TO BIT		
		0 m								0	0			0 min		
DRILL PIPE SIZE (")	TYPE	LENGTH						Surface @	0 m	TOTAL CIRCULATING VOL	BBL / STK	STK / MIN	BOTTOMS UP	0 min		
0	HW	0 m						Intermediate @	0 m					min		
DRILL COLLAR SIZE ( " )		LENGTH						Prod. or LNR @	0 m	STORAGE TANKS	BBL / MIN	GAL / MIN	TOT CIRC TIME			
0	0	0	0 m							0	0	0	ECD ppg/sg		0	

MUD PROPERTIES	MUD PROPERTY SPECIFICATIONS
----------------	-----------------------------

SAMPLE FROM										Mud Wt	3.34-8.66	Yld Pt	>14	API Loss	<=15
MUD TYPE										pH	8.5-9.5	MBT	<10	Solids	:=3%
TIME SAMPLE TAKEN										MUD COMMENTS					
DRILLING FLUID TEMPERATURE °C (In/Out)										Received chemicals from Shenandoah S1/1H to Amungee NW 3H well.					
TOTAL MEASURED DEPTH ( TMD ) Metres															
INCLINATION (Deg)															
WEIGHT ppg / SG				0.00											
FUNNEL VISCOSITY ( sec / qt ) API															
RHEOLOGY 600 : 300 RPM °F / °C															
RHEOLOGY 200 : 100 RPM °F / °C															
RHEOLOGY 6 : 3 RPM °F / °C															
PLASTIC VISCOSITY cP @ °F / °C															
YIELD POINT ( lb / 100 ft² ) °F / °C															
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min										OPERATIONAL COMMENTS					
LOW SHEAR RATE VISCOSITY (LSRV)															
n K ( lb / 100 ft² )															
API FILTRATE ( cm³ / 30 min. )															
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C															
API : HPHT ( Cake / 32nd in. )															
pH															
ALKALINITY MUD ( Pm )															
ALKALINITY FILTRATE ( Pf / Mf )															
CHLORIDE ( mg / L )															
TOTAL HARDNESS AS CALCIUM ( mg / L )										Shenandoah S1/1H well ended on September 16, 2023.					
SULPHITE( mg / L ) / CaCO3 (ppb)															
KCL / K2CO3/ K2SO4															
K + ( mg / L )				0											
PHPA (ppb)															
METHYLENE BLUE CAPACITY (ppb / % by vol)															
BENTONITE ADDED (ppb / % by vol)				0.0											
OTHER PRODUCTS ADDED (ppb / % by vol)															
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)															
Glycol % v/v															
OIL ( % by Vol )				0.0											
TOTAL WATER ( % by Vol )				0.0											
TOTAL SOLIDS ( % by Vol )				100.0											
SAND ( % by Vol )															
										Conduct hydrostatic tests on Mud tanks, leakage observed. Rectifying is on progress.					
										Dress shakers with API 80 screens.					
										Water Source   Water Bor					
										MUD ACCOUNTING (BBLS)   SUMMARY					
										TOTAL MUD ON RIG (bbls) : 0					

[illegible]

		CURRENCY	DAILY COST	CUMULATIVE COSTS
		AUD		
Newpark Engineer: T.Uruski Budi Tjahyono		Office: Adelaide	Telephone: +61 (0)40 862 33	Fax: NA

# DAILY MUD VOLUME ACCOUNT

**Date** : 23/09/2023

**Report No:** 1

**Well Name:** Amungee NW 3H

**Operator** : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		bbl		bbl	Losses Attributed To Shakers:		bbl
Chemical Volume added		bbl		bbl	Losses To Centrifuge:		bbl
Sump recycled water		bbl		bbl	Losses To Desander/Desilter:		bbl
Seawater		bbl		bbl	Losses To Cutting Dryer/Mud Cleaner:		bbl
Other Received on Rig		bbl		bbl	Losses To Tripping:		bbl
Other Built		bbl		bbl	Discharged:		bbl
<b>TOTAL BUILT:</b>		<b>0</b>			Other Surface Losses:		
					<b>Surface Losses Subtotal:</b>	<b>0</b>	
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	Seepage Losses:			
DAILY BACKLOADED:		0		bbl	Lost Circulation:		bbl
DAILY RECEIVED:		0		bbl	Lost Behind Casing/Left Downhole:		bbl
Cuttings Volume:				bbl	Other Sub-Surface Losses:		bbl
					<b>Sub-surface Losses Subtotal:</b>	<b>0</b>	
					<b>TOTAL DISPOSED:</b>	<b>0</b>	
					<b>Interval losses ( bbl/m ) :</b>	<b>0</b>	

VOLUME SUMMARY:		+	-
Starting Volume:			
Current Tank Volume:			
Mud Volume In Hole(Incl Ri			
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:			
Total Built:			
Total Storage:			
Total Reserve:			
Total Disposed:			
Whole Mud Backloaded:			
Whole Mud Received:			
<b>TOTAL MUD AT RIGSITE</b>			<b>bbls</b>

# Daily Inventory

**Report No:** 1

**Well:** Amungee NW 3H

**Report Date:** 23/09/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
AvaGlyco LC	208Ltr	31		31					31
Barite BB 1.5MT	1500Kg	14		14					14
Barite BB 1.5MT - Darwin	1500Kg	11		11					11
CaCl2 - Prills - bb	1000Kg	33		33					33
Caustic Soda	25Kg Drum	10		10					10
Citric Acid	25Kg Sack	50		50					50
CleanTrol HD	22.7Kg	229		229					229
DEFOAM AP 400	25Ltr	18		18					18
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	288		288					288
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	16		16					16
JK-161 LV	25Kg	85		85					85
KCL (L)	1000Kg Bulk Bag	1		1					1
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	238		238					238
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	100		100					100
NewSeal 25	25Kg	80		80					80
NewZan D	25Kg	83		83					83
Omyacarb 2 (bb)	1000Kg	19		19					19
Omyacarb 5 (bb)	1000Kg	2		2					2
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	64		64					64
Sugar	25Kg Sack	37		37					37
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	23		23					23
Zinc Oxide 25 Kg	25Kg	21		21					21



**Newpark Engineer:** T.Uruski Budi Tjahyono **Office:** Adelaide **Telephone:** +61 (0)40 862 33 **Fax:** NA



# DAILY MUD VOLUME ACCOUNT

**Date :** 24/09/2023  
**Report No:** 2

**Well Name:** Amungee NW 3H  
**Operator :** Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		522	bbl	522	bbl		bbl
Chemical Volume added		12	bbl	12	bbl		bbl
Sump recycled water			bbl		bbl		bbl
Seawater			bbl		bbl		bbl
Other Received on Rig			bbl		bbl		bbl
Other Built			bbl		bbl		bbl
<b>TOTAL BUILT:</b>		<b>534</b>	bbl	<b>534</b>	bbl		

WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
DAILY BACKLOADED:		0	bbl	Losses Attributed To Shakers:			bbl
DAILY RECEIVED:		450	bbl	Losses To Centrifuge:			bbl
Cuttings Volume:			bbl	Losses To Desander/Desilter:			bbl
				Losses To Cutting Dryer/Mud Cleaner:			bbl
				Losses To Tripping:			bbl
				Discharged:			bbl
				Other Surface Losses:			bbl
				<b>Surface Losses Subtotal:</b>	<b>0</b>	bbl	

TANK STORAGE VOLUMES		Tank Volumes (bbls)					
Tank Name	Tank Status	Current	Capacity	MW	(ppg)	MW(sg)	Comments
Sandtrap	Active	22	77	8.5	1.02		KCI/PHPA/ Polymer
Degasser	Active	15	77	8.5	1.02		KCI/PHPA/ Polymer
Desilter	Active	15	77	8.5	1.02		KCI/PHPA/ Polymer
Backflow	Active	15	77	8.5	1.02		KCI/PHPA/ Polymer
Tank#1	Active	62	100	8.5	1.02		KCI/PHPA/ Polymer
Tank#2	Active	63	100	8.5	1.02		KCI/PHPA/ Polymer
Tank#3	Active	63	100	8.5	1.02		KCI/PHPA/ Polymer
Suction#1	Active	62	100	8.5	1.02		KCI/PHPA/ Polymer
Suction#2	Reserve	62	100	8.5	1.02		KCI/PHPA/ Polymer
Suction#3	Active	60	100	8.5	1.02		KCI/PHPA/ Polymer
Slug	Reserve	95	100	8.55	1.02		KCI/PHPA/ Polymer
Frac Tank-1	Reserve	400	450	10.3	1.23		CleanDrill HT
Frac Tank-2	Reserve	50	450	10.3	1.23		CleanDrill HT

VOLUME SUMMARY:		+	-
Starting Volume:			
Current Tank Volume:	377		
Mud Volume In Hole(Incl Ri			
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:			
Total Built:	534		
Total Storage:			
Total Reserve:	607		
Total Disposed:			
Whole Mud Backloaded:			
Whole Mud Received:	450		
<b>TOTAL MUD AT RIGSITE</b>	<b>984</b>	bbls	

VOLUME BREAKDOWN		
FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
CLEANDRILL HT	450	
KCL/PHPA/ POLYMER	534	

# Daily Inventory

**Report No:** 2

**Well:** Amungee NW 3H

**Report Date:** 24/09/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	12		12					12
AvaGlyco LC	208Ltr	87		87					87
Barite BB 1.5MT	1500Kg	15		15					15
Barite BB 1.5MT - Darwin	1500Kg	11		11					11
CaCl2 - Prills - bb	1000Kg	33		33					33
Caustic Soda	25Kg Drum	42		42	1	1			41
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	309		309					309
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	288		288					288
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	80		80	1	1			79
JK-161 LV	25Kg	85		85	2	2			83
KCL (L)	1000Kg Bulk Bag	31		31	3	3			28
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	278		278					278
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	180		180	8	8			172
NewSeal 25	25Kg	80		80					80
NewZan D	25Kg	323		323	7	7			316
Omyacarb 2 (bb)	1000Kg	19		19					19
Omyacarb 5 (bb)	1000Kg	2		2					2
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	64		64					64
Sugar	25Kg Sack	37		37					37
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	63		63	2	2			61
Zinc Oxide 25 Kg	25Kg	21		21					21



Date	25/09/2023	Section name	22" Section			
Report	3	Report Depth m	86	MDBRT	86	TVDBRT
Rig Name / #	469	Prev Report Depth m	0	MDBRT	0	TVDBRT
Mud Ops start date		Daily metres drilled	86	Report time	23:59 Hr	
Spud date		Section metres drilled	86	Avg ROP	21.5	m/hour
RT-Seabed/Ground m		Report time activity	run casing and cementing			

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Greg Porter	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE						DEPTHS/CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE (" ) 22	No bit	0	0	0	0	0	0	0.00	Riser Length	m	HOLE VOL 133	MUD INHOLE 124	PUMP SIZE x Inches		CIRCULATION PRESS		psi
DRILL PIPE SIZE (" ) 5.5	TYPE DP	LENGTH 0 m									Conductor @	0 m	Active Pits 339	Reserve Pits 512	PUMP MODEL	% EFFICIENCY	SURFACE TO BIT
DRILL PIPE SIZE (" ) 5.5	TYPE HW	LENGTH 0 m						Surface @	0 m	TOTAL CIRCULATING VOL 463	BBL / STK	STK / MIN	BOTTOMS UP		0 min		
						Intermediate @	0 m	TOT CIRC TIME					min				
DRILL COLLAR SIZE (" ) 9.5	18.625	LENGTH 0	84 m					Prod. or LNR @	0 m	STORAGE TANKS 53		BBL / MIN 0	GAL / MIN 0	ECD ppg/sg		0	

MUD PROPERTIES	MUD PROPERTY SPECIFICATIONS
----------------	-----------------------------

SAMPLE FROM				Pit		Pit						Mud Wt {34-8.66	Yld Pt	>14	API Loss	<=15			
MUD TYPE				5KBP		5KBP						pH	8.5-9.5	MBT	<10	Solids	:=3%		
TIME SAMPLE TAKEN				3:30		21:30						MUD COMMENTS							
DRILLING FLUID TEMPERATURE °C (In/Out)				20		30						Build 95 bbls of Hivis sweeps in Slug Pit. Swept hole with 20 bbl of Hi-vis at 44 and 75 m depth at connections.Circulated well clean and spotted 50 bbl of Hi-vis on bottom. Mixed barite for cmt spacer. Add slowly PHPA to the system while drilling  2 BBs of Barite used for Cement spacer.							
TOTAL MEASURED DEPTH ( TMD ) Metres				0		84													
INCLINATION (Deg)				0															
WEIGHT ppg / SG				8.5 1.02		8.6 1.03													
FUNNEL VISCOSITY ( sec / qt ) API				50		45													
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C				50 38		48 35													
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C				30 22		28 20													
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C				10 8		9 7													
PLASTIC VISCOSITY cP @ 120 °F / 49 °C				12		13													
YIELD POINT ( lb / 100 ft² ) 120 °F / 49 °C				26		22													
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min				8 9		8 9													
LOW SHEAR RATE VISCOSITY (LSRV)				6		5						OPERATIONAL COMMENTS							
n K ( lb / 100 ft² )				0.40 3.22		0.46 2.04						M/U BHA of 22" bit. Spudded well with 22" bit at 07:45 hrs to 85.5 m. Pump sweeps as required. Run 18 5/8" casing to 84 m. M/U shoe and Float. Set casing at 84 m							
API FILTRATE ( cm³ / 30 min. )				15		15													
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C																			
API : HPHT ( Cake / 32nd in. )				1		1													
pH				9.0		8.5													
ALKALINITY MUD ( Pm )				0.28		0.06													
ALKALINITY FILTRATE ( Pf / Mf )				0.20 0.3		0.02 0.0													
CHLORIDE ( mg / L )				19000		19500													
TOTAL HARDNESS AS CALCIUM ( mg / L )				300		320													
SULPHITE( mg / L ) / CaCO3 (ppb)																			
KCL ( % by Wt. )				4.5		4.5						Water Source				Water Bor			
K + ( mg / L )				24318		24318						MUD ACCOUNTING (BBLS)						SUMMARY	
PHPA (ppb)						0.5						FLUID BUILT		FLUID LOSSES		Start Vol		984	
METHYLENE BLUE CAPACITY (ppb / % by vol)												Drill Water	28	S.C.E.	42	Received	0		
BENTONITE ADDED (ppb / % by vol)						0.0						Chemical	5	Discharge	0	Backload	0		
OTHER PRODUCTS ADDED (ppb / % by vol)												Sump/SeaW	0	Downhole	0	Built	33		
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)												Other Rec'd	0	Tripping	0	Lost sub	0		
Glycol % v/v												Other Built	0	Other	0	Lost srf	42		
OIL ( % by Vol )				0.0		0.0						TOTAL MUD ON RIG (bbls) : 975							
TOTAL WATER ( % by Vol )				98.0		97.0													
TOTAL SOLIDS ( % by Vol )				2.0		3.0													
SAND ( % by Vol )						0.1													

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT							Time Breakdown	
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF		UF		Analysis Item	Hrs
JK-161 LV	25Kg	83	0	6	77								M/U BHA	4
NewPac LV 25 Kg	25Kg	172	0	3	169								Drilling	4
NewZan D	25Kg	316	0	3	313								Tripping	1
Barite BB 1.5MT	1500Kg	15	0	2	13								Lay down BHA	8
KCL (L)	000Kg Bulk Bag	28	0	1	27	Shale Shaker #1	2x80,2x100						run casing and c	7
						Shale Shaker #1	2x80,2x100	6						
						Shale Shaker #2	2x80,2x100	6	SOLIDS ANALYSIS					
						Shale Shaker #3	2x80,2x100	6	Salt %	1.1	HGS %	0.0	Turbidity (NTU)	0
										LGS %	1.9	TSS %		0
									Corrected Solids %	1.9	Drilled Solids%	1.9		
													Conduct. (uS/cm)	
													DO mg/l	0
						CURRENCY		DAILY COST			CUMULATIVE COSTS			
						AUD		\$5,289.50			\$14,691.00			

**Newpark Engineer:** T.Uruski Budi Tjahyono **Office:** Adelaide **Telephone:** +61 (0)40 862 33 **Fax:** NA

# DAILY MUD VOLUME ACCOUNT

**Date** : 25/09/2023  
**Report No:** 3

**Well Name:** Amungee NW 3H  
**Operator** : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		28 bbl	550 bbl	Losses Attributed To Shakers:		42 bbl	42 bbl
Chemical Volume added		5 bbl	17 bbl	Losses To Centrifuge:		bbl	bbl
Sump recycled water		bbl	bbl	Losses To Desander/Desilter:		bbl	bbl
Seawater		bbl	bbl	Losses To Cutting Dryer/Mud Cleaner:		bbl	bbl
Other Received on Rig		bbl	bbl	Losses To Tripping:		bbl	bbl
Other Built		bbl	bbl	Discharged:		bbl	bbl
<b>TOTAL BUILT:</b>		<b>33 bbl</b>	<b>567 bbl</b>	Other Surface Losses:		bbl	bbl
				<b>Surface Losses Subtotal:</b>	<b>42 bbl</b>	<b>42 bbl</b>	

WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	Seepage Losses:		BBL/HR For	hr	bbl	bbl
DAILY BACKLOADED:		0	bbl	Lost Circulation:				bbl	bbl
DAILY RECEIVED:		0	450 bbl	Lost Behind Casing/Left Downhole:				bbl	bbl
Cuttings Volume:			bbl	Other Sub-Surface Losses:				bbl	bbl
				<b>Sub-surface Losses Subtotal:</b>	<b>0 bbl</b>			<b>0 bbl</b>	
				<b>TOTAL DISPOSED:</b>	<b>42 bbl</b>			<b>42 bbl</b>	
				<b>Interval losses ( bbl/m ) :</b>	<b>0</b>			<b>1</b>	

## TANK STORAGE VOLUMES

Tank Name	Tank Status	Current	Tank Volumes (bbls)				Comments
			Capacity	MW	(ppg)	MW(sg)	
Sandtrap	Active	22	77	8.5	1.02		KCI/PHPA/ Polymer
Degasser	Active	15	77	8.5	1.02		KCI/PHPA/ Polymer
Desilter	Active	15	77	8.5	1.02		KCI/PHPA/ Polymer
Backflow	Active	15	77	8.5	1.02		KCI/PHPA/ Polymer
Tank#1	Active	62	100	8.5	1.02		KCI/PHPA/ Polymer
Tank#2	Active	63	100	8.5	1.02		KCI/PHPA/ Polymer
Tank#3	Active	63	100	8.5	1.02		KCI/PHPA/ Polymer
Suction#1	Active	62	100	8.5	1.02		KCI/PHPA/ Polymer
Suction#2	Reserve	62	100	8.5	1.02		KCI/PHPA/ Polymer
Suction#3	Active	22	100	8.5	1.02		KCI/PHPA/ Polymer
Slug	Storage	53	100	11	1.32		Spacer
Frac Tank-1	Reserve	400	450	10.3	1.23		CleanDrill HT
Frac Tank-2	Reserve	50	450	10.3	1.23		CleanDrill HT

## VOLUME SUMMARY:

	+	-
Starting Volume:	984	
Current Tank Volume:	339	
Mud Volume In Hole(Incl Ri	124	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	133	
Total Built:	33	
Total Storage:	53	
Total Reserve:	512	
Total Disposed:		42
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>975</b>	<b>bbls</b>

## VOLUME BREAKDOWN

### FLUID TYPE VOLUME BREAKDOWN 24hr Consumption

CLEANDRILL HT	450	
KCL/PHPA/ POLYMER	401	
SPACER	53	

## Daily Inventory

**Report No:** 3

**Well:** Amungee NW 3H

**Report Date:** 25/09/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	12		12					12
AvaGlyco LC	208Ltr	87		87					87
Barite BB 1.5MT	1500Kg	15		15	2	2			13
Barite BB 1.5MT - Darwin	1500Kg	11		11					11
CaCl2 - Prills - bb	1000Kg	33		33					33
Caustic Soda	25Kg Drum	41		42		1			41
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	309		309					309
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	288		288					288
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	79		80		1			79
JK-161 LV	25Kg	83		85	6	8			77
KCL (L)	1000Kg Bulk Bag	28		31	1	4			27
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	278		278					278
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	172		180	3	11			169
NewSeal 25	25Kg	80		80					80
NewZan D	25Kg	316		323	3	10			313
Omyacarb 2 (bb)	1000Kg	19		19					19
Omyacarb 5 (bb)	1000Kg	2		2					2
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	64		64					64
Sugar	25Kg Sack	37		37					37
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	61		63		2			61
Zinc Oxide 25 Kg	25Kg	21		21					21



PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown		
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs		
NewPac LV 25 Kg	25Kg	169	0	16	153						Cementing	4		
NewZan D	25Kg	313	0	10	303						Rig up	1		
Sodium Bicarbonate	25Kg Sack	64	0	4	60						wait on cement	8		
KCL (L)	000Kg Bulk Bag	27	0	3	24						Rig down	4		
Caustic Soda	25Kg Drum	41	0	1	40	Shale Shaker #1	2x80,2x100	6			M/U BHA	7		
						Shale Shaker #2	2x80,2x100	6						
						Shale Shaker #3	2x80,2x100	6	SOLIDS ANALYSIS					
									Salt %	1.7	HGS %	0.0	Turbidity (NTU)	0
											LGS %	2.3	TSS %	0
									Corrected Solids %	2.3	Drilled Solids%	2.3		
												Conduct. (uS/cm)		
												DO mg/l		0
						CURRENCY		DAILY COST			CUMULATIVE COSTS			
						AUD		\$10,692.00			\$25,383.00			

**Newpark Engineer:** Nicholas Doust      Budi Tjahyono      **Office:** 0488013339      **Telephone:** 0894108202      **Fax:** 0894108200



# DAILY MUD VOLUME ACCOUNT

**Date** : 26/09/2023  
**Report No:** 4

**Well Name:** Amungee NW 3H  
**Operator** : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		113 bbl	663 bbl	Losses Attributed To Shakers:		40 bbl	82 bbl
Chemical Volume added		12 bbl	29 bbl	Losses To Centrifuge:			
Sump recycled water				Losses To Desander/Desilter:			
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
<b>TOTAL BUILT:</b>		<b>125</b> bbl	<b>692</b> bbl	Other Surface Losses:			
				<b>Surface Losses Subtotal:</b>		<b>40</b> bbl	<b>82</b> bbl
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE				
DAILY BACKLOADED:		0		Seepage Losses:	<input type="text"/> BBL/HR For <input type="text"/> hr		
DAILY RECEIVED:		320	770	Lost Circulation:			
Cuttings Volume:				Lost Behind Casing/Left Downhole:			
				Other Sub-Surface Losses:			
				<b>Sub-surface Losses Subtotal:</b>		<b>0</b> bbl	
				<b>TOTAL DISPOSED:</b>		<b>40</b> bbl	<b>82</b> bbl
				<b>Interval losses ( bbl/m ) :</b>		<b>0</b>	<b>2</b>

## TANK STORAGE VOLUMES

		Tank Volumes (bbls)					Comments
Tank Name	Tank Status	Current	Capacity	MW	(ppg)	MW(sg)	
Sandtrap	Active	22	77	8.6	1.03		KCl/PHPA/ Polymer
Degasser	Active	17	77	8.6	1.03		KCl/PHPA/ Polymer
Desilter	Active	17	77	8.6	1.03		KCl/PHPA/ Polymer
Backflow	Active	17	77	8.6	1.03		KCl/PHPA/ Polymer
Tank#1	Active	68	100	8.6	1.03		KCl/PHPA/ Polymer
Tank#2	Active	68	100	8.6	1.03		KCl/PHPA/ Polymer
Tank#3	Active	68	100	8.6	1.03		KCl/PHPA/ Polymer
Suction#1	Active	65	100	8.6	1.03		KCl/PHPA/ Polymer
Suction#2	Active	61	100	8.6	1.03		KCl/PHPA/ Polymer
Suction#3	Reserve	85	100	8.6	1.03		KCl/PHPA/ Polymer - Hivis
Slug	Reserve	85	100	8.6	1.03		Kcl/PHPA/Polymer- Hivis
Frac Tank-1	Reserve	400	450	10.3	1.23		CleanDrill HT
Frac Tank-2	Reserve	320	450	10.3	1.23		CleanDrill HT
Frac Tank-3	Reserve		450				

## VOLUME SUMMARY:

	+	-
Starting Volume:	975	
Current Tank Volume:	403	
Mud Volume In Hole(Incl Ri	87	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	87	
Total Built:	125	
Total Storage:		
Total Reserve:	890	
Total Disposed:		40
Whole Mud Backloaded:		
Whole Mud Received:	320	
<b>TOTAL MUD AT RIGSITE</b>	<b>1380</b>	<b>bbls</b>

## VOLUME BREAKDOWN

FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
CLEANDRILL HT	720	
KCL/PHPA/ POLYMER	403	
KCL/PHPA/ POLYMER -	85	
KCL/PHPA/POLYMER- HI	85	


## Daily Inventory

**Report No:** 4

**Well:** Amungee NW 3H

**Report Date:** 26/09/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	12		12					12
AvaGlyco LC	208Ltr	87		87					87
Barite BB 1.5MT	1500Kg	13		15		2			13
Barite BB 1.5MT - Darwin	1500Kg	11		11					11
CaCl2 - Prills - bb	1000Kg	33		33					33
Caustic Soda	25Kg Drum	41		42	1	2			40
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	309		309					309
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	288		288					288
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	79		80		1			79
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	27		31	3	7			24
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	278		278					278
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	169		180	16	27			153
NewSeal 25	25Kg	80		80					80
NewZan D	25Kg	313		323	10	20			303
Omyacarb 2 (bb)	1000Kg	19		19					19
Omyacarb 5 (bb)	1000Kg	2		2					2
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	64		64	4	4			60
Sugar	25Kg Sack	37		37					37
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	61		63		2			61
Zinc Oxide 25 Kg	25Kg	21		21					21

<div><div>NEWPARK FLUIDS SYSTEMS</div></div> <div>WATER BASED MUD Daily Operation Report</div>	Date	27/09/2023	Section name		17 1/2" Section											
	Report		5	Report Depth	m	283	MDBRT	283	TVDBRT							
	Rig Name / #		469	Prev Report Depth	m	86	MDBRT	86	TVDBRT							
	Mud Ops start date			Daily metres drilled		197	Report time	23:59 Hr								
	Spud date			Section metres drilled		283	Avg ROP	18.8	m/hour							
	RT-Seabed/Ground	m		Report time activity	run casing and cementing											
OPERATOR			Tamboran Resources			CONTRACTOR			H & P							
REPORT FOR			Maurice Verkerk			REPORT FOR			Joseph Stowell							
WELL NAME AND No.			Amungee NW 3H			FIELD		LOCATION		STATE						
						EP 117		Beetaloo Basin		Northern Territory						
BHA	BIT TYPE	JET SIZE		DEPTHS/CASING		MUD VOLUME (BBL)		CIRCULATION DATA								
BIT SIZE (") 17.5	Insert ReedHycaloe	18	18	18	0	0.00	Riser Length	m	PUMP SIZE x Inches	CIRCULATION PRESS	psi					
DRILL PIPE SIZE (") 5.5	TYPE DP	LENGTH		0	m	Conductor @	0	m	PUMP MODEL	% EFFICIENCY	SURFACE TO BIT	0	min			
DRILL PIPE SIZE (") 5.5	TYPE HW	LENGTH		0	m	18.625	Surface @	84	m	TOTAL CIRCULATING VOL	BBL / STK	STK / MIN	BOTTOMS UP	0	min	
DRILL COLLAR SIZE (") 9.5	8.25	LENGTH		0	0	m	Intermediate @	0	m	656	BBL / MIN	GAL / MIN	TOT CIRC TIME	min		
							Prod. or LNR @	0	m	STORAGE TANKS	0	0	ECD ppg/sg		0	
										55						
MUD PROPERTIES						MUD PROPERTY SPECIFICATIONS										
SAMPLE FROM			Pit		Pit						Mud Wt	3.34-8.66	Yld Pt	>14	API Loss	<=15
MUD TYPE			5KBP		5KBP						pH	8.5-9.5	MBT	<10	Solids	<=3%
TIME SAMPLE TAKEN			2:00		21:00						MUD COMMENTS					
DRILLING FLUID TEMPERATURE °C (In/Out)			36	37	28						Will build hivis from fresh water with NewZan D at 2.75 ppb concentration.					
TOTAL MEASURED DEPTH ( TMD ) Metres			65		0						Received 100MT calcium chloride MO52-56					
INCLINATION (Deg)											Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
WEIGHT ppg / SG			9.0	1.08	8.3+	1.00					Active mud system is now Water					
FUNNEL VISCOSITY ( sec / qt ) API			43		26						Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
RHEOLOGY 600 : 300 RPM °F / °C			40	30							Active mud system is now Water					
RHEOLOGY 200 : 100 RPM °F / °C			25	20							Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
RHEOLOGY 6 : 3 RPM °F / °C			8	6							Active mud system is now Water					
PLASTIC VISCOSITY cP @ °F / °C			10								Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
YIELD POINT ( lb / 100 ft² ) °F / °C			20								Active mud system is now Water					
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min			8	11	15						Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
LOW SHEAR RATE VISCOSITY (LSRV)			4								Active mud system is now Water					
n K ( lb / 100 ft² )			0.41	2.26							Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
API FILTRATE ( cm³ / 30 min. )			13.6								Active mud system is now Water					
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C											Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
API : HPHT ( Cake / 32nd in. )			1								Active mud system is now Water					
pH			8.5								Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
ALKALINITY MUD ( Pm )			0.02								Active mud system is now Water					
ALKALINITY FILTRATE ( Pf / Mf )			0.01	0.4							Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
CHLORIDE ( mg / L )			25000								Active mud system is now Water					
TOTAL HARDNESS AS CALCIUM ( mg / L )			200								Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
SULPHITE( mg / L ) / CaCO3 (ppb)											Active mud system is now Water					
KCL ( % by Wt. )			5.0								Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
K + ( mg / L )			27020		0						Active mud system is now Water					
PHPA (ppb)			0.75								Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
METHYLENE BLUE CAPACITY (ppb / % by vol)			1.3	0.1							Active mud system is now Water					
BENTONITE ADDED (ppb / % by vol)			0.0		0.0						Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
OTHER PRODUCTS ADDED (ppb / % by vol)											Active mud system is now Water					
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)											Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
Glycol % v/v											Active mud system is now Water					
OIL ( % by Vol )			0.0		0.0						Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
TOTAL WATER ( % by Vol )			97.0		0.0						Active mud system is now Water					
TOTAL SOLIDS ( % by Vol )			3.0		100.0						Total downhole lost 9,875 bbls approximately including 660 bbls of KCl/PHPA/Polymer mud					
SAND ( % by Vol )			0.1								Active mud system is now Water					
PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown				
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs				
NewZan D	25Kg	303	0	2	301						M/U BHA	3				
CaCl2 - Prills - bb	1000Kg	33	100	0	133						Drill through ce	1				
											Drilling	10				
											Trouble shoot D	1				
						Shale Shaker #1	2x80,2x100				Work Tight Spot	2				
						Shale Shaker #2	2x80,2x100				Lay down BHA	4				
						Shale Shaker #3	2x80,2x100				SOLIDS ANALYSIS					
											Salt %	0.0	HGS %	0.0	Turbidity (NTU)	0
													LGS %	100.0	TSS %	0
											Corrected Solids %	100.0	Drilled Solids%	100.0	Conduct. (uS/cm)	
															DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS						
						AUD		\$621.00		\$26,004.00						
Newpark Engineer: Nicholas Doust Budi Tjahyono						Office: 0488013339		Telephone: 0894108202		Fax: 0894108200						

# DAILY MUD VOLUME ACCOUNT

**Date** : 27/09/2023  
**Report No:** 5

**Well Name:** Amungee NW 3H  
**Operator** : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		9897 bbl	10560 bbl	Losses Attributed To Shakers:			82 bbl
Chemical Volume added		0 bbl	29 bbl	Losses To Centrifuge:			bbl
Sump recycled water		bbl	bbl	Losses To Desander/Desilter:			bbl
Seawater		bbl	bbl	Losses To Cutting Dryer/Mud Cleaner:			bbl
Other Received on Rig		bbl	bbl	Losses To Tripping:			bbl
Other Built		bbl	bbl	Discharged:			bbl
<b>TOTAL BUILT:</b>		<b>9897</b> bbl	<b>10589</b> bbl	Other Surface Losses:			bbl
				<b>Surface Losses Subtotal:</b>	<b>0</b> bbl	<b>82</b> bbl	
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE				
DAILY BACKLOADED:		0	bbl	Seepage Losses:	<input type="text"/> BBL/HR For <input type="text"/> hr	bbl	bbl
DAILY RECEIVED:		0	770 bbl	Lost Circulation:		9875 bbl	9875 bbl
Cuttings Volume:			bbl	Lost Behind Casing/Left Downhole:		bbl	bbl
				Other Sub-Surface Losses:		bbl	bbl
				<b>Sub-surface Losses Subtotal:</b>	<b>9875</b> bbl	<b>9875</b> bbl	
				<b>TOTAL DISPOSED:</b>	<b>9875</b> bbl	<b>9957</b> bbl	
				<b>Interval losses ( bbl/m ) :</b>	<b>35</b>	<b>175</b>	

## TANK STORAGE VOLUMES

Tank Name	Tank Status	Current	Tank Volumes (bbls)				Comments
			Capacity	MW	(ppg)	MW(sg)	
Sandtrap	Active	22	77	8.34	1		Water
Degasser	Active	15	77	8.34	1		Water
Desilter	Active	15	77	8.34	1		Water
Backflow	Active	17	77	8.34	1		Water
Tank#1	Active	62	100	8.34	1		Water
Tank#2	Active	62	100	8.34	1		Water
Tank#3	Active	62	100	8.34	1		Water
Suction#1	Active	61	100	8.34	1		Water
Suction#2	Active	61	100	8.34	1		Water
Suction#3	Reserve	26	100	8.34	1		KCl/PHPA/Polymer Hivis
Slug	Storage	55	100	10.5	1.26		Spacer
Frac Tank-1	Reserve	400	450	10.3	1.23		CleanDrill HT
Frac Tank-2	Reserve	320	450	10.3	1.23		CleanDrill HT
Frac Tank-3	Reserve		450				

## VOLUME SUMMARY:

	+	-
Starting Volume:	1380	
Current Tank Volume:	377	
Mud Volume In Hole(Incl Ri	279	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	279	
Total Built:	9897	
Total Storage:	55	
Total Reserve:	746	
Total Disposed:		9875
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>1402</b> bbls	

## VOLUME BREAKDOWN

FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
CLEANDRILL HT	720	
KCL/PHPA/POLYMER HI	26	
SPACER	55	
WATER	377	

## Daily Inventory

**Report No:** 5

**Well:** Amungee NW 3H

**Report Date:** 27/09/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	12		12					12
AvaGlyco LC	208Ltr	87		87					87
Barite BB 1.5MT	1500Kg	13		15		2			13
Barite BB 1.5MT - Darwin	1500Kg	11		11					11
CaCl2 - Prills - bb	1000Kg	33	100	133					133
Caustic Soda	25Kg Drum	40		42		2			40
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	309		309					309
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	288		288					288
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	79		80		1			79
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	278		278					278
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	80		80					80
NewZan D	25Kg	303		323	2	22			301
Omyacarb 2 (bb)	1000Kg	19		19					19
Omyacarb 5 (bb)	1000Kg	2		2					2
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	60		64		4			60
Sugar	25Kg Sack	37		37					37
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	61		63		2			61
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	28/09/2023	Section name	17 1/2" Section				
Report	6	Report Depth	m	283	MDBRT	283	TVDBRT
Rig Name / #	469	Prev Report Depth	m	283	MDBRT	283	TVDBRT
Mud Ops start date		Daily metres drilled	0	Report time	23:59 Hr		
Spud date		Section metres drilled	283	Avg ROP	0.0	m/hour	
RT-Ground Level m		Report time activity	Nipple UP BOP				

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE	DEPTHS/CASING	MUD VOLUME (BBL)	CIRCULATION DATA			
BIT SIZE (") 13.375	Casing 13 3/8	0 0 0 0 0	0.00 Riser Length m	HOLE VOL 139	MUD INHOLE 117	PUMP SIZE x Inches	CIRCULATION PRESS	psi
DRILL PIPE SIZE (") 5.5	TYPE DP	LENGTH 0 m	Conductor @ 0 m	Active Pits 377	Reserve Pits 746	PUMP MODEL	% EFFICIENCY	SURFACE TO BIT 0 min
DRILL PIPE SIZE (") 5.5	TYPE HW	LENGTH 0 m	18.625 Surface @ 84 m	TOTAL CIRCULATING VOL 494		BBL / STK	STK / MIN	BOTTOMS UP 0 min
DRILL COLLAR SIZE (") 9.5	13.375	LENGTH 0 280 m	13.375 Intermediate @ 280 m	STORAGE TANKS 0		BBL / MIN	GAL / MIN	TOT CIRC TIME min
			Prod. or LNR @ 0 m			0	0	ECD ppg/sg 0

MUD PROPERTIES				MUD PROPERTY SPECIFICATIONS			
SAMPLE FROM	Pit				Mud Wt 13.34-8.66	Yld Pt >14	API Loss <=15
MUD TYPE	5KBP				pH 8.5-9.5	MBT <10	Solids <=3%
TIME SAMPLE TAKEN	3:00				MUD COMMENTS		
DRILLING FLUID TEMPERATURE °C (In/Out)	30				Use 2 bulk bags of Barite to make cmt spacer.  Mixing chemicals and/or reverting to CleanDrill mud are still in progress. Will put the chemicals usage and its mud properties onto tomorrow Mud Report as the new section of 12.25" hole.		
TOTAL MEASURED DEPTH ( TMD ) Metres	280						
INCLINATION (Deg)							
WEIGHT ppg / SG	8.3+ 1.00						
FUNNEL VISCOSITY ( sec / qt ) API	26						
RHEOLOGY 600 : 300 RPM °F / °C							
RHEOLOGY 200 : 100 RPM °F / °C							
RHEOLOGY 6 : 3 RPM °F / °C							
PLASTIC VISCOSITY cP @ °F / °C							
YIELD POINT ( lb / 100 ft <sup>2</sup> ) °F / °C							
GEL STRENGTH ( lb / 100 ft <sup>2</sup> ) 10sec/10min/30min							
LOW SHEAR RATE VISCOSITY (LSRV)							
n K ( lb / 100 ft <sup>2</sup> )							
API FILTRATE ( cm <sup>3</sup> / 30 min. )							
HPHT FILTRATE ( cm <sup>3</sup> / 30 min. ) °F / °C							
API : HPHT ( Cake / 32nd in. )							
pH							
ALKALINITY MUD ( Pm )							
ALKALINITY FILTRATE ( Pf / Mf )							
CHLORIDE ( mg / L )							
TOTAL HARDNESS AS CALCIUM ( mg / L )							
SULPHITE( mg / L ) / CaCO3 (ppb)							
KCL / K2CO3/ K2SO4							
K + ( mg / L )	0						
PHPA (ppb)					Water Source Water Bor		
METHYLENE BLUE CAPACITY (ppb / % by vol)					MUD ACCOUNTING (BBLs) SUMMARY		
BENTONITE ADDED (ppb / % by vol)	0.0				FLUID BUILT	FLUID LOSSES	Start Vol 1402
OTHER PRODUCTS ADDED (ppb / % by vol)					Drill Water 300	S.C.E. 0	Received 0
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)					Chemical 0	Discharge 0	Backload 0
Glycol % v/v					Sump/SeaW 0	Downhole 462	Built 300
OIL ( % by Vol )	0.0				Other Rec'd 0	Tripping 0	Lost sub 462
TOTAL WATER ( % by Vol )	0.0				Other Built 0	Other 0	Lost srf 0
TOTAL SOLIDS ( % by Vol )	100.0				TOTAL MUD ON RIG (bbls) : 1240		
SAND ( % by Vol )							

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT				Time Breakdown	
Product	UnitSize	Start	Received	Used	Close	Type	Hrs	OF	UF	Analysis Item	Hrs
Dynafiber AP Medium	11.34Kg	288	0	5	283					Run casing	4
Barite BB 1.5MT	1500Kg	13	0	2	11					Cementing Job	7
Ancor 1 (190 Lt)	190Ltr	12	12	0	24					R/D	8
Barite BB 1.5MT - Darwi	1500Kg	11	42	0	53					Nipple UP BOP	4
CaCl2 - Prills - bb	1000Kg	133	57	0	190	Shale Shaker #1	2x80,2x100				
						Shale Shaker #2	2x80,2x100				
						Shale Shaker #3	2x80,2x100				
						SOLIDS ANALYSIS					
						Salt %	0.0	HGS %	0.0	Turbidity (NTU)	0
								LGS %	100.0	TSS %	0
						Corrected Solids %	100.0	Drilled Solids%	100.0	Conduct. (uS/cm)	
										DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS	
						AUD		\$1,779.50		\$27,783.50	



# DAILY MUD VOLUME ACCOUNT

**Date :** 28/09/2023  
**Report No:** 6

**Well Name:** Amungee NW 3H  
**Operator :** Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		300	bbl	10860	bbl		82
Chemical Volume added			bbl	29	bbl		
Sump recycled water			bbl		bbl		
Seawater			bbl		bbl		
Other Received on Rig			bbl		bbl		
Other Built			bbl		bbl		
<b>TOTAL BUILT:</b>		<b>300</b>	bbl	<b>10889</b>	bbl		

WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	Seepage Losses:		BBL/HR For		hr	DAILY	CUMULATIVE
DAILY BACKLOADED:		0	bbl							
DAILY RECEIVED:		0	bbl						462	10337
Cuttings Volume:			bbl							

FLUID LOSSES:		DAILY	CUMULATIVE
Losses Attributed To Shakers:			
Losses To Centrifuge:			
Losses To Desander/Desilter:			
Losses To Cutting Dryer/Mud Cleaner:			
Losses To Tripping:			
Discharged:			
Other Surface Losses:			
<b>Surface Losses Subtotal:</b>		<b>0</b>	bbl
<b>Sub-surface Losses Subtotal:</b>		<b>462</b>	bbl
<b>TOTAL DISPOSED:</b>		<b>462</b>	bbl
<b>Interval losses ( bbl/m ) :</b>		<b>37</b>	<b>220</b>

## TANK STORAGE VOLUMES

Tank Name	Tank Status	Current	Tank Volumes (bbls)				Comments
			Capacity	MW	(ppg)	MW(sg)	
Sandtrap	Active	22	77	8.34	1		Water
Degasser	Active	15	77	8.34	1		Water
Desilter	Active	15	77	8.34	1		Water
Backflow	Active	17	77	8.34	1		Water
Tank#1	Active	62	100	8.34	1		Water
Tank#2	Active	62	100	8.34	1		Water
Tank#3	Active	62	100	8.34	1		Water
Suction#1	Active	61	100	8.34	1		Water
Suction#2	Active	61	100	8.34	1		Water
Suction#3	Reserve	26	100	8.34	1		KCl/PHPA/Polymer Hivis
Slug	Storage		100				r
Frac Tank-1	Reserve	400	450	10.3	1.23		CleanDrill HT
Frac Tank-2	Reserve	320	450	10.3	1.23		CleanDrill HT
Frac Tank-3	Reserve		450				

## VOLUME SUMMARY:

	+	-
Starting Volume:	1402	
Current Tank Volume:	377	
Mud Volume In Hole(Incl Ri	117	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	139	
Total Built:	300	
Total Storage:		
Total Reserve:	746	
Total Disposed:		462
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>1240</b>	<b>bbls</b>

## VOLUME BREAKDOWN

FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
CLEANDRILL HT	720	
KCL/PHPA/POLYMER HI	26	
R		
WATER	377	

# Daily Inventory

**Report No:** 6

**Well:** Amungee NW 3H

**Report Date:** 28/09/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	12	12	24					24
AvaGlyco LC	208Ltr	87		87					87
Barite BB 1.5MT	1500Kg	13		15	2	4			11
Barite BB 1.5MT - Darwin	1500Kg	11	42	53					53
CaCl2 - Prills - bb	1000Kg	133	57	190					190
Caustic Soda	25Kg Drum	40		42		2			40
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	309		309					309
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	288		288	5	5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	79		80		1			79
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	278		278					278
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	80		80					80
NewZan D	25Kg	301		323		22			301
Omyacarb 2 (bb)	1000Kg	19		19					19
Omyacarb 5 (bb)	1000Kg	2		2					2
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	60		64		4			60
Sugar	25Kg Sack	37		37					37
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	61		63		2			61
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	29/09/2023	Section name	12 1/4" Section					
Report	7	Report Depth	m	373	MDBRT	383		TVDBRT
Rig Name / #	469	Prev Report Depth	m	283	MDBRT	283		TVDBRT
Mud Ops start date		Daily metres drilled	90	Report time	23:59			Hr
Spud date		Section metres drilled	90	Avg ROP	18.0	m/hour		
RT-Ground Level	m	Report time activity	Drilling					

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE	DEPTHS/CASING	MUD VOLUME (BBL)	CIRCULATION DATA			
BIT SIZE (") 12.25	PDC SMITH	12 12 12 12 12 12 10 10 10 0	8.00 Riser Length m	HOLE VOL 182	MUD INHOLE 139	PUMP SIZE 6 x 11 Inches	CIRCULATION PRESS 1600	psi
DRILL PIPE SIZE (") 5.5	TYPE DP	LENGTH 85 m	Conductor @ 0 m	Active Pits 312	Reserve Pits 356	PUMP MODEL Gardner-Denver	% EFFICIENCY 97	SURFACE TO BIT 1 min
DRILL PIPE SIZE (") 5.5	TYPE HW	LENGTH 86 m	18.625 Surface @ 84 m	TOTAL CIRCULATING VOL 451		BBL / STK 0.0933	STK / MIN 180	BOTTOMS UP 5 min
DRILL COLLAR SIZE (") 9	7.75	LENGTH 27 174 m	13.375 Intermediate @ 280 m	STORAGE TANKS 0		BBL / MIN 16.8	GAL / MIN 706	TOT CIRC TIME 27 min
			Prod. or LNR @ 0 m					ECD ppg/sg 9.91 1.19

MUD PROPERTIES										MUD PROPERTY SPECIFICATIONS									
SAMPLE FROM				Pit		Pit		Pit				Mud Wt 9.6-9.8		Yld Pt >14		API Loss <=12			
MUD TYPE				CL H		CL H		CL H				pH 8.5-9.5		MBT <10		Solids :=3%			
TIME SAMPLE TAKEN				3:00		13:00		23:00											
DRILLING FLUID TEMPERATURE °C (In/Out)				34				40 42				<div>MUD COMMENTS</div> <div>Received MO42/43 (Omyacarb 2 and Cleanrol)</div> <div>Mixed 400 bbls Cleandrill HD using 65/35 mix of salvaged Cleandrill HD and water to reduce weight to 9.6-9.7 ppg. Plan to increase rheology once mud is circulated.</div> <div>Note: Starting volume for 12.25" section = 720 bbls CleanTrol HD mud</div>							
TOTAL MEASURED DEPTH ( TMD ) Metres				0		283		353											
INCLINATION (Deg)								5.12											
WEIGHT ppg / SG				9.8 1.17		9.7 1.16		9.8 1.17											
FUNNEL VISCOSITY ( sec / qt ) API				38		39		50											
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C				32 22		29 20		52 40											
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C				17 12		16 12		32 26											
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C				4 2		4 4		12 10											
PLASTIC VISCOSITY cP @ 120 °F / 49 °C				10		9		12											
YIELD POINT ( lb / 100 ft <sup>2</sup> ) 120 °F / 49 °C				12		11		28											
GEL STRENGTH ( lb / 100 ft <sup>2</sup> ) 10sec/10min/30min				4 7		4 7 9		12 22 36											
LOW SHEAR RATE VISCOSITY (LSRV)				0		4		8											
n K ( lb / 100 ft <sup>2</sup> )				0.54 0.76		0.54 0.71		0.38 3.78											
API FILTRATE ( cm <sup>3</sup> / 30 min. )				13.6		13.2		12.4											
HPHT FILTRATE ( cm <sup>3</sup> / 30 min. ) °F / °C																			
API : HPHT ( Cake / 32nd in. )				1		1		1											
pH				10.5		10.5		9.5											
ALKALINITY MUD ( Pm )				1.10		1.15		0.90											
ALKALINITY FILTRATE ( Pf / Mf )				0.60 1.2		0.65 1.2		0.32 0.6											
CHLORIDE ( mg / L )				67000		69000		68000											
TOTAL HARDNESS AS CALCIUM ( mg / L )																			
SULPHITE( mg / L ) / CaCO3 (ppb)				15.0				10.0											
KCL / K2CO3/ K2SO4																			
K + ( mg / L )				0		0		0											
PHPA (ppb)																			
METHYLENE BLUE CAPACITY (ppb / % by vol)				2.5 0.3		2.5 0.3		7.5 0.8											
BENTONITE ADDED (ppb / % by vol)				0.0		0.0		0.0											
OTHER PRODUCTS ADDED (ppb / % by vol)																			
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)																			
Glycol % v/v				2.0				1.5											
OIL ( % by Vol )				0.0		0.0		0.0											
TOTAL WATER ( % by Vol )				91.0		90.0		91.0											
TOTAL SOLIDS ( % by Vol )				9.0		10.0		9.0											
SAND ( % by Vol )						0		0.1											
										Water Source		Water Bor							
										MUD ACCOUNTING (BBLs)				SUMMARY					
										FLUID BUILT		FLUID LOSSES		Start Vol		720			
										Drill Water		190 S.C.E.		115 Received		0			
										Chemical		12 Discharge		0 Backload		0			
										Sump/SeaW		0 Downhole		0 Built		202			
										Other Rec'd		0 Tripping		0 Lost sub		0			
										Other Built		0 Other		0 Lost srf		115			
										TOTAL MUD ON RIG (bbls) : 807									

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown	
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs	
CleanTrol HD	22.7Kg	309	320	38	591						M/U BHA	6	
NewZan D	25Kg	301	0	13	288						Drilling	5	
Magnesium Oxide	20Kg Sack	278	0	10	268						Miscellaneous	13	
Idcide-G50	20Ltr	79	0	5	74								
TrueScav HD	25Kg	61	0	5	56	Shale Shaker #1	2x80,2x100	8					
AvaGlyco LC	208Ltr	87	0	4	83	Shale Shaker #2	2x80,2x100	8					
Omyacarb 2 (bb)	1000Kg	19	32	0	51	Shale Shaker #3	2x80,2x100	8	SOLIDS ANALYSIS				
								Salt %	3.9	HGS %	1.7	Turbidity (NTU)	0
										LGS %	3.4	TSS %	0
								Corrected Solids %	5.1	Drilled Solids%	2.3		
												Conduct. (uS/cm)	
												DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS			
						AUD		\$16,192.50		\$43,976.00			

# DAILY MUD VOLUME ACCOUNT

**Date** : 29/09/2023  
**Report No:** 7

**Well Name:** Amungee NW 3H  
**Operator** : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		190 bbl	11050 bbl	Losses Attributed To Shakers:		68 bbl	150 bbl
Chemical Volume added		12 bbl	41 bbl	Losses To Centrifuge:			
Sump recycled water				Losses To Desander/Desilter:		47 bbl	47 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
<b>TOTAL BUILT:</b>		<b>202</b> bbl	<b>11091</b> bbl	Other Surface Losses:			
				<b>Surface Losses Subtotal:</b>		<b>115</b> bbl	<b>197</b> bbl
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE				
DAILY BACKLOADED:		0		Seepage Losses:	<input type="text"/> BBL/HR For <input type="text"/> hr		
DAILY RECEIVED:		0	770	Lost Circulation:			10337
Cuttings Volume:				Lost Behind Casing/Left Downhole:			
				Other Sub-Surface Losses:			
				<b>Sub-surface Losses Subtotal:</b>		<b>0</b> bbl	<b>10337</b> bbl
				<b>TOTAL DISPOSED:</b>		<b>115</b> bbl	<b>10534</b> bbl
				<b>Interval losses ( bbl/m ) :</b>		<b>17</b>	<b>116</b>

## TANK STORAGE VOLUMES

		Tank Volumes (bbls)					Comments
Tank Name	Tank Status	Current	Capacity	MW	(ppg)	MW(sg)	
Sandtrap	Active	23	77	9.8	1.17		ClenTroll HD
Degasser	Active	15	77	9.8	1.17		ClenTroll HD
Desilter	Active	15	77	9.8	1.17		ClenTroll HD
Backflow	Active	17	77	9.8	1.17		ClenTroll HD
Tank#1	Active	50	100	9.8	1.17		ClenTroll HD
Tank#2	Active	50	100	9.8	1.17		ClenTroll HD
Tank#3	Active	50	100	9.8	1.17		ClenTroll HD
Suction#1	Active	47	100	9.8	1.17		ClenTroll HD
Suction#2	Active	45	100	9.8	1.17		ClenTroll HD
Suction#3	Reserve	78	100	9.8	1.17		ClenTroll HD
Slug	Reserve	56	100	9.8	1.17		ClenTroll HD
Frac Tank-1	Reserve	0	450	10.3	1.23		ClenTroll HD
Frac Tank-2	Reserve	222	450	10.3	1.23		ClenTroll HD
Frac Tank-3	Reserve		450				

## VOLUME SUMMARY:

	+	-
Starting Volume:	720	
Current Tank Volume:	312	
Mud Volume In Hole(Incl Ri	139	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	182	
Total Built:	202	
Total Storage:		
Total Reserve:	356	
Total Disposed:		115
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>807</b> bbls	

## VOLUME BREAKDOWN

FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
CLENTROLL HD	668	


# Daily Inventory

**Report No:** 7

**Well:** Amungee NW 3H

**Report Date:** 29/09/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	87		87	4	4			83
Barite BB 1.5MT	1500Kg	11		15		4			11
Barite BB 1.5MT - Darwin	1500Kg	53		53					53
CaCl2 - Prills - bb	1000Kg	190		190					190
Caustic Soda	25Kg Drum	40		42		2			40
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	309	320	629	38	38			591
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	79		80	5	6			74
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	278		278	10	10			268
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	80		80					80
NewZan D	25Kg	301		323	13	35			288
Omyacarb 2 (bb)	1000Kg	19	32	51					51
Omyacarb 5 (bb)	1000Kg	2		2					2
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	60		64		4			60
Sugar	25Kg Sack	37		37					37
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	61		63	5	7			56
Zinc Oxide 25 Kg	25Kg	21		21					21

<div><div><b>NEWPARK</b> FLUIDS SYSTEMS</div></div> <div><b>WATER BASED MUD</b> Daily Operation Report</div>	Date	30/09/2023	Section name		12 1/4" Section								
	Report		8	Report Depth	m	609	MDBRT	609	TVDBRT				
	Rig Name / #		469	Prev Report Depth	m	373	MDBRT	373	TVDBRT				
	Mud Ops start date			Daily metres drilled		236	Report time	23:59 Hr					
	Spud date			Section metres drilled		326	Avg ROP	27.0	m/hour				
	RT-Ground Level m			Report time activity	run casing and cementing								
OPERATOR			Tamboran Resources			CONTRACTOR			H & P				
REPORT FOR			Maurice Verkerk			REPORT FOR			Joseph Stowell				
WELL NAME AND No.			Amungee NW 3H			FIELD		LOCATION		STATE			
						EP 117		Beetaloo Basin		Northern Territory			
BHA	BIT TYPE	JET SIZE		DEPTHS/CASING		MUD VOLUME (BBL)		CIRCULATION DATA					
BIT SIZE (") 12.25	No bit	0	0	0	0	0	0	PUMP SIZE 6 x 11 Inches		CIRCULATION PRESS psi			
DRILL PIPE SIZE (") 5.5	TYPE DP	LENGTH 0 m		8.00 Riser Length m		291		256					
DRILL PIPE SIZE (") 5.5	TYPE HW	LENGTH 0 m		Conductor @ 0 m		Active Pits 383		Reserve Pits 141		PUMP MODEL Gardner-Denver			
DRILL COLLAR SIZE (") 9	9.625	LENGTH 0		18.625 Surface @ 84 m		TOTAL CIRCULATING VOL 639		BBL / STK		% EFFICIENCY 97			
		605 m		13.375 Intermediate @ 280 m		STORAGE TANKS 90		BBL / MIN 0		STK / MIN			
				Prod. or LNR @ m				GAL / MIN 0		SURFACE TO BIT 0 min			
										BOTTOMS UP 0 min			
										TOT CIRC TIME min			
										ECD ppg/sg			
										0			
MUD PROPERTIES						MUD PROPERTY SPECIFICATIONS							
SAMPLE FROM				Pit		FL		Mud Wt 9.6-9.8 Yld Pt >14 API Loss <=12					
MUD TYPE				CL H		CL H		pH 8.5-9.5 MBT <10 Solids <=3%					
TIME SAMPLE TAKEN				4:30		7:30		MUD COMMENTS					
DRILLING FLUID TEMPERATURE °C (In/Out)				43 46		49 52		Run Centrifuge to maintain mud weight at 9.8 ppg. Added water at 4-5 bbl/hr to help control mud weight. Centrate weight is 9.2 ppg. Cuttings are predominanntly Clays					
TOTAL MEASURED DEPTH ( TMD ) Metres				487		572							
INCLINATION (Deg)						14.48							
WEIGHT ppg / SG				9.8 1.17		9.7 1.16							
FUNNEL VISCOSITY ( sec / qt ) API				45		40		Dilute active system with 90 bbls of 9.4 ppg premixed mud to keep mud weight at 9.8 ppg. Good stead flow of cuttings over shakers, not sticky and travelling freely down stream over shakers. Shakers cleaned up well after 2 x bottoms up circulations at section TD.					
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C				48 35		42 30							
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C				28 21		25 18							
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C				8 6		7 5							
PLASTIC VISCOSITY cP @ 120 °F / 49 °C				13		12							
YIELD POINT ( lb / 100 ft² ) 120 °F / 49 °C				22		18							
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min				7 8 10		5 12 15							
LOW SHEAR RATE VISCOSITY (LSRV)				4		3							
n K ( lb / 100 ft² )				0.46 2.04		0.49 1.46							
API FILTRATE ( cm³ / 30 min. )				11.2		12.8							
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C													
API : HPHT ( Cake / 32nd in. )				1		1							
pH				9.5		9.5							
ALKALINITY MUD ( Pm )				0.88		0.60							
ALKALINITY FILTRATE ( Pf / Mf )				0.60 1.2		0.34 1.4							
CHLORIDE ( mg / L )				65000		43000							
TOTAL HARDNESS AS CALCIUM ( mg / L )													
SULPHITE( mg / L ) / CaCO3 (ppb)						10.0							
KCL / K2CO3/ K2SO4													
K + ( mg / L )				0		0							
PHPA (ppb)								Water Source Water Bor					
METHYLENE BLUE CAPACITY (ppb / % by vol)				5.0 0.6		5.0 0.6		MUD ACCOUNTING (BBLs) SUMMARY					
BENTONITE ADDED (ppb / % by vol)				0.0		0.0		FLUID BUILT FLUID LOSSES Start Vol 807					
OTHER PRODUCTS ADDED (ppb / % by vol)								Drill Water 120 S.C.E. 154 Received 0					
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)								Chemical 7 Discharge 0 Backload 0					
Glycol % v/v				1.5		1.4		Sump/SeaW 0 Downhole 0 Built 127					
OIL ( % by Vol )				0.0		0.0		Other Rec'd 0 Tripping 0 Lost sub 0					
TOTAL WATER ( % by Vol )				91.0		92.0		Other Built 0 Other 0 Lost srf 154					
TOTAL SOLIDS ( % by Vol )				9.0		8.0		TOTAL MUD ON RIG (bbls) : 780					
SAND ( % by Vol )						0.25							
PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown	
Product	UnitSize	Start	Received	Used	Close	Type	Hrs	OF	UF	Analysis Item	Hrs		
Barite BB 1.5MT - Darwi	1500Kg	53	0	8	45	Centrifuge 1	9	9.2	15.2	Drilling	9		
CleanTrol HD	22.7Kg	591	0	7	584					Circulation	3		
NewZan D	25Kg	288	0	3	285					Flow check			
Magnesium Oxide	20Kg Sack	268	0	2	266					Tripping	2		
AvaGlyco LC	208Ltr	83	0	1	82	Shale Shaker #1	2x80,2x100	10		Lay down BHA	2		
Idcide-G50	20Ltr	74	0	1	73	Shale Shaker #2	2x80,2x100	10		Surface String H	2		
TrueScav HD	25Kg	56	0	1	55	Shale Shaker #3	2x80,2x100	10	SOLIDS ANALYSIS				
								Salt %	2.4	HGS %	1.8		
										Turbidity (NTU)	0		
										LGS %	3.8		
										TSS %	0		
								Corrected Solids %	5.6	Drilled Solids%	2.7		
										Conduct. (uS/cm)			
										DO mg/l	0		
						CURRENCY		DAILY COST		CUMULATIVE COSTS			
						AUD		\$12,655.50		\$56,631.50			
Newpark Engineer: Nicholas Doust Budi Tjahyono						Office: 0488013339		Telephone: 0894108202		Fax: 0894108200			



# DAILY MUD VOLUME ACCOUNT

**Date :** 30/09/2023  
**Report No:** 8

**Well Name:** Amungee NW 3H  
**Operator :** Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		120 bbl	11170 bbl	Losses Attributed To Shakers:		65 bbl	215 bbl
Chemical Volume added		7 bbl	48 bbl	Losses To Centrifuge:		23 bbl	23 bbl
Sump recycled water				Losses To Desander/Desilter:		66 bbl	113 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
<b>TOTAL BUILT:</b>		<b>127 bbl</b>	<b>11218 bbl</b>	Other Surface Losses:			
				<b>Surface Losses Subtotal:</b>	<b>154 bbl</b>	<b>351 bbl</b>	

WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	Seepage Losses:			
DAILY BACKLOADED:		0		Lost Circulation:			
DAILY RECEIVED:		0	770	Lost Behind Casing/Left Downhole:			
Cuttings Volume:				Other Sub-Surface Losses:			
				<b>Sub-surface Losses Subtotal:</b>	<b>0 bbl</b>	<b>10337 bbl</b>	
				<b>TOTAL DISPOSED:</b>	<b>154 bbl</b>	<b>10688 bbl</b>	
				<b>Interval losses ( bbl/m ) :</b>	<b>12</b>	<b>98</b>	

## TANK STORAGE VOLUMES

Tank Name	Tank Status	Current	Tank Volumes (bbls)				Comments
			Capacity	MW	(ppg)	MW(sg)	
Sandtrap	Active	23	77	9.7	1.16		CleanTroll HD
Degasser	Active	16	77	9.7	1.16		CleanTroll HD
Desilter	Active	16	77	9.7	1.16		CleanTroll HD
Backflow	Active	16	77	9.7	1.16		CleanTroll HD
Tank#1	Active	56	100	9.7	1.16		CleanTroll HD
Tank#2	Active	56	100	9.7	1.16		CleanTroll HD
Tank#3	Active	55	100	9.7	1.16		CleanTroll HD
Suction#1	Active	55	100	9.7	1.16		CleanTroll HD
Suction#2	Active	54	100	9.7	1.16		CleanTroll HD
Suction#3	Storage		100	12.5	1.5		Cement Spacer
Slug	Storage	90	100	12.5	1.5		Cement Spacer
T/T-1	Active	18	35	9.7	1.16		CleanTroll HD
T/T-2	Active	18	35	9.7	1.16		CleanTroll HD
Frac Tank-1	Active		450	10.3	1.23		CleanTroll HD
Frac Tank-2	Reserve	141	450	10.3	1.23		CleanTroll HD
Frac Tank-3	Reserve		450				

## VOLUME SUMMARY:

	+	-
Starting Volume:	807	
Current Tank Volume:	383	
Mud Volume In Hole(Incl Ri	256	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	291	
Total Built:	127	
Total Storage:	90	
Total Reserve:	141	
Total Disposed:		154
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>780</b>	<b>bbls</b>

## VOLUME BREAKDOWN

### FLUID TYPE VOLUME BREAKDOWN 24hr Consumption

CEMENT SPACER	90	
CLEANTROL HD	36	
CLEANTROLL HD	488	

## Daily Inventory

**Report No:** 8

**Well:** Amungee NW 3H

**Report Date:** 30/09/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	83		87	1	5			82
Barite BB 1.5MT	1500Kg	11		15		4			11
Barite BB 1.5MT - Darwin	1500Kg	53		53	8	8			45
CaCl2 - Prills - bb	1000Kg	190		190					190
Caustic Soda	25Kg Drum	40		42		2			40
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	591		629	7	45			584
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	74		80	1	7			73
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	268		278	2	12			266
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	80		80					80
NewZan D	25Kg	288		323	3	38			285
Omyacarb 2 (bb)	1000Kg	51		51					51
Omyacarb 5 (bb)	1000Kg	2		2					2
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	60		64		4			60
Sugar	25Kg Sack	37		37					37
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	56		63	1	8			55
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	1/10/2023	Section name	8 1/2" Section					
Report	9	Report Depth	m	609	MDBRT	609		TVDBRT
Rig Name / #	469	Prev Report Depth	m	609	MDBRT	609		TVDBRT
Mud Ops start date		Daily metres drilled	0	Report time	23:59	Hr		
Spud date		Section metres drilled	0	Avg ROP	0.0	m/hour		
RT-Ground Level m		Report time activity	Drilling FC and a Shoe track					

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE					DEPTHS/CASING		MUD VOLUME (BBL)		CIRCULATION DATA					
BIT SIZE (") 8.5	PDC Bit - Ulterra	12	12	12	13	13	22.00	Riser Length	m	HOLE VOL 146	MUD INHOLE 122	PUMP SIZE 6 x 11 Inches		CIRCULATION PRESS	psi	
DRILL PIPE SIZE (" ) 5.5	TYPE DP	LENGTH 440 m					Conductor @ 0 m			Active Pits 446	Reserve Pits 572	PUMP MODEL Gardner-Denver	% EFFICIENCY 97	SURFACE TO BIT 0 min		
DRILL PIPE SIZE (" ) 5.5	TYPE HW	LENGTH 29 m					18.625 Surface @ 84 m			TOTAL CIRCULATING VOL 568		BBL / STK	STK / MIN	BOTTOMS UP 0 min		
							13.375 Intermediate @ 280 m							TOT CIRC TIME min		
DRILL COLLAR SIZE ( " ) 6.65	6.5	LENGTH 25 89 m					9.625 Prod. or LNR @ 605 m			STORAGE TANKS 0		BBL / MIN 0	GAL / MIN 0	ECD ppg/sg		0

MUD PROPERTIES										MUD PROPERTY SPECIFICATIONS																																																	
SAMPLE FROM				Pit		Pit		Pit				Mud Wt 9.6-9.8		Yld Pt >14		API Loss <=12																																											
MUD TYPE				CL H		CL H		CL H				pH 8.5-9.5		MBT <10		Solids :=3%																																											
TIME SAMPLE TAKEN				5:15		7:30		23:30				<div>MUD COMMENTS</div> <div>Changed shaker screens to API 170.</div> <div>Mixed 360 bbls of Calcium Chloride (CaCl2) brine for later in the well.</div> <div>Mud weight of 10.2 ppg may not be indicative of entire active system.</div> <div>Will run centrifuge and desilter when drilling formation start</div> <div>OPERATIONAL COMMENTS</div> <div>R/U cementing head. Test lines. Pump cement as per program (150 bbls 12.5 ppg spacer, 84.2 bbls Lead slurries, 52.8 bbls Tail slurries) and displace with 139.7 bbls mud from cement unit. No downhole lost recorded while pumping and displacing cement. Observe spacer contamination with cement but no neat cement return on surface. WOC. P/U and M/U 8 5" MWD BHA. Tripping in hole and tag cmt plug at 578 m. Drill ahead to 583 m at midnight report.</div> <div>Water Source</div> <div>Water Bor</div> <div>MUD ACCOUNTING (BBLs)</div> <div>SUMMARY</div> <table><tr><td colspan="2">FLUID BUILT</td><td colspan="2">FLUID LOSSES</td><td>Start Vol</td><td>780</td></tr><tr><td>Drill Water</td><td>301</td><td>S.C.E.</td><td>0</td><td>Received</td><td>0</td></tr><tr><td>Chemical</td><td>59</td><td>Discharge</td><td>0</td><td>Backload</td><td>0</td></tr><tr><td>Sump/SeaW</td><td>0</td><td>Downhole</td><td>0</td><td>Built</td><td>360</td></tr><tr><td>Other Rec'd</td><td>0</td><td>Tripping</td><td>0</td><td>Lost sub</td><td>0</td></tr><tr><td>Other Built</td><td>0</td><td>Other</td><td>0</td><td>Lost srf</td><td>0</td></tr><tr><td colspan="6">TOTAL MUD ON RIG (bbls) : 1140</td></tr></table>						FLUID BUILT		FLUID LOSSES		Start Vol	780	Drill Water	301	S.C.E.	0	Received	0	Chemical	59	Discharge	0	Backload	0	Sump/SeaW	0	Downhole	0	Built	360	Other Rec'd	0	Tripping	0	Lost sub	0	Other Built	0	Other	0	Lost srf	0	TOTAL MUD ON RIG (bbls) : 1140					
FLUID BUILT		FLUID LOSSES		Start Vol	780																																																						
Drill Water	301	S.C.E.	0	Received	0																																																						
Chemical	59	Discharge	0	Backload	0																																																						
Sump/SeaW	0	Downhole	0	Built	360																																																						
Other Rec'd	0	Tripping	0	Lost sub	0																																																						
Other Built	0	Other	0	Lost srf	0																																																						
TOTAL MUD ON RIG (bbls) : 1140																																																											
DRILLING FLUID TEMPERATURE °C (In/Out)				42				42	42																																																		
TOTAL MEASURED DEPTH ( TMD ) Metres				609		609		583																																																			
INCLINATION (Deg)						15.9		15																																																			
WEIGHT ppg / SG				9.7+	1.17	10.2	1.22	10.1	1.21																																																		
FUNNEL VISCOSITY ( sec / qt ) API				42		41		42																																																			
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C				44	32	42	29	42	30																																																		
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C				26	19	24	18	25	18																																																		
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C				8	6	6	4	7	5																																																		
PLASTIC VISCOSITY cP @ 120 °F / 49 °C				12		13		12																																																			
YIELD POINT ( lb / 100 ft² ) 120 °F / 49 °C				20		16		18																																																			
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min				7	10	14	4	9	12	5	7	9																																															
LOW SHEAR RATE VISCOSITY (LSRV)				4		2		3																																																			
n K ( lb / 100 ft² )				0.46	1.83	0.53	1.04	0.49	1.46																																																		
API FILTRATE ( cm³ / 30 min. )				11.6		12.4		12.2																																																			
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C																																																											
API : HPHT ( Cake / 32nd in. )				1		1		1																																																			
pH				9.0		9.5		9.5																																																			
ALKALINITY MUD ( Pm )				0.46		0.55		0.80																																																			
ALKALINITY FILTRATE ( Pf / Mf )				0.30	1.0	0.34	1.2	0.42	0.9																																																		
CHLORIDE ( mg / L )				42000		42000		42000																																																			
TOTAL HARDNESS AS CALCIUM ( mg / L )																																																											
SULPHITE( mg / L ) / CaCO3 (ppb)					10.0				10.0																																																		
KCL / K2CO3/ K2SO4																																																											
K + ( mg / L )				0		0		0																																																			
PHPA (ppb)																																																											
METHYLENE BLUE CAPACITY (ppb / % by vol)				7.5	0.8	5.0	0.6	7.5	0.8																																																		
BENTONITE ADDED (ppb / % by vol)					0.0		0.0		0.0																																																		
OTHER PRODUCTS ADDED (ppb / % by vol)																																																											
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)																																																											
Glycol % v/v				1.4		1.2		1.2																																																			
OIL ( % by Vol )				0.0		0.0		0.0																																																			
TOTAL WATER ( % by Vol )				92.0		90.0		91.0																																																			
TOTAL SOLIDS ( % by Vol )				8.0		10.0		9.0																																																			
SAND ( % by Vol )				0.1		0.1		0.1																																																			

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT					Time Breakdown			
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs		
CaCl2 - Prills - bb	1000Kg	190	5	20	175	Centrifuge 1	NOV-Big Bowl				Circulation	2		
Sugar	25Kg Sack	37	0	16	21						Cementing	3		
Barite BB 1.5MT - Darwi	1500Kg	45	0	4	41						WOC	11		
Barite BB 1.5MT	1500Kg	11	5	0	16						M/U BHA	5		
CleanTrol HD	22.7Kg	584	200	0	784	Shale Shaker #1	2x80,2x100				Tripping	2		
Magnesium Oxide	20Kg Sack	266	96	0	362	Shale Shaker #2	2x80,2x100				Drilling FC and a	1		
NewSeal 25	25Kg	80	39	0	119	Shale Shaker #3	2x80,2x100		SOLIDS ANALYSIS					
Omyacarb 2 (bb)	1000Kg	51	24	0	75				Salt %	2.4	HGS %	3.7	Turbidity (NTU)	0
Omyacarb 5 (bb)	1000Kg	2	16	0	18						LGS %	3.0	TSS %	0
Soda Ash	25Kg Sack	0	48	0	48				Corrected Solids %	6.7	Drilled Solids%	1.9	Conduct. (uS/cm)	
													DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS				
						AUD		\$29,326.00		\$85,957.50				

# DAILY MUD VOLUME ACCOUNT

**Date :** 1/10/2023  
**Report No:** 9

**Well Name:** Amungee NW 3H  
**Operator :** Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		301 bbl	11471 bbl	Losses Attributed To Shakers:			215 bbl
Chemical Volume added		59 bbl	107 bbl	Losses To Centrifuge:			23 bbl
Sump recycled water				Losses To Desander/Desilter:			113 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
<b>TOTAL BUILT:</b>		<b>360</b> bbl	<b>11578</b> bbl	Other Surface Losses:			
				<b>Surface Losses Subtotal:</b>	<b>0</b> bbl	<b>351</b> bbl	
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE				
DAILY BACKLOADED:		0		Seepage Losses:	<input type="text"/> BBL/HR For <input type="text"/> hr		
DAILY RECEIVED:		0	770	Lost Circulation:			10337
Cuttings Volume:				Lost Behind Casing/Left Downhole:			
				Other Sub-Surface Losses:			
				<b>Sub-surface Losses Subtotal:</b>	<b>0</b> bbl	<b>10337</b> bbl	
				<b>TOTAL DISPOSED:</b>	<b>0</b> bbl	<b>10688</b> bbl	
				<b>Interval losses ( bbl/m ) :</b>	<b>0</b>		

## TANK STORAGE VOLUMES

Tank Name	Tank Status	Current	Tank Volumes (bbls)				Comments
			Capacity	MW	(ppg)	MW(sg)	
Sandtrap	Active	23	77	10.1	1.21		CleanTroll HD
Degasser	Active	16	77	10.1	1.21		CleanTroll HD
Desilter	Active	16	77	10.1	1.21		CleanTroll HD
Backflow	Active	16	77	10.1	1.21		CleanTroll HD
Tank#1	Active	69	100	10.1	1.21		CleanTroll HD
Tank#2	Active	69	100	10.1	1.21		CleanTroll HD
Tank#3	Active	69	100	10.1	1.21		CleanTroll HD
Suction#1	Active	66	100	10.1	1.21		CleanTroll HD
Suction#2	Active	66	100	10.1	1.21		CleanTroll HD
Suction#3	Reserve	71	100	9.8	1.17		CleanTroll HD
Slug	Reserve	90	100	10.8	1.29		CaCl2 Brine
T/T-1	Active	18	35	9.7	1.16		CleanTroll HD
T/T-2	Active	18	35	9.7	1.16		CleanTroll HD
Frac Tank-1	Reserve	270	450	10.8	1.29		CaCl2 Brine
Frac Tank-2	Reserve	141	450	10.3	1.23		CleanTroll HD
Frac Tank-3	Reserve		450				

## VOLUME SUMMARY:

	+	-
Starting Volume:	780	
Current Tank Volume:	446	
Mud Volume In Hole(Incl Ri	122	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	146	
Total Built:	360	
Total Storage:		
Total Reserve:	572	
Total Disposed:		
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>1140</b>	<b>bbls</b>

## VOLUME BREAKDOWN

FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
CACL2 BRINE	360	
CLEANTROL HD	107	
CLEANTROLL HD	551	

# Daily Inventory

**Report No:** 9

**Well:** Amungee NW 3H

**Report Date:** 1/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	82		87		5			82
Barite BB 1.5MT	1500Kg	11	5	20		4			16
Barite BB 1.5MT - Darwin	1500Kg	45		53	4	12			41
CaCl2 - Prills - bb	1000Kg	190	5	195	20	20			175
Caustic Soda	25Kg Drum	40		42		2			40
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	584	200	829		45			784
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	73		80		7			73
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	266	96	374		12			362
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	80	39	119					119
NewZan D	25Kg	285		323		38			285
Omyacarb 2 (bb)	1000Kg	51	24	75					75
Omyacarb 5 (bb)	1000Kg	2	16	18					18
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack		48	48					48
Sodium Bicarbonate	25Kg Sack	60		64		4			60
Sugar	25Kg Sack	37		37	16	16			21
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	55		63		8			55
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	2/10/2023	Section name	8 1/2" Section					
Report	10	Report Depth	m	1243	MDBRT	1213		TVDBRT
Rig Name / #	469	Prev Report Depth	m	609	MDBRT	609		TVDBRT
Mud Ops start date		Daily metres drilled	634	Report time	23:59			Hr
Spud date		Section metres drilled	634	Avg ROP	27.6	m/hour		
RT-Ground Level	m	Report time activity	Drilling					

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE	DEPTHS/CASING	MUD VOLUME (BBL)	CIRCULATION DATA			
BIT SIZE (") 8.5	PDC Bit - Ultterra	12 12 12 13 13 13 0 0 0 0	22.00 Riser Length m	HOLE VOL 292	MUD INHOLE 252	PUMP SIZE 6 x 11 Inches	CIRCULATION PRESS	2000 psi
DRILL PIPE SIZE (") 5.5	TYPE DP	LENGTH 1,097 m	Conductor @ 0 m	Active Pits 396	Reserve Pits 517	PUMP MODEL Gardner-Denver	% EFFICIENCY 97	SURFACE TO BIT 6 min
DRILL PIPE SIZE (") 5.5	TYPE HW	LENGTH 32 m	18.625 Surface @ 84 m	TOTAL CIRCULATING VOL 648		BBL / STK 0.0933	STK / MIN 154	BOTTOMS UP 9 min
DRILL COLLAR SIZE (") 6.65	6.5	LENGTH 25 89 m	13.375 Intermediate @ 280 m	STORAGE TANKS 0		BBL / MIN 14.37	GAL / MIN 604	TOT CIRC TIME 45 min
			9.625 Prod. or LNR @ 605 m			BBL / MIN	GAL / MIN	ECD ppg/sg 10.53 1.26

MUD PROPERTIES										MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM	FL			Pit		FL		FL		Mud Wt	9.6-9.8	Yld Pt	>14	API Loss	<=12
MUD TYPE	CL H			CL H		CL H		CL H		pH	8.5-9.5	MBT	<10	Solids	:=3%
TIME SAMPLE TAKEN	2:30			8:15		14:45		21:00		<div>MUD COMMENTS</div> <div>Add Sodium Bicarb to prevent contamination to the mud as cement being drilled. Run desilter and centrifuge for 3 hours approximately to knock down mud weight from 10.1 ppg to 9.8 ppg. Build 186 bbls Premix with 9.5 pp to dilute mud system and maintain volume. Treated active system with 0.5 ppb Newzan D to increase 6 rpm and 1.8 ppb Cleanrol to reduce fluid loss. Will add Lime to the Active system to reduce progressive gels strenght and Mf as shown on Mud Check #4</div> <div>OPERATIONAL COMMENTS</div> <div>Continue drilling cement and a shoe track from 583 m to to 612 m, 3 m new formation. Circulate till shakers clean and perform FIT with 10.1 ppg mud with EMW = 16.1 ppg (press = 623 psi). Drill ahead 8-1/2" hole rotate (40-60 rpm) and slide to 1243 m at midnight report.</div> <div>Drilling parameters: WOB 15-28, GPM 600, DIFF 400, Tq 4-10 K</div>					
DRILLING FLUID TEMPERATURE °C (In/Out)	42	45	49	52	52	55	54	58							
TOTAL MEASURED DEPTH ( TMD ) Metres	654			783		945		1167							
INCLINATION (Deg)	12.4			13.65		17.9		17.39							
WEIGHT ppg / SG	9.8	1.17	9.9	1.19	10.0	1.20	9.9	1.19							
FUNNEL VISCOSITY ( sec / qt ) API	38			42		42		50							
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C	30	22	59	43	56	40	48	35							
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C	18	13	36	27	35	26	30	22							
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C	5	4	9	7	8	6	8	6							
PLASTIC VISCOSITY cP @ 120 °F / 49 °C	8			16		16		13							
YIELD POINT ( lb / 100 ft <sup>2</sup> ) 120 °F / 49 °C	14			27		24		22							
GEL STRENGTH ( lb / 100 ft <sup>2</sup> ) 10sec/10min/30min	4	9	10	7	17	24	7	18	23						
LOW SHEAR RATE VISCOSITY (LSRV)	3			5		4		4							
n K ( lb / 100 ft <sup>2</sup> )	0.45	1.35	0.46	2.50	0.49	1.94	0.46	2.04							
API FILTRATE ( cm <sup>3</sup> / 30 min. )	13.4			10.1		10.0		9.8							
HPHT FILTRATE ( cm <sup>3</sup> / 30 min. ) °F / °C															
API : HPHT ( Cake / 32nd in. )	1			1		1		1							
pH	10.5			9.5		9.5		8.5							
ALKALINITY MUD ( Pm )	1.20			0.45		0.50		0.10							
ALKALINITY FILTRATE ( Pf / Mf )	0.66	1.3	0.30	1.2	0.40	1.4	0.06								
CHLORIDE ( mg / L )	50000			50000		50000		52000							
TOTAL HARDNESS AS CALCIUM ( mg / L )															
SULPHITE( mg / L ) / CaCO3 (ppb)		10.0						10.0							
KCL / K2CO3/ K2SO4															
K + ( mg / L )	0			0		0		0							
PHPA (ppb)															
METHYLENE BLUE CAPACITY (ppb / % by vol)	5.0	0.6	5.0	0.6	7.5	0.8	7.5	0.8							
BENTONITE ADDED (ppb / % by vol)		0.0		0.0		0.0		0.0							
OTHER PRODUCTS ADDED (ppb / % by vol)															
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)															
Glycol % v/v	1.2			1.2		1.2		1.2							
OIL ( % by Vol )	0.0			0.0		0.0		0.0							
TOTAL WATER ( % by Vol )	91.5			90.0		89.5		91.0							
TOTAL SOLIDS ( % by Vol )	8.5			10.0		10.5		9.0							
SAND ( % by Vol )	0.1			0.2		0.2		0.1							
TOTAL MUD ON RIG (bbls) : 1165															
Water Source Water Bore															
MUD ACCOUNTING (BBLs) SUMMARY															
FLUID BUILT		FLUID LOSSES		Start Vol		1140									
Drill Water	170	S.C.E.	161	Received	0										
Chemical	16	Discharge	0	Backload	0										
Sump/SeaW	0	Downhole	0	Built	186										
Other Rec'd	0	Tripping	0	Lost sub	0										
Other Built	0	Other	0	Lost srf	161										

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT				Time Breakdown	
Product	UnitSize	Start	Received	Used	Close	Type	Hrs	OF	UF	Analysis Item	Hrs
CleanTrol HD	22.7Kg	784	0	44	740	Centrifuge 1	3	9	18.5	Drilling	23
NewZan D	25Kg	285	0	12	273					Circulation	1
Sodium Bicarbonate	25Kg Sack	60	0	12	48						
AvaGlyco LC	208Ltr	82	0	3	79						
Idcide-G50	20Ltr	73	0	3	70	Shale Shaker #1	4x170	24			
CaCl2 - Prills - bb	1000Kg	175	0	2	173	Shale Shaker #2	4x170	24			
						Shale Shaker #3	4x170	24			
						SOLIDS ANALYSIS					
						Salt %	2.9	HGS %	2.2	Turbidity (NTU)	0
								LGS %	3.9	TSS %	0
						Corrected Solids %	6.1	Drilled Solids%	2.8	Conduct. (uS/cm)	
										DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS	
						AUD		\$16,980.00		\$102,937.50	





DAILY MUD VOLUME ACCOUNT

Date : 2/10/2023

Report No: 10

Well Name: Amungee NW 3H

Operator : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		170 bbl	11641 bbl	Losses Attributed To Shakers:		85 bbl	300 bbl
Chemical Volume added		16 bbl	123 bbl	Losses To Centrifuge:		9 bbl	32 bbl
Sump recycled water				Losses To Desander/Desilter:		67 bbl	179 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
TOTAL BUILT:		186 bbl	11764 bbl	Other Surface Losses:			
				Surface Losses Subtotal:		161 bbl	511 bbl
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	Seepage Losses: <input type="text"/> BBL/HR For <input type="text"/> hr			
DAILY BACKLOADED:		0		Lost Circulation:			10337 bbl
DAILY RECEIVED:		0	770 bbl	Lost Behind Casing/Left Downhole:			
Cuttings Volume:				Other Sub-Surface Losses:			
				Sub-surface Losses Subtotal:		0 bbl	10337 bbl
TOTAL DISPOSED:		161 bbl	10848 bbl				
Interval losses ( bbl/m ) :		2	20				

TANK STORAGE VOLUMES							TANK VOLUMES (bbls)	
Tank Name	Tank Status	Current	Capacity	MW	(ppg)	MW (sg)	Comments	
Sandtrap	Active	24	77	9.85	1.18		CleanTroll HD	
Degasser	Active	17	77	9.85	1.18		CleanTroll HD	
Desilter	Active	17	77	9.85	1.18		CleanTroll HD	
Backflow	Active	17	77	9.85	1.18		CleanTroll HD	
Tank#1	Active	56	100	9.85	1.18		CleanTroll HD	
Tank#2	Active	56	100	9.85	1.18		CleanTroll HD	
Tank#3	Active	69	100	9.85	1.18		CleanTroll HD	
Suction#1	Active	52	100	9.85	1.18		CleanTroll HD	
Suction#2	Active	52	100	9.85	1.18		CleanTroll HD	
Suction#3	Reserve	32	100	9.8	1.17		CleanTrol HD	
Slug	Reserve	85	100	9.4	1.13		CleanTrol HD	
T/T-1	Active	18	35	9.85	1.18		CleanTrol HD	
T/T-2	Active	18	35	9.85	1.18		CleanTrol HD	
Frac Tank-1	Reserve	400	450	10.6	1.27		CaCl2 Brine	
Frac Tank-2	Reserve	0	450	10.3	1.23		CleanTroll HD	
Frac Tank-3	Reserve		450					

VOLUME SUMMARY:		+	-
Starting Volume:		1140	
Current Tank Volume:		396	
Mud Volume In Hole(Incl Ri		252	
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:		292	
Total Built:		186	
Total Storage:			
Total Reserve:		517	
Total Disposed:			161
Whole Mud Backloaded:			
Whole Mud Received:			
TOTAL MUD AT RIGSITE		1165	bbls

VOLUME BREAKDOWN		
FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
CACL2 BRINE	400	
CLEANTROL HD	153	
CLEANTROLL HD	360	

# Daily Inventory

**Report No:** 10

**Well:** Amungee NW 3H

**Report Date:** 2/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	82		87	3	8			79
Barite BB 1.5MT	1500Kg	16		20		4			16
Barite BB 1.5MT - Darwin	1500Kg	41		53		12			41
CaCl2 - Prills - bb	1000Kg	175		195	2	22			173
Caustic Soda	25Kg Drum	40		42		2			40
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	784		829	44	89			740
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	73		80	3	10			70
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	38		38					38
Magnesium Oxide	20Kg Sack	362		374		12			362
NDFT 325	208Ltr	7		7					7
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	285		323	12	50			273
Omyacarb 2 (bb)	1000Kg	75		75					75
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	60		64	12	16			48
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	55		63		8			55
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	3/10/2023	Section name	8 1/2" Section					
Report	11	Report Depth	m	1426	MDBRT	1388		TVDBRT
Rig Name / #	469	Prev Report Depth	m	1243	MDBRT	1213		TVDBRT
Mud Ops start date		Daily metres drilled		183	Report time	23:59 Hr		
Spud date		Section metres drilled		817	Avg ROP	12.2		m/hour
RT-Ground Level m		Report time activity	Drilling					

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE	DEPTHS/CASING	MUD VOLUME (BBL)	CIRCULATION DATA			
BIT SIZE (") 8.5	PDC Bit - VAREL	12 12 12 12 12 11 0 0 0 0	22.00 Riser Length m	HOLE VOL 334	MUD INHOLE 283	PUMP SIZE 6 x 11 Inches	CIRCULATION PRESS	psi
DRILL PIPE SIZE (") 5.5	TYPE DP	LENGTH 1,097 m	Conductor @ 0 m	Active Pits 425	Reserve Pits 403	PUMP MODEL Gardner-Denver	% EFFICIENCY 97	SURFACE TO BIT 0 min
DRILL PIPE SIZE (") 5.5	TYPE HW	LENGTH 215 m	18.625 Surface @ 84 m	TOTAL CIRCULATING VOL 708		BBL / STK	STK / MIN	BOTTOMS UP 0 min
DRILL COLLAR SIZE (") 6.65	6.5	LENGTH 25 89 m	13.375 Intermediate @ 280 m	STORAGE TANKS 0		BBL / MIN	GAL / MIN	TOT CIRC TIME min
			9.625 Prod. or LNR @ 605 m			BBL / MIN	GAL / MIN	ECD ppg/sg
						0	0	0

MUD PROPERTIES						MUD PROPERTY SPECIFICATIONS						
SAMPLE FROM	Pit		Pit				Mud Wt	9.6-9.8	Yld Pt	>14	API Loss	<=12
MUD TYPE	CL H		CL H				pH	8.5-9.5	MBT	<10	Solids	:=3%
TIME SAMPLE TAKEN	3:00		8:30				MUD COMMENTS					
DRILLING FLUID TEMPERATURE °C (In/Out)	54	59	56	61								
TOTAL MEASURED DEPTH ( TMD ) Metres	1303		1397				Build 80 bbls premix with 9.4 ppg and transfer across to the active pit.  Treated active system with 0.5 ppb Newzan to increase 6 rpm. Treated active with  Ran NOV centrifuge to cut mud weight from 10 ppg to 9.9 ppg. Minimal solids discharged due to majority of weight from chlorides. Run water at 2 BPH to hydrate active mud.					
INCLINATION (Deg)	17		17									
WEIGHT ppg / SG	9.9	1.19	10.0	1.20								
FUNNEL VISCOSITY ( sec / qt ) API	46		42									
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C	44	30	47	34								
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C	24	16	28	21								
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C	5	4	7	5								
PLASTIC VISCOSITY cP @ 120 °F / 49 °C	14		13									
YIELD POINT ( lb / 100 ft <sup>2</sup> ) 120 °F / 49 °C	16		21									
GEL STRENGTH ( lb / 100 ft <sup>2</sup> ) 10sec/10min/30min	5	13	18	7	19	24						
LOW SHEAR RATE VISCOSITY (LSRV)	3		3				OPERATIONAL COMMENTS					
n K ( lb / 100 ft <sup>2</sup> )	0.55	0.96	0.47	1.85								
API FILTRATE ( cm <sup>3</sup> / 30 min. )	9.4		11.1				Drill ahead 8.5" directional hole with Rotate and Slide as required from 1243 to 1404 m, Moroak fmt. Circulate twice bottoms up. Flow check, static. Pump slug. POOH from 1404 m to surface to pick new 8.5" bit and BHA. RIH with new bit and drill ahead 8.5" directional from 1404 to 1426 m at midnight report.					
HPHT FILTRATE ( cm <sup>3</sup> / 30 min. ) °F / °C												
API : HPHT ( Cake / 32nd in. )	1		1									
pH	9.0		9.5									
ALKALINITY MUD ( Pm )	0.40		0.45									
ALKALINITY FILTRATE ( Pf / Mf )	0.12	0.5	0.30	1.2								
CHLORIDE ( mg / L )	65000		60000									
TOTAL HARDNESS AS CALCIUM ( mg / L )												
SULPHITE( mg / L ) / CaCO3 (ppb)		5.0		5.0								
KCL / K2CO3/ K2SO4												
K + ( mg / L )	0		0				Water Source		Water Bore			
PHPA (ppb)							MUD ACCOUNTING (BBLs)					
METHYLENE BLUE CAPACITY (ppb / % by vol)	7.5	0.8										
BENTONITE ADDED (ppb / % by vol)		0.0		0.0			FLUID BUILT		FLUID LOSSES		Start Vol	1166
OTHER PRODUCTS ADDED (ppb / % by vol)							Drill Water	50	S.C.E.	115	Received	0
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)							Chemical	10	Discharge	0	Backload	0
Glycol % v/v	1.2		1.1				Sump/SeaW	0	Downhole	0	Built	60
OIL ( % by Vol )	0.0		0.0				Other Rec'd	0	Tripping	0	Lost sub	0
TOTAL WATER ( % by Vol )	91.0		90.8				Other Built	0	Other	0	Lost srf	115
TOTAL SOLIDS ( % by Vol )	9.0		9.2				TOTAL MUD ON RIG (bbls) : 1111					
SAND ( % by Vol )	0.1		0.25									

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown		
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs		
NewZan D	25Kg	273	0	9	264	Centrifuge 1	NOV-Big Bowl	10	9.4	17.6	Drilling	15		
CleanTrol HD	22.7Kg	740	0	8	732						Circulation	1		
Lime 25 Kg	25Kg	38	0	8	30						Flow check			
Magnesium Oxide	20Kg Sack	362	0	4	358						Tripping	4		
Barite BB 1.5MT - Darwi	1500Kg	41	0	2	39	Shale Shaker #1	4x170	15			M/U BHA	4		
AvaGlyco LC	208Ltr	79	0	1	78	Shale Shaker #2	4x170	15						
Caustic Soda	25Kg Drum	40	0	1	39	Shale Shaker #3	4x170	15	SOLIDS ANALYSIS					
Idcide-G50	20Ltr	70	0	1	69				Salt %	3.4	HGS %	2.6	Turbidity (NTU)	0
NDFT 325	208Ltr	7	0	1	6						LGS %	3.2	TSS %	0
									Corrected Solids %	5.8	Drilled Solids%	2.7		
													Conduct. (uS/cm)	
													DO mg/l	0
						CURRENCY		DAILY COST			CUMULATIVE COSTS			
						AUD		\$10,759.00			\$113,696.50			

# DAILY MUD VOLUME ACCOUNT

**Date** : 3/10/2023  
**Report No:** 11

**Well Name:** Amungee NW 3H  
**Operator** : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		50 bbl	11691 bbl	Losses Attributed To Shakers:		79 bbl	379 bbl
Chemical Volume added		10 bbl	133 bbl	Losses To Centrifuge:		36 bbl	68 bbl
Sump recycled water				Losses To Desander/Desilter:			179 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
<b>TOTAL BUILT:</b>		<b>60</b> bbl	<b>11824</b> bbl	Other Surface Losses:			
				<b>Surface Losses Subtotal:</b>		<b>115</b> bbl	<b>626</b> bbl
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE				
DAILY BACKLOADED:		0		Seepage Losses:	<input type="text"/> BBL/HR For <input type="text"/> hr		
DAILY RECEIVED:		0	770	Lost Circulation:			10337
Cuttings Volume:				Lost Behind Casing/Left Downhole:			
				Other Sub-Surface Losses:			
				<b>Sub-surface Losses Subtotal:</b>		<b>0</b> bbl	<b>10337</b> bbl
				<b>TOTAL DISPOSED:</b>		<b>115</b> bbl	<b>10963</b> bbl
				<b>Interval losses ( bbl/m ) :</b>		<b>4</b>	<b>41</b>

## TANK STORAGE VOLUMES

Tank Name	Tank Status	Current	Tank Volumes (bbls)				Comments
			Capacity	MW	(ppg)	MW(sg)	
Sandtrap	Active	24	77	9.85	1.18		CleanTroll HD
Degasser	Active	17	77	9.85	1.18		CleanTroll HD
Desilter	Active	17	77	9.85	1.18		CleanTroll HD
Backflow	Active	17	77	9.85	1.18		CleanTroll HD
Tank#1	Active	65	100	9.85	1.18		CleanTroll HD
Tank#2	Active	65	100	9.85	1.18		CleanTroll HD
Tank#3	Active	64	100	9.85	1.18		CleanTroll HD
Suction#1	Active	61	100	9.85	1.18		CleanTroll HD
Suction#2	Active	59	100	9.85	1.18		CleanTroll HD
Suction#3	Reserve	18	100	9.8	1.17		CleanTrol HD
Slug	Reserve	25	100	12	1.44		CleanTrol HD
T/T-1	Active	18	35	9.85	1.18		CleanTrol HD
T/T-2	Active	18	35	9.85	1.18		CleanTrol HD
Frac Tank-1	Reserve	360	450	10.6	1.27		CaCl2 Brine
Frac Tank-2	Reserve	0	450				
Frac Tank-3	Reserve		450				

## VOLUME SUMMARY:

	+	-
Starting Volume:	1166	
Current Tank Volume:	425	
Mud Volume In Hole(Incl Ri	283	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	334	
Total Built:	60	
Total Storage:		
Total Reserve:	403	
Total Disposed:		115
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>1111</b>	<b>bbls</b>

## VOLUME BREAKDOWN

FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
	0	
CACL2 BRINE	360	
CLEANTROL HD	79	
CLEANTROLL HD	389	

## Daily Inventory

**Report No:** 11

**Well:** Amungee NW 3H

**Report Date:** 3/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	79		87	1	9			78
Barite BB 1.5MT	1500Kg	16		20		4			16
Barite BB 1.5MT - Darwin	1500Kg	41		53	2	14			39
CaCl2 - Prills - bb	1000Kg	173		195		22			173
Caustic Soda	25Kg Drum	40		42	1	3			39
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	740		829	8	97			732
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	70		80	1	11			69
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	38		38	8	8			30
Magnesium Oxide	20Kg Sack	362		374	4	16			358
NDFT 325	208Ltr	7		7	1	1			6
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	273		323	9	59			264
Omyacarb 2 (bb)	1000Kg	75		75					75
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	48		64		16			48
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	55		63		8			55
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	4/10/2023	Section name	8 1/2" Section					
Report	12	Report Depth	m	1753	MDBRT	1699		TVDBRT
Rig Name / #	469	Prev Report Depth	m	1426	MDBRT	1388		TVDBRT
Mud Ops start date		Daily metres drilled		327	Report time	23:59 Hr		
Spud date		Section metres drilled		1144	Avg ROP	14.2		m/hour
RT-Ground Level m		Report time activity	Circulation					

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE	DEPTHS/CASING	MUD VOLUME (BBL)	CIRCULATION DATA			
BIT SIZE (") 8.5	PDC Bit - VAREL	12 12 12 12 12	22.00 Riser Length	HOLE VOL 410	MUD INHOLE 347	PUMP SIZE 6 x 11 Inches	CIRCULATION PRESS	psi
DRILL PIPE SIZE (" ) 5.5	TYPE DP	LENGTH 1,480 m	Conductor @ 0 m	Active Pits 407	Reserve Pits 439	PUMP MODEL Gardner-Denver	% EFFICIENCY 97	SURFACE TO BIT 0 min
DRILL PIPE SIZE (" ) 5.5	TYPE HW	LENGTH 48 m	18.625 Surface @ 84 m	TOTAL CIRCULATING VOL 754		BBL / STK	STK / MIN	BOTTOMS UP 0 min
DRILL COLLAR SIZE (" ) 6.65	6.5	LENGTH 49 176 m	13.375 Intermediate @ 280 m	STORAGE TANKS 0		BBL / MIN 0	GAL / MIN 0	TOT CIRC TIME min
			9.625 Prod. or LNR @ 605 m					ECD ppg/sg 0

MUD PROPERTIES										MUD PROPERTY SPECIFICATIONS																			
SAMPLE FROM	Pit			Pit			FL			Pit			Mud Wt	9.6-9.8	Yld Pt	>14	API Loss	<=12											
MUD TYPE	CL H			CL H			CL H			CL H			pH	8.5-9.5	MBT	<10	Solids	:=3%											
TIME SAMPLE TAKEN	3:00			8:30			14:15			22:30			MUD COMMENTS																
DRILLING FLUID TEMPERATURE °C (In/Out)	55	59		59	65		60	65		62	68																		
TOTAL MEASURED DEPTH ( TMD ) Metres	1486			1564			1646			1753			Build 120 bbls premix mud of 9.1 ppg. Transfer across slowly to active to keep mud weight at 10.0 ppg Run water at 2 bbl/hr to Active for mud hydration. 3 ppb OM2 added to mud system for bridging in Moroak Sandstone. Treated active with 1 ppb NDFT325 corrosion inhibitor.qg Run Desilter at 2:30 hrs. Mud weight under the Cones = 13.2 ppg. Ran centrifuge for 3.5 hrs with centrate at 9.7 ppg. Increase mud weight from 10.1 to 10.6 ppg with Calcium Chloride and Barite. BHCT = 70 Deg Centigrade at 3:00 hrs																
INCLINATION (Deg)	17			17			17																						
WEIGHT ppg / SG	10.0	1.20		10.0	1.20		10.0	1.20		10.6	1.27																		
FUNNEL VISCOSITY ( sec / qt ) API	48			47			49			47																			
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C	50	35		50	35		50	35		58	40																		
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C	29	21		29	21		28	20		32	22																		
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C	8	6		7	5		7	5		8	6																		
PLASTIC VISCOSITY cP @ 120 °F / 49 °C	15			15			15			18																			
YIELD POINT ( lb / 100 ft² ) 120 °F / 49 °C	20			20			20			22																			
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min	6	16		5	16	23	5	15	23	7	19	26																	
LOW SHEAR RATE VISCOSITY (LSRV)	4			3			3			4																			
n K ( lb / 100 ft² )	0.51	1.42		0.51	1.42		0.51	1.42		0.54	1.42		OPERATIONAL COMMENTS																
API FILTRATE ( cm³ / 30 min. )	11.2			12.2			12.6			11.8																			
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C													Continue drilling 8.5" directional hole from 1426 to 1753 m. Circulate 1.5 bottoms up and shakers clean. Flow check at report time, 24:00 hrs.  Drilling parameters: WOB 20-34, RPM 80-100 GPM 650, Off Btm 2400, Diff 300, Torque Off 9 Tq on 16																
API : HPHT ( Cake / 32nd in. )	1			1			1			1																			
pH	9.5			9.5			9.0			9.0																			
ALKALINITY MUD ( Pm )	0.86			0.72			0.73			0.42																			
ALKALINITY FILTRATE ( Pf / Mf )	0.57	1.7		0.50	1.7		0.58	1.7		0.26	1.2																		
CHLORIDE ( mg / L )	58000			50000			55000			69000																			
TOTAL HARDNESS AS CALCIUM ( mg / L )																													
SULPHITE( mg / L ) / CaCO3 (ppb)		7.5									5.0																		
KCL / K2CO3/ K2SO4																													
K + ( mg / L )	0			0			0			0																			
PHPA (ppb)													Water Source Water Bore																
METHYLENE BLUE CAPACITY (ppb / % by vol)	7.5	0.8		7.5	0.8		5.0	0.6		7.5	0.8																		
BENTONITE ADDED (ppb / % by vol)		0.0			0.0			0.0			0.0		MUD ACCOUNTING (BBLs) SUMMARY																
OTHER PRODUCTS ADDED (ppb / % by vol)																													
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)													TOTAL MUD ON RIG (bbls) : 1193																
Glycol % v/v	1.2			1.1			1.7			1.7																			
OIL ( % by Vol )	0.0			0.0			0.0			0.0																			
TOTAL WATER ( % by Vol )	90.5			90.5			90.5			88.4																			
TOTAL SOLIDS ( % by Vol )	9.5			9.5			9.5			11.6																			
SAND ( % by Vol )	0.1			0.1			0.1			0.1																			
																		FLUID BUILT				FLUID LOSSES				Start Vol		1111	
																		Drill Water		65	S.C.E.		18	Received		0			
																		Chemical		35	Discharge		0	Backload		0			
																		Sump/SeaW		0	Downhole		0	Built		100			
													Other Rec'd		0	Tripping		0	Lost sub		0								
													Other Built		0	Other		0	Lost srf		18								

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown		
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs		
CleanTrol HD	22.7Kg	732	0	12	720	Centrifuge 1	NOV-Big Bowl	4	9.7	15.2	Drilling	23		
AvaGlyco LC	208Ltr	78	0	7	71						Circulation	1		
Magnesium Oxide	20Kg Sack	358	0	6	352									
NewZan D	25Kg	264	0	6	258									
Barite BB 1.5MT - Darwi	1500Kg	39	0	5	34	Shale Shaker #1	4x170	24						
CaCl2 - Prills - bb	1000Kg	173	0	3	170	Shale Shaker #2	4x170	24						
Idcide-G50	20Ltr	69	0	2	67	Shale Shaker #3	4x170	24	SOLIDS ANALYSIS					
NDFT 325	208Ltr	6	0	1	5				Salt %	3.8	HGS %	4.6	Turbidity (NTU)	0
Omyacarb 2 (bb)	1000Kg	75	0	1	74						LGS %	3.2	TSS %	0
									Corrected Solids %	7.8	Drilled Solids%	2.7	Conduct. (uS/cm)	
													DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS				
						AUD		\$23,778.50		\$137,475.00				





# DAILY MUD VOLUME ACCOUNT

Date : 4/10/2023  
Report No: 12

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		65 bbl	11756 bbl	Losses Attributed To Shakers:		13 bbl	392 bbl
Chemical Volume added		35 bbl	168 bbl	Losses To Centrifuge:		5 bbl	73 bbl
Sump recycled water				Losses To Desander/Desilter:			179 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
TOTAL BUILT:		100 bbl	11924 bbl	Other Surface Losses:			
				Surface Losses Subtotal:		18 bbl	645 bbl
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	Seepage Losses: <input type="text"/> BBL/HR For <input type="text"/> hr			
DAILY BACKLOADED:		0		Lost Circulation:			10337 bbl
DAILY RECEIVED:		0	770 bbl	Lost Behind Casing/Left Downhole:			
Cuttings Volume:				Other Sub-Surface Losses:			
				Sub-surface Losses Subtotal:		0 bbl	10337 bbl
				TOTAL DISPOSED:		18 bbl	10981 bbl
				Interval losses ( bbl/m ) :		3	34

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	23	77	10.55	1.26	CleanTroll HD
Degasser	Active	17	77	10.55	1.26	CleanTroll HD
Desilter	Active	17	77	10.55	1.26	CleanTroll HD
Backflow	Active	17	77	10.55	1.26	CleanTroll HD
Tank#1	Active	57	100	10.55	1.26	CleanTroll HD
Tank#2	Active	58	100	10.55	1.26	CleanTroll HD
Tank#3	Active	48	100	10.55	1.26	CleanTroll HD
Suction#1	Active	57	100	10.55	1.26	CleanTroll HD
Suction#2	Active	56	100	10.55	1.26	CleanTroll HD
Suction#3	Reserve	79	100	9.8	1.17	CleanTrol HD
Slug	Reserve	40	100	12.8	1.53	CleanTrol HD
F/L	Active	15	10	10.55	1.26	
T/T-1	Active	21	35	10.55	1.26	CleanTrol HD
T/T-2	Active	21	35	10.55	1.26	CleanTrol HD
Frac Tank-1	Reserve	320	450	10.6	1.27	CaCl2 Brine
Frac Tank-2	Reserve	0	450			
Frac Tank-3	Reserve		450			

VOLUME SUMMARY:		+	-
Starting Volume:		1111	
Current Tank Volume:		407	
Mud Volume In Hole(Incl Ri		347	
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:		410	
Total Built:		100	
Total Storage:			
Total Reserve:		439	
Total Disposed:			18
Whole Mud Backloaded:			
Whole Mud Received:			
TOTAL MUD AT RIGSITE		1193	bbls
VOLUME BREAKDOWN			
FLUID TYPE VOLUME BREAKDOWN 24hr Consumption			
	15		
CACL2 BRINE	320		
CLEANTROL HD	161		
CLEANTROLL HD	350		

# Daily Inventory

**Report No:** 12

**Well:** Amungee NW 3H

**Report Date:** 4/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	78		87	7	16			71
Barite BB 1.5MT	1500Kg	16		20		4			16
Barite BB 1.5MT - Darwin	1500Kg	39		53	5	19			34
CaCl2 - Prills - bb	1000Kg	173		195	3	25			170
Caustic Soda	25Kg Drum	39		42		3			39
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	732		829	12	109			720
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	69		80	2	13			67
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	30		38		8			30
Magnesium Oxide	20Kg Sack	358		374	6	22			352
NDFT 325	208Ltr	6		7	1	2			5
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	264		323	6	65			258
Omyacarb 2 (bb)	1000Kg	75		75	1	1			74
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	20		20					20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	48		64		16			48
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	22		22					22
TrueScav HD	25Kg	55		63		8			55
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	5/10/2023	Section name	8 1/2" Section				
Report	13	Report Depth	m	1815	MDBRT	1770	TVDBRT
Rig Name / #	469	Prev Report Depth	m	1753	MDBRT	1699	TVDBRT
Mud Ops start date		Daily metres drilled	62	Report time	23:59 Hr		
Spud date		Section metres drilled	1206	Avg ROP	5.0	m/hour	
RT-Ground Level	m	Report time activity	Drilling				

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE	DEPTHS/CASING	MUD VOLUME (BBL)	CIRCULATION DATA			
BIT SIZE (") 8.5	Baker Hughes	12 12 12 12 12	22.00 Riser Length	HOLE VOL 424	MUD INHOLE 355	PUMP SIZE 6 x 11 Inches	CIRCULATION PRESS 2000	psi
DRILL PIPE SIZE (") 5.5	TYPE DP	LENGTH 1,491 m	Conductor @ 0 m	Active Pits 470	Reserve Pits 361	PUMP MODEL Gardner-Denver	% EFFICIENCY 97	SURFACE TO BIT 8 min
DRILL PIPE SIZE (") 5.5	TYPE HW	LENGTH 48 m	18.625 Surface @ 84 m	TOTAL CIRCULATING VOL 825		BBL / STK 0.0933	STK / MIN 155	BOTTOMS UP 12 min
DRILL COLLAR SIZE (") 6.65	6.5	LENGTH 33 243 m	13.375 Intermediate @ 280 m	STORAGE TANKS 0		BBL / MIN 14.47	GAL / MIN 608	TOT CIRC TIME 57 min
			9.625 Prod. or LNR @ 605 m			BBL / MIN	GAL / MIN	ECD ppg/sg 11.54 1.38

MUD PROPERTIES	MUD PROPERTY SPECIFICATIONS
----------------	-----------------------------

SAMPLE FROM	Pit		Pit		FL		FL		Mud Wt	9.6-9.8	Yld Pt	>14	API Loss	<=12				
MUD TYPE	CL H		CL H		CL H		CL H		pH	8.5-9.5	MBT	<10	Solids	:=3%				
TIME SAMPLE TAKEN	3:00		7:30		14:45		22:00		MUD COMMENTS									
DRILLING FLUID TEMPERATURE °C (In/Out)	54				56	61	57	63	Streaming in water at 3 bbls per minute to counter evaporation and rising gel strengths. Mud weight increased due to slugs.									
TOTAL MEASURED DEPTH ( TMD ) Metres	1753	1753		1766		1804												
INCLINATION (Deg)	18					4												
WEIGHT ppg / SG	10.6	1.27	10.6	1.27	10.9	1.31	11.0	1.32	Charged off 8 drums of Radiagreen EME Salt which were sent to Shenandoah S1-1H. 1 x TEA drum used for pilot testing.									
FUNNEL VISCOSITY ( sec / qt ) API	48	49		49		47												
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C	58	41	59	39	54	38	50	34										
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C	32	22	31	20	30	21	29	20	OPERATIONAL COMMENTS									
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C	7	5	5	4	7	5	7	5										
PLASTIC VISCOSITY cP @ 120 °F / 49 °C	17	20		16		16												
YIELD POINT ( lb / 100 ft² ) 120 °F / 49 °C	24	19		22		18		Pump Slug. TOOHH from 1753 to 1523 m. Build new slug and pump. TOOHH from 1523 to 556 m. Flow check, well static. TOOHH from from 556 m to surface to lay down BHA and DC. P/U and M/U new BHA post Moroak fmt. RIH to 300 m and shallow test. Trouble shoot directional MWD tools. RIH. Drill ahead 8.5" directional hole from 1753 to 1815 m with Slide more predominantly to Rotate at report time, 24:00 hrs.										
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min	6	19	17	5	14	23	7							24	36	6	19	27
LOW SHEAR RATE VISCOSITY (LSRV)	3	3		3		3												
n K ( lb / 100 ft² )	0.50	1.81	0.60	0.94	0.51	1.61	0.56	1.06	Water Source									
API FILTRATE ( cm³ / 30 min. )	12.0	12.6		10.8		11.2												
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C																		
API : HPHT ( Cake / 32nd in. )	1	1		1		1		MUD ACCOUNTING (BBLs)										
pH	9.0	0.32		0.42		0.36												
ALKALINITY MUD ( Pm )	0.46	0.32		0.42		0.36												
ALKALINITY FILTRATE ( Pf / Mf )	0.22	1.1	0.20	1.4	0.35	2.3	0.28	1.0	SUMMARY									
CHLORIDE ( mg / L )	69000	62000		72500		75000												
TOTAL HARDNESS AS CALCIUM ( mg / L )																		
SULPHITE( mg / L ) / CaCO3 (ppb)		5.0						10.0	FLUID BUILT									
KCL / K2CO3/ K2SO4																		
K + ( mg / L )	0	0		0		0												
PHPA (ppb)									FLUID LOSSES									
METHYLENE BLUE CAPACITY (ppb / % by vol)	7.5	0.8	5.0	0.6	5.0	0.6	7.5	0.8										
BENTONITE ADDED (ppb / % by vol)		0.0	0.0		0.0		0.0											
OTHER PRODUCTS ADDED (ppb / % by vol)									Start Vol									
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)																		
Glycol % v/v	1.7	1.8		1.7		1.7												
OIL ( % by Vol )	0.0	0.0		0.0		0.0		Received										
TOTAL WATER ( % by Vol )	88.4	86.4		86.0		86.4												
TOTAL SOLIDS ( % by Vol )	11.6	13.6		14.0		13.6												
SAND ( % by Vol )	0.1	0.1		0.1		0.1		Backload										
TOTAL MUD ON RIG (bbls) : 1186																		
								Built										
								Lost sub										
								Lost srf										

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT				Time Breakdown	
Product	UnitSize	Start	Received	Used	Close	Type	Hrs	OF	UF	Analysis Item	Hrs
Radiagreen EME	175Ltr	20	0	8	12	Centrifuge 1	NOV-Big Bowl			Tripping	7
Barite BB 1.5MT - Darwi	1500Kg	34	0	2	32					M/U BHA	3
TEA (230 KG)	230Kg	22	0	1	21					Trouble Shoot	2
Barite BB 1.5MT	1500Kg	16	45	0	61					Drilling	12
						Shale Shaker #1	4x170	13			
						Shale Shaker #2	4x170	13			
						Shale Shaker #3	4x170	13			
						SOLIDS ANALYSIS					
						Salt %	4.1	HGS %	5.9	Turbidity (NTU)	0
								LGS %	3.6	TSS %	0
						Corrected Solids %	9.5	Drilled Solids%	2.5	Conduct. (uS/cm)	
										DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS	
						AUD		\$20,479.60		\$157,954.60	



# DAILY MUD VOLUME ACCOUNT

Date : 5/10/2023  
Report No: 13

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		16 bbl	11772 bbl	Losses Attributed To Shakers:		37 bbl	429 bbl
Chemical Volume added		14 bbl	182 bbl	Losses To Centrifuge:			73 bbl
Sump recycled water				Losses To Desander/Desilter:			179 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
TOTAL BUILT:		30 bbl	11954 bbl	Other Surface Losses:			
				Surface Losses Subtotal:		37 bbl	682 bbl
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	Seepage Losses:			
DAILY BACKLOADED:		0		Lost Circulation:			10337 bbl
DAILY RECEIVED:		0	770 bbl	Lost Behind Casing/Left Downhole:			
Cuttings Volume:				Other Sub-Surface Losses:			
				Sub-surface Losses Subtotal:		0 bbl	10337 bbl
				TOTAL DISPOSED:		37 bbl	11018 bbl
				Interval losses ( bbl/m ) :		3	36

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11	1.32	CleanTroll HD
Degasser	Active	18	77	11	1.32	CleanTroll HD
Desilter	Active	19	77	11	1.32	CleanTroll HD
Backflow	Active	18	77	11	1.32	CleanTroll HD
Tank#1	Active	72	100	11	1.32	CleanTroll HD
Tank#2	Active	72	100	11	1.32	CleanTroll HD
Tank#3	Active	69	100	11	1.32	CleanTroll HD
Suction#1	Active	67	100	11	1.32	CleanTroll HD
Suction#2	Active	65	100	11	1.32	CleanTroll HD
Suction#3	Reserve	46	100	9.8	1.17	CleanTrol HD
Slug	Reserve	75	100	9.7	1.16	CleanTrol HD
F/L	Active	30	10	11	1.32	CleanTrol HD
T/T-1	Active	8	35	11	1.32	CleanTrol HD
T/T-2	Active	8	35	11	1.32	CleanTrol HD
Frac Tank-1	Reserve	240	450	10.6	1.27	CaCl2 Brine
Frac Tank-2	Reserve	0	450			
Frac Tank-3	Reserve		450			

VOLUME SUMMARY:		+	-
Starting Volume:		1193	
Current Tank Volume:		470	
Mud Volume In Hole(Incl Ri		355	
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:		424	
Total Built:		30	
Total Storage:			
Total Reserve:		361	
Total Disposed:			37
Whole Mud Backloaded:			
Whole Mud Received:			
TOTAL MUD AT RIGSITE		1186	bbls
VOLUME BREAKDOWN			
FLUID TYPE VOLUME BREAKDOWN 24hr Consumption			
	0		
CACL2 BRINE	240		
CLEANTROL HD	167		
CLEANTROLL HD	424		

# Daily Inventory

**Report No:** 13

**Well:** Amungee NW 3H

**Report Date:** 5/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	71		87		16			71
Barite BB 1.5MT	1500Kg	16	45	65		4			61
Barite BB 1.5MT - Darwin	1500Kg	34		53	2	21			32
CaCl2 - Prills - bb	1000Kg	170		195		25			170
Caustic Soda	25Kg Drum	39		42		3			39
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	720		829		109			720
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	67		80		13			67
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	30		38		8			30
Magnesium Oxide	20Kg Sack	352		374		22			352
NDFT 325	208Ltr	5		7		2			5
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	258		323		65			258
Omyacarb 2 (bb)	1000Kg	74		75		1			74
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	20		20	8	8			12
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	48		64		16			48
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	22		22	1	1			21
TrueScav HD	25Kg	55		63		8			55
Zinc Oxide 25 Kg	25Kg	21		21					21







# DAILY MUD VOLUME ACCOUNT

Date : 6/10/2023  
Report No: 14

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		20 bbl	11792 bbl	Losses Attributed To Shakers:			421 bbl
Chemical Volume added		33 bbl	207 bbl	Losses To Centrifuge:	19		92 bbl
Sump recycled water				Losses To Desander/Desilter:			179 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
TOTAL BUILT:		53 bbl	11999 bbl	Other Surface Losses:			
				Surface Losses Subtotal:	19 bbl		692 bbl
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	Seepage Losses: <input type="text"/> BBL/HR For <input type="text"/> hr			
DAILY BACKLOADED:		0		Lost Circulation:			10337 bbl
DAILY RECEIVED:		0	770 bbl	Lost Behind Casing/Left Downhole:			
Cuttings Volume:				Other Sub-Surface Losses:			
				Sub-surface Losses Subtotal:	0 bbl		10337 bbl
				TOTAL DISPOSED:	19 bbl		11029 bbl
				Interval losses ( bbl/m ) :	2		34

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11.1	1.33	CleanTroll HD
Degasser	Active	18	77	11.1	1.33	CleanTroll HD
Desilter	Active	18	77	11.1	1.33	CleanTroll HD
Backflow	Active	18	77	11.1	1.33	CleanTroll HD
Tank#1	Active	68	100	11.1	1.33	CleanTroll HD
Tank#2	Active	69	100	11.1	1.33	CleanTroll HD
Tank#3	Active	69	100	11.1	1.33	CleanTroll HD
Suction#1	Active	62	100	11.1	1.33	CleanTroll HD
Suction#2	Active	58	100	11.1	1.33	CleanTroll HD
Suction#3	Reserve	60	100	9.8	1.17	CleanTrol HD
Slug	Reserve	70	100	15	1.8	CleanTrol HD
F/L	Active	20	10	11.1	1.33	CleanTrol HD
T/T-1	Active	8	35	11	1.32	CleanTrol HD
T/T-2	Active	8	35	11	1.32	CleanTrol HD
Frac Tank-1	Reserve	240	450	10.6	1.27	CaCl2 Brine
Frac Tank-2	Reserve	0	450			
Frac Tank-3	Reserve		450			

VOLUME SUMMARY:		+	-
Starting Volume:		1186	
Current Tank Volume:		440	
Mud Volume In Hole(Incl Ri		410	
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:		485	
Total Built:		53	
Total Storage:			
Total Reserve:		370	
Total Disposed:			19
Whole Mud Backloaded:			
Whole Mud Received:			
TOTAL MUD AT RIGSITE		1220	bbls
VOLUME BREAKDOWN			
FLUID TYPE VOLUME BREAKDOWN 24hr Consumption			
	0		
CACL2 BRINE	240		
CLEANROL HD	166		
CLEANROLL HD	404		

# Daily Inventory

**Report No:** 14

**Well:** Amungee NW 3H

**Report Date:** 6/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	71		87		16			71
Barite BB 1.5MT	1500Kg	61		65		4			61
Barite BB 1.5MT - Darwin	1500Kg	31		53	6	28			25
CaCl2 - Prills - bb	1000Kg	170		195	2	27			168
Caustic Soda	25Kg Drum	39		42		3			39
Citric Acid	25Kg Sack	138		138					138
CleanTrol HD	22.7Kg	720		829		109			720
DEFOAM AP 400	25Ltr	50		50					50
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	67		80		13			67
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	30		38		8			30
Magnesium Oxide	20Kg Sack	352		374		22			352
NDFT 325	208Ltr	5		7		2			5
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	258		323		65			258
Omyacarb 2 (bb)	1000Kg	74		75		1			74
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	20		20	12	12	8	8	
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	48		64		16			48
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	55		63		8			55
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	7/10/2023	Section name	8 1/2" Section				
Report	15	Report Depth	m	2220	MDBRT	2170	TVDBRT
Rig Name / #	469	Prev Report Depth	m	2080	MDBRT	2034	TVDBRT
Mud Ops start date		Daily metres drilled	140	Report time	23:59 Hr		
Spud date		Section metres drilled	1611	Avg ROP	15.6	m/hour	
RT-Ground Level m		Report time activity	Drilling				

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE	DEPTHS/CASING	MUD VOLUME (BBL)	CIRCULATION DATA			
BIT SIZE (") 8.5	PDC Bit - Ulterra	10   10   10   10   10	22.00 Riser Length m	HOLE VOL 517	MUD INHOLE 426	PUMP SIZE 6 x 11 Inches	CIRCULATION PRESS 2900	psi
DRILL PIPE SIZE (") 5.5	TYPE DP	LENGTH 1,616 m	Conductor @ 0 m	Active Pits 443	Reserve Pits 325	PUMP MODEL Gardner-Denver	% EFFICIENCY 97	SURFACE TO BIT 10 min
DRILL PIPE SIZE (") 5.5	TYPE HW	LENGTH 279 m	18.625 Surface @ 84 m	TOTAL CIRCULATING VOL 869		BBL / STK 0.0933	STK / MIN 140	BOTTOMS UP 15 min
DRILL COLLAR SIZE (") 6.65	6.5	LENGTH 313   12 m	13.375 Intermediate @ 280 m	STORAGE TANKS 0		BBL / MIN 13.07	GAL / MIN 549	TOT CIRC TIME 66 min
			9.625 Prod. or LNR @ 605 m			BBL / MIN	GAL / MIN	ECD ppg/sg 12.57   1.51

MUD PROPERTIES	MUD PROPERTY SPECIFICATIONS
----------------	-----------------------------

SAMPLE FROM	FL		Pit		FL		Mud Wt	9.6-9.8	Yld Pt	>14	API Loss	<=12
MUD TYPE	CL H		CL H		CL H		pH	8.5-9.5	MBT	<10	Solids	:=3%
TIME SAMPLE TAKEN	2:30		11:00		23:00		MUD COMMENTS					
DRILLING FLUID TEMPERATURE °C (In/Out)	60	67			59	62	Increased mud weight to 11.35 ppg with barite as per OCR instructions. Treated active system with calcium chloride brine to help reduce gel strengths. Treated active system with 0.5% for inhibition and Avaglycol and 1 ppb Cleanrol. Run water onto Active system at 5 BPH to compensate evaporation and hydartion of the mud. Add 16 sacks CleanTrol HD to Active to reduce API Fluid Loss. Transfer 65 bbls or 9.7 Brine slowly from Slug to Active to keep mud at 11.6 ppg and to reduce the rheology. Bottoms up had some mechanical splinters but cleaned up quickly. Inventory adjustment made today. Mud check #2 mud weight heavier due to slug					
TOTAL MEASURED DEPTH ( TMD ) Metres	2089		2089		2207							
INCLINATION (Deg)					18.96							
WEIGHT ppg / SG	11.3+	1.36	11.7	1.40	11.6	1.39						
FUNNEL VISCOSITY ( sec / qt ) API	55		56		53							
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C	77	53	74	54	66	42						
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C	43	32	45	33	32	22						
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C	16	14	16	16	9	7						
PLASTIC VISCOSITY cP @ 120 °F / 49 °C	24		20		24							
YIELD POINT ( lb / 100 ft <sup>2</sup> ) 120 °F / 49 °C	29		34		18							
GEL STRENGTH ( lb / 100 ft <sup>2</sup> ) 10sec/10min/30min	17	53	72	18	55	77	8	35	54			
LOW SHEAR RATE VISCOSITY (LSRV)	12		16		5		OPERATIONAL COMMENTS					
n K ( lb / 100 ft <sup>2</sup> )	0.54	1.84	0.45	3.18	0.65	0.72						
API FILTRATE ( cm <sup>3</sup> / 30 min. )	11.4		10.1		8.6		Slide from 2080 to 2088 m. Drill from 2080 to 2089 with WOB = 32, Tq=25, RPM = 40 GPM 600. Circulate 1.5 annular volumes. Flow check, static. Pump Slug to trip out from 2089 to 605 m. Flow check at shoe, static. TOOH from 605 to surface and LD BHA. P/U and M/U KOP BHA and TIH to 1500 m. Trouble shoot MWD. Take survey at 1617 m. Wash and ream from 2037 to 2080 m. Slide and rotate to drill 8.5" directional hole from 2080 to 2220 m at midnight report. Drilling parameters WOB 20, Tq 18, Diff 400 and GPM 525					
HPHT FILTRATE ( cm <sup>3</sup> / 30 min. ) °F / °C												
API : HPHT ( Cake / 32nd in. )	1.5		1		1							
pH	9.0		9.0		9.5							
ALKALINITY MUD ( Pm )	0.60		0.33		1.00							
ALKALINITY FILTRATE ( Pf / Mf )	0.40	1.6	0.22	1.7	0.56	1.8						
CHLORIDE ( mg / L )	85000		85000		110000							
TOTAL HARDNESS AS CALCIUM ( mg / L )												
SULPHITE( mg / L ) / CaCO3 (ppb)						5.0						
KCL / K2CO3/ K2SO4												
K + ( mg / L )	0		0		0		Water Source   Water Bore					
PHPA (ppb)							MUD ACCOUNTING (BBLs)   SUMMARY					
METHYLENE BLUE CAPACITY (ppb / % by vol)	7.5	0.8	7.5	0.8	7.5	0.8	FLUID BUILT		FLUID LOSSES		Start Vol	1220
BENTONITE ADDED (ppb / % by vol)		0.0		0.0		0.0	Drill Water	60	S.C.E.	101	Received	0
OTHER PRODUCTS ADDED (ppb / % by vol)							Chemical	15	Discharge	0	Backload	0
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)							Sump/SeaW	0	Downhole	0	Built	75
Glycol % v/v	1.5		1.7		1.1		Other Rec'd	0	Tripping	0	Lost sub	0
OIL ( % by Vol )	0.0		0.0		0.0		Other Built	0	Other	0	Lost srf	101
TOTAL WATER ( % by Vol )	86.4		82.0		83.5		TOTAL MUD ON RIG (bbls) : 1194					
TOTAL SOLIDS ( % by Vol )	13.6		18.0		16.5							
SAND ( % by Vol )	0.1		0.1		0.1							

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT					Time Breakdown			
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs		
CleanTrol HD	22.7Kg	720	0	30	690	Centrifuge 1	NOV-Big Bowl				Drilling	9		
Barite BB 1.5MT - Darwi	1500Kg	25	0	12	13						Tripping	9		
CaCl2 - Prills - bb	1000Kg	168	0	8	160						M/U BHA	6		
Magnesium Oxide	20Kg Sack	352	0	8	344									
NewZan D	25Kg	258	0	7	251	Shale Shaker #1	4x170	15						
DEFOAM AP 400	25Ltr	50	0	6	44	Shale Shaker #2	4x170	15						
Omyacarb 2 (bb)	1000Kg	74	0	6	68	Shale Shaker #3	4x170	15	SOLIDS ANALYSIS					
NDFT 325	208Ltr	5	0	3	2				Salt %	5.9	HGS %	7.3	Turbidity (NTU)	0
Citric Acid	25Kg Sack	138	0	2	136					LGS %	3.3	TSS %		0
Idcide-G50	20Ltr	67	0	2	65				Corrected Solids %	10.6	Drilled Solids%	2.8	Conduct. (uS/cm)	
Lime 25 Kg	25Kg	30	0	2	28								DO mg/l	0

CURRENCY						DAILY COST				CUMULATIVE COSTS	
AUD						\$46,655.50				\$223,570.60	

# DAILY MUD VOLUME ACCOUNT

**Date** : 7/10/2023  
**Report No:** 15

**Well Name:** Amungee NW 3H  
**Operator** : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		60 bbl	11852 bbl	Losses Attributed To Shakers:		101 bbl	522 bbl
Chemical Volume added		15 bbl	222 bbl	Losses To Centrifuge:			92 bbl
Sump recycled water				Losses To Desander/Desilter:			179 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			
<b>TOTAL BUILT:</b>		<b>75</b> bbl	<b>12074</b> bbl	Other Surface Losses:			
				<b>Surface Losses Subtotal:</b>		<b>101</b> bbl	<b>793</b> bbl
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE				
DAILY BACKLOADED:		0		Seepage Losses:	<input type="text"/> BBL/HR For <input type="text"/> hr		
DAILY RECEIVED:		0	770	Lost Circulation:			10337
Cuttings Volume:				Lost Behind Casing/Left Downhole:			
				Other Sub-Surface Losses:			
				<b>Sub-surface Losses Subtotal:</b>		<b>0</b> bbl	<b>10337</b> bbl
				<b>TOTAL DISPOSED:</b>		<b>101</b> bbl	<b>11130</b> bbl
				<b>Interval losses ( bbl/m ) :</b>		<b>2</b>	<b>34</b>

## TANK STORAGE VOLUMES

		Tank Volumes (bbls)					Comments
Tank Name	Tank Status	Current	Capacity	MW	(ppg)	MW(sg)	
Sandtrap	Active	24	77	11.6	1.39		CleanTroll HD
Degasser	Active	19	77	11.6	1.39		CleanTroll HD
Desilter	Active	19	77	11.6	1.39		CleanTroll HD
Backflow	Active	19	77	11.6	1.39		CleanTroll HD
Tank#1	Active	68	100	11.6	1.39		CleanTroll HD
Tank#2	Active	69	100	11.6	1.39		CleanTroll HD
Tank#3	Active	69	100	11.6	1.39		CleanTroll HD
Suction#1	Active	62	100	11.6	1.39		CleanTroll HD
Suction#2	Active	58	100	11.6	1.39		CleanTroll HD
Suction#3	Reserve	60	100	11.6	1.39		CleanTroll HD
Slug	Reserve	25	100	9.7	1.16		CleanTroll HD
F/L	Active	20	10	11.6	1.39		CleanTroll HD
T/T-1	Active	8	35	11.6	1.39		CleanTroll HD
T/T-2	Active	8	35	11.6	1.39		CleanTroll HD
Frac Tank-1	Reserve	240	450	10.6	1.27		CaCl2 Brine
Frac Tank-2	Reserve	0	450				
Frac Tank-3	Reserve		450				

## VOLUME SUMMARY:

	+	-
Starting Volume:	1220	
Current Tank Volume:	443	
Mud Volume In Hole(Incl Ri	426	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	517	
Total Built:	75	
Total Storage:		
Total Reserve:	325	
Total Disposed:		101
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>1194</b> bbls	

## VOLUME BREAKDOWN

FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
	0	
CACL2 BRINE	240	
CLEANTROL HD	121	
CLEANTROLL HD	407	

# Daily Inventory

**Report No:** 15

**Well:** Amungee NW 3H

**Report Date:** 7/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	71		87		16			71
Barite BB 1.5MT	1500Kg	61		65		4	1	1	60
Barite BB 1.5MT - Darwin	1500Kg	25		53	12	40			13
CaCl2 - Prills - bb	1000Kg	168		195	8	35			160
Caustic Soda	25Kg Drum	39		42		3			39
Citric Acid	25Kg Sack	138		138	2	2			136
CleanTrol HD	22.7Kg	720		829	30	139			690
DEFOAM AP 400	25Ltr	50		50	6	6			44
Desco CF	25lb	16		16					16
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	67		80	2	15			65
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	30		38	2	10			28
Magnesium Oxide	20Kg Sack	352		374	8	30			344
NDFT 325	208Ltr	5		7	3	5			2
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	258		323	7	72			251
Omyacarb 2 (bb)	1000Kg	74		75	6	7			68
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr			20		12		8	
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	48		64		16			48
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	55		63		8			55
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	8/10/2023	Section name	8 1/2" Section					
Report	16	Report Depth	m	2441	MDBRT	2365		TVDBRT
Rig Name / #	469	Prev Report Depth	m	2220	MDBRT	2170		TVDBRT
Mud Ops start date		Daily metres drilled	221	Report time	23:59			Hr
Spud date		Section metres drilled	1832	Avg ROP	9.2	m/hour		
RT-Ground Level	m	Report time activity	Drilling					

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE	DEPTHS/CASING	MUD VOLUME (BBL)	CIRCULATION DATA			
BIT SIZE (") 8.5	PDC Bit - Ulterra	10   10   10   10   10	22.00 Riser Length m	HOLE VOL 568	MUD INHOLE 472	PUMP SIZE 6 x 11 Inches	CIRCULATION PRESS 3300 psi	
DRILL PIPE SIZE (") 5.5	TYPE DP	LENGTH 1,837 m	Conductor @ 0 m	Active Pits 478	Reserve Pits 336	PUMP MODEL Gardner-Denver	% EFFICIENCY 97	SURFACE TO BIT 11 min
DRILL PIPE SIZE (") 5.5	TYPE HW	LENGTH 279 m	18.625 Surface @ 84 m	TOTAL CIRCULATING VOL 950		BBL / STK 0.0933	STK / MIN 150	BOTTOMS UP 16 min
DRILL COLLAR SIZE (") 6.65	6.5	LENGTH 313   12 m	13.375 Intermediate @ 280 m	STORAGE TANKS 0		BBL / MIN 14	GAL / MIN 588	TOT CIRC TIME 68 min
			9.625 Prod. or LNR @ 605 m			BBL / MIN	GAL / MIN	ECD ppg/sg 12.52   1.5

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS									
SAMPLE FROM	FL		Pit		FL		Pit		Mud Wt 9.6-9.8	Yld Pt >14	API Loss <=12			
MUD TYPE	CL H		CL H		CL H		CL H		pH 8.5-9.5	MBT <10	Solids :=3%			
TIME SAMPLE TAKEN	4:00				15:30		11:30		MUD COMMENTS					
DRILLING FLUID TEMPERATURE °C (In/Out)	59	65	60	64	62	65	63	70	Add 2 ppb of CleanTrol HD to reduce API FL. Continue with addition of calcium chloride brine to the active to lower rheology. Treated active with 0.4 ppb Desco CF to help reduce gel strengths (minimal improvement at this concentration). Dilute active system with 80 bbls of 11.7 ppg mainly consist of Brine and 3 bulk bags of Omnyacarb 2. Mud check #4 is the result. Will do the same dilution by maintaining mud weight 11.6 ppg to reduce rheology. Added 2 sacks of lime to active.  Built 180 bbls of 10.6 ppg calcium chloride brine.					
TOTAL MEASURED DEPTH ( TMD ) Metres	2265		2319		2380		2438							
INCLINATION (Deg)	22.83		21		23		52.93							
WEIGHT ppg / SG	11.6	1.39	11.4+	1.37	11.5	1.38	11.6	1.39						
FUNNEL VISCOSITY ( sec / qt ) API	56		59		54		54							
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C	72	52	71	52	67	48	55	38						
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C	42	32	43	35	40	30	30	23						
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C	18	17	20	19	17	16	12	11						
PLASTIC VISCOSITY cP @ 120 °F / 49 °C	20		19		19		17							
YIELD POINT ( lb / 100 ft² ) 120 °F / 49 °C	32		33		29		21							
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min	20	32	50	25	55	72	19	42	48	18	34	39		
LOW SHEAR RATE VISCOSITY (LSRV)	16		18		15		10		OPERATIONAL COMMENTS					
n K ( lb / 100 ft² )	0.47	2.79	0.45	3.16	0.48	2.39	0.53	1.37	Rotate and slide 8.5" directional hole to build angle from 2220 to 2441 m at report time, 24:00 hrs.  BHCT = 92 deg Celcius.					
API FILTRATE ( cm³ / 30 min. )	8.6		6.4		6.2		7.2							
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C														
API : HPHT ( Cake / 32nd in. )	1.0		1		1		1							
pH	9.5		9.0		9.0		8.5							
ALKALINITY MUD ( Pm )	1.20		0.21		0.18		0.04							
ALKALINITY FILTRATE ( Pf / Mf )	0.58	1.4	0.05	1.3	0.05	1.2	0.02	0.4						
CHLORIDE ( mg / L )	110000		106000		107000		120000							
TOTAL HARDNESS AS CALCIUM ( mg / L )														
SULPHITE( mg / L ) / CaCO3 (ppb)		5.0						7.5						
KCL / K2CO3/ K2SO4									Water Source   Water Bore					
K + ( mg / L )	0		0		0		0							
PHPA (ppb)									MUD ACCOUNTING (BBLs)			SUMMARY		
METHYLENE BLUE CAPACITY (ppb / % by vol)	9.0	1.0	7.5	0.8	7.5	0.8	7.5	0.8	FLUID BUILT		FLUID LOSSES		Start Vol	1194
BENTONITE ADDED (ppb / % by vol)		0.0		0.0		0.0		0.0	Drill Water	170	S.C.E.	73	Received	0
OTHER PRODUCTS ADDED (ppb / % by vol)									Chemical	65	Discharge	70	Backload	0
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)									Sump/SeaW	0	Downhole	0	Built	235
Glycol % v/v			1.7		1.3		1.1		Other Rec'd	0	Tripping	0	Lost sub	0
OIL ( % by Vol )	0.0		0.0		0.0		0.0		Other Built	0	Other	0	Lost srf	143
TOTAL WATER ( % by Vol )	83.5		83.0		82.5		83.0		TOTAL MUD ON RIG (bbls) : 1286					
TOTAL SOLIDS ( % by Vol )	16.5		17.0		17.5		17.0							
SAND ( % by Vol )	0.1				0.1		0.1							

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown	
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs	
CleanTrol HD	22.7Kg	690	0	40	650	Centrifuge 1	NOV-Big Bowl				Drilling	24	
CaCl2 - Prills - bb	1000Kg	160	0	18	142								
Desco CF	25lb	16	0	16	0								
Omyacarb 2 (bb)	1000Kg	68	0	3	65								
Sodium Bicarbonate	25Kg Sack	48	0	3	45	Shale Shaker #1	4x170						
Lime 25 Kg	25Kg	28	0	2	26	Shale Shaker #2	4x170						
NewZan D	25Kg	251	0	1	250	Shale Shaker #3	4x170		SOLIDS ANALYSIS				
								Salt %	6.5	HGS %	6.7	Turbidity (NTU)	0
										LGS %	3.8	TSS %	0
								Corrected Solids %	10.5	Drilled Solids%	3.0		
												Conduct. (uS/cm)	
												DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS			
						AUD		\$33,714.50		\$257,285.10			





# DAILY MUD VOLUME ACCOUNT

Date : 8/10/2023  
Report No: 16

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		170 bbl	12022 bbl	Losses Attributed To Shakers:		73 bbl	595 bbl
Chemical Volume added		65 bbl	287 bbl	Losses To Centrifuge:			92 bbl
Sump recycled water				Losses To Desander/Desilter:			179 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:	70 bbl	70 bbl	
TOTAL BUILT:		235 bbl	12309 bbl	Other Surface Losses:			
				Surface Losses Subtotal:	143 bbl	936 bbl	
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE				
DAILY BACKLOADED:		0		Seepage Losses:			
DAILY RECEIVED:		0	770	Lost Circulation:			10337
Cuttings Volume:				Lost Behind Casing/Left Downhole:			
				Other Sub-Surface Losses:			
				Sub-surface Losses Subtotal:	0 bbl	10337 bbl	
				TOTAL DISPOSED:	143 bbl	11273 bbl	
				Interval losses ( bbl/m ) :	2	33	

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11.6	1.39	CleanTroll HD
Degasser	Active	19	77	11.6	1.39	CleanTroll HD
Desilter	Active	19	77	11.6	1.39	CleanTroll HD
Backflow	Active	19	77	11.6	1.39	CleanTroll HD
Tank#1	Active	73	100	11.6	1.39	CleanTroll HD
Tank#2	Active	73	100	11.6	1.39	CleanTroll HD
Tank#3	Active	74	100	11.6	1.39	CleanTroll HD
Suction#1	Active	67	100	11.6	1.39	CleanTroll HD
Suction#2	Active	64	100	11.6	1.39	CleanTroll HD
Suction#3	Reserve	60	100	11.6	1.39	CleanTroll HD
Slug	Reserve	36	100	10.9	1.31	Brine CaCO3
F/L	Active	30	10	11.6	1.39	CleanTroll HD
T/T-1	Active	8	35	11.6	1.39	CleanTroll HD
T/T-2	Active	8	35	11.6	1.39	CleanTroll HD
Frac Tank-1	Reserve	240	450	10.6	1.27	CaCl2 Brine
Frac Tank-2	Reserve	0	450			
Frac Tank-3	Reserve		450			

VOLUME SUMMARY:		+	-
Starting Volume:		1194	
Current Tank Volume:		478	
Mud Volume In Hole(Incl Ri		472	
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:		568	
Total Built:		235	
Total Storage:			
Total Reserve:		336	
Total Disposed:			143
Whole Mud Backloaded:			
Whole Mud Received:			
TOTAL MUD AT RIGSITE		1286	bbls
VOLUME BREAKDOWN			
FLUID TYPE VOLUME BREAKDOWN 24hr Consumption			
	0		
BRINE CACO3	36		
CACL2 BRINE	240		
CLEANTROLL HD	106		
CLEANTROLL HD	432		

# Daily Inventory

**Report No:** 16

**Well:** Amungee NW 3H

**Report Date:** 8/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	71		87		16			71
Barite BB 1.5MT	1500Kg	60		65		4		1	60
Barite BB 1.5MT - Darwin	1500Kg	13		53		40			13
CaCl2 - Prills - bb	1000Kg	160		195	18	53			142
Caustic Soda	25Kg Drum	39		42		3			39
Citric Acid	25Kg Sack	136		138		2			136
CleanTrol HD	22.7Kg	690		829	40	179			650
DEFOAM AP 400	25Ltr	44		50		6			44
Desco CF	25lb	16		16	16	16			
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	65		80		15			65
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	28		38	2	12			26
Magnesium Oxide	20Kg Sack	344		374		30			344
NDFT 325	208Ltr	2		7		5			2
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	251		323	1	73			250
Omyacarb 2 (bb)	1000Kg	68		75	3	10			65
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr			20		12		8	
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	48		64	3	19			45
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	55		63		8			55
Zinc Oxide 25 Kg	25Kg	21		21					21



# WATER BASED MUD Daily Operation Report

Date	9/10/2023	Section name	8 1/2" Section					
Report	17	Report Depth	m	2664	MDBRT	2447		TVDBRT
Rig Name / #	469	Prev Report Depth	m	2441	MDBRT	2447		TVDBRT
Mud Ops start date		Daily metres drilled	223	Report time	23:59			Hr
Spud date		Section metres drilled	2055	Avg ROP	10.9	m/hour		
RT-Ground Level	m	Report time activity	Circulation					

OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

BHA	BIT TYPE	JET SIZE					DEPTHS/CASING		MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE (" ) 8.5	PDC Bit - Ultterra	10	10	10	10	10	22.00	Riser Length	m	HOLE VOL 620	MUD INHOLE 520	PUMP SIZE 6 x 11 Inches		CIRCULATION PRESS 3400	psi
DRILL PIPE SIZE (" ) 5.5	TYPE DP	LENGTH 2,086 m					Conductor @ 0 m			Active Pits 478	Reserve Pits 292	PUMP MODEL Gardner-Denver	% EFFICIENCY 97	SURFACE TO BIT 12 min	
DRILL PIPE SIZE (" ) 5.5	TYPE HW	LENGTH 279 m					18.625	Surface @	84 m	TOTAL CIRCULATING VOL 998		BBL / STK 0.0933	STK / MIN 155	BOTTOMS UP 17 min	
DRILL COLLAR SIZE (" ) 6.65	6.5	LENGTH 287	12 m				13.375	Intermediate @	280 m	STORAGE TANKS 0		BBL / MIN 14.47	GAL / MIN 608	TOT CIRC TIME 69 min	
							9.625	Prod. or LNR @	605 m			ECD ppg/sg	12.52	1.5	

MUD PROPERTIES												MUD PROPERTY SPECIFICATIONS									
SAMPLE FROM	FL			Pit		FL		Pit		Mud Wt	9.6-9.8	Yld Pt	>14	API Loss	<=12						
MUD TYPE	CL H			CL H		CL H		CL H		pH	8.5-9.5	MBT	<10	Solids	=3%						
TIME SAMPLE TAKEN	4:00			8:30		16:00		23:00		MUD COMMENTS											
DRILLING FLUID TEMPERATURE °C (In/Out)	64	72	66	73	67	74	66	74													
TOTAL MEASURED DEPTH ( TMD ) Metres	2498			2554		2639		2660		Treated mud with 0.8% Avaglycol, Ran centrifuge intermittingly to help control solids. Continued with water/brine addition to control gel strengths. Added 1 ppb Cleanrol HD to tighten fluid loss after water additions. Rheology increase with Cleanrol HD additons. Treated mud with 0.5 ppb NDFT 325 corrosion inhibitor plus 0.3 ppb Truescav HD oxygen scavenger. Changed screens to finer API200. 2 pails caustic soda added to increase pH Build 70 bbls Brine Premix with 20 sacks of CleanTrol HD, not yet transfer to Active. It is in Suction 3											
INCLINATION (Deg)				60				78.93													
WEIGHT ppg / SG	11.6	1.39	11.6+	1.40	11.6	1.39	11.6	1.39													
FUNNEL VISCOSITY ( sec / qt ) API	48			51		51		55													
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C	64	45	65	45	75	55	67	48													
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C	36	28	37	28	47	37	40	31													
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C	17	15	17	16	20	19	18	17													
PLASTIC VISCOSITY cP @ 120 °F / 49 °C	19			20		20		19													
YIELD POINT ( lb / 100 ft <sup>2</sup> ) 120 °F / 49 °C	26			25		35		29													
GEL STRENGTH ( lb / 100 ft <sup>2</sup> ) 10sec/10min/30min	22	40	50	20	40	45	26	35	43							20	32	34			
LOW SHEAR RATE VISCOSITY (LSRV)	13			15		18		16		OPERATIONAL COMMENTS											
n K ( lb / 100 ft <sup>2</sup> )	0.51	1.90	0.53	1.65	0.45	3.38	0.48	2.39													
API FILTRATE ( cm <sup>3</sup> / 30 min. )	7.6			9.4		10.4		10.4		Rotate and Slide to drill 8.5" directional hole. Trouble shooting MWD tools, no signal. Circulate to maintaining mud weight to 11.6 ppg. Pump out for one stand to 2633 m and circulate to revive MWD. Circulate and maintain mud weight in the active at 11.6 ppg.											
HPHT FILTRATE ( cm <sup>3</sup> / 30 min. ) °F / °C																					
API : HPHT ( Cake / 32nd in. )	1			1		1		1													
pH	8.5			8.5		8.5															
ALKALINITY MUD ( Pm )	0.04			0.15		0.17															
ALKALINITY FILTRATE ( Pf / Mf )	0.01	0.7	0.01	0.7	0.01	0.7															
CHLORIDE ( mg / L )	110000			100000		101000		110000													
TOTAL HARDNESS AS CALCIUM ( mg / L )																					
SULPHITE( mg / L ) / CaCO3 (ppb)		7.5						8.0													
KCL / K2CO3/ K2SO4																					
K + ( mg / L )	0			0		0		0													
PHPA (ppb)																Water Source		Water Bore			
METHYLENE BLUE CAPACITY (ppb / % by vol)	12.5	1.4	12.5	1.4	12.5	1.4	12.5	1.4	MUD ACCOUNTING (BBLs)							SUMMARY					
BENTONITE ADDED (ppb / % by vol)		0.0		0.0		0.0		0.0	FLUID BUILT		FLUID LOSSES		Start Vol	1286							
OTHER PRODUCTS ADDED (ppb / % by vol)									Drill Water	90	S.C.E.	139	Received	0							
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)									Chemical	53	Discharge	0	Backload	0							
Glycol % v/v	1.1		1.0		1.5		1.5		Sump/SeaW	0	Downhole	0	Built	143							
OIL ( % by Vol )	0.0		0.0		0.0		0.0		Other Rec'd	0	Tripping	0	Lost sub	0							
TOTAL WATER ( % by Vol )	83.0		82.0		82.0		83.0		Other Built	0	Other	0	Lost srf	139							
TOTAL SOLIDS ( % by Vol )	17.0		18.0		18.0		17.0		TOTAL MUD ON RIG (bbls) : 1290												
SAND ( % by Vol )	0.1		0.1		0.1		0.1														

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown		
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs		
CleanTrol HD	22.7Kg	650	0	40	610	Centrifuge 1	NOV-Big Bowl	4	9.8	15.8	Drilling	20		
Barite BB 1.5MT - Darwi	1500Kg	13	0	12	1						Trrouble shoot	3		
Omyacarb 2 (bb)	1000Kg	65	0	8	57						Circulation			
Caustic Soda	25Kg Drum	39	0	2	37									
Idcide-G50	20Ltr	65	0	2	63	Shale Shaker #1	4x200	24						
Lime 25 Kg	25Kg	26	0	2	24	Shale Shaker #2	2x 200, 2 x 170	24						
AvaGlyco LC	208Ltr	71	0	1	70	Shale Shaker #3	4x200	24	SOLIDS ANALYSIS					
DEFOAM AP 400	25Ltr	44	0	1	43				Salt %	5.9	HGS %	6.7	Turbidity (NTU)	0
NDFT 325	208Ltr	2	0	1	1						LGS %	4.4	TSS %	0
Radiagreen EME	175Ltr	0	20	0	20				Corrected Solids %	11.1	Drilled Solids%	3.5	Conduct. (uS/cm)	
													DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS				
						AUD		\$32,113.00		\$289,398.10				



# DAILY MUD VOLUME ACCOUNT

Date : 9/10/2023  
Report No: 17

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT		DAILY	CUMULATIVE	FLUID LOSSES:		DAILY	CUMULATIVE
Premix drill water		90 bbl	12112 bbl	Losses Attributed To Shakers:		57 bbl	652 bbl
Chemical Volume added		53 bbl	340 bbl	Losses To Centrifuge:		30 bbl	122 bbl
Sump recycled water				Losses To Desander/Desilter:		52 bbl	232 bbl
Seawater				Losses To Cutting Dryer/Mud Cleaner:			
Other Received on Rig				Losses To Tripping:			
Other Built				Discharged:			70 bbl
TOTAL BUILT:		143 bbl	12452 bbl	Other Surface Losses:			
				Surface Losses Subtotal:		139 bbl	1075 bbl
WHOLE MUD TRANSFERS ON/OFF		DAILY	CUMULATIVE	Seepage Losses: <input type="text"/> BBL/HR For <input type="text"/> hr			
DAILY BACKLOADED:		0		Lost Circulation:			10337 bbl
DAILY RECEIVED:		0	770 bbl	Lost Behind Casing/Left Downhole:			
Cuttings Volume:				Other Sub-Surface Losses:			
				Sub-surface Losses Subtotal:		0 bbl	10337 bbl
				TOTAL DISPOSED:		139 bbl	11412 bbl
				Interval losses ( bbl/m ) :		2	35

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11.6	1.39	CleanTroll HD
Degasser	Active	19	77	11.6	1.39	CleanTroll HD
Desilter	Active	19	77	11.6	1.39	CleanTroll HD
Backflow	Active	19	77	11.6	1.39	CleanTroll HD
Tank#1	Active	68	100	11.6	1.39	CleanTroll HD
Tank#2	Active	64	100	11.6	1.39	CleanTroll HD
Tank#3	Active	60	100	11.6	1.39	CleanTroll HD
Suction#1	Active	61	100	11.6	1.39	CleanTroll HD
Suction#2	Active	60	100	11.6	1.39	CleanTroll HD
Suction#3	Reserve	67	100	10.6	1.27	Brine/CleanTrol HD Premix
Slug	Reserve	45	100	14.5	1.74	ClenTrol HD
F/L	Active	30	10	11.6	1.39	CleanTrol HD
T/T-1	Active	27	35	11.6	1.39	CleanTrol HD
T/T-2	Active	27	35	11.6	1.39	CleanTrol HD
Frac Tank-1	Reserve	180	450	10.6	1.27	CaCl2 Brine
Frac Tank-2	Reserve		450			
Frac Tank-3	Reserve		450			

VOLUME SUMMARY:		+	-
Starting Volume:		1286	
Current Tank Volume:		478	
Mud Volume In Hole(Incl Ri		520	
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:		620	
Total Built:		143	
Total Storage:			
Total Reserve:		292	
Total Disposed:			139
Whole Mud Backloaded:			
Whole Mud Received:			
TOTAL MUD AT RIGSITE		1290	bbls
VOLUME BREAKDOWN			
FLUID TYPE VOLUME BREAKDOWN 24hr Consumption			
BRINE/CLEANTROL HD	67		
CACL2 BRINE	180		
CLEANTROL HD	84		
CLEANTROLL HD	394		
CLENTROL HD	45		




# Daily Inventory

Report No: 17

Well: Amungee NW 3H

Report Date: 9/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	71		87	1	17			70
Barite BB 1.5MT	1500Kg	60		65		4		1	60
Barite BB 1.5MT - Darwin	1500Kg	13		53	12	52			1
CaCl2 - Prills - bb	1000Kg	142		195		53			142
Caustic Soda	25Kg Drum	39		42	2	5			37
Citric Acid	25Kg Sack	136		138		2			136
CleanTrol HD	22.7Kg	650		829	40	219			610
DEFOAM AP 400	25Ltr	44		50	1	7			43
Desco CF	25lb			16		16			
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	65		80	2	17			63
JK-161 LV	25Kg	77		85		8			77
KCL (L)	1000Kg Bulk Bag	24		31		7			24
Lime 25 Kg	25Kg	26		38	2	14			24
Magnesium Oxide	20Kg Sack	344		374		30			344
NDFT 325	208Ltr	2		7	1	6			1
NewPac LV 25 Kg	25Kg	153		180		27			153
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	250		323		73			250
Omyacarb 2 (bb)	1000Kg	65		75	8	18			57
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr		20	40		12		8	20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	45		64		19			45
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	55		63		8			55
Zinc Oxide 25 Kg	25Kg	21		21					21

<div></div> <div>WATER BASED MUD</div> <div>Daily Operation Report</div>		Date	10/10/2023		Section name		8 1/2" Section																												
		Report	18		Report Depth	m	2767	MDBRT	2447	TVDBRT																									
		Rig Name / #	469		Prev Report Depth	m	2664	MDBRT	2467	TVDBRT																									
		Mud Ops start date			Daily metres drilled	103	Report time	23:59 Hr																											
		Spud date			Section metres drilled	2158	Avg ROP	17.2	m/hour																										
		RT-Ground Level m			Report time activity	Drilling																													
OPERATOR					Tamboran Resources					CONTRACTOR					H & P																				
REPORT FOR					Maurice Verkerk					REPORT FOR					Joseph Stowell																				
WELL NAME AND No.					Amungee NW 3H					FIELD					LOCATION					STATE															
										EP 117					Beetaloo Basin					Northern Territory															
BHA		BIT TYPE		JET SIZE		DEPTHS/CASING				MUD VOLUME (BBL)				CIRCULATION DATA																					
BIT SIZE (")		NOV TKC66		13 13 13 13 13		22.00 Riser Length m				HOLE VOL		MUD INHOLE		PUMP SIZE				CIRCULATION																	
8.5				13 0 0 0 0						643		576		6 x 11 Inches				PRESS 3398 psi																	
DRILL PIPE		TYPE		LENGTH		Conductor @				Active Pits		Reserve Pits		PUMP MODEL				SURFACE																	
SIZE (")		DP		2.724 m		0 m				539		204		Gardner-Denver				TO BIT																	
DRILL PIPE		TYPE		LENGTH		18.625 Surface @				TOTAL CIRCULATING VOL				STK / MIN				BOTTOMS UP																	
SIZE (")		HW		38 m		84 m				1115				145				23 min																	
DRILL PIPE						13.375 Intermediate @				STORAGE TANKS				BBL / MIN				TOT CIRC TIME																	
SIZE (")						280 m				0				13.53				82 min																	
DRILL COLLAR SIZE (")		6.5		LENGTH		9.625 Prod. or LNR @								GAL / MIN				ECD ppg/sg																	
6.5				5 0 m		605 m								568				12.96 1.55																	
MUD PROPERTIES												MUD PROPERTY SPECIFICATIONS																							
SAMPLE FROM						Pit		Pit		Pit				Mud Wt 0.6-11.4		Yld Pt >14		API Loss <=12																	
MUD TYPE						CL H		CL H		CL H				pH 8.5-9.5		MBT <10		Solids :=3%																	
TIME SAMPLE TAKEN						4:00		10:30		23:00				MUD COMMENTS																					
DRILLING FLUID TEMPERATURE °C (In/Out)						60				66 74				Treating mud with 1 ppb Cleantral HD to tighten API fluid loss. Adding caustic soda to increase pH. Mud check #2 is active pit and contains heavy slug.  Balanced inventory and made some adjustments. Defoamer added to system. Some mechanical splinter at shakers on bottoms up after the trip. Direct addition of 4.5bbls/hr fresh water to counter evaporation when commenced circulating.																					
TOTAL MEASURED DEPTH ( TMD ) Metres						1090		266		2734																									
INCLINATION (Deg)						78.93		79		92.92																									
WEIGHT ppg / SG						11.6 1.39		11.9 1.43		11.6+ 1.39																									
FUNNEL VISCOSITY ( sec / qt ) API						55		56		55																									
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C						67 47		75 55		67 48																									
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C						40 30		47 36		40 31																									
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C						17 16		20 19		18 17																									
PLASTIC VISCOSITY cP @ 120 °F / 49 °C						20		20		19																									
YIELD POINT ( lb / 100 ft² ) 120 °F / 49 °C						27		35		29																									
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min						19 32 34		22 30 36		20 32 34																									
LOW SHEAR RATE VISCOSITY (LSRV)						15		18		16																									
n K ( lb / 100 ft² )						0.51 1.94		0.45 3.38		0.48 2.39																									
API FILTRATE ( cm³ / 30 min. )						10.2		10.6		10.0																									
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C																																			
API : HPHT ( Cake / 32nd in. )						1		1		1																									
pH						8.5		8.5		8.5																									
ALKALINITY MUD ( Pm )						0.06		0.10		0.05																									
ALKALINITY FILTRATE ( Pf / Mf )						0.02 0.6		0.01 0.6		0.02 0.6																									
CHLORIDE ( mg / L )						110000		108000		110000																									
TOTAL HARDNESS AS CALCIUM ( mg / L )																																			
SULPHITE( mg / L ) / CaCO3 (ppb)						8.0				8.0																									
KCL / K2CO3/ K2SO4																																			
K + ( mg / L )						0		0		0																									
PHPA (ppb)																																			
METHYLENE BLUE CAPACITY (ppb / % by vol)						12.5 1.4		12.5 1.4		12.5 1.4																									
BENTONITE ADDED (ppb / % by vol)						0.0		0.0		0.0																									
OTHER PRODUCTS ADDED (ppb / % by vol)																																			
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)																																			
Glycol % v/v						1.5		1.4		1.5																									
OIL ( % by Vol )						0.0		0.0		0.0																									
TOTAL WATER ( % by Vol )						83.0		80.5		81.0																									
TOTAL SOLIDS ( % by Vol )						17.0		19.5		19.0																									
SAND ( % by Vol )						0.1		0.1		0.1																									
												Water Source		Water Bore																					
												MUD ACCOUNTING (BBLs)				SUMMARY																			
						FLUID BUILT		FLUID LOSSES		Start Vol		1290																							
Drill Water						27		S.C.E.		6		Received		0																					
Chemical						8		Discharge		0		Backload		0																					
Sump/SeaW						0		Downhole		0		Built		35																					
Other Rec'd						0		Tripping		0		Lost sub		0																					
Other Built						0		Other		0		Lost srf		6																					
						TOTAL MUD ON RIG (bbls) : 1319																													
PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown																							
Product		UnitSize		Start		Received		Used		Close		Type		Hrs		OF		UF		Analysis Item		Hrs													
TrueScav HD		25Kg		55		0		32		23		Centrifuge 1		NOV-Big Bowl						Tripping		13													
Magnesium Oxide		20Kg Sack		344		0		12		332										Lay down BHA		2													
Lime 25 Kg		25Kg		24		0		8		16										M/U BHA		3													
AvaGlyco LC		208Ltr		70		0		4		66										Drilling		6													
DEFOAM AP 400		25Ltr		43		0		4		39		Shale Shaker #1		4x200		6																			
Ildcide-G50		20Ltr		63		0		4		59		Shale Shaker #2		2x 200, 2 x 170		6																			
Caustic Soda		25Kg Drum		37		0		3		34		Shale Shaker #3		4x200		6		SOLIDS ANALYSIS																	
NDFT 325		208Ltr		1		0		1		0								Salt %		5.8		HGS %		5.0		Turbidity (NTU)		0							
KCL (L)		100Kg Bulk Bag		24		0		-1		25										LGS %		8.2		TSS %				0							
NewPac LV 25 Kg		25Kg		153		0		-2		155								Corrected Solids %		13.2		Drilled Solids%		7.3		Conduct. (uS/cm)									
Barite BB 1.5MT - Darwi		1500Kg		1		0		-5		6														DO mg/l				0							
JK-161 LV		25Kg		77		0		-7		84																									
CleanTrol HD		22.7Kg		610		0		-12		622																									
						CURRENCY						DAILY COST						CUMULATIVE COSTS																	
						AUD						-\$4,664.50						\$284,733.60																	
Newpark Engineer:						Nicholas Doust						Jason Cremor						Office: 0488013339						Telephone: 0894108202						Fax: 0894108200					





# DAILY MUD VOLUME ACCOUNT

Date : 10/10/2023  
Report No: 18

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT	DAILY	CUMULATIVE	FLUID LOSSES:	DAILY	CUMULATIVE
Premix drill water	27 bbl	12139 bbl	Losses Attributed To Shakers:	6 bbl	658 bbl
Chemical Volume added	8 bbl	348 bbl	Losses To Centrifuge:		122 bbl
Sump recycled water			Losses To Desander/Desilter:		232 bbl
Seawater			Losses To Cutting Dryer/Mud Cleaner:		
Other Received on Rig			Losses To Tripping:		
Other Built			Discharged:		70 bbl
<b>TOTAL BUILT:</b> 35 bbl 12487 bbl			Other Surface Losses:		
			<b>Surface Losses Subtotal:</b>	6 bbl	1081 bbl
<b>WHOLE MUD TRANSFERS ON/OFF</b>	<b>DAILY</b>	<b>CUMULATIVE</b>	Seepage Losses: <input type="text"/> BBL/HR For <input type="text"/> hr		
DAILY BACKLOADED:	0		Lost Circulation:		10337 bbl
DAILY RECEIVED:	0	770 bbl	Lost Behind Casing/Left Downhole:		
Cuttings Volume:			Other Sub-Surface Losses:		
			<b>Sub-surface Losses Subtotal:</b>	0 bbl	10337 bbl
			<b>TOTAL DISPOSED:</b>	6 bbl	11418 bbl
			<b>Interval losses ( bbl/m ) :</b>	2	36

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11.65	1.4	CleanDrill HD
Degasser	Active	19	77	11.65	1.4	CleanDrill HD
Desilter	Active	19	77	11.65	1.4	CleanDrill HD
Backflow	Active	19	77	11.65	1.4	CleanDrill HD
Tank#1	Active	81	100	11.65	1.4	CleanDrill HD
Tank#2	Active	73	100	11.65	1.4	CleanDrill HD
Tank#3	Active	83	100	11.65	1.4	CleanDrill HD
Suction#1	Active	69	100	11.65	1.4	CleanDrill HD
Suction#2	Active	68	100	11.65	1.4	CleanDrill HD
Suction#3	Reserve	66	100	10.6	1.27	Brine/CleanDrill HD Premix
Slug	Reserve	18	100	14.5	1.74	CleanDrill HD
F/L	Active	30	10	11.6	1.39	CleanDrill HD
T/T-1	Active	27	35	11.6	1.39	CleanDrill HD
T/T-2	Active	27	35	11.6	1.39	CleanDrill HD
Frac Tank-1	Reserve	120	450	10.6	1.27	CaCl2 Brine
Frac Tank-2	Reserve		450			
Frac Tank-3	Reserve		450			

VOLUME SUMMARY:	+	-
Starting Volume:	1290	
Current Tank Volume:	539	
Mud Volume In Hole(Incl Riser)	576	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	643	
Total Built:	35	
Total Storage:		
Total Reserve:	204	
Total Disposed:		6
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>1319</b>	<b>bbls</b>
<b>VOLUME BREAKDOWN</b>		
<b>FLUID TYPE VOLUME BREAKDOWN 24hr Consumption</b>		
BRINE/CLEANDRILL H	66	
CACL2 BRINE	120	
CLEANDRILL HD	557	


# Daily Inventory

**Report No:** 18

**Report Date:** 10/10/2023

**Well:** Amungee NW 3H

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24					24
AvaGlyco LC	208Ltr	70		87	4	21			66
Barite BB 1.5MT	1500Kg	60		65		4		1	60
Barite BB 1.5MT - Darwin	1500Kg	1		53	-5	47			6
CaCl2 - Prills - bb	1000Kg	142		195		53			142
Caustic Soda	25Kg Drum	37		42	3	8			34
Citric Acid	25Kg Sack	136		138		2			136
CleanTrol HD	22.7Kg	610		829	-12	207			622
DEFOAM AP 400	25Ltr	43		50	4	11			39
Desco CF	25lb			16		16			
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	63		80	4	21			59
JK-161 LV	25Kg	77		85	-7	1			84
KCL (L)	1000Kg Bulk Bag	24		31	-1	6			25
Lime 25 Kg	25Kg	24		38	8	22			16
Magnesium Oxide	20Kg Sack	344		374	12	42			332
NDFT 325	208Ltr	1		7	1	7			
NewPac LV 25 Kg	25Kg	153		180	-2	25			155
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	250		323		73			250
Omyacarb 2 (bb)	1000Kg	57		75	-12	6			69
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	20		40		12		8	20
Salt 1000 Kg BB	1000Kg	4		4					4
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	45		64		19			45
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	55		63	32	40			23
Zinc Oxide 25 Kg	25Kg	21		21					21

<div></div> <div>WATER BASED MUD</div> <div>Daily Operation Report</div>		Date	11/10/2023		Section name		8 1/2" Section																			
		Report	19		Report Depth	m	3170	MDBRT	2440	TVDBRT																
		Rig Name / #	469		Prev Report Depth	m	2767	MDBRT	2447	TVDBRT																
		Mud Ops start date	23/09/2023		Daily metres drilled	403	Report time	23:59 Hr																		
		Spud date	25/09/2023		Section metres drilled	2561	Avg ROP	16.8	m/hour																	
		RT-Ground Level m			Report time activity																					
OPERATOR					Tamboran Resources			CONTRACTOR					H & P													
REPORT FOR					Maurice Verkerk			REPORT FOR					Joseph Stowell													
WELL NAME AND No.					Amungee NW 3H			FIELD		EP 117		LOCATION		Beetaloo Basin		STATE		Northern Territory								
BHA		BIT TYPE		JET SIZE		DEPTHS/CASING		MUD VOLUME (BBL)		CIRCULATION DATA																
BIT SIZE (")		NOV TKC66		13 13 13 13 13		8.00 Riser Length		m		HOLE VOL		MUD INHOLE		PUMP SIZE		CIRCULATION		4038 psi								
8.5				13 0 0 0 0						736		659		6 x 11 Inches		PRESS										
DRILL PIPE		TYPE		LENGTH		Conductor @		0 m		Active Pits		Reserve Pits		PUMP MODEL		% EFFICIENCY		SURFACE								
SIZE (")		DP		3.127 m						556		178		Gardner-Denver		97		TO BIT								
DRILL PIPE		TYPE		LENGTH		18.625 Surface @		84 m		TOTAL CIRCULATING VOL				BBL / STK		STK / MIN		BOTTOMS UP								
SIZE (")		HW		38 m						1215				0.0933		145		26 min								
DRILL COLLAR SIZE (")				LENGTH		13.375 Intermediate @		280 m		STORAGE TANKS				BBL / MIN		GAL / MIN		TOT CIRC TIME								
6.5		6.5		5		0 m		9.625 Prod. or LNR @ 605 m		0				13.53		568		90 min								
																		ECD ppg/sg								
																		13.01								
																		1.56								
MUD PROPERTIES															MUD PROPERTY SPECIFICATIONS											
SAMPLE FROM						FL		Pit		FL		FL		Mud Wt		0.6-11.4		Yld Pt		>14		API Loss		<=12		
MUD TYPE						CL H		CL H		CL H		CL H		pH		8.5-9.5		MBT		<10		Solids		:=3%		
TIME SAMPLE TAKEN						3:00		9:00		16:30		21:25		MUD COMMENTS												
DRILLING FLUID TEMPERATURE °C (In/Out)						67 75		68 76		70 77		69 77														
TOTAL MEASURED DEPTH ( TMD ) Metres						2852		2965		3042		3117														
INCLINATION (Deg)						90		89		90		90														
WEIGHT ppg / SG						11.7 1.40		11.7+ 1.41		11.8 1.41		11.8+ 1.42														
FUNNEL VISCOSITY ( sec / qt ) API						54		54		58		57		Continue treatment of circulating system with concentrated CleanTrol HD premix(2 ppb) to assist in reducing API FL. Treat whole mud system with biocide. Treating active with caustic soda to increase pH. Ran centrifuge for 2 hrs but switched off due to mud aeration. Treated mud with 1 % Glycol for inhibition and help with fluid loss and mud aeration. Aeration evident in fluid, increase addition of Defoamer. Premix @ 10.2ppg being introduced to active to combat increasing MW.												
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C						67 47		73 53		72 55		77 58														
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C						40 30		43 33		49 40		51 41														
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C						17 16		20 19		27 26		27 26														
PLASTIC VISCOSITY cP @ 120 °F / 49 °C						20		20		17		19														
YIELD POINT ( lb / 100 ft <sup>2</sup> ) 120 °F / 49 °C						27		33		38		39														
GEL STRENGTH ( lb / 100 ft <sup>2</sup> ) 10sec/10min/30min						22 31 37		23 32 36		30 33 38		27 32 40														
LOW SHEAR RATE VISCOSITY (LSRV)						15		18		25		25														
n K ( lb / 100 ft <sup>2</sup> )						0.51 1.94		0.46 2.98		0.39 4.88		0.41 4.54														
API FILTRATE ( cm <sup>3</sup> / 30 min. )						9.2		11.4		8.4																
HPHT FILTRATE ( cm <sup>3</sup> / 30 min. ) °F / °C																										
API : HPHT ( Cake / 32nd in. )						1		1		1		1														
pH						8.5				8.5		8.5														
ALKALINITY MUD ( Pm )						0.05		0.12		0.10		0.10														
ALKALINITY FILTRATE ( Pf / Mf )						0.05 0.6		0.01 0.8		0.05 1.3		0.05 1.3														
CHLORIDE ( mg / L )						108000		108000		113000		105000														
TOTAL HARDNESS AS CALCIUM ( mg / L )																										
SULPHITE( mg / L ) / CaCO3 (ppb)																										
KCL / K2CO3/ K2SO4																										
K + ( mg / L )						0		0		0		0														
PHPA (ppb)																										
METHYLENE BLUE CAPACITY (ppb / % by vol)						12.5 1.4		12.5 1.4		12.5 1.4		12.5 1.4														
BENTONITE ADDED (ppb / % by vol)						0.0		0.0		0.0		0.0														
OTHER PRODUCTS ADDED (ppb / % by vol)																										
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)																										
Glycol % v/v						1.5		1.7		2.8		2.8														
OIL ( % by Vol )						0.0		0.0		0.0		0.0														
TOTAL WATER ( % by Vol )						81.0		81.0		81.0		81.0														
TOTAL SOLIDS ( % by Vol )						19.0		19.0		19.0		19.0														
SAND ( % by Vol )						0.1		0.1		0.1		0.2														
PRODUCT USAGE															SOLIDS CONTROL EQUIPMENT							Time Breakdown				
Product		UnitSize		Start		Received		Used		Close		Type		Hrs		OF		UF		Analysis Item		Hrs				
CleanTrol HD		22.7Kg		622		0		40		582		Centrifuge 1		NOV-Big Bowl		2		9.8		15.8		Drilling		24		
DEFOAM AP 400		25Ltr		39		0		12		27																
AvaGlyco LC		208Ltr		66		0		6		60																
CaCl2 - Prills - bb		1000Kg		142		0		4		138		Shale Shaker #1		4x200		24										
Caustic Soda		25Kg Drum		34		0		4		30		Shale Shaker #2		2x 200, 2 x 170		24										
Ildcide-G50		20Ltr		59		0		4		55		Shale Shaker #3		4x200		24										
Lime 25 Kg		25Kg		16		0		2		14																
NewZan D		25Kg		250		0		2		248								Salt %		5.5		HGS %		6.9		
TrueScav HD		25Kg		23		0		2		21								Corrected Solids %		13.5		Drilled Solids%		6.6		
Ancor 1 (190 Lt)		190Ltr		24		0		1		23																
Barite BB 1.5MT - Darwi		1500Kg		6		0		1		5																
Salt 1000 Kg BB		1000Kg		4		10		0		14																
CURRENCY															DAILY COST				CUMULATIVE COSTS							
AUD															\$23,721.50				\$308,455.10							
Newpark Engineer: Nicholas Doust Jason Cremor															Office: 0488013339				Telephone: 0894108202				Fax: 0894108200			



# DAILY MUD VOLUME ACCOUNT

Date : 11/10/2023  
Report No: 19

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT	DAILY	CUMULATIVE	FLUID LOSSES:	DAILY	CUMULATIVE
Premix drill water	237 bbl	12376 bbl	Losses Attributed To Shakers:	104 bbl	762 bbl
Chemical Volume added	30 bbl	378 bbl	Losses To Centrifuge:	17 bbl	139 bbl
Sump recycled water			Losses To Desander/Desilter:		232 bbl
Seawater			Losses To Cutting Dryer/Mud Cleaner:		
Other Received on Rig			Losses To Tripping:		
Other Built			Discharged:		70 bbl
<b>TOTAL BUILT:</b>	<b>267</b> bbl	<b>12754</b> bbl	Other Surface Losses:	72 bbl	72 bbl
			<b>Surface Losses Subtotal:</b>	<b>193</b> bbl	<b>1274</b> bbl
WHOLE MUD TRANSFERS ON/OFF	DAILY	CUMULATIVE	Seepage Losses: <input type="text"/> BBL/HR For <input type="text"/> hr		
DAILY BACKLOADED:	0		Lost Circulation:		10337 bbl
DAILY RECEIVED:	0	770 bbl	Lost Behind Casing/Left Downhole:		
Cuttings Volume:			Other Sub-Surface Losses:		
			<b>Sub-surface Losses Subtotal:</b>	<b>0</b> bbl	<b>10337</b> bbl
			<b>TOTAL DISPOSED:</b>	<b>193</b> bbl	<b>11611</b> bbl
			<b>Interval losses ( bbl/m ) :</b>	<b>2</b>	<b>34</b>

## TANK STORAGE VOLUMES

Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11.85	1.42	CleanDrill HD
Degasser	Active	19	77	11.85	1.42	CleanDrill HD
Desilter	Active	19	77	11.85	1.42	CleanDrill HD
Backflow	Active	19	77	11.85	1.42	CleanDrill HD
Tank#1	Active	81	100	11.85	1.42	CleanDrill HD
Tank#2	Active	76	100	11.85	1.42	CleanDrill HD
Tank#3	Active	83	100	11.85	1.42	CleanDrill HD
Suction#1	Active	73	100	11.85	1.42	CleanDrill HD
Suction#2	Active	78	100	11.85	1.42	CleanDrill HD
Suction#3	Reserve	45	100	11.2	1.34	Brine/CleanDrill HD Premix
Slug	Reserve	75	100	10.2	1.22	CleanDrill HD Premix Low Weight
F/L	Active	30	10	11.85	1.42	CleanDrill HD
T/T-1	Active	27	35	11.85	1.42	CleanDrill HD
T/T-2	Active	27	35	11.85	1.42	CleanDrill HD
Frac Tank-1	Reserve	58	450	10.6	1.27	CaCl2 Brine
Frac Tank-2	Reserve		450			
Frac Tank-3	Reserve		450			

## VOLUME SUMMARY:

	+	-
Starting Volume:	1319	
Current Tank Volume:	556	
Mud Volume In Hole(Incl Ri	659	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	736	
Total Built:	267	
Total Storage:		
Total Reserve:	178	
Total Disposed:		193
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>1393</b> bbls	

## VOLUME BREAKDOWN

### FLUID TYPE VOLUME BREAKDOWN 24hr Consumption

BRINE/CLEANDRILL HD	45	
CACL2 BRINE	58	
CLEANDRILL HD	556	
CLEANDRILL HD PREMI	75	


# Daily Inventory

**Report No:** 19

**Report Date:** 11/10/2023

**Well:** Amungee NW 3H

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	24		24	1	1			23
AvaGlyco LC	208Ltr	66		87	6	27			60
Barite BB 1.5MT	1500Kg	60		65		4		1	60
Barite BB 1.5MT - Darwin	1500Kg	6		53	1	48			5
CaCl2 - Prills - bb	1000Kg	142		195	4	57			138
Caustic Soda	25Kg Drum	34		42	4	12			30
Citric Acid	25Kg Sack	136		138		2			136
CleanTrol HD	22.7Kg	622		829	40	247			582
DEFOAM AP 400	25Ltr	39		50	12	23			27
Desco CF	25lb			16		16			
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	59		80	4	25			55
JK-161 LV	25Kg	84		85		1			84
KCL (L)	1000Kg Bulk Bag	25		31		6			25
Lime 25 Kg	25Kg	16		38	2	24			14
Magnesium Oxide	20Kg Sack	332		374		42			332
NDFT 325	208Ltr			7		7			
NewPac LV 25 Kg	25Kg	155		180		25			155
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	250		323	2	75			248
Omyacarb 2 (bb)	1000Kg	69		75		6			69
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	20		40		12		8	20
Salt 1000 Kg BB	1000Kg	4	10	14					14
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	45		64		19			45
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	23		63	2	42			21
Zinc Oxide 25 Kg	25Kg	21		21					21

<div></div> <div>WATER BASED MUD</div> <div>Daily Operation Report</div>		Date	12/10/2023		Section name		8 1/2" Section																						
		Report	20		Report Depth	m	3701	MDBRT	2430	TVDBRT																			
		Rig Name / #	469		Prev Report Depth	m	3170	MDBRT	2440	TVDBRT																			
		Mud Ops start date	23/09/2023		Daily metres drilled	531	Report time	23:59 Hr																					
		Spud date	25/09/2023		Section metres drilled	3092	Avg ROP	22.1	m/hour																				
RT-Ground Level m				Report time activity		Drilling																							
OPERATOR				Tamboran Resources		CONTRACTOR		H & P																					
REPORT FOR				Maurice Verkerk		REPORT FOR		Joseph Stowell																					
WELL NAME AND No.				Amungee NW 3H		FIELD		LOCATION		STATE																			
						EP 117		Beetaloo Basin		Northern Territory																			
BHA		BIT TYPE		JET SIZE		DEPTHS/CASING		MUD VOLUME (BBL)		CIRCULATION DATA																			
BIT SIZE (") 8.5		NOV TKC66		13 13 13 13 13 13 0 0 0 0		22.00 Riser Length m		HOLE VOL 859		CIRCULATION PRESS 3861 psi																			
DRILL PIPE SIZE (") 5.5		TYPE DP		LENGTH 3.658 m		Conductor @ 0 m		Active Pits 466		SURFACE TO BIT 20 min																			
DRILL PIPE SIZE (") 5.5		TYPE HW		LENGTH 38 m		18.625 Surface @ 84 m		Reserve Pits 173		BOTTOMS UP 31 min																			
DRILL COLLAR SIZE (") 6.5		6.5		LENGTH 5 0 m		13.375 Intermediate @ 280 m		TOTAL CIRCULATING VOL 1235		TOT CIRC TIME 92 min																			
						9.625 Prod. or LNR @ 605 m		STORAGE TANKS 0		ECD ppg/sg 12.98 1.56																			
								BBL / STK 0.0933		STK / MIN 144																			
								BBL / MIN 13.44		GAL / MIN 564																			
MUD PROPERTIES												MUD PROPERTY SPECIFICATIONS																	
SAMPLE FROM						FL		Pit		FL		FL		Mud Wt 0.6-11.4		Yld Pt >14		API Loss <=12											
MUD TYPE						CL H		CL H		CL H		CL H		pH 8.5-9.5		MBT <10		Solids :=3%											
TIME SAMPLE TAKEN						3:00				15:30		21:00		MUD COMMENTS Continue to bleed in premix to reduce API filtrate and reduce rheology. Treated active with 0.5 ppb Cleantrol HD to reduce API filtrate,  Treated mud with caustic soda to increase pH and lime for any carbonates.  Good steady flow of cuttings on shakers. Noticeable increase in cuttings load when increase pipe rpm from 80 to 120. Premix fluid being built with lower CaCl2 concentration. Incorporating MagOx as pH buffer in Premix fluid. Fluid showing signs of HT degradation.															
DRILLING FLUID TEMPERATURE °C (In/Out)						70 78		71 80		72 80		75 81																	
TOTAL MEASURED DEPTH ( TMD ) Metres						3232		3413		3556		3650																	
INCLINATION (Deg)						91.07		90		90		91.01																	
WEIGHT ppg / SG						11.8 1.41		11.7+ 1.41		11.9 1.43		11.8 1.41																	
FUNNEL VISCOSITY ( sec / qt ) API						54				64		62		OPERATIONAL COMMENTS Drilling 8 1/2" hole continued to 3560 mMD. Repair to standpipe gasket. P/U & rack back stand.  Resumed drilling as per Direction Drillers instruction to 3701 mMD.															
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C						73 54		91 68		80 63		75 57																	
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C						46 38		59 49		58 50		51 43																	
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C						25 24		35 35		36 36		31 31																	
PLASTIC VISCOSITY cP @ 120 °F / 49 °C						19		23		17		18																	
YIELD POINT ( lb / 100 ft <sup>2</sup> ) 120 °F / 49 °C						35		45		46		39		Water Source Water Bore															
GEL STRENGTH ( lb / 100 ft <sup>2</sup> ) 10sec/10min/30min						26 29 29		39 42 43		36 36 37		30 30 36																	
LOW SHEAR RATE VISCOSITY (LSRV)						23		35		36		31																	
n K ( lb / 100 ft <sup>2</sup> )						0.43 3.59		0.42 4.95		0.34 7.35		0.40 4.83																	
API FILTRATE ( cm <sup>3</sup> / 30 min. )						10.1		10.2		15.4		13.1								MUD ACCOUNTING (BBLs) SUMMARY FLUID BUILT FLUID LOSSES Start Vol 1393 Drill Water 228 S.C.E. 156 Received 0 Chemical 17 Discharge 0 Backload 0 Sump/SeaW 0 Downhole 2 Built 245 Other Rec'd 0 Tripping 0 Lost sub 2 Other Built 0 Other 72 Lost srf 228 TOTAL MUD ON RIG (bbbls) : 1408									
HPHT FILTRATE ( cm <sup>3</sup> / 30 min. ) °F / °C																													
API : HPHT ( Cake / 32nd in. )						1		1		2		2																	
pH						8.5		9.0		8.5		8.5																	
ALKALINITY MUD ( Pm )						0.10		0.14		0.15		0.10																	
ALKALINITY FILTRATE ( Pf / Mf )						0.05 1.1		0.05 1.8		0.05 1.3		0.05 1.3		CURRENCY DAILY COST CUMULATIVE COSTS AUD \$11,285.00 \$319,740.10															
CHLORIDE ( mg / L )						105000		112000		112500		100000																	
TOTAL HARDNESS AS CALCIUM ( mg / L )																													
SULPHITE( mg / L ) / CaCO3 (ppb)																													
KCL / K2CO3/ K2SO4																													
K + ( mg / L )						0		0		0		0		PRODUCT USAGE SOLIDS CONTROL EQUIPMENT Time Breakdown															
PHPA (ppb)																													
METHYLENE BLUE CAPACITY (ppb / % by vol)						12.5 1.4				12.5 1.4		12.5 1.4																	
BENTONITE ADDED (ppb / % by vol)						0.0		0.0		0.0		0.0																	
OTHER PRODUCTS ADDED (ppb / % by vol)																													
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)														Shale Shaker #1 4x200 24 Shale Shaker #2 2x 200, 2 x 170 24 Shale Shaker #3 4x200 24 SOLIDS ANALYSIS Salt % 5.2 HGS % 6.3 Turbidity (NTU) 0 LGS % 7.5 TSS % 0 Corrected Solids % 13.8 Drilled Solids% 7.5 Conduct. (uS/cm) DO mg/l 0															
Glycol % v/v						2.7		3.0		3.0		3.0																	
OIL ( % by Vol )						0.0		0.0		0.0		0.0																	
TOTAL WATER ( % by Vol )						81.0		81.0		81.0		81.0																	
TOTAL SOLIDS ( % by Vol )						19.0		19.0		19.0		19.0																	
SAND ( % by Vol )						0.15		0.1		0.1		0.1																	
PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown																	
Product		UnitSize		Start		Received		Used		Close		Type		Hrs		OF		UF		Analysis Item		Hrs							
CleanTrol HD		22.7Kg		582		0		16		566		Centrifuge 1		NOV-Big Bowl		7		9.9		15.8		Drilling 24							
DEFOAM AP 400		25Ltr		27		0		4		23																			
CaCl2 - Prills - bb		1000Kg		138		0		3		135																			
AvaGlyco LC		208Ltr		60		0		2		58																			
Caustic Soda		25Kg Drum		30		0		2		28		Shale Shaker #1		4x200		24													
Ildcide-G50		20Ltr		55		0		2		53		Shale Shaker #2		2x 200, 2 x 170		24													
Lime 25 Kg		25Kg		14		0		2		12		Shale Shaker #3		4x200		24													
Magnesium Oxide		20Kg Sack		332		0		2		330								Salt % 5.2		HGS % 6.3		Turbidity (NTU) 0							
TrueScav HD		25Kg		21		0		2		19								LGS % 7.5		TSS % 0									
Barite BB 1.5MT - Darwi		1500Kg		5		0		1		4								Corrected Solids % 13.8		Drilled Solids% 7.5		Conduct. (uS/cm)							
NewZan D		25Kg		248		0		1		247												DO mg/l 0							
CURRENCY						DAILY COST						CUMULATIVE COSTS																	
AUD						\$11,285.00						\$319,740.10																	
Newpark Engineer: Nicholas Doust						Jason Cremor						Office: 0488013339						Telephone: 0894108202						Fax: 0894108200					





# DAILY MUD VOLUME ACCOUNT

Date : 12/10/2023  
Report No: 20

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT	DAILY	CUMULATIVE	FLUID LOSSES:	DAILY	CUMULATIVE
Premix drill water	228 bbl	12604 bbl	Losses Attributed To Shakers:	108 bbl	870 bbl
Chemical Volume added	17 bbl	395 bbl	Losses To Centrifuge:	48 bbl	187 bbl
Sump recycled water			Losses To Desander/Desilter:		232 bbl
Seawater			Losses To Cutting Dryer/Mud Cleaner:		
Other Received on Rig			Losses To Tripping:		
Other Built			Discharged:		70 bbl
<b>TOTAL BUILT:</b>	<b>245 bbl</b>	<b>12999 bbl</b>	Other Surface Losses:	72 bbl	144 bbl
			<b>Surface Losses Subtotal:</b>	<b>228 bbl</b>	<b>1502 bbl</b>
WHOLE MUD TRANSFERS ON/OFF	DAILY	CUMULATIVE	Seepage Losses: 0.1 BBL/HR For 20 hr	2.0 bbl	2.0 bbl
DAILY BACKLOADED:	0		Lost Circulation:		10337 bbl
DAILY RECEIVED:	0	770 bbl	Lost Behind Casing/Left Downhole:		
Cuttings Volume:			Other Sub-Surface Losses:		
			<b>Sub-surface Losses Subtotal:</b>	<b>2 bbl</b>	<b>10339 bbl</b>
			<b>TOTAL DISPOSED:</b>	<b>230 bbl</b>	<b>11841 bbl</b>
			<b>Interval losses ( bbl/m ) :</b>	<b>2</b>	<b>32</b>

## TANK STORAGE VOLUMES

Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11.85	1.42	CleanDrill HD
Degasser	Active	19	77	11.85	1.42	CleanDrill HD
Desilter	Active	24	77	11.85	1.42	CleanDrill HD
Backflow	Active	19	77	11.85	1.42	CleanDrill HD
Tank#1	Active	72	100	11.85	1.42	CleanDrill HD
Tank#2	Active	72	100	11.85	1.42	CleanDrill HD
Tank#3	Active	73	100	11.85	1.42	CleanDrill HD
Suction#1	Active	63	100	11.85	1.42	CleanDrill HD
Suction#2	Active	62	100	11.85	1.42	CleanDrill HD
Suction#3	Reserve	12	100	11.2	1.34	Brine/CleanDrill HD Premix
Slug	Reserve	49	100	10.2	1.22	CleanDrill HD Premix Low Weight
F/L	Active	30	10	11.85	1.42	CleanDrill HD
T/T-1	Active	4	35	11.85	1.42	CleanDrill HD
T/T-2	Active	4	35	11.85	1.42	CleanDrill HD
Frac Tank-1	Reserve	0	450	0		M/T
Frac Tank-2	Reserve	112	450	11.85	1.42	Old CleanDrill HD
Frac Tank-3	Reserve		450			

## VOLUME SUMMARY:

	+	-
Starting Volume:	1393	
Current Tank Volume:	466	
Mud Volume In Hole(Incl Ri	769	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	859	
Total Built:	245	
Total Storage:		
Total Reserve:	173	
Total Disposed:		230
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>1408 bbls</b>	

## VOLUME BREAKDOWN

### FLUID TYPE VOLUME BREAKDOWN 24hr Comsumption

BRINE/CLEANDRILL HD	12	
CLEANDRILL HD	466	
CLEANDRILL HD PREMI	49	
M/T	0	
OLD CLEANDRILL HD	112	

# Daily Inventory

**Report No:** 20

**Report Date:** 12/10/2023

**Well:** Amungee NW 3H

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	23		24		1			23
AvaGlyco LC	208Ltr	60		87	2	29			58
Barite BB 1.5MT	1500Kg	60		65		4		1	60
Barite BB 1.5MT - Darwin	1500Kg	5		53	1	49			4
CaCl2 - Prills - bb	1000Kg	138		195	3	60			135
Caustic Soda	25Kg Drum	30		42	2	14			28
Citric Acid	25Kg Sack	136		138		2			136
CleanTrol HD	22.7Kg	582		829	16	263			566
DEFOAM AP 400	25Ltr	27		50	4	27			23
Desco CF	25lb			16		16			
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	55		80	2	27			53
JK-161 LV	25Kg	84		85		1			84
KCL (L)	1000Kg Bulk Bag	25		31		6			25
Lime 25 Kg	25Kg	14		38	2	26			12
Magnesium Oxide	20Kg Sack	332		374	2	44			330
NDFT 325	208Ltr			7		7			
NewPac LV 25 Kg	25Kg	155		180		25			155
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	248		323	1	76			247
Omyacarb 2 (bb)	1000Kg	69		75		6			69
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	20		40		12		8	20
Salt 1000 Kg BB	1000Kg	14		14					14
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	45		64		19			45
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	21		63	2	44			19
Zinc Oxide 25 Kg	25Kg	21		21					21



OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.	Amungee NW 3H	FIELD	LOCATION	STATE
		EP 117	Beetaloo Basin	Northern Territory

MUD PROPERTIES	MUD PROPERTY SPECIFICATIONS
----------------	-----------------------------

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown		
Product	UnitSize	Start	Received	Used	Close	Type		Hrs	OF	UF	Analysis Item	Hrs		
Radiagreen EME	175Ltr	20	0	10	10	Centrifuge 1	NOV-Big Bowl				Drilling	7		
DEFOAM AP 400	25Ltr	23	0	6	17						Circulation	3		
Barite BB 1.5MT - Darwi	1500Kg	4	0	3	1						Wash/Ream	14		
Desco CF	25lb	0	69	0	69									
						Shale Shaker #1	4x200	24						
						Shale Shaker #2	2x 200, 2 x 170	24						
						Shale Shaker #3	4x200	24	SOLIDS ANALYSIS					
									Salt %	5.4	HGS %	5.8	Turbidity (NTU)	0
											LGS %	9.6	TSS %	0
									Corrected Solids %	15.4	Drilled Solids%	9.6		
													Conduct. (uS/cm)	
													DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS				
						AUD		\$25,814.50		\$345,554.60				



# DAILY MUD VOLUME ACCOUNT

Date : 13/10/2023  
Report No: 21

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT			DAILY		CUMULATIVE		FLUID LOSSES:			DAILY		CUMULATIVE										
Premix drill water		100	bbl		12704	bbl	Losses Attributed To Shakers:		35	bbl		905	bbl									
Chemical Volume added		19	bbl		414	bbl	Losses To Centrifuge:			bbl		187	bbl									
Sump recycled water			bbl			bbl	Losses To Desander/Desilter:			bbl		232	bbl									
Seawater			bbl			bbl	Losses To Cutting Dryer/Mud Cleaner:			bbl			bbl									
Other Received on Rig			bbl			bbl	Losses To Tripping:			bbl			bbl									
Other Built			bbl			bbl	Discharged:			bbl		70	bbl									
TOTAL BUILT:				119	bbl	13118	bbl	Other Surface Losses:		38	bbl		182	bbl								
								Surface Losses Subtotal:		73	bbl		1575	bbl								
WHOLE MUD TRANSFERS ON/OFF			DAILY		CUMULATIVE		Seepage Losses:				1	BBL/HR For		5	hr		5.0	bbl		7.0	bbl	
DAILY BACKLOADED:				0			bbl	Lost Circulation:											bbl		10337	bbl
DAILY RECEIVED:				0			bbl	Lost Behind Casing/Left Downhole:											bbl			bbl
Cuttings Volume:							bbl	Other Sub-Surface Losses:											bbl			bbl
								Sub-surface Losses Subtotal:		5	bbl		10344	bbl								
								TOTAL DISPOSED:		78	bbl		11919	bbl								
								Interval losses ( bbl/m ) :		2			33									

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11.85	1.42	CleanDrill HD
Degasser	Active	19	77	11.85	1.42	CleanDrill HD
Desilter	Active	24	77	11.85	1.42	CleanDrill HD
Backflow	Active	19	77	11.85	1.42	CleanDrill HD
Tank#1	Active	56	100	11.85	1.42	CleanDrill HD
Tank#2	Active	56	100	11.85	1.42	CleanDrill HD
Tank#3	Active	56	100	11.85	1.42	CleanDrill HD
Suction#1	Active	56	100	11.85	1.42	CleanDrill HD
Suction#2	Active	53	100	11.85	1.42	CleanDrill HD
Suction#3	Reserve	25	100	11.2	1.34	Brine/CleanDrill HD Premix
Slug	Reserve	23	100	10.2	1.22	CleanDrill HD Premix Low Weight
F/L	Active	30	10	11.85	1.42	CleanDrill HD
T/T-1	Active	20	35	11.85	1.42	CleanDrill HD
T/T-2	Active	19	35	11.85	1.42	CleanDrill HD
Frac Tank-1	Reserve	0	450	0		M/T
Frac Tank-2	Reserve	118	450	11.85	1.42	Old CleanDrill HD
Frac Tank-3	Reserve		450			

VOLUME SUMMARY:		+	-
Starting Volume:		1408	
Current Tank Volume:		432	
Mud Volume In Hole(Incl Ri		851	
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:		890	
Total Built:		119	
Total Storage:			
Total Reserve:		166	
Total Disposed:			78
Whole Mud Backloaded:			
Whole Mud Received:			
TOTAL MUD AT RIGSITE		1449	bbls
VOLUME BREAKDOWN			
FLUID TYPE VOLUME BREAKDOWN 24hr Comsumption			
BRINE/CLEANDRILL HD	25		
CLEANDRILL HD	432		
CLEANDRILL HD PREMI	23		
M/T	0		
OLD CLEANDRILL HD	118		

# Daily Inventory

**Report No:** 21

**Well:** Amungee NW 3H

**Report Date:** 13/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	23		24		1			23
AvaGlyco LC	208Ltr	58		87		29			58
Barite BB 1.5MT	1500Kg	60		65		4		1	60
Barite BB 1.5MT - Darwin	1500Kg	4		53	3	52			1
CaCl2 - Prills - bb	1000Kg	135		195		60			135
Caustic Soda	25Kg Drum	28		42		14			28
Citric Acid	25Kg Sack	136		138		2			136
CleanTrol HD	22.7Kg	566		829		263			566
DEFOAM AP 400	25Ltr	23		50	6	33			17
Desco CF	25lb		69	85		16			69
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	53		80		27			53
JK-161 LV	25Kg	84		85		1			84
KCL (L)	1000Kg Bulk Bag	25		31		6			25
Lime 25 Kg	25Kg	12		38		26			12
Magnesium Oxide	20Kg Sack	330		374		44			330
NDFT 325	208Ltr			7		7			
NewPac LV 25 Kg	25Kg	155		180		25			155
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	247		323		76			247
Omyacarb 2 (bb)	1000Kg	69		75		6			69
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	20		40	10	22		8	10
Salt 1000 Kg BB	1000Kg	14		14					14
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	45		64		19			45
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	19		63		44			19
Zinc Oxide 25 Kg	25Kg	21		21					21







# DAILY MUD VOLUME ACCOUNT

Date : 14/10/2023  
Report No: 22

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT			DAILY		CUMULATIVE		FLUID LOSSES:			DAILY		CUMULATIVE		
Premix drill water		bbl			12704	bbl	Losses Attributed To Shakers:		bbl		905	bbl		
Chemical Volume added	15	bbl			429	bbl	Losses To Centrifuge:		bbl		187	bbl		
Sump recycled water		bbl				bbl	Losses To Desander/Desilter:		bbl		232	bbl		
Seawater		bbl				bbl	Losses To Cutting Dryer/Mud Cleaner:		bbl			bbl		
Other Received on Rig		bbl				bbl	Losses To Tripping:		bbl			bbl		
Other Built		bbl				bbl	Discharged:	14	bbl		84	bbl		
TOTAL BUILT:			15	bbl	13133	bbl	Other Surface Losses:		bbl		182	bbl		
							Surface Losses Subtotal:		14	bbl	1589	bbl		
WHOLE MUD TRANSFERS ON/OFF			DAILY		CUMULATIVE									
DAILY BACKLOADED:	0	bbl				bbl	Seepage Losses:		BBL/HR For		hr		7.0	bbl
DAILY RECEIVED:	0	bbl			770	bbl	Lost Circulation:						10337	bbl
Cuttings Volume:		bbl				bbl	Lost Behind Casing/Left Downhole:							bbl
							Other Sub-Surface Losses:							bbl
							Sub-surface Losses Subtotal:		0	bbl	10344	bbl		
							TOTAL DISPOSED:		14	bbl	11933	bbl		
							Interval losses ( bbl/m ) :		0					

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11.9	1.43	CleanDrill HD
Degasser	Active	19	77	11.9	1.43	CleanDrill HD
Desilter	Active	24	77	11.9	1.43	CleanDrill HD
Backflow	Active	19	77	11.9	1.43	CleanDrill HD
Tank#1	Active	67	100	11.9	1.43	CleanDrill HD
Tank#2	Active	65	100	11.9	1.43	CleanDrill HD
Tank#3	Active	64	100	11.9	1.43	CleanDrill HD
Suction#1	Active	61	100	11.9	1.43	CleanDrill HD
Suction#2	Active	61	100	11.9	1.43	CleanDrill HD
Suction#3	Reserve	0	100			Clean
Slug	Reserve	0	100			Clean
F/L	Active	30	10	11.85	1.42	CleanDrill HD
T/T-1	Active	20	35	11.85	1.42	CleanDrill HD
T/T-2	Active	19	35	11.85	1.42	CleanDrill HD
Frac Tank-1	Reserve	0	450			Cleaning
Frac Tank-2	Reserve	118	450	11.85	1.42	Old CleanDrill HD
Frac Tank-3	Reserve	0	450	0		

VOLUME SUMMARY:		+	-
Starting Volume:		1449	
Current Tank Volume:		473	
Mud Volume In Hole(Incl Riser)		859	
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:		890	
Total Built:		15	
Total Storage:			
Total Reserve:		118	
Total Disposed:			14
Whole Mud Backloaded:			
Whole Mud Received:			
TOTAL MUD AT RIGSITE		1450	bbls

VOLUME BREAKDOWN		
FLUID TYPE VOLUME BREAKDOWN 24hr Consumption		
	0	
CLEAN	0	
CLEANDRILL HD	473	
CLEANING	0	
OLD CLEANDRILL HD	118	


# Daily Inventory

**Report No:** 22

**Well:** Amungee NW 3H

**Report Date:** 14/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	23		24		1			23
AvaGlyco LC	208Ltr	58		87	3	32			55
Barite BB 1.5MT	1500Kg	60		65	2	6		1	58
Barite BB 1.5MT - Darwin	1500Kg	1		53	1	53			
CaCl2 - Prills - bb	1000Kg	135		195	1	61			134
Caustic Soda	25Kg Drum	28		42	2	16			26
Citric Acid	25Kg Sack	136		138		2			136
CleanTrol HD	22.7Kg	566		829	8	271			558
DEFOAM AP 400	25Ltr	17		50		33			17
Desco CF	25lb	69		85		16			69
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	53		80		27			53
JK-161 LV	25Kg	84		85		1			84
KCL (L)	1000Kg Bulk Bag	25		31		6			25
Lime 25 Kg	25Kg	12		38		26			12
Magnesium Oxide	20Kg Sack	330		374	1	45			329
NDFT 325	208Ltr			7		7			
NewPac LV 25 Kg	25Kg	155		180		25			155
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	247		323	1	77			246
Omyacarb 2 (bb)	1000Kg	69		75		6			69
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	10		40		22		8	10
Salt 1000 Kg BB	1000Kg	14		14					14
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	45		64		19			45
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	19		63		44			19
Zinc Oxide 25 Kg	25Kg	21		21					21

<div></div> <div>WATER BASED MUD</div> <div>Daily Operation Report</div>		Date	15/10/2023		Section name		Post TD																
		Report	23		Report Depth	m	3837	MDBRT	2430	TVDBRT													
		Rig Name / #	469		Prev Report Depth	m	3837	MDBRT	2430	TVDBRT													
		Mud Ops start date	23/09/2023		Daily metres drilled	0	Report time	23:59 Hr															
		Spud date	25/09/2023		Section metres drilled	0	Avg ROP	0.0	m/hour														
RT-Ground Level m				Report time activity		Circulation																	
OPERATOR				Tamboran Resources				CONTRACTOR				H & P											
REPORT FOR				Maurice Verkerk				REPORT FOR				Joseph Stowell											
WELL NAME AND No.						FIELD		LOCATION		STATE													
Amungee NW 3H						EP 117		Beetaloo Basin		Northern Territory													
BHA		BIT TYPE		JET SIZE		DEPTHS/CASING		MUD VOLUME (BBL)		CIRCULATION DATA													
BIT SIZE (")		No Bit		0 0 0 0 0 0		8.00 Riser Length m		HOLE VOL 898		MUD INHOLE 789		PUMP SIZE 6 x 11 Inches		CIRCULATION PRESS 726 psi									
DRILL PIPE SIZE (") 5.5		TYPE Casing		LENGTH 3.830 m		Conductor @ 0 m		Active Pits 536		Reserve Pits 589		PUMP MODEL Gardner-Denver		SURFACE TO BIT 35 min									
DRILL PIPE SIZE (") 5.5		TYPE HW		LENGTH 0 m		18.625 Surface @ 84 m		TOTAL CIRCULATING VOL 1325		BBL / STK 0.0933		STK / MIN 79		BOTTOMS UP 57 min									
DRILL COLLAR SIZE (") 6.5		6.5		LENGTH 0 0 m		13.375 Intermediate @ 280 m								BBL / MIN 7.37		GAL / MIN 310		TOT CIRC TIME 180 min					
				9.625 Prod. or LNR @ 605 m				STORAGE TANKS 0						ECD ppg/sg 0									
MUD PROPERTIES										MUD PROPERTY SPECIFICATIONS													
SAMPLE FROM				Pit		Pit						Mud Wt 0.6-11.4		Yld Pt >14		API Loss <=12							
MUD TYPE				CL H		CL H						pH 8.5-9.5		MBT <10		Solids :=3%							
TIME SAMPLE TAKEN				9:00		19:00						<div>MUD COMMENTS</div> <p>Built 400bbls 9.5ppg Inhibited Brine for displacement.</p> <p>Cleaned and flushed required tanks again for the cement spacer. Mixed 160 bbls of cement spacer.</p> <p>Conditioning fluid to reduce rheology profile with direct addition of 1ppb Desco CF. Will be charged off on tomorrows DMR.</p> <div>OPERATIONAL COMMENTS</div> <p>Continue to RIH with 5 1/2" casing to 3815 mMD. P/U landing joint and commence circulating @ 220GPM then increase to 300GPM. Perform flow check prior to conditioning fluid.</p> <div>Water Source</div> Water Bore											
DRILLING FLUID TEMPERATURE °C (In/Out)																							
TOTAL MEASURED DEPTH ( TMD ) Metres				3837		3837																	
INCLINATION (Deg)				90		90																	
WEIGHT ppg / SG				12.0 1.44		11.9+ 1.43																	
FUNNEL VISCOSITY ( sec / qt ) API				55		58																	
RHEOLOGY 600 : 300 RPM 120 °F / 49 °C				77 59		77 59																	
RHEOLOGY 200 : 100 RPM 120 °F / 49 °C				50 42		50 42																	
RHEOLOGY 6 : 3 RPM 120 °F / 49 °C				29 29		29 29																	
PLASTIC VISCOSITY cP @ 120 °F / 49 °C				18		18																	
YIELD POINT ( lb / 100 ft² ) 120 °F / 49 °C				41		41																	
GEL STRENGTH ( lb / 100 ft² ) 10sec/10min/30min				29 29 31		29 30 31																	
LOW SHEAR RATE VISCOSITY (LSRV)				29		29																	
n K ( lb / 100 ft² )				0.38 5.38		0.38 5.38																	
API FILTRATE ( cm³ / 30 min. )				18.6		18.2																	
HPHT FILTRATE ( cm³ / 30 min. ) °F / °C																							
API : HPHT ( Cake / 32nd in. )				3		3																	
pH				8.5		8.5																	
ALKALINITY MUD ( Pm )				0.10		0.10																	
ALKALINITY FILTRATE ( Pf / Mf )				0.05 1.1		0.05 1.1																	
CHLORIDE ( mg / L )				105000		105000																	
TOTAL HARDNESS AS CALCIUM ( mg / L )																							
SULPHITE( mg / L ) / CaCO3 (ppb)																							
KCL / K2CO3/ K2SO4																							
K + ( mg / L )				0		0																	
PHPA (ppb)																							
METHYLENE BLUE CAPACITY (ppb / % by vol)				12.5 1.4		12.5 1.4																	
BENTONITE ADDED (ppb / % by vol)				0.0		0.0																	
OTHER PRODUCTS ADDED (ppb / % by vol)																							
OTHER LIQ PRODUCTS ADDED (ppb / % by vol)																							
Glycol % v/v				1.7		1.7																	
OIL ( % by Vol )				0.0		0.0																	
TOTAL WATER ( % by Vol )				79.0		79.0																	
TOTAL SOLIDS ( % by Vol )				21.0		21.0																	
SAND ( % by Vol )				0.1		0.1																	
PRODUCT USAGE										SOLIDS CONTROL EQUIPMENT						Time Breakdown							
Product		UnitSize		Start		Received		Used		Close		Type		Hrs		OF		UF		Analysis Item		Hrs	
Barite BB 1.5MT		1500Kg		58		0		9		49		Centrifuge 1		NOV-Big Bowl						Run Casing		19	
Omyacarb 2 (bb)		1000Kg		69		0		5		64										Circulation		5	
												Shale Shaker #1		4x200		24							
												Shale Shaker #2		2x 200, 2 x 170									
												Shale Shaker #3		4x200									
								</															



# DAILY MUD VOLUME ACCOUNT

Date : 15/10/2023  
Report No: 23

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT	DAILY	CUMULATIVE	FLUID LOSSES:	DAILY	CUMULATIVE
Premix drill water	520 bbl	13224 bbl	Losses Attributed To Shakers:		905 bbl
Chemical Volume added	32 bbl	461 bbl	Losses To Centrifuge:		187 bbl
Sump recycled water			Losses To Desander/Desilter:		232 bbl
Seawater			Losses To Cutting Dryer/Mud Cleaner:		
Other Received on Rig			Losses To Tripping:		
Other Built			Discharged:	88 bbl	172 bbl
<b>TOTAL BUILT:</b> 552 bbl 13685 bbl			Other Surface Losses:		182 bbl
			<b>Surface Losses Subtotal:</b>	88 bbl	1677 bbl
<b>WHOLE MUD TRANSFERS ON/OFF</b>	<b>DAILY</b>	<b>CUMULATIVE</b>	Seepage Losses: <input type="text"/> BBL/HR For <input type="text"/> hr		7.0 bbl
DAILY BACKLOADED:	0		Lost Circulation:		10337 bbl
DAILY RECEIVED:	0	770 bbl	Lost Behind Casing/Left Downhole:		
Cuttings Volume:			Other Sub-Surface Losses:		
			<b>Sub-surface Losses Subtotal:</b>	0 bbl	10344 bbl
			<b>TOTAL DISPOSED:</b>	88 bbl	12021 bbl
			<b>Interval losses ( bbl/m ) :</b>	0	

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	24	77	11.8	1.41	CleanDrill HD
Degasser	Active	19	77	11.8	1.41	CleanDrill HD
Desilter	Active	24	77	11.8	1.41	CleanDrill HD
Backflow	Active	19	77	11.8	1.41	CleanDrill HD
Tank#1	Active	84	100	11.8	1.41	CleanDrill HD
Tank#2	Active	80	100	11.8	1.41	CleanDrill HD
Tank#3	Active	76	100	11.8	1.41	CleanDrill HD
Suction#1	Active	71	100	11.8	1.41	CleanDrill HD
Suction#2	Active	70	100	11.8	1.41	CleanDrill HD
Suction#3	Reserve	65	100	12.5	1.5	SLB Cement Spacer
Slug	Reserve	74	100	12.5	1.5	SLB Cement Spacer
F/L	Active	30	10	11.8	1.41	CleanDrill HD
T/T-1	Active	20	35	11.8	1.41	CleanDrill HD
T/T-2	Active	19	35	11.8	1.41	CleanDrill HD
Frac Tank-1	Reserve	400	450	9.5	1.14	KCl / NaCl Inhibited Brine
Frac Tank-2	Reserve	25	450	11.85	1.42	Waste
Frac Tank-3	Reserve	25	450	11.85	1.42	Waste

VOLUME SUMMARY:	+	-
Starting Volume:	1450	
Current Tank Volume:	536	
Mud Volume In Hole(Incl Ri	789	
Other Volume In Hole:		
Riser Volume:		
Total Hole Volume:	898	
Total Built:	552	
Total Storage:		
Total Reserve:	589	
Total Disposed:		88
Whole Mud Backloaded:		
Whole Mud Received:		
<b>TOTAL MUD AT RIGSITE</b>	<b>1914</b>	<b>bbls</b>
<b>VOLUME BREAKDOWN</b>		
<b>FLUID TYPE VOLUME BREAKDOWN 24hr Comsumption</b>		
CLEANDRILL HD	536	
KCL / NACL INHIBITED	400	
SLB CEMENT SPACER	139	
WASTE	50	

# Daily Inventory

**Report No:** 23

**Well:** Amungee NW 3H

**Report Date:** 15/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	23		24		1			23
AvaGlyco LC	208Ltr	55		87		32			55
Barite BB 1.5MT	1500Kg	58		65	9	15		1	49
Barite BB 1.5MT - Darwin	1500Kg			53		53			
CaCl2 - Prills - bb	1000Kg	134		195		61			134
Caustic Soda	25Kg Drum	26		42		16			26
Citric Acid	25Kg Sack	136		138		2			136
CleanTrol HD	22.7Kg	558		829		271			558
DEFOAM AP 400	25Ltr	17		50		33			17
Desco CF	25lb	69		85		16			69
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	53		80		27			53
JK-161 LV	25Kg	84		85		1			84
KCL (L)	1000Kg Bulk Bag	25		31		6			25
Lime 25 Kg	25Kg	12		38		26			12
Magnesium Oxide	20Kg Sack	329		374		45			329
NDFT 325	208Ltr			7		7			
NewPac LV 25 Kg	25Kg	155		180		25			155
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	246		323		77			246
Omyacarb 2 (bb)	1000Kg	69		75	5	11			64
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	10		40		22		8	10
Salt 1000 Kg BB	1000Kg	14		14					14
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	45		64		19			45
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	19		63		44			19
Zinc Oxide 25 Kg	25Kg	21		21					21



OPERATOR	Tamboran Resources	CONTRACTOR	H & P	
REPORT FOR	Maurice Verkerk	REPORT FOR	Joseph Stowell	
WELL NAME AND No.		FIELD	LOCATION	STATE
	Amungee NW 3H	EP 117	Beetaloo Basin	Northern Territory

MUD PROPERTIES										MUD PROPERTY SPECIFICATIONS									
----------------	--	--	--	--	--	--	--	--	--	-----------------------------	--	--	--	--	--	--	--	--	--

PRODUCT USAGE						SOLIDS CONTROL EQUIPMENT						Time Breakdown	
Product	UnitSize	Start	Received	Used	Close	Type	Hrs	OF	UF	Analysis Item	Hrs		
Desco CF	25lb	69	0	37	32	Centrifuge 1	NOV-Big Bowl			Circulation	4		
Salt 1000 Kg BB	1000Kg	14	0	13	1					CMT	6		
AvaGlyco LC	208Ltr	55	0	6	49					Rig down	14		
Idcide-G50	20Ltr	53	0	6	47								
DEFOAM AP 400	25Ltr	17	0	2	15	Shale Shaker #1	4x200						
KCL (L)	100Kg Bulk Bag	25	0	2	23	Shale Shaker #2	2x 200, 2 x 170						
Ancor 1 (190 Lt)	190Ltr	23	0	1	22	Shale Shaker #3	4x200		SOLIDS ANALYSIS				
TrueScav HD	25Kg	19	0	1	18			Salt %	0.0	HGS %	0.0	Turbidity (NTU)	0
Barite BB 1.5MT	1500Kg	49	0	-1	50					LGS %	100.0	TSS %	0
								Corrected Solids %	100.0	Drilled Solids%	100.0	Conduct. (uS/cm)	
												DO mg/l	0
						CURRENCY		DAILY COST		CUMULATIVE COSTS			
						AUD		\$24,257.50		\$390,203.10			

**Newpark Engineer:** Nicholas Doust      Jason Cremor      **Office:** 0488013339      **Telephone:** 0894108202      **Fax:** 0894108200





# DAILY MUD VOLUME ACCOUNT

Date : 16/10/2023  
Report No: 24

Well Name: Amungee NW 3H  
Operator : Tamboran Resources

FLUID BUILT			DAILY		CUMULATIVE		FLUID LOSSES:			DAILY		CUMULATIVE			
Premix drill water		bbl			13224	bbl	Losses Attributed To Shakers:		bbl		905	bbl			
Chemical Volume added	57	bbl			518	bbl	Losses To Centrifuge:		bbl		187	bbl			
Sump recycled water		bbl				bbl	Losses To Desander/Desilter:		bbl		232	bbl			
Seawater		bbl				bbl	Losses To Cutting Dryer/Mud Cleaner:		bbl			bbl			
Other Received on Rig		bbl				bbl	Losses To Tripping:		bbl			bbl			
Other Built		bbl				bbl	Discharged:	1709	bbl		1881	bbl			
TOTAL BUILT:			57	bbl	13742	bbl	Other Surface Losses:		bbl		182	bbl			
							Surface Losses Subtotal:		1709	bbl	3386	bbl			
WHOLE MUD TRANSFERS ON/OFF			DAILY		CUMULATIVE										
DAILY BACKLOADED:	0					bbl	Seepage Losses:		BBL/HR For		hr		bbl	7.0	bbl
DAILY RECEIVED:	0				770	bbl	Lost Circulation:					bbl		10337	bbl
Cuttings Volume:						bbl	Lost Behind Casing/Left Downhole:					bbl			bbl
							Other Sub-Surface Losses:					bbl			bbl
							Sub-surface Losses Subtotal:		0	bbl	10344	bbl			
							TOTAL DISPOSED:		1709	bbl	13730	bbl			
							Interval losses ( bbl/m ) :		0						

TANK STORAGE VOLUMES						
Tank Volumes (bbls)						
Tank Name	Tank Status	Current	Capacity	MW (ppg)	MW (sg)	Comments
Sandtrap	Active	0	77			
Degasser	Active	0	77			
Desilter	Active	0	77			
Backflow	Active	0	77			
Tank#1	Active	0	100			
Tank#2	Active	0	100			
Tank#3	Active	0	100			
Suction#1	Active	0	100			
Suction#2	Active	0	100			
Suction#3	Reserve	0	100			
Slug	Reserve	0	100			
F/L	Active	0	10			
T/T-1	Active	0	35			
T/T-2	Active	0	35			
Frac Tank-1	Reserve	0	450			
Frac Tank-2	Reserve	0	450			
Frac Tank-3	Reserve	0	450			

VOLUME SUMMARY:		+	-
Starting Volume:		1914	
Current Tank Volume:			
Mud Volume In Hole(Incl Ri		262	
Other Volume In Hole:			
Riser Volume:			
Total Hole Volume:		262	
Total Built:		57	
Total Storage:			
Total Reserve:			
Total Disposed:			1709
Whole Mud Backloaded:			
Whole Mud Received:			
TOTAL MUD AT RIGSITE		262	bbls
VOLUME BREAKDOWN			
FLUID TYPE VOLUME BREAKDOWN 24hr Comsumption			
	0		

# Daily Inventory

**Report No:** 24

**Well:** Amungee NW 3H

**Report Date:** 16/10/2023

Product	Unit Size	Start Amnt	Daily Rec'd	Cumul Rec'd	Daily Used	Cumul Used	Daily B'Load	Cumul B'Load	Final Stock
Alpine Spotting Beads	50lb	252		252					252
Ancor 1 (190 Lt)	190Ltr	23		24	1	2			22
AvaGlyco LC	208Ltr	55		87	6	38			49
Barite BB 1.5MT	1500Kg	49		65	-1	14		1	50
Barite BB 1.5MT - Darwin	1500Kg			53		53			
CaCl2 - Prills - bb	1000Kg	134		195		61			134
Caustic Soda	25Kg Drum	26		42		16			26
Citric Acid	25Kg Sack	136		138		2			136
CleanTrol HD	22.7Kg	558		829		271			558
DEFOAM AP 400	25Ltr	17		50	2	35			15
Desco CF	25lb	69		85	37	53			32
Dynafiber AP Fine	11.34Kg	246		246					246
Dynafiber AP Medium	11.34Kg	283		288		5			283
Dynafibre AP Coarse	11.34Kg	48		48					48
Idcide-G50	20Ltr	53		80	6	33			47
JK-161 LV	25Kg	84		85		1			84
KCL (L)	1000Kg Bulk Bag	25		31	2	8			23
Lime 25 Kg	25Kg	12		38		26			12
Magnesium Oxide	20Kg Sack	329		374		45			329
NDFT 325	208Ltr			7		7			
NewPac LV 25 Kg	25Kg	155		180		25			155
NewSeal 25	25Kg	119		119					119
NewZan D	25Kg	246		323		77			246
Omyacarb 2 (bb)	1000Kg	64		75		11			64
Omyacarb 5 (bb)	1000Kg	18		18					18
Radiagreen EME	175Ltr	10		40		22		8	10
Salt 1000 Kg BB	1000Kg	14		14	13	13			1
SAPP	25Kg Sack	48		48					48
Soda Ash	25Kg Sack	48		48					48
Sodium Bicarbonate	25Kg Sack	45		64		19			45
Sugar	25Kg Sack	21		37		16			21
TEA (230 KG)	230Kg	21		22		1			21
TrueScav HD	25Kg	19		63	1	45			18
Zinc Oxide 25 Kg	25Kg	21		21					21