DRILLING FLUID SUMMARY

FOR : CENTRAL PETROLEUM

WELL : SURPRISE # 1 ST1

AMADEUS BASIN

NORTHERN TERRITORY

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Date : December 2011

Operator : **Central Petroleum**
Well : **Surprise # 1 ST1**
Rig : **Hunt Energy Rig 3**
Spud : **19th November 2011**

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1. SUMMARY OF OPERATIONS

Surprise1 Re-Entry is located in Central Australia in Permit EP-115 within the Amadeus Basin. It is situated on the South-west part of the Northern Territory 400 km west of Alice Springs. The well is on the previously drilled Surprise1 location and is a re-entry to Surprise 1, drilled in December 2010.

The primary geological objectives of Surprise 1 Re-Entry are to appraise the hydrocarbon potential of the Ordovician reservoir units of the Stairway and Pacoota Sandstones. Objectives of the re entry will be to continue appraising the Lower Stairway Sandstone.

The drill water was carted from the local water well CTP JOW High Flow and had the following properties:-

pH	:	7.5
Pf/mf	:	0.0 / 0.22
Cl	:	1300 mg/l
Ca	:	660 mg/l

After rigging up Hunt Rig #3 and inspecting it to Northern Territory Mines Department requirements and Central Petroleum specifications the Surprise1 hole was re entered at 18:00 hours on the 19th of Nov 2011.

HOLE SIZE	**:**	**8½" Re-Entry**
MUD TYPE	**:**	**KCl/Polymer**
INTERVAL	**:**	**0 - 2556m**
CASING	**:**	**9 ⅝" @ 1450m**

A short system was used to drill with returns from the shale shakers diverted via the trough to the pill tank. Water and old KCl mud from downhole were used to drill out the cement plugs. Gel/KCl sweeps containing 8ppb Aus-Ben, 11ppb KCl and Xanbore at 1.2ppb were pumped to ensure adequate hole cleaning.

The top cement plug was tagged at 100 meters and drilled to 132 meters, the middle plug was tagged at 1378 metres and it was drilled to 1432 metres where there was a drop in the pump pressure of 851 psi. A carbide test was performed indicating a washout. The pipe was pulled out of hole wet while inspecting the drill string for a washout.

While running in hole between cement plugs the old KCl mud was dumped via the sand trap. The remaining section of the cement plug was drilled to 1446 metres. Bottoms up

was circulated and a flow check was performed before running in hole to 1467 metres where a Formation Integrity Test was performed. The FIT test was 700 psi for an EMW of 11.7ppg. The mud weight for the test was 8.9ppg.

After the FIT test the pipe was run in hole washing and reaming as required to tag the bottom plug at 2297 metres. The top of the plug was circulated and an Xtra-sweep pill was pumped, circulated out and observed at the shakers. Visual inspection of the pill returns showed slightly more than normal cuttings at the shakers.

A wiper trip was then initiated to the 9 ⅝" casing shoe without problem. While at the shoe surface equipment was repaired then a decision was made to pull out to surface and test the BOP's. A 2.5bbls per hour static loss was recorded during this time. A new bit was made up and run in the hole with second bottom hole assembly. The cement plug was drilled out and the string run in to 2538 metres, washing and reaming as required, where the old mud was displaced to new KCl/Polymer mud. Bottom was tagged at 2556 metres and an Xtra-Sweep pill was prepared. The hole was swept and circulated clean.

HOLE SIZE : **8½" Production Hole**
MUD TYPE : **KCl/Polymer/Residrill**
INTERVAL : **2556m – 2732m**
CASING : **7" @ 2729m**

KCl/Polymer mud was use to displace the old mud in the hole between 2297 metres and 2556 metres. Some cement contamination was evident from the displacement process when old mud was incorporated into the system to maintain volume. The contamination was treated with Citric Acid and Sodium Bicarbonate.

Residrill was introduced into the system from 2583 metres at 4ppb. The Sand Bed Test upon reaching 4ppb was 17mm. From 2650 metres the Sand Bed Test was greater than 25mm. This was mainly due to depletion of Residrill at the shakers and a low Bentonite/solids concentration (LGS 2.3%). The Bentonite concentration was 5.0ppb at 2650 metres but additions via premixes increased the concentration to 7.5ppb by TD thereby assisting in achieving a better Sand Bed Test. The Residrill concentration was also increased to a calculated 8ppb, no depletion being taken into account, to achieve and maintain a Sand Bed Test of 25mm.

Typical premixes consisted of 8ppb Bentonite, 3% KCl, 1 – 2ppb AMC Pac-L and 6 – 8ppb Residrill. Residrill was also added directly to the active to counter depletion and maintain the desired Sand Bed Test results.

Whilst logging this section the static loss rate was averaging 0.7 – 1.0bbl/hr. Two wiper trips were conducted without problems during the logging. The first trip returned large amounts of thin filter cake when a hi-vis pill was circulated out. During the MDT run it was

thought the tool became stuck at 2544 metres and a fishing job ensued. The tool was free to move once the DP had been run into 2200 metres indicating that the wireline was possibly key seated in the Mereenie Formation. The tool itself was not stuck per se.

A wiper trip was conducted and a high viscosity sweep was pumped. Some small pieces of filter cake were seen at the shakers. Biocide and Sodium Sulphite were added to maintain fluid stability.

VSP logs were then conducted followed by a further wiper trip. Pipe was then pulled from the hole, laying out excess 3½" pipe and laying out the Heavy Weight drill pipe, 6¼" Drill Collars and Kelly.

The drill floor was prepared and the 7" casing was run in the hole. After circulating the hole, the casing was successfully cemented with good returns throughout.

BOP's were then nippled down and were then nippled up again for the commencement of the 6" horizontal section.

After various pressure testing and the like, a Whipstock was picked up and run in the hole. This was set at 2429 m.

Mud was transferred from the surface system to a frac tank, keeping 55 bbls so as to run a short system when milling the window. All other tanks were then cleaned out in preparation for mixing brine.

A window was milled in the 7" casing with the previous section's fluid run on a short system. Once the window was milled, pipe was pulled. A Directional assembly and associated equipment were picked up and run in the hole. At this stage, Surprise 1 ST1 was completed.

The well then continued as Surprise 1 Re-Entry H.

2. OBSERVATIONS, RECOMMENDATIONS AND WELL ANALYSIS

Surprise1 Re-entry was drilled to a Total Depth of 2732 m for a mud cost of $78,602.29 or $28.77 per metre. No hole problems were encountered on the re-entry, drilling cement plugs or whilst drilling the new 8½" section.

8 ½" Re-entry Section to 2554m

This section was drilled for a mud cost of $16,368.90 or $6.41 per metre. Water was used initially to circulate and drill the cement plugs. Gel Sweeps were occasionally pumped to the top of the second cement plug. Below the 9⅝" casing shoe KCl/Gel sweeps were pumped to maintain good hole cleaning. Xanbore was used to raise the viscosity and Yield Point.

Most of the pipe displacement returns were dumped via the sand trap. Some of the old mud was mixed in with the Water/Gel sweeps for drilling the cement plugs after which this fluid was treated for cement contamination.

The two linear motion shakers were fitted with the finest mesh screens that would handle the mud type and flow rate. The De-silter and De-sander were not used.

8½" Production Hole Section to 2554m 2732m

This section of hole was drilled with KCl/Polymer/Residrill mud for a mud cost of $62,233.39 or $349.63 per metre. This interval was drilled over a period of 4 days.

Prior to drilling new hole the drilling fluid properties were tightened to the Drilling Fluid Program specifications. The Yield Point (>15lb/100ft^2), 6 rpm (6lb/100ft^2) and Funnel Viscosity (>40 sec/qt) were maintained with Xanthan Gum. All mud properties remained within specification throughout the entire section.

At the start of the section the mud weight of the fresh mud was 8.75ppg. Solids invasion due to not using SCE gradually increased the mud weight with drill solids to 9.0ppg. This was acceptable and desirable because the use of some drill solids is required to maximise the effect of Residrill.

Initial mud mixes supplied 3% KCl to the system. This was maintained through this section via premixes. No reactive formations were encountered and only very minimal depletion was observed.

Residrill was added to the system to convert the KCl/Polymer system to a Non Invasive Fluid (NIF) system for this section. Some drill solids were incorporated by the Residrill to optimise its performance. When the drill solids concentration was low Aus-Ben was added to the system to maintain optimum performance of the Residrill. The ability of Residrill to aggregate drill solids also meant that controlling mud weight while using coarse shaker screens was not an issue. The aggregated drill solids were easily removed at the shakers.

Although no conventional fluid loss additives had been programmed for this section AMC Pac-L was used in conjunction with Residrill to enhance the ability of the Residrill to form a thin pliable filter cake. The average API fluid loss for this section was between 7 - 9cc/30mins.

The mud rheology whilst drilling the new hole section was within specification, with yield point at 15 - 18 lb/100ft^2 and the 6 rpm reading at 5 - 7lb/100ft^2. These rheological properties were regulated by additions of Xanthan Gum polymer. Good wellbore cleaning was seen throughout this section.

Only minimal seepage losses were encountered throughout this section.

Solids control equipment was operated as required. The two shale shakers were dressed with 70-mesh and 50-mesh screens. Besides the use of settling tanks the shakers were the only solids control used on this section.

Overall good wellbore stability was apparent, and the casing was run and cemented with no problems.

3. INTERVAL COSTS

Product			8-1/2" Re-Entry			8-1/2" Production Hole			Total Well Consumption		
		Interval :	0 - 2556 m			2556 m - 2719 m					
	Cost	Unit Size	Used	Cost	%Cost	Used	Cost	%Cost	Used	Cost	%Cost
AMC Biocide G	$ 155.65	25 kg	3	$466.95	2.9%	7	$1,089.55	1.8%	10	$1,556.50	2.0%
AMC Defoamer	$ 169.50	25 lt	1	$169.50	1.0%	1	$169.50	0.3%	2	$339.00	0.4%
AMC Pac L	$ 125.60	25 kg				32	$4,019.20	6.5%	32	$4,019.20	5.1%
AMC Xtra-Sweep	$ 122.65	12 lb	1	$122.65	0.7%	6	$735.90	1.2%	7	$858.55	1.1%
Aus-Ben	$ 16.50	25 kg	242	$3,993.00	24.4%	155	$2,557.50	4.1%	397	$6,550.50	8.3%
Barytes	$ 11.20	25 kg				384	$4,300.80	6.9%	384	$4,300.80	5.5%
Caustic Soda	$ 36.50	25 kg				7	$255.50	0.4%	7	$255.50	0.3%
Citric Acid	$ 75.00	25 kg	2	$150.00	0.9%	2	$150.00	0.2%	4	$300.00	0.4%
Flossy Salt	$ 7.50	25 kg									
Liquipol	$ 105.00	25 lt									
Potassium Chloride	$ 33.60	25 kg	234	$7,862.40	48.0%	155	$5,208.00	8.4%	389	$13,070.40	16.6%
Residrill (l)	$ 136.53	25 lb				228	$31,128.84	50.0%	228	$31,128.84	39.6%
Residrill (s)	$ 90.10	16.5 lb				59	$5,315.90	8.5%	59	$5,315.90	6.8%
Soda Ash	$ 24.10	25 kg	5	$120.50	0.7%	4	$96.40	0.2%	9	$216.90	0.3%
Sodium Bicarbonate	$ 29.70	25 kg	3	$89.10	0.5%	13	$386.10	0.6%	16	$475.20	0.6%
Sodium Sulphite	$ 42.60	25 kg				14	$596.40	1.0%	14	$596.40	0.8%
Xanbore	$ 188.60	25 kg	18	$3,394.80	20.7%	33	$6,223.80	10.0%	51	$9,618.60	12.2%
Totals :				**$16,368.90**	**100.0%**		**$62,233.39**	**100.0%**		**$78,602.29**	**100.0%**
Cost per Metre :				**$46.24**			**$75.99**			**$67.01**	

4. Material Reconciliaton

	DT:	53330	53335	53336	53279	53119	56406	Ex Falcon	Total	Total	Total
	Date :	4/11/2011	7/11/2011	7/11/2011	17/11/2011	5/12/2011	15/12/2011	Oil	Delivered	Invoiced	Remaining
Product Description	**Nett Weight**	**Amount**	**Amount**	**Amount**	**Amount**	**Amount**	**Amount**	**Amount**	**Amount**	**Amount**	**AMC Stock**
AMC Biocide G	25 lt		32					11	43	10	33
AMC Defoamer	25 lt		32					6	38	2	36
AMC Pac L	25 kg		32			64			96	32	64
Aus-Ben	25 kg		192		210	252		24	678	397	281
Baryte	25 kg	816							816	384	432
Caustic Soda	25 kg							32	32	7	25
Citric Acid	25 kg			12				7	19	4	15
Fracseal F	11 kg	70							70		70
Fracseal M	11 kg	35							35		35
Liquipol	25 kg						12		12	1	11
Potassium Chloride	25 kg		240		192	288	240	114	1074	522	552
Residrill	7.5 kg		59						59	59	0
Residrill	11.4 kg		144		240	96			480	228	252
Rod-Free	25 lt			6					6		6
SAPP	25 kg			6					6		6
Soda Ash	25 kg		48					10	58	14	44
Sodium Bicarbonate	25 kg				48				48	16	32
Sodium Chloride (Flossy)	25 kg						1008		1008	252	756
Sodium Sulphite	25 kg		40					20	60	32	28
Xan-Bore	25 kg		40			40			80	58	22

5. FLUID PROPERTIES SUMMARY

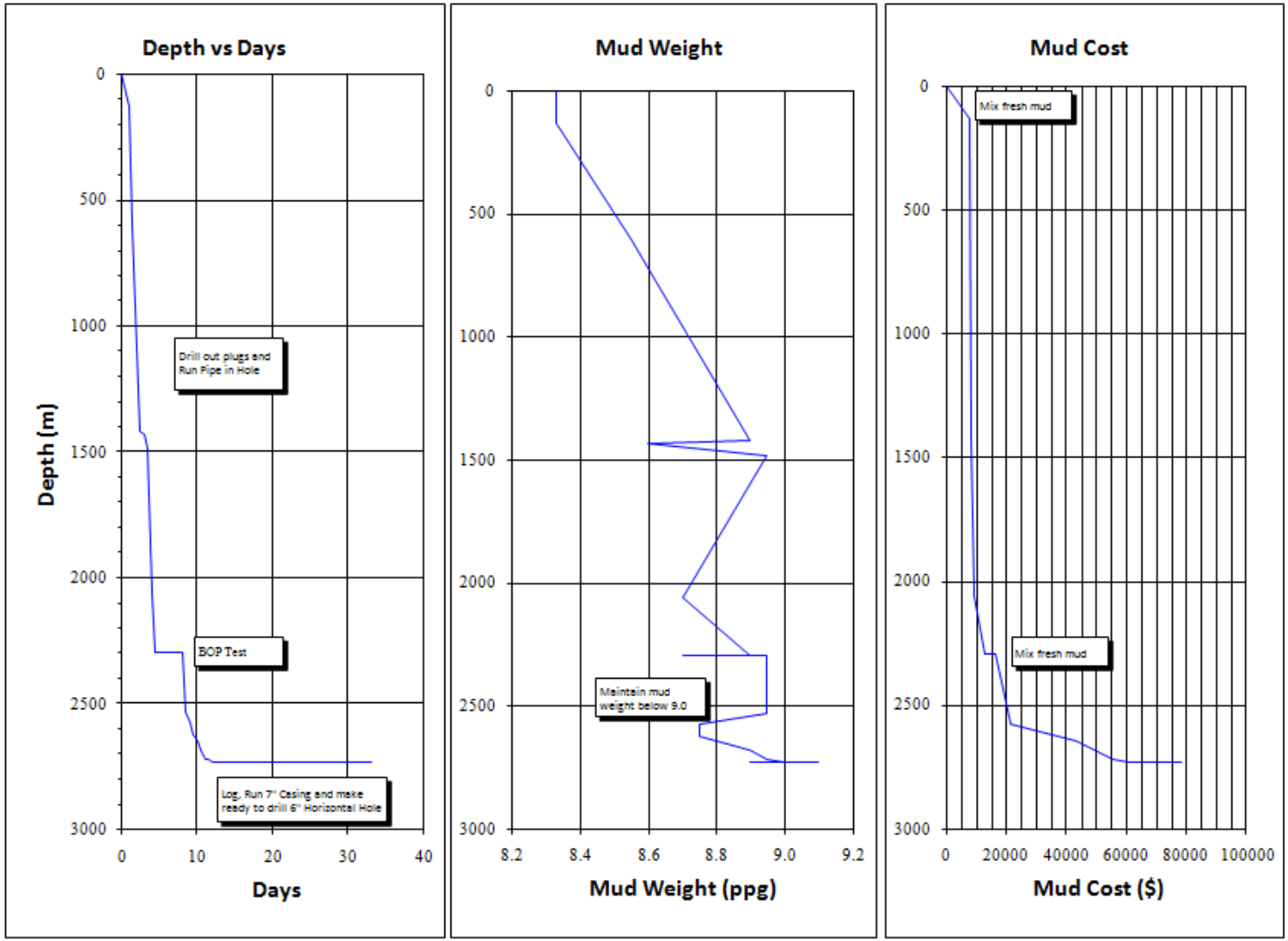
								Gels		Filtrate		Solids											
Date	Mud Type	Temp	Depth	Weight	Vis	PV	YP	10 sec	10 min	API	Cake	Solids	Water	Sand	MBT	pH	Pf	Mf	Cl-	Ca++	SO3=	K+	KCl
19-Nov-11	Water / Gel Sweeps		130	8.33	27								100.0			8.5							
20-Nov-11	Water / Gel Sweeps	31	600	8.55	35	5	7	5	8	25.0	1	0.4	99.6			9.5	0.12	0.50	24,000	1040		21,616.0	4.0
21-Nov-11	Water / Gel Sweeps	29	1420	8.90	32	5	2	3	6	20.0	2	3.1	96.9	0.2		13.5	1.90	2.50	22,000	1000		18,373.6	3.4
	Water / Gel Sweeps		1432	8.60	35	5	6	5	7	26.0	1	0.7	99.3		2.0	9.5	0.15	0.54	23,500	1020		21,616.0	4.0
22-Nov-11	Water / Gel Sweeps	29	1486	8.95	32	5	5	4	5	20.0	2	3.4	96.6	0.3		13.0	2.20	2.60	22,000	880		18,373.6	3.4
	Water / Gel Sweeps	27	2059	8.70	33	6	3	6	9	23.0	1	1.4	98.6		2.0	9.5	0.15	0.52	23,500	600		21,616.0	4.0
23-Nov-11	Water / Gel Sweeps		2297	8.90	33	5	5	4	6	20.0	2	3.1	96.9	0.4		13.0	2.10	2.50	22,000	920		18,373.6	3.4
	Water / Gel Sweeps		2297	8.70	38	7	10	11	14	16.0	1	1.6	98.4			9.0	0.08	0.32	22,000	600		18,373.6	3.4
24-Nov-11	Water / Gel Sweeps		2297	8.70	37	6	11	10	14	16.4	1	1.6	98.4		2.0	9.0	0.10	0.34	22,000	680		18,373.6	3.4
	Water / Gel Sweeps	30	2297	8.90	33	5	5	4	6	21.0	1	3.1	96.9	0.4	3.0	13.0	2.00	2.50	22,000	1000		18,373.6	3.4
25-Nov-11	Water/Gel/KCL Sweeps		2297	8.70	36	6	9	12	15	14.3	1	1.6	98.4		2.0	9.0	0.08	0.30	22,500	640		18,914.0	3.5
	Water/Gel/KCL Sweeps	25	2297	8.90	32	6	3	4	6	19.4	1	3.1	96.9	0.3	3.0	13.5	1.90	2.40	22,000	920		18,373.6	3.4
26-Nov-11	Water / Gel S/KCLSweeps	27	2297	8.70	39	6	10	11	16	13.4	1	1.7	98.3		2.5	9.0	0.05	0.28	21,000	800		17,833.2	3.3
	Water / Gel S/KCLSweeps	29	2297	8.95	34	6	4	4	6	18.5	1	3.4	96.6	0.4	3.4	12.5	1.80	2.30	22,000	1040		18,373.6	3.4
27-Nov-11	Water / Gel S/KCLSweeps	38	2534	8.95	36	8	6	8	13	24.5	1	3.0	97.0	0.7	5.0	13.0	1.17	2.12	19,500	1000		21,616.0	4.0
	KCL/Polymer	37	2575	8.75	37	6	11	9	15	14.8	1	1.7	98.3	0.4	2.5	11.0	0.18	0.32	18,000	820		19,994.8	3.7
28-Nov-11	KCl Residrill	39	2624	8.75	37	7	14	15	19	11.3	1	1.7	98.3	0.6	5.0	10.5	0.10	0.52	18,000	600	250	19,994.8	3.7
	KCl Residrill	47	2648	8.80	40	9	18	17	23	6.9	1	2.3	97.7	0.7	6.3	9.5	0.08	0.46	15,000	720	200	16,752.4	3.1
29-Nov-11	KCl Residrill	48	2682	8.90	40	11	15	16	21	8.6	1	3.0	97.0	0.8	5.0	9.5	0.08	0.45	15,000	700	250	16,752.4	3.1
	KCl Residrill	50	2720	8.95	40	12	15	17	20	6.6	1	3.1	96.9	0.6	7.5	9.0	0.06	0.48	18,000	720	180	19,994.8	3.7
30-Nov-11	KCl Residrill	51	2717	8.95	40	12	16	17	20	6.8	1	3.3	96.7	0.7	7.5	9.5	0.08	0.52	15,000	600	250	16,752.4	3.1
	KCl Residrill	52	2732	9.00	40	13	15	17	19	7.6	1	3.7	96.3	0.6	6.3	10.0	0.12	0.60	15,000	640	200	16,752.4	3.1
1-Dec-11	KCl Residrill		2732	9.10	42	12	21	19	22	6.8	1	4.4	95.6	0.8	8.8	9.0	0.03	0.50	15,000	592	80	16,752.4	3.1
	KCl Residrill		2732	9.10	42	13	19	19	23	6.5	1	4.2	95.8	0.8	8.8	9.0	0.05	0.50	15,000	580	80	16,752.4	3.1
2-Dec-11	KCl Residrill		2732	9.10	43	13	19	19	23	6.5	1	4.2	95.8	0.8	8.8	9.0	0.05	0.50	15,000	580	80	16,752.4	3.1
	KCl Residrill		2732	9.10	41	12	19	18	22	6.4	1	4.2	95.8	0.8	8.6	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
3-Dec-11	KCl Residrill		2732	9.10	42	12	19	18	22	6.4	1	4.2	95.8	0.8	8.6	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	9.10	42	12	19	18	22	6.4	1	4.2	95.8	0.8	8.6	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
4-Dec-11	KCl Residrill		2732	9.10	42	12	19	18	22	6.4	1	4.2	95.8	0.8	8.6	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	9.10	42	12	19	18	22	6.4	1	4.2	95.8	0.8	8.6	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
5-Dec-11	KCl Residrill		2732	9.10	41	12	19	18	22	6.4	1	4.2	95.8	0.8	8.6	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill	39	2732	9.10	46	18	24	8	10	8.5	1	4.1	95.9	0.8	8.6	9.0	0.05	0.50	15,200	560	80	17,292.8	3.2
6-Dec-11	KCl Residrill		2732	9.10	50	12	26	10	14	7.2	1	4.1	95.9	0.8	8.2	9.0	0.05	0.50	15,200	560	80	17,292.8	3.2
	KCl Residrill		2732	9.10	50	12	26	10	14	7.2	1	4.1	95.9	0.8	8.2	9.0	0.05	0.50	15,200	560	80	17,292.8	3.2
7-Dec-11	KCl Residrill		2732	9.10	50	14	24	10	14	7.2	1	4.1	95.9	0.8	8.2	9.0	0.05	0.50	15,200	560	80	17,292.8	3.2
	KCl Residrill		2732	9.10	50	14	24	10	14	7.2	1	4.1	95.9	0.8	8.2	9.0	0.05	0.50	15,200	560	80	17,292.8	3.2
8-Dec-11	KCl Residrill		2732	9.10	50	14	24	10	14	7.2	1	4.1	95.9	0.8	8.2	9.0	0.05	0.50	15,200	560	80	17,292.8	3.2
	KCl Residrill		2732	8.90	50	13	22	10	13	7.2	1	2.7	97.3	0.6	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1

Date	Mud Type	Temp	Depth	Weight	Vis	PV	YP	Gels		Filtrate		Solids											
								10 sec	10 min	API	Cake	Solids	Water	Sand	MBT	pH	Pf	Mf	Cl-	Ca++	SO3=	K+	KCl
9-Dec-11	KCl Residrill		2732	8.90	50	13	22	10	13	7.2	1	2.7	97.3	0.6	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	46	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
10-Dec-11	KCl Residrill		2732	8.90	46	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	46	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
11-Dec-11	KCl Residrill		2732	8.90	46	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	45	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
12-Dec-11	KCl Residrill		2732	8.90	45	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	45	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
13-Dec-11	KCl Residrill		2732	8.90	45	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	45	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
14-Dec-11	KCl Residrill		2732	8.90	45	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	45	12	21	9	13	7.2	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
15-Dec-11	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
16-Dec-11	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
17-Dec-11	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
18-Dec-11	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.50	8.00	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
19-Dec-11	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2732	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
20-Dec-11	KCl Residrill		2429	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2429	8.90	44	12	19	9	13	7.4	1	2.7	97.3	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
21-Dec-11	KCl Residrill		2429	8.90	42	12	18	8	11	7.6	1	2.8	97.2	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1
	KCl Residrill		2429	8.90	42	12	18	8	11	7.6	1	2.8	97.2	0.5	8.0	9.0	0.05	0.50	15,000	560	80	16,752.4	3.1

6. Mud Volume Analysis

		Interval			Fluid Built & Received					Fluid Disposed						Summary			
Date	Hole Size	From	To	Mud Type	Fresh Premix	Sump Premix	Direct Recirc	Water	Other	De-sander	De-silter	Centrifuge	Down-hole	Dumped	Other	Initial	Received	Disposed	Final
19-Nov-11	12-1/4"	0 m	132 m	Spud Mud	530			50					-1	17		0	580	16	564
20-Nov-11	12-1/4"	132 m	1378 m	Spud Mud				15	300				0	24		564	315	24	856
21-Nov-11	12-1/4"	1378 m	1432 m	Spud Mud					20				0	32	43	856	20	75	801
22-Nov-11	12-1/4"	1432 m	2201 m	Spud Mud	45			5	175				5		15	801	225	20	1006
23-Nov-11	12-1/4"	2201 m	2297 m	Spud Mud	208				43				36	58	95	1006	251	189	1068
24-Nov-11	12-1/4"	2297 m	2297 m	Spud Mud				32					16	12	16	1068	32	44	1056
25-Nov-11	12-1/4"	2297 m	2297 m	Spud Mud	110								25	12	65	1056	110	102	1064
26-Nov-11	12-1/4"	2297 m	2297 m	Spud Mud	116			8					88	6	35	1064	124	129	1059
Sub Total					**1009**	**0**	**0**	**110**	**538**	**0**	**0**	**0**	**168**	**161**	**269**	**6415**	**1657**	**598**	
27-Nov-11	8-1/2"	2297 m	2565 m	KCl Polymer	560			20	18				133	460	65	1059	598	658	999
28-Nov-11	8-1/2"	2565 m	2632 m	KCl Polymer				15					0	60	42	999	15	102	912
29-Nov-11	8-1/2"	2632 m	2705 m	KCl Polymer	140								0	10	46	912	140	56	996
30-Nov-11	8-1/2"	2705 m	2732 m	KCl Polymer	100								0	40	130	996	100	170	926
1-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									33	15	55	926	0	103	823
2-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer	100								0			823	100	0	923
3-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									15			923	0	15	908
4-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									15	12		908	0	27	881
5-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									36	12	22	881	0	70	810
6-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer	100								16			810	100	16	895
7-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									15			895	0	15	880
8-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer	50								15			880	50	15	915
9-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									29			915	0	29	886
10-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									17			886	0	17	869
11-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									22			869	0	22	847
12-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer	100								19		90	847	100	109	838
13-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									17			838	0	17	821
14-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									14			821	0	14	807
15-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									0	104		807	0	104	703
16-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									0			703	0	0	703
17-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									0			703	0	0	703
18-Dec-11	8-1/2"	2732 m	2732 m	KCl Polymer									0			703	0	0	703
19-Dec-11	8-1/2"	2732 m	2429 m	KCl Polymer									35	295		703	0	330	372
20-Dec-11	8-1/2"	2429 m	2429 m	KCl Polymer									0			372	0	0	373
21-Dec-11	8-1/2"	2429 m	2429 m	KCl Polymer	50								0	104		373	50	104	318
Sub Total					**1200**	**0**	**0**	**35**	**18**	**0**	**0**	**0**	**432**	**1112**	**450**	**20548**	**1253**	**1994**	
Well Total					**2209**	**0**	**0**	**145**	**556**	**0**	**0**	**0**	**600**	**1273**	**719**		**2910**	**2592**	

7. Graphs


Depth vs Days
Depth (m)
0
500
1000
1500
2000
2500
3000
Drill out plugs and Run Pipe in Hole
BOP Test
Log, Run 7" Casing and make ready to drill 6" Horizontal Hole
0
10
20
30
40
Days
Mud Weight
0
500
1000
1500
2000
2500
3000
Maintain mud weight below 9.0
8.2
8.4
8.6
8.8
9.0
9.2
Mud Weight (ppg)
Mud Cost
0
500
1000
1500
2000
2500
3000
Mix fresh mud
Mix fresh mud
0
20000
40000
60000
80000
100000
Mud Cost ($)

8. DAILY MUD REPORTS

DRILLING FLUID REPORT

Report #	1	Date :	19-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth		to 132	Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	
WELL NAME AND No	Surprise1 ST1	FIELD / LOCATION / STATE	EP-115 GDA94 Zone 52 / Amadeus Basin / Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING		MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	18	18	18		SURFACE	ft	HOLE	PITS	PUMP SIZE			CIRCULATION	
8.50	REED					SET @	M	18	40	5.5 X 7.5	Inches		PRESS (PSI)	psi
DRILL PIPE	TYPE	Length				INTERMEDIATE	ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF		BOTTOMS	
SIZE 4.0	#	0	Mtrs			SET @	M	564		Triplex1	97	%	UP (min)	1 min
DRILL PIPE	TYPE	Length				PRODUCTION. oi	ft	IN STORAGE		BBL/STK	STK / MIN		TOTAL CIRC.	
SIZE 4.50	HW	19	Mtrs			LINER Set @	M	506		0.0550	222		TIME (min)	48 min
DRILL COLLAR SIZE (")		Length				MUD TYPE				BBL/MIN	GAL / MIN		ANN VEL. DP	217
6.25		113	Mtrs			Water / Gel Sweeps				11.84	497		(ft/min) DCs	367

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS		
SAMPLE FROM			Mud Weight 8.33	API Filtrate	HPHT Filtrate
TIME SAMPLE TAKEN			Plastic Vis	Yield Point	pH 8.5
DEPTH (ft) - (m) Metres	130		KCl	PHPA	Sulphites
FLOWLINE TEMPERATURE °C	IN	OUT			
WEIGHT ppg / SG	8.33	1.000			
FUNNEL VISCOSITY (sec/qt) API @ °C	27				
PLASTIC VISCOSITY cP @ °C					
YIELD POINT (lb/100ft²)					
GEL STRENGTHS (lb/100ft²) 10 sec/10 min					
RHEOLOGY θ600 / θ300					
RHEOLOGY θ200 / θ100					
RHEOLOGY θ6 / θ3					
FILTRATE API (cc's/30 min)					
HPHT FILTRATE (cc's/30 min) @ °F					
CAKE THICKNESS API : HPHT (32nd in)					
SOLIDS CONTENT (% by Volume)	#DIV/0!				
LIQUID CONTENT (% by Volume) OIL/WATER	#####	#####			
SAND CONTENT (% by Vol.)					
METHYLENE BLUE CAPACITY (ppb equiv.)					
pH	8.5				
ALKALINITY MUD (Pm)					
ALKALINITY FILTRATE (Pf / Mf)					
CHLORIDE (mg/L)					
TOTAL HARDNESS AS CALCIUM (mg/L)					
SULPHITE (mg/L)					
K+ (mg/L)					
KCl (% by Wt.)					
PHPA (ppb)					
ECD (ppg)					

OBSERVATIONS

First mud loadout arrived on the 11th Nov 2011. Mud Tanks were rigged up and a new triplex pump was installed and lines were made.
Water was treated with soda ash and Gel spud mud was mixed and stored in surface mud tanks. While drilling rat hole with water it was found that the shaker mud tanks were at lower level to the main suction tank thus causing mud to flow back towards settling tanks. The tanks were rigged down and soil was compacted and lined with timber and mud tanks resitted.
Gel mud was mixed and stored in tanks including 2x 80 bbls Frac tanks
KCL brine was made at 1% to 2% and added slowly to the Gel. Xanbore was added to increase viscosity to 37 sec/quart.
A short system was made to drill cement with water using the pill tank.
Ocassional gel sweeps were made.

OPERATIONS SUMMARY

Mud Engineer arrived onsite 11th Nov 2011.
Hunt Rig 3 was rigged up until 19th Nov 2011. The rig was made ready to Northern Territory mines departments requirements and Central Petroleum Ltd specifications. It was inspected by Central Petroleums drilling representatives
Ran in hole and tagged top cement plug at 100 m. Started drilling cement plug on Surprise1 ST1 at 1800 hours 19th November 2011.
Drilled cement plug from 100 m to 130 m. Ran in hole with pipes.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	530	Desander		INITIAL VOLUME	0
Premix (recirc from sump)		Desilter			
Drill Water	50	Downhole	-1	+ FLUID RECEIVED	580
Direct Recirc Sump		Dumped	17	- FLUID LOST	16
Other (eg Diesel)		Other		+ FLUID IN STORAGE	506
TOTAL RECEIVED	580	TOTAL LOST	16	FINAL VOLUME	1,070

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x50	
Degasser			Desilter			Shaker #2	3x50	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Biocide G	$ 155.65		43	1	42	$ 155.65
AMC Defoamer	$ 169.50		38	1	37	$ 169.50
Aus-Ben	$ 16.50		192	160	32	$ 2,640.00
Citric Acid	$ 75.00		12	1	11	$ 75.00
Potassium Chloride	$ 33.60		353	120	233	$ 4,032.00
Soda Ash	$ 24.10		48	4	44	$ 96.40
Xanbore	$ 188.60		48	3	45	$ 565.80

Solids Analysis	%	PPB
High Grav solids		
Total LGS		
Bentonite		
Drilled Solids		
Salt		
n @ Hrs		
K @ Hrs		

Bit Hydraulics & Pressure Data	
Jet Velocity	214
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	
Equiv. Mud Wt.	
Max Pressure @ Shoe :	

DAILY COST	CUMULATIVE COST
$7,734.35	$7,734.35

RMN ENGINEER	A Lokea	CITY	Adelaide Office	TELEPHONE	08 8338 7266

DRILLING FLUID REPORT

Report #	2	Date :	20-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	132 to 1378		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING		MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE		18	18	18	SURFACE	ft	HOLE	PITS	PUMP SIZE		CIRCULATION	
8.50	REED					SET @	M	319	38	5.5 X 7.5	Inches	PRESS (PSI)	psi
DRILL PIPE	TYPE	Length				INTERMEDIATE	ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS	
SIZE 4.0	#	55	Mtrs			SET @	M	857		Triplex1	97 %	UP (min)	min
DRILL PIPE	TYPE	Length				PRODUCTION. or	ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.	
SIZE 4.50	HW	19	Mtrs			LINER Set @	M	500		0.0550		TIME (min)	min
DRILL COLLAR SIZE (")		Length				MUD TYPE				BBL/MIN	GAL / MIN	ANN VEL. DP	
	6.25	113	Mtrs			Water / Gel Sweeps						(ft/min) DCs	

MUD PROPERTIES			
SAMPLE FROM	Pit		
TIME SAMPLE TAKEN	10:30		
DEPTH (ft) - (m) Metres	600		
FLOWLINE TEMPERATURE °C IN OUT	29	31	
WEIGHT ppg / SG	8.55	1.026	
FUNNEL VISCOSITY (sec/qt) API @ °C	35		
PLASTIC VISCOSITY cP @ °C	5		
YIELD POINT (lb/100ft²)	7		
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	5	8	
RHEOLOGY θ600 / θ300	17	12	
RHEOLOGY θ200 / θ100	9	7	
RHEOLOGY θ6 / θ3	4	3	
FILTRATE API (cc's/30 min)	25.0		
HPHT FILTRATE (cc's/30 min) @ °F			
CAKE THICKNESS API : HPHT (32nd in)	1		
SOLIDS CONTENT (% by Volume)	0.4		
LIQUID CONTENT (% by Volume) OIL/WATER		99.6	
SAND CONTENT (% by Vol.)			
METHYLENE BLUE CAPACITY (ppb equiv.)			
pH	9.5		
ALKALINITY MUD (Pm)			
ALKALINITY FILTRATE (Pf / Mf)	0.12	0.50	
CHLORIDE (mg/L)	24,000		
TOTAL HARDNESS AS CALCIUM (mg/L)	1040		
SULPHITE (mg/L)			
K+ (mg/L)	21,000		
KCl (% by Wt.)	4.0		
PHPA (ppb)			
ECD (ppg)			

MUD PROPERTY SPECIFICATIONS		
Mud Weight 8.33	API Filtrate	HPHT Filtrate
Plastic Vis	Yield Point	pH 8.5
KCl	PHPA	Sulphites

OBSERVATIONS

Charged 3x Xanbore from 19/11/2011, Used to increase viscosity for gel mud stored as reserve for displacing old fluid after drilling cement plugs with water. Dumped water and brine displaced to sump via sand trap.

Slow seepage into gel mud stored as reserve mud. Observed cement contamination from seepages into mud tanks. Extra mud stored in 2 frac tanks approx 160 bbls. Recieved more new chemicals to location.

Tested reserve mud for report.

OPERATIONS SUMMARY

Continue to run in hole with pipes to next cement plug. At 1275 meters worked on rig draw works. Continue run in hole with pipes to next cement plug. Water and KCL dispalced is dumped via sand trap. Tagged plug at 1378m. Circulated and pressure test 9 5/8 inch casing.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	564
Premix (recirc from sump)		Desilter			
Drill Water	15	Downhole	0	+ FLUID RECEIVED	315
Direct Recirc Sump		Dumped	22	- FLUID LOST	22
Other (eg Diesel)	300	Other		+ FLUID IN STORAGE	500
TOTAL RECEIVED	315	TOTAL LOST	22	FINAL VOLUME	1,357

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x50	16
Degasser			Desilter			Shaker #2	3x50	16

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Xanbore	$ 188.60	45		3	42	$ 565.80

Solids Analysis	%	PPB
High Grav solids		
Total LGS		
Bentonite		
Drilled Solids		
Salt		
n @ Hrs		
K @ Hrs		

Bit Hydraulics & Pressure Data
Jet Velocity
Impact force
HHP
HSI
Bit Press Loss
CSG Seat Frac Press
Equiv. Mud Wt.
Max Pressure @ Shoe :

DAILY COST	CUMULATIVE COST
$565.80	$8,300.15

RMN ENGINEER	A Lokea	CITY	Adelaide Office	TELEPHONE	08 8338 7266

DRILLING FLUID REPORT

Report #	3	Date :	21-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	1378 to 1432		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING		MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	18	18	18	SURFACE	ft	HOLE	PITS	PUMP SIZE			CIRCULATION		
8.50	REED				SET @	M	326	35	5.5 X 7.5	Inches		PRESS (PSI)	850	psi
DRILL PIPE	TYPE	Length			INTERMEDIATE	ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF		BOTTOMS		
SIZE 4.0	#	1264	Mtrs		SET @	M	801		Triplex1	97	%	UP (min)	29	min
DRILL PIPE	TYPE	Length			PRODUCTION. oi	ft	IN STORAGE		BBL/STK	STK / MIN		TOTAL CIRC.		
SIZE 4.50	HW	55	Mtrs		LINER Set @	M	440		0.0550	200		TIME (min)	75	min
DRILL COLLAR SIZE (")		Length			MUD TYPE				BBL/MIN	GAL / MIN		ANN VEL. DP	195	Tur
6.25		113	Mtrs		Water / Gel Sweeps				10.67	448		(ft/min) DCs	331	Tur

MUD PROPERTIES				
SAMPLE FROM	Pit		Pit	
TIME SAMPLE TAKEN	10:30		21:00	
DEPTH (ft) - (m) Metres	1,420		1,432	
FLOWLINE TEMPERATURE °C IN OUT	27	29	25	
WEIGHT ppg / SG	8.90	1.068	8.60	1.032
FUNNEL VISCOSITY (sec/qt) API @ °C	32		35	
PLASTIC VISCOSITY cP @ °C	5		5	
YIELD POINT (lb/100ft²)	2		6	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	3	6	5	7
RHEOLOGY θ600 / θ300	12	7	16	11
RHEOLOGY θ200 / θ100	5	3	8	6
RHEOLOGY θ6 / θ3	2	1	3	2
FILTRATE API (cc's/30 min)	20.0		26.0	
HPHT FILTRATE (cc's/30 min) @ °F				
CAKE THICKNESS API : HPHT (32nd in)	2		1	
SOLIDS CONTENT (% by Volume)	3.1		0.7	
LIQUID CONTENT (% by Volume) OIL/WATER		96.9		99.3
SAND CONTENT (% by Vol.)	0.20			
METHYLENE BLUE CAPACITY (ppb equiv.)			2.0	
pH	13.5		9.5	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)	1.90	2.50	0.15	0.54
CHLORIDE (mg/L)	22,000		23,500	
TOTAL HARDNESS AS CALCIUM (mg/L)	1000		1020	
SULPHITE (mg/L)				
K+ (mg/L)	17,850		21,000	
KCl (% by Wt.)	3.4		4.0	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS		
Mud Weight 8.33	API Filtrate	HPHT Filtrate
Plastic Vis	Yield Point	pH 8.5
KCl	PHPA	Sulphites

OBSERVATIONS

Circulated after tagging cement plug at 1378m. Some returns lost to sump via open sand trap valve. Transferred Gel mud to premix tank to top up short system surface volume. Tested returns from short system for report test 1. Mud weight in short system at 8.85 ppg and viscosity at 32 sec/quart. Filled up trip tank from Pill tank to fill hole while tripping out. Ran in hole Tested Reserve Gel mud for test 2 in report.

OPERATIONS SUMMARY

Tagged second cement plug at 1378 m. Tested 9 5/8 inch casing. Drilled cement plug to 1432 m. Observed increase change in pump pressure. Trouble shoot pump pressure readings and pumped carbide test with mud loggers for posible washout. Pull out of hole to inspect drillstring for washouts. Inspected drill string to surface and ran in hole with pipes.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	856
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	0	+ FLUID RECEIVED	20
Direct Recirc Sump		Dumped	32	- FLUID LOST	75
Other (eg Diesel)	20	Other	43	+ FLUID IN STORAGE	440
TOTAL RECEIVED	20	TOTAL LOST	75	FINAL VOLUME	1,241

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x50	14
Degasser			Desilter			Shaker #2	3x50	14

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis	%	PPB
High Grav solids		
Total LGS	0.7	6.7
Bentonite	0.2	1.5
Drilled Solids	0.5	4.9
Salt	1.4	13.6
n @ 21:00 Hrs	0.54	
K @ 21:00 Hrs	1.93	

Bit Hydraulics & Pressure Data	
Jet Velocity	192
Impact force	384
HHP	75
HSI	1.3
Bit Press Loss	286
CSG Seat Frac Press	
Equiv. Mud Wt.	
Max Pressure @ Shoe :	

DAILY COST	CUMULATIVE COST
	$8,300.15

RMN ENGINEER A Lokea CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	4	Date :	22-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	1432 to 2201		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION			
8.50	REED				SET @	1450	M	501	39	5.5 X 7.5	Inches	PRESS (PSI)	1360	psi	
DRILL PIPE	TYPE	Length			INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS			
SIZE 4.0	#	2033	Mtrs		SET @		M	1006		Triplex1	97 %	UP (min)	50	min	
DRILL PIPE	TYPE	Length			PRODUCTION. OI		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.			
SIZE 4.50	HW	55	Mtrs		LINER Set @		M	466		0.0550	179	TIME (min)	105	min	
DRILL COLLAR SIZE (")		Length			MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP	175	Tur	
6.25		113	Mtrs		Water / Gel Sweeps					9.55	401	(ft/min) DCs	296	Tur	

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS		
SAMPLE FROM	Pit		Pit		Mud Weight 8.33	API Filtrate	HPHT Filtrate
TIME SAMPLE TAKEN	10:00		22:00		Plastic Vis	Yield Point	pH 8.5
DEPTH (ft) - (m) Metres	1,486		2,059		KCl	PHPA	Sulphites
FLOWLINE TEMPERATURE °C IN OUT	27	29	26	27			
WEIGHT ppg / SG	8.95	1.074	8.70	1.044			
FUNNEL VISCOSITY (sec/qt) API @ °C	32		33				
PLASTIC VISCOSITY cP @ °C	5		6				
YIELD POINT (lb/100ft²)	5		3				
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	4	5	6	9			
RHEOLOGY θ600 / θ300	15	10	15	9			
RHEOLOGY θ200 / θ100	8	5	7	5			
RHEOLOGY θ6 / θ3	3	1	3	1			
FILTRATE API (cc's/30 min)	20.0		23.0				
HPHT FILTRATE (cc's/30 min) @ °F							
CAKE THICKNESS API : HPHT (32nd in)	2		1				
SOLIDS CONTENT (% by Volume)	3.4		1.4				
LIQUID CONTENT (% by Volume) OIL/WATER		96.6		98.6			
SAND CONTENT (% by Vol.)	0.30						
METHYLENE BLUE CAPACITY (ppb equiv.)			2.0				
pH	13.0		9.5				
ALKALINITY MUD (Pm)							
ALKALINITY FILTRATE (Pf / Mf)	2.20	2.60	0.15	0.52			
CHLORIDE (mg/L)	22,000		23,500				
TOTAL HARDNESS AS CALCIUM (mg/L)	880		600				
SULPHITE (mg/L)							
K+ (mg/L)	17,850		21,000				
KCl (% by Wt.)	3.4		4.0				
PHPA (ppb)							
ECD (ppg)							

OBSERVATIONS

Ocassionally transferred Gel/KCL mud to pill tank to help in hole cleaning. Slight mud losses at charge pumps. Volume of Gel/KCL mud in reserve tanks low due to ocassional Gel sweeps and surface losses. Filled up Suction tank 1 and mixed Bentonite at 8 ppb and KCl at 11 ppb. Added Xanbore to increase viscosity and transferred mud to other reserve tanks . Observed slight losses at pill tank and trouble shoot and found that it was downhole losses while pumping.

OPERATIONS SUMMARY

Ran in hole with pipes to 1432 meters. Drilled cement plug from 1432 m to 1467 m. Circulated hole clean and perform FIT test. FIT at 1450 m 700 psi and 11.7 ppg EMW.

Ran in hole with pipes from 1467 m to 1682 m. Washed and reamed ocassionally from 1682 m. Continue run in hole and ocassionally washed and reamed to 2201 m. Serviced rig at 1946m.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	45	Desander		INITIAL VOLUME	801
Premix (recirc from sump)		Desilter			
Drill Water	5	Downhole	5	+ FLUID RECEIVED	225
Direct Recirc Sump		Dumped		- FLUID LOST	20
Other (eg Diesel)	175	Other	15	+ FLUID IN STORAGE	466
TOTAL RECEIVED	225	TOTAL LOST	20	FINAL VOLUME	1,472

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x50	24
Degasser			Desilter			Shaker #2	3x50	24

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Biocide G	$ 155.65	42		1	41	$ 155.65
Aus-Ben	$ 16.50	242		8	234	$ 132.00
Potassium Chloride	$ 33.60	425		12	413	$ 403.20
Soda Ash	$ 24.10	54		1	53	$ 24.10
Xanbore	$ 188.60	42		1	41	$ 188.60

Solids Analysis	%	PPB
High Grav solids		
Total LGS	1.4	13.4
Bentonite	0.1	0.7
Drilled Solids	1.3	12.3
Salt	1.4	13.6
n @ 22:00 Hrs	0.74	
K @ 22:00 Hrs	0.47	

Bit Hydraulics & Pressure Data	
Jet Velocity	172
Impact force	311
HHP	54
HSI	1.0
Bit Press Loss	232
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	742 psi

DAILY COST	CUMULATIVE COST
$903.55	$9,203.70

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DRILLING FLUID REPORT

Report #	5	Date :	23-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2201 to 2297		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING		MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE	4758 ft	HOLE	PITS	PUMP SIZE		CIRCULATION PRESS (PSI)	1381 psi
8.50	REED				SET @	1450 M	523	35	5.5 X 7.5 Inches			
DRILL PIPE SIZE 4.0	TYPE #	Length 2129 Mtrs			INTERMEDIATE SET @	ft M	TOTAL CIRCULATING VOL. 1068		PUMP MODEL Triplex1	ASSUMED EFF 97 %	BOTTOMS UP (min)	55 min
DRILL PIPE SIZE 4.50	TYPE HW	Length 55 Mtrs			PRODUCTION. OI LINER Set @	ft M	IN STORAGE 510		BBL/STK 0.0550	STK / MIN 170	TOTAL CIRC. TIME (min)	118 min
DRILL COLLAR SIZE (")		Length			MUD TYPE				BBL/MIN	GAL / MIN	ANN VEL. DP	166 Tur
6.25		113 Mtrs			Water / Gel Sweeps				9.07	381	(ft/min) DCs	281 Lam

MUD PROPERTIES				
SAMPLE FROM	Pit		Pit	
TIME SAMPLE TAKEN	08:00		23:00	
DEPTH (ft) - (m) Metres	2,297		2,297	
FLOWLINE TEMPERATURE °C IN OUT	25		26	
WEIGHT ppg / SG	8.90	1.068	8.70	1.044
FUNNEL VISCOSITY (sec/qt) API @ °C	33		38	
PLASTIC VISCOSITY cP @ °C	5		7	
YIELD POINT (lb/100ft²)	5		10	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	4	6	11	14
RHEOLOGY θ600 / θ300	15	10	24	17
RHEOLOGY θ200 / θ100	8	5	13	10
RHEOLOGY θ6 / θ3	3	1	5	3
FILTRATE API (cc's/30 min)	20.0		16.0	
HPHT FILTRATE (cc's/30 min) @ °F				
CAKE THICKNESS API : HPHT (32nd in)	2		1	
SOLIDS CONTENT (% by Volume)	3.1		1.6	
LIQUID CONTENT (% by Volume) OIL/WATER		96.9		98.4
SAND CONTENT (% by Vol.)	0.40			
METHYLENE BLUE CAPACITY (ppb equiv.)				
pH	13.0		9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)	2.10	2.50	0.08	0.32
CHLORIDE (mg/L)	22,000		22,000	
TOTAL HARDNESS AS CALCIUM (mg/L)	920		600	
SULPHITE (mg/L)				
K+ (mg/L)	17,850		17,850	
KCl (% by Wt.)	3.4		3.4	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS		
Mud Weight 8.33	API Filtrate	HPHT Filtrate
Plastic Vis	Yield Point	pH 8.5
KCl	PHPA	Sulphites

OBSERVATIONS

Used short system while run in hole. Ocassionally circulated and reamed hole with short system from shakers via trough to pill tank. After tagging cement plug at 2297 m mixed and pumped xtra sweep pill. Circulated and observed at shakers. Slightly higher cuttings at shakers observed. Transferred mud from pill tank to trip tank for trip out. Mixed new Gel/KCL/polymer mud to displace old mud from hole when back on bottom. Used some gel mud to fill up hole. Slow seepage into hole. Mixed more Gel/KCL/Polymer mud to use for drilling new hole. Arrange lines to suck gel mud from two frac tanks. Mix Gel at 10 ppb, KCL 15 ppb and 2 ppb. Treated new Gel/KCL mud with citric Acid and Sodium Bicarbonate for potential cement contamination.

OPERATIONS SUMMARY

Ran in hole with pipes ocassionally washed and reamed from 2201 m. Tagged first plug at 2297 m. Circulated and pumped a xtra sweep pill. Continue circulation till hole clean. Pulled out of hole to 9 5/8 inch. casing shoe. Worked on rig drawworks and breaks. Continued pulling out of hole to surface. Performed BOP test.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	208	Desander		INITIAL VOLUME	1006
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	36	+ FLUID RECEIVED	251
Direct Recirc Sump		Dumped	58	- FLUID LOST	189
Other (eg Diesel)	43	Other	95	+ FLUID IN STORAGE	510
TOTAL RECEIVED	251	TOTAL LOST	189	FINAL VOLUME	1,578

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x50	10
Degasser			Desilter			Shaker #2	3x50	10

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Xtra-Sweep	$ 122.65	14		1	13	$ 122.65
Aus-Ben	$ 16.50	234		34	200	$ 561.00
Citric Acid	$ 75.00	18		1	17	$ 75.00
Potassium Chloride	$ 33.60	413		42	371	$ 1,411.20
Sodium Bicarbonate	$ 29.70	48		2	46	$ 59.40
Xanbore	$ 188.60	41		6	35	$ 1,131.60

Solids Analysis	%	PPB
High Grav solids		
Total LGS	1.6	15.4
Bentonite	-0.2	-1.9
Drilled Solids	1.8	16.7
Salt	1.3	12.7
n @ 23:00 Hrs	0.50	
K @ 23:00 Hrs	3.91	

Bit Hydraulics & Pressure Data	
Jet Velocity	163
Impact force	281
HHP	46
HSI	0.8
Bit Press Loss	209
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	742 psi

DAILY COST	CUMULATIVE COST
$3,360.85	$12,564.55

RMN ENGINEER A Lokea CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	6	Date :	24-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2297 to 2297		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE		18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION	
8.50	SMITH PMO17					SET @	1450	M	496	41	5.5 X 7.5	Inches	PRESS (PSI)	psi
DRILL PIPE SIZE 4.0	TYPE #	Length 2117 Mtrs				INTERMEDIATE SET @		ft M	TOTAL CIRCULATING VOL. 1056		PUMP MODEL Triplex1	ASSUMED EFF 97 %	BOTTOMS UP (min)	min
DRILL PIPE SIZE 4.50	TYPE HW	Length 55 Mtrs				PRODUCTION. OI LINER Set @		ft M	IN STORAGE 519		BBL/STK 0.0550	STK / MIN	TOTAL CIRC. TIME (min)	min
DRILL COLLAR SIZE (")		Length				MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP (ft/min) DCs	Lam Lam
6.25		125 Mtrs				Water / Gel Sweeps								

MUD PROPERTIES				
SAMPLE FROM	Pit		Pit	
TIME SAMPLE TAKEN	10:00		20:00	
DEPTH (ft) - (m) Metres	2,297		2,297	
FLOWLINE TEMPERATURE °C IN OUT	27		28	30
WEIGHT ppg / SG	8.70	1.044	8.90	1.068
FUNNEL VISCOSITY (sec/qt) API @ °C	37		33	
PLASTIC VISCOSITY cP @ °C	6		5	
YIELD POINT (lb/100ft²)	11		5	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	10	14	4	6
RHEOLOGY θ600 / θ300	23	17	15	10
RHEOLOGY θ200 / θ100	13	11	7	4
RHEOLOGY θ6 / θ3	5	3	3	1
FILTRATE API (cc's/30 min)	16.4		21.0	
HPHT FILTRATE (cc's/30 min) @ °F				
CAKE THICKNESS API : HPHT (32nd in)	1		1	
SOLIDS CONTENT (% by Volume)	1.6		3.1	
LIQUID CONTENT (% by Volume) OIL/WATER		98.4		96.9
SAND CONTENT (% by Vol.)			0.40	
METHYLENE BLUE CAPACITY (ppb equiv.)	2.0		3.0	
pH	9.0		13.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)	0.10	0.34	2.00	2.50
CHLORIDE (mg/L)	22,000		22,000	
TOTAL HARDNESS AS CALCIUM (mg/L)	680		1000	
SULPHITE (mg/L)				
K+ (mg/L)	17,850		17,850	
KCl (% by Wt.)	3.4		3.4	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS		
Mud Weight 8.33	API Filtrate	HPHT Filtrate
Plastic Vis	Yield Point	pH 8.5
KCl	PHPA	Sulphites

OBSERVATIONS

Run in hole and monitor volume from trip tank, Installed flow line and circulated with trip tank. Used new mud in reserve to fill up trip tank. Top up volume in reserve tanks with water and mixed Gel 8 ppb and KCL 14 ppb.

OPERATIONS SUMMARY

Continued BOP test. Prepared rig to run in hole. Ran in hole with drill collars. Ran in hole to casing shoe. Nippled down flow line and install valves to suite circulation with trip tank. Nippled up flow line and continue run in hole with drill pipes. Picked up 4 1/2 inch drill pipes. Break 4 inch drill pipes to singles and lay out on pipe racks. While attempting to fill up pipes the stand pipe burst on the drill floor level. Stopped circulation and pulled out to 1440 m. Rigged down stand pipe and worked on stand pipe.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	1068
Premix (recirc from sump)		Desilter			
Drill Water	32	Downhole	16	+ FLUID RECEIVED	32
Direct Recirc Sump		Dumped	12	- FLUID LOST	44
Other (eg Diesel)		Other	16	+ FLUID IN STORAGE	519
TOTAL RECEIVED	32	TOTAL LOST	44	FINAL VOLUME	1,575

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x50	
Degasser			Desilter			Shaker #2	3x50	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Aus-Ben	$ 16.50	200		8	192	$ 132.00
Potassium Chloride	$ 33.60	371		12	359	$ 403.20

Solids Analysis	%	PPB
High Grav solids		
Total LGS	3.1	28.9
Bentonite	0.0	-0.1
Drilled Solids	3.1	27.9
Salt	1.3	12.7
n @ 20:00 Hrs	0.58	
K @ 20:00 Hrs	1.33	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	693 psi

DAILY COST	CUMULATIVE COST
$535.20	$13,099.75

RMN ENGINEER A Lokea CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	7	Date :	25-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2297 to 2297		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	18	18	18	9 5/8	SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION		
8.50	SMITH PMO17					SET @	1450	M	496	36	5.5 X 7.5	Inches	PRESS (PSI)	1375	psi
DRILL PIPE	TYPE	Length				INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS		
SIZE 4.0	#	2117	Mtrs			SET @		M	1064		Triplex1	97 %	UP (min)	75	min
DRILL PIPE	TYPE	Length				PRODUCTION. OI		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.		
SIZE 4.50	HW	55	Mtrs			LINER Set @		M	532		0.0550	112	TIME (min)	178	min
DRILL COLLAR SIZE (")		Length			MUD TYPE						BBL/MIN	GAL / MIN	ANN VEL. DP	109	Tur
6.25		125	Mtrs		Water / Gel Sweeps						5.98	251	(ft/min) DCs	185	Tur

		MUD PROPERTIES			
SAMPLE FROM		Pit		Pit	
TIME SAMPLE TAKEN		17:00		22:00	
DEPTH (ft) - (m)	Metres	2,297		2,297	
FLOWLINE TEMPERATURE	°C IN/OUT	24		23	25
WEIGHT	ppg / SG	8.70	1.044	8.90	1.068
FUNNEL VISCOSITY (sec/qt) API @	°C	36		32	
PLASTIC VISCOSITY cP @	°C	6		6	
YIELD POINT (lb/100ft²)		9		3	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min		12	15	4	6
RHEOLOGY θ600 / θ300		21	15	15	9
RHEOLOGY θ200 / θ100		12	9	8	4
RHEOLOGY θ6 / θ3		4	3	3	1
FILTRATE API (cc's/30 min)		14.3		19.4	
HPHT FILTRATE (cc's/30 min) @	°F				
CAKE THICKNESS API : HPHT (32nd in)		1		1	
SOLIDS CONTENT (% by Volume)		1.6		3.1	
LIQUID CONTENT (% by Volume) OIL/WATER			98.4		96.9
SAND CONTENT (% by Vol.)				0.30	
METHYLENE BLUE CAPACITY (ppb equiv.)		2.0		3.0	
pH		9.0		13.5	
ALKALINITY MUD (Pm)					
ALKALINITY FILTRATE (Pf / Mf)		0.08	0.30	1.90	2.40
CHLORIDE (mg/L)		22,500		22,000	
TOTAL HARDNESS AS CALCIUM (mg/L)		640		920	
SULPHITE (mg/L)					
K+ (mg/L)		18,375		17,850	
KCl (% by Wt.)		3.5		3.4	
PHPA (ppb)					
ECD (ppg)					

MUD PROPERTY SPECIFICATIONS					
Mud Weight	8.6 - 9.2	API Filtrate		HPHT Filtrate	
Plastic Vis	ALAP	Yield Point	12 --15	pH	9.5 - 10
KCl	2 %- 3%	PHPA		Sulphites	

OBSERVATIONS

While working on stand pipe monitored hole on trip tank. Slow seepage to formation. While transferring mud to trip tank lost 60 bbls to sump via opened sand trap. Mixed new Gel/KCL polymer mud to replace lost volume. Gel/KCL/Polymer mud will be used for displacing old mud in the hole at 2297 meters. Circulated Gel mud in Frac tanks to give some mixing before displacing old mud.

OPERATIONS SUMMARY

Worked on stand pipe. Modified hoses and installed as stand pipe. Tested the newly made stand pipe connections. Ran in hole and washed and reamed several connections due to stabiliser in the BHA. Continue run in hole and break circulation per 20 stands to 1833 meters.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	110	Desander		INITIAL VOLUME	1056
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	25	+ FLUID RECEIVED	110
Direct Recirc Sump		Dumped	12	- FLUID LOST	102
Other (eg Diesel)		Other	65	+ FLUID IN STORAGE	532
TOTAL RECEIVED	110	TOTAL LOST	102	FINAL VOLUME	1,596

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x110	4
Degasser			Desilter			Shaker #2	3x140	4

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Biocide G	$ 155.65	41		1	40	$ 155.65
Aus-Ben	$ 16.50	192		16	176	$ 264.00
Potassium Chloride	$ 33.60	359		24	335	$ 806.40
Sodium Bicarbonate	$ 29.70	46		1	45	$ 29.70
Xanbore	$ 188.60	35		2	33	$ 377.20

Solids Analysis

	%	PPB
High Grav solids		
Total LGS	3.1	28.9
Bentonite	0.0	-0.1
Drilled Solids	3.1	27.9
Salt	1.3	12.7
n @ 22:00 Hrs	0.74	
K @ 22:00 Hrs	0.47	

Bit Hydraulics & Pressure Data

Jet Velocity	108
Impact force	125
HHP	14
HSI	0.2
Bit Press Loss	93
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	693 psi

DAILY COST	CUMULATIVE COST
$1,632.95	$14,732.70

RMN ENGINEER	A Lokea	CITY	Adelaide Office	TELEPHONE	08 8338 7266

DRILLING FLUID REPORT

Report #	8	Date :	26-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2297 to 2297		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	18	18	18	9 5/8	SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION		
8.50	SMITH PMO17					SET @	1450	M	496	40	5.5 X 7.5	Inches	PRESS (PSI)	1250	psi
DRILL PIPE	TYPE	Length				INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS		
SIZE 4.0	#	2117	Mtrs			SET @		M	1059		Triplex1	97 %	UP (min)	47	min
DRILL PIPE	TYPE	Length				PRODUCTION. OI		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.		
SIZE 4.50	HW	55	Mtrs			LINER Set @		M	523		0.0550	179	TIME (min)	111	min
DRILL COLLAR SIZE (")		Length			MUD TYPE						BBL/MIN	GAL / MIN	ANN VEL. DP	175	Tur
6.25		125	Mtrs		Water / Gel S/KCLSweeps						9.55	401	(ft/min) DCs	296	Tur

MUD PROPERTIES				
SAMPLE FROM	Pit		Pit	
TIME SAMPLE TAKEN	14:30		23:00	
DEPTH (ft) - (m) Metres	2,297		2,297	
FLOWLINE TEMPERATURE °C IN OUT	26	27	27	29
WEIGHT ppg / SG	8.70	1.044	8.95	1.074
FUNNEL VISCOSITY (sec/qt) API @ °C	39		34	
PLASTIC VISCOSITY cP @ °C	6		6	
YIELD POINT (lb/100ft²)	10		4	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	11	16	4	6
RHEOLOGY θ600 / θ300	22	16	16	10
RHEOLOGY θ200 / θ100	13	10	9	5
RHEOLOGY θ6 / θ3	5	4	3	2
FILTRATE API (cc's/30 min)	13.4		18.5	
HPHT FILTRATE (cc's/30 min) @ °F				
CAKE THICKNESS API : HPHT (32nd in)	1		1	
SOLIDS CONTENT (% by Volume)	1.7		3.4	
LIQUID CONTENT (% by Volume) OIL/WATER		98.3		96.6
SAND CONTENT (% by Vol.)			0.40	
METHYLENE BLUE CAPACITY (ppb equiv.)	2.5		3.4	
pH	9.0		12.5	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)	0.05	0.28	1.80	2.30
CHLORIDE (mg/L)	21,000		22,000	
TOTAL HARDNESS AS CALCIUM (mg/L)	800		1040	
SULPHITE (mg/L)				
K+ (mg/L)	17,325		17,850	
KCl (% by Wt.)	3.3		3.4	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS			
Mud Weight 8.6 - 9.2	API Filtrate		HPHT Filtrate
Plastic Vis ALAP	Yield Point 12 --15		pH 9.5 - 10
KCl 2 %- 3%	PHPA		Sulphites

OBSERVATIONS

Transferred Gel/KCL polymer mud to pill tank as high viscosity sweep.
Mixed new Gel/KC:L/polymer mud and stored in reserve tanks.
Losing mud down hole while drilling at 2 to 3 bbls per hour. Mixed Gel at 8 ppb and KCL at 12 ppb. Xanbore was mixed at 1 ppb.

OPERATIONS SUMMARY

Continue run hole from 1833 meters. Wash and ream with 10 singles and pulled out 10 singles and lay them sideways before running in with 5 stands. Continue wash and reamed to 2238 meters.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	116	Desander		INITIAL VOLUME	1064
Premix (recirc from sump)		Desilter			
Drill Water	8	Downhole	88	+ FLUID RECEIVED	124
Direct Recirc Sump		Dumped	6	- FLUID LOST	129
Other (eg Diesel)		Other	35	+ FLUID IN STORAGE	523
TOTAL RECEIVED	124	TOTAL LOST	129	FINAL VOLUME	1,582

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	24
Degasser			Desilter			Shaker #2	3x80API	24

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Aus-Ben	$ 16.50	176		16	160	$ 264.00
Potassium Chloride	$ 33.60	335		24	311	$ 806.40
Xanbore	$ 188.60	33		3	30	$ 565.80

Solids Analysis	%	PPB
High Grav solids		
Total LGS	3.4	32.3
Bentonite	0.0	0.0
Drilled Solids	3.4	31.1
Salt	1.3	12.7
n @ 23:00 Hrs	0.68	
K @ 23:00 Hrs	0.75	

Bit Hydraulics & Pressure Data	
Jet Velocity	172
Impact force	320
HHP	56
HSI	1.0
Bit Press Loss	238
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	680 psi

DAILY COST	CUMULATIVE COST
$1,636.20	$16,368.90

RMN ENGINEER A Lokea CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	9	Date :	27-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2297 to 2583		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	BING
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	18	18	18	9 5/8	SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION		
8.50	SMITH PMO17					SET @	1450	M	558	319	5.5 X 7.5	Inches	PRESS (PSI)	1370	psi
DRILL PIPE	TYPE	Length				INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS		
SIZE 4.0	#	2403	Mtrs			SET @		M	1003		Triplex1	97 %	UP (min)	52	min
DRILL PIPE	TYPE	Length				PRODUCTION. OI		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.		
SIZE 4.50	HW	55	Mtrs			LINER Set @		M	126		0.0550	182	TIME (min)	103	min
DRILL COLLAR SIZE (")		Length			MUD TYPE						BBL/MIN	GAL / MIN	ANN VEL. DP	178	Tur
6.25		125	Mtrs		Water / Gel S/KCLSweeps						9.71	408	(ft/min) DCs	301	Lam

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS			
SAMPLE FROM	Pit	Pit	Mud Weight 8.6 - 9.2	API Filtrate		HPHT Filtrate
TIME SAMPLE TAKEN	13:00	22:00	Plastic Vis ALAP	Yield Point 8-- 15		pH 9.0 --10
DEPTH (ft) - (m) Metres	2,534	2,575	KCl 2 %- 3%	PHPA		Sulphites
FLOWLINE TEMPERATURE °C IN/OUT	36 38	34 37				
WEIGHT ppg / SG	8.95 1.074	8.75 1.050				
FUNNEL VISCOSITY (sec/qt) API @ °C	36	37				
PLASTIC VISCOSITY cP @ °C	8	6				
YIELD POINT (lb/100ft²)	6	11				
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	8 13	9 15				
RHEOLOGY θ600 / θ300	22 14	23 17				
RHEOLOGY θ200 / θ100	11 8	13 10				
RHEOLOGY θ6 / θ3	3 2	4 3				
FILTRATE API (cc's/30 min)	24.5	14.8				
HPHT FILTRATE (cc's/30 min) @ °F						
CAKE THICKNESS API : HPHT (32nd in)	1	1				
SOLIDS CONTENT (% by Volume)	3.0	1.7				
LIQUID CONTENT (% by Volume) OIL/WATER	97.0	98.3				
SAND CONTENT (% by Vol.)	0.70	0.40				
METHYLENE BLUE CAPACITY (ppb equiv.)	5.0	2.5				
pH	13.0	11.0				
ALKALINITY MUD (Pm)						
ALKALINITY FILTRATE (Pf / Mf)	1.17 2.12	0.18 0.32				
CHLORIDE (mg/L)	19,500	18,000				
TOTAL HARDNESS AS CALCIUM (mg/L)	1000	820				
SULPHITE (mg/L)						
K+ (mg/L)	21,000	19,425				
KCl (% by Wt.)	4.0	3.7				
PHPA (ppb)						
ECD (ppg)	8.99	8.90				

OBSERVATIONS

Mixed new Gel/KCL polymer mud to replace lost volume at surface due to equipment problems. Losing down hole at 3 bbls/hr while reaming old hole. Circulated reserve mud in two Frac tanks ready for use when displacing mud. Lined up pumps to suck mud from Frac tanks and filled up all surface mud tanks with mud. Pill tank and trip tank were filled with old mud. Start displacing new Gel/KCL/Polymer mud while adding Frac tanks to active tanks. Ocassionally filled up pill tank with old mud and transferred to suction tank to help maintain suction volume. Displace with 565 bbls. Dumped 460 bbls and top up with water. Used some old mud to to help maintain suction volume. Dumped Sand trap and transfer new KCL 11 ppb and Gel 8 ppb mix to the suction tanks.

OPERATIONS SUMMARY

Washed and reamed 8.5 inch hole from 2255 m to 2297 m. Drilled cement from 2297 m to 2374 m. Test cement with 10 klbs. Reamed out old hole to 2388 m. Flow check hole and serviced rig. Continued reamed 8.5 inch hole from 2388 m to 2455 m and worked on pump#3 while circulating. Pump #3 suction line got loose and pulled out 10 stands and worked on it. Ran in hole to 2523 m and observed pump#3 suction line loose again. Worked on it and washed and reamed to 2556 meters. Displaced hole with KCL/Polymer mud. Drilled from 2556 m to 2583 m.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	560	Desander		INITIAL VOLUME	1059
Premix (recirc from sump)		Desilter			
Drill Water	20	Downhole	130	+ FLUID RECEIVED	598
Direct Recirc Sump		Dumped	460	- FLUID LOST	655
Other (eg Diesel)	18	Other	65	+ FLUID IN STORAGE	126
TOTAL RECEIVED	598	TOTAL LOST	655	FINAL VOLUME	1,129

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	24
Degasser			Desilter			Shaker #2	3x80API	24

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Aus-Ben	$ 16.50	160		48	112	$ 792.00
Potassium Chloride	$ 33.60	311		72	239	$ 2,419.20
Sodium Bicarbonate	$ 29.70	45		2	43	$ 59.40
Xanbore	$ 188.60	30		9	21	$ 1,697.40

Solids Analysis	%	PPB
High Grav solids		
Total LGS	1.7	16.1
Bentonite	0.1	0.9
Drilled Solids	1.6	14.6
Salt	1.1	10.4
n @ 22:00 Hrs	0.44	
K @ 22:00 Hrs	5.73	

Bit Hydraulics & Pressure Data	
Jet Velocity	175
Impact force	324
HHP	57
HSI	1.0
Bit Press Loss	241
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	730 psi

DAILY COST	CUMULATIVE COST
$4,968.00	$21,336.90

RMN ENGINEER A Lokea CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	10	Date :	28-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2583 to 2650		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	BING
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE		18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION		
8.50	SMITH PMO17					SET @	1450	M	572	329	5.5 X 7.5	Inches	PRESS (PSI)	1500	psi
DRILL PIPE	TYPE	Length				INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS		
SIZE 4.0	#	2470	Mtrs			SET @		M	916		Triplex1	97 %	UP (min)	50	min
DRILL PIPE	TYPE	Length				PRODUCTION. or		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.		
SIZE 4.50	HW	55	Mtrs			LINER Set @		M	15		0.0550	196	TIME (min)	88	min
DRILL COLLAR SIZE (")		Length				MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP	191	Lam
6.25		125	Mtrs			Water / Gel S/KCLSweeps					10.46	439	(ft/min) DCs	324	Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM			Pit	Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN			1430	23:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)		Metres	2,624	2,648	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C	IN OUT	37 39	45 47						
WEIGHT		ppg / SG	8.75 1.050	8.80 1.056						
FUNNEL VISCOSITY (sec/qt) API @		°C	37	40						
PLASTIC VISCOSITY cP @		°C	7	9						
YIELD POINT (lb/100ft²)			14	18						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min			15 19	17 23						
RHEOLOGY θ600 / θ300			28 21	36 27						
RHEOLOGY θ200 / θ100			17 13	22 17						
RHEOLOGY θ6 / θ3			5 4	6 5						
FILTRATE API (cc's/30 min)			11.3	6.9						
HPHT FILTRATE (cc's/30 min) @		°F	24 mm	17 mm						
CAKE THICKNESS API : HPHT (32nd in)			1	1						
SOLIDS CONTENT (% by Volume)			1.7	2.3						
LIQUID CONTENT (% by Volume) OIL/WATER			98.3	97.7						
SAND CONTENT (% by Vol.)			0.60	0.70						
METHYLENE BLUE CAPACITY (ppb equiv.)			5.0	6.3						
pH			10.5	9.5						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)			0.10 0.52	0.08 0.46						
CHLORIDE (mg/L)			18,000	15,000						
TOTAL HARDNESS AS CALCIUM (mg/L)			600	720						
SULPHITE (mg/L)										
K+ (mg/L)			19,425	16,275						
KCl (% by Wt.)			3.7	3.1						
PHPA (ppb)										
ECD (ppg)			8.89	8.90						

OBSERVATIONS

Dumped sand trap at connections and cleaned out possum belly to make room in surface mud tanks. Used short system from Shakers, sand trap, settling tank, desilter tank and desander tank with only one suction. Used 1x suction tank and pill tank to mix new KCL polymer mud and treatment chemicals. MW in active 8.9 ppg and viscosity of 35 sec/quart and low end rheology of 4 and 3. Used Xanbore to increase viscosity and low end rheology. Added Citric Acid to reduce PH due to cmt contamination. Used Soda Bicarbonate to treat and remove Calcium ions. Added Pac-L to reduce water loss. Added Sodium Sulphite and Biocide treatment to active mud. Started adding Residrill to system slowly and increasing it to a calculated 4 ppb concentration in circulation volume. Observed SBT test for Residrill at 17 mm.

OPERATIONS SUMMARY

Drilled 8.5 inch hole from 2584 meters to 2599 meters. Flow check hole and serviced rig. Drilled from 2599 m to 2621 meters. Circulated hole for samples per wellsite geologist. Drilled 8.5 inch hole from 2621 meters to 2650 m.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	1003
Premix (recirc from sump)		Desilter			
Drill Water	15	Downhole	0	+ FLUID RECEIVED	15
Direct Recirc Sump		Dumped	60	- FLUID LOST	102
Other (eg Diesel)		Other	42	+ FLUID IN STORAGE	15
TOTAL RECEIVED	15	TOTAL LOST	102	FINAL VOLUME	931

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	24
Degasser			Desilter			Shaker #2	3x80API	24

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Biocide G	$ 155.65	40		1	39	$ 155.65
AMC Defoamer	$ 169.50	37		1	36	$ 169.50
AMC Pac L	$ 125.60	32		12	20	$ 1,507.20
Aus-Ben	$ 16.50	112		4	108	$ 66.00
Citric Acid	$ 75.00	17		2	15	$ 150.00
Potassium Chloride	$ 33.60	239		10	229	$ 336.00
Residrill	$ 90.10	384		96	288	$ 8,649.60
Residrill	$ 90.10	59		59		$ 5,315.90
Soda Ash	$ 24.10	53		2	51	$ 48.20
Sodium Bicarbonate	$ 29.70	43		8	35	$ 237.60
Sodium Sulphite	$ 42.60	73		2	71	$ 85.20
Xanbore	$ 188.60	21		4	17	$ 754.40

Solids Analysis	%	PPB
High Grav solids		
Total LGS	2.3	21.4
Bentonite	0.5	4.6
Drilled Solids	1.8	16.0
Salt	0.9	8.7
n @ 23:00 Hrs	0.41	
K @ 23:00 Hrs	10.39	

Bit Hydraulics & Pressure Data	
Jet Velocity	189
Impact force	377
HHP	72
HSI	1.3
Bit Press Loss	281
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	718 psi

DAILY COST	CUMULATIVE COST
$21,932.53	$43,269.43

RMN ENGINEER	A Lokea	CITY	Adelaide Office	TELEPHONE	08 8338 7266

DRILLING FLUID REPORT

Report #	11	Date :	29-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2650 to 2723		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	BING	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY			JET SIZE		
BIT SIZE	TYPE	18	18	18	
8.50	SMITH PMO17				
DRILL PIPE SIZE 4.0	TYPE #	Length 2543 Mtrs			
DRILL PIPE SIZE 4.50	TYPE HW	Length 55 Mtrs			
DRILL COLLAR SIZE (") 6.25		Length 125 Mtrs			

CASING			
9 5/8	SURFACE SET @	4758 ft / 1450 M	
	INTERMEDIATE SET @	ft / M	
	PRODUCTION. OR LINER Set @	ft / M	
MUD TYPE	Water / Gel S/KCLSweeps		

MUD VOLUME (BBL)	
HOLE	PITS
588	356
TOTAL CIRCULATING VOL.	
1000	
IN STORAGE	
56	

CIRCULATION DATA			
PUMP SIZE		CIRCULATION PRESS (PSI)	1500 psi
7 X 9 Inches			
PUMP MODEL	ASSUMED EFF	BOTTOMS UP (min)	53 min
Triplex3	100 %		
BBL/STK	STK / MIN	TOTAL CIRC. TIME (min)	100 min
0.0550	182		
BBL/MIN	GAL / MIN	ANN VEL. DP	183 Lam
10.01	420	(ft/min) DCs	310 Lam

MUD PROPERTIES				
SAMPLE FROM		Pit	Pit	
TIME SAMPLE TAKEN		09:00	22:30	
DEPTH (ft) - (m)	Metres	2,482	2,720	
FLOWLINE TEMPERATURE	°C IN/OUT	46 48	47 50	
WEIGHT	ppg / SG	8.90 1.068	8.95 1.074	
FUNNEL VISCOSITY (sec/qt) API @	°C	40	40	
PLASTIC VISCOSITY cP @	°C	11	12	
YIELD POINT (lb/100ft²)		15	15	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min		16 21	17 20	
RHEOLOGY θ600 / θ300		37 26	39 27	
RHEOLOGY θ200 / θ100		22 17	23 17	
RHEOLOGY θ6 / θ3		6 5	7 5	
FILTRATE API (cc's/30 min)		8.6	6.6	
HPHT FILTRATE (cc's/30 min) @	°F	28 mm	25 mm	
CAKE THICKNESS API : HPHT (32nd in)		1	1	
SOLIDS CONTENT (% by Volume)		3.0	3.1	
LIQUID CONTENT (% by Volume) OIL/WATER		97.0	96.9	
SAND CONTENT (% by Vol.)		0.80	0.60	
METHYLENE BLUE CAPACITY (ppb equiv.)		5.0	7.5	
pH		9.5	9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)		0.08 0.45	0.06 0.48	
CHLORIDE (mg/L)		15,000	18,000	
TOTAL HARDNESS AS CALCIUM (mg/L)		700	720	
SULPHITE (mg/L)		250	180	
K+ (mg/L)		16,275	19,425	
KCl (% by Wt.)		3.1	3.7	
PHPA (ppb)				
ECD (ppg)		9.00	9.10	

MUD PROPERTY SPECIFICATIONS					
Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
KCl	2 %- 3%	PHPA		Sulphites	

OBSERVATIONS

Observed flow at Flow check after drill break. MW at 8.75 ppg. Increased MW by agitating solids and changing the 3x 80 API screens to coarser 3x50 API. MW increased to 8.8 ppg and slowly to 9.0 ppg. Continued treatment to remove Ca++ from cement contamination. Added Sodium Sulphite to counter corrosion. SBT test was greater than 25 mm and added Residrill to active to get it to about 25 mm. Losing mud at Charge pump and stopped and worked on it. Made new premix at KCL 11 ppb, Residrill 8 ppb, PacL 6 ppb, Xanthum Gum 2 ppb and Bentonite at 8 ppb. Transferred premix to active. Adding Residrill 2 sacks at 30 minutes to get required SBT test.

OPERATIONS SUMMARY

Drilled 8.5 inch hole from 2650 m to 2723 m.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	140	Desander		INITIAL VOLUME	916
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	0	+ FLUID RECEIVED	140
Direct Recirc Sump		Dumped	10	- FLUID LOST	56
Other (eg Diesel)		Other	46	+ FLUID IN STORAGE	56
TOTAL RECEIVED	140	TOTAL LOST	56	FINAL VOLUME	1,056

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	24
Degasser			Desilter			Shaker #2	3x50 API	24

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Pac L	$ 125.60	20		18	2	$ 2,260.80
Aus-Ben	$ 16.50	108		22	86	$ 363.00
Caustic Soda	$ 36.50	32		2	30	$ 73.00
Potassium Chloride	$ 33.60	229		22	207	$ 739.20
Residrill	$ 90.10	288		52	236	$ 4,685.20
Sodium Bicarbonate	$ 29.70	35		3	32	$ 89.10
Sodium Sulphite	$ 42.60	71		6	65	$ 255.60
Xanbore	$ 188.60	17		7	10	$ 1,320.20

Solids Analysis	%	PPB
High Grav solids		
Total LGS	3.1	29.7
Bentonite	0.5	5.0
Drilled Solids	2.6	23.6
Salt	1.1	10.4
n @ 22:30 Hrs	0.53	
K @ 22:30 Hrs	5.06	

Bit Hydraulics & Pressure Data	
Jet Velocity	180
Impact force	352
HHP	64
HSI	1.1
Bit Press Loss	262
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	680 psi

DAILY COST	CUMULATIVE COST
$12,200.46	$55,469.89

RMN ENGINEER A Lokea CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	12	Date :	30-Nov-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2705 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	BING
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52
LOCATION	Amadeus Basin	STATE	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	18	18	18	9 5/8	SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION		
8.50	SMITH PMO17					SET @	1450	M	590	14	7 X 9	Inches	PRESS (PSI)	1500	psi
DRILL PIPE	TYPE	Length				INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS		
SIZE 4.0	#	2552	Mtrs			SET @		M	926		Triplex3	100 %	UP (min)	54	min
DRILL PIPE	TYPE	Length				PRODUCTION. OI		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.		
SIZE 4.50	HW	55	Mtrs			LINER Set @		M	322		0.0550	182	TIME (min)	92	min
DRILL COLLAR SIZE (")		Length			MUD TYPE						BBL/MIN	GAL / MIN	ANN VEL. DP	183	Lam
6.25		125	Mtrs		Water / Gel S/KCLSweeps						10.01	420	(ft/min) DCs	310	Lam

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS			
SAMPLE FROM	Pit	Pit	Mud Weight 8.6 - 9.2	API Filtrate 6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN	09:00	1500	Plastic Vis ALAP	Yield Point 8-- 15	pH	9.0 --10
DEPTH (ft) - (m) Metres	2,735	2,750	KCl 2 %- 3%	PHPA	Sulphites	
FLOWLINE TEMPERATURE °C IN/OUT	49 51	50 52				
WEIGHT ppg / SG	8.95 1.074	9.00 1.080				
FUNNEL VISCOSITY (sec/qt) API @ °C	40	40				
PLASTIC VISCOSITY cP @ °C	12	13				
YIELD POINT (lb/100ft²)	16	15				
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	17 20	17 19				
RHEOLOGY θ600 / θ300	40 28	41 28				
RHEOLOGY θ200 / θ100	24 17	25 17				
RHEOLOGY θ6 / θ3	6 5	7 6				
FILTRATE API (cc's/30 min)	6.8	7.6				
HPHT FILTRATE (cc's/30 min) @ °F	28 mm	26 mm				
CAKE THICKNESS API : HPHT (32nd in)	1	1				
SOLIDS CONTENT (% by Volume)	3.3	3.7				
LIQUID CONTENT (% by Volume) OIL/WATER	96.7	96.3				
SAND CONTENT (% by Vol.)	0.70	0.60				
METHYLENE BLUE CAPACITY (ppb equiv.)	7.5	6.3				
pH	9.5	10.0				
ALKALINITY MUD (Pm)						
ALKALINITY FILTRATE (Pf / Mf)	0.08 0.52	0.12 0.60				
CHLORIDE (mg/L)	15,000	15,000				
TOTAL HARDNESS AS CALCIUM (mg/L)	600	640				
SULPHITE (mg/L)	250	200				
K+ (mg/L)	16,275	16,275				
KCl (% by Wt.)	3.1	3.1				
PHPA (ppb)						
ECD (ppg)	9.05	9.10				

OBSERVATIONS

Continue adding Residrill at 2 sacks per hour to active. Observed SBT test improving at 24 mm to 28 mm and holding. Mud losses at charge pump and evaporation losses. Made new premix and transferred to active. Mud weight increased to 9.0 ppg and dumped sand trap at connections to maintain mud weight. Made 30 bbls xtra sweep pill and circulated around. Observed sweep returns with lots of sludge. circulated until shakers clean. Flow checked hole and pumped 30 bbls slug and pulled out of hole.Sweep removed some residrill out as well. Monitor hole on trip tank.

OPERATIONS SUMMARY

Drilled 8.5 inch hole from 2705 m to 2732.3 m. Circulated bottoms up and pumped xtra sweep pill. Flow checked hole and pumped slug and pulled out of hole strapping pipe. At mid night 281 m.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	100	Desander		INITIAL VOLUME	996
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	0	+ FLUID RECEIVED	100
Direct Recirc Sump		Dumped	40	- FLUID LOST	170
Other (eg Diesel)		Other	130	+ FLUID IN STORAGE	322
TOTAL RECEIVED	100	TOTAL LOST	170	FINAL VOLUME	1,248

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	16
Degasser			Desilter			Shaker #2	3x50 API	16

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Xtra-Sweep	$ 122.65	13		3	10	$ 367.95
Aus-Ben	$ 16.50	86		16	70	$ 264.00
Barytes	$ 11.20	816		48	768	$ 537.60
Caustic Soda	$ 36.50	30		4	26	$ 146.00
Potassium Chloride	$ 33.60	207		10	197	$ 336.00
Residrill (l)	$ 136.53	236		27	209	$ 3,686.31
Sodium Sulphite	$ 42.60	65		2	63	$ 85.20
Xanbore	$ 188.60	10		2	8	$ 377.20

Solids Analysis	%	PPB
High Grav solids		
Total LGS	3.7	34.9
Bentonite	0.3	3.0
Drilled Solids	3.4	30.6
Salt	0.9	8.7
n @ 1500 Hrs	0.55	
K @ 1500 Hrs	4.64	

Bit Hydraulics & Pressure Data	
Jet Velocity	180
Impact force	354
HHP	65
HSI	1.1
Bit Press Loss	264
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	668 psi

DAILY COST	CUMULATIVE COST
$5,800.26	$61,270.15

RMN ENGINEER A Lokea CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

RMN drilling fluids

AUSTRALIAN MUD COMPANY LTD

Report #	13	Date :	1-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	BING	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE		18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION	
8.50	SMITH PMO17					SET @	1450	M	629	24	7 X 9	Inches	PRESS (PSI)	psi
DRILL PIPE	TYPE	Length				INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS	
SIZE	#		Mtrs			SET @		M	823		Triplex3	100 %	UP (min)	min
DRILL PIPE	TYPE	Length				PRODUCTION. or		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.	
SIZE 4.50	HW		55	Mtrs		LINER Set @		M	170		0.0550		TIME (min)	min
DRILL COLLAR SIZE (")		Length				MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP	Lam
	6.25		125	Mtrs		Water / Gel S/KCLSweeps							(ft/min) DCs	Lam

MUD PROPERTIES				
SAMPLE FROM	Pit		Pit	
TIME SAMPLE TAKEN	10:00		21:00	
DEPTH (ft) - (m) Metres	2,732		2,732	
FLOWLINE TEMPERATURE °C IN/OUT	46		41	
WEIGHT ppg / SG	9.10	1.092	9.10	1.092
FUNNEL VISCOSITY (sec/qt) API @ °C	42		42	
PLASTIC VISCOSITY cP @ °C	12		13	
YIELD POINT (lb/100ft²)	21		19	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	19	22	19	23
RHEOLOGY θ600 / θ300	45	33	45	32
RHEOLOGY θ200 / θ100	27	20	25	19
RHEOLOGY θ6 / θ3	8	6	8	6
FILTRATE API (cc's/30 min)	6.8		6.5	
HPHT FILTRATE (cc's/30 min) @ °F	28 mm		26 mm	
CAKE THICKNESS API : HPHT (32nd in)	1		1	
SOLIDS CONTENT (% by Volume)	4.4		4.2	
LIQUID CONTENT (% by Volume) OIL/WATER		95.6		95.8
SAND CONTENT (% by Vol.)	0.80		0.80	
METHYLENE BLUE CAPACITY (ppb equiv.)	8.8		8.8	
pH	9.0		9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)	0.03	0.50	0.05	0.50
CHLORIDE (mg/L)	15,000		15,000	
TOTAL HARDNESS AS CALCIUM (mg/L)	592		580	
SULPHITE (mg/L)	80		80	
K+ (mg/L)	16,275		16,275	
KCl (% by Wt.)	3.1		3.1	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS					
Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
KCl	2 %- 3%	PHPA		Sulphites	

OBSERVATIONS

Prepare 25bbls pumpable of Xtra-Sweep mud to sweep hole. Prepare 30bbls pumpable of 10ppg mud, weighted with Barite, to slug pipe.
Tripping losses of 20bbls.

OPERATIONS SUMMARY

RIH, pumped 25bbl sweep, circulated hole clean. Some filter cake and sludge noted at shakers. Shakers running very wet when sweep returned to surface.
Slugged pipe, POOH laying out 4" DP.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	926
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	33	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped	15	- FLUID LOST	103
Other (eg Diesel)		Other	55	+ FLUID IN STORAGE	170
TOTAL RECEIVED		TOTAL LOST	103	FINAL VOLUME	993

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	2
Degasser			Desilter			Shaker #2	3x50 API	2

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Xtra-Sweep	$ 122.65	10		3	7	$ 367.95
Barytes	$ 11.20	768		48	720	$ 537.60
Xanbore	$ 188.60	8		1	7	$ 188.60

Solids Analysis	%	PPB
High Grav solids	0.2	3.21
Total LGS	4.0	37.8
Bentonite	0.6	5.5
Drilled Solids	3.4	30.9
Salt	0.9	8.7
n @ 21:00 Hrs	0.49	
K @ 21:00 Hrs	7.63	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	643 psi

DAILY COST	CUMULATIVE COST
$1,094.15	$62,364.30

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

RMN drilling fluids

AUSTRALIAN MUD COMPANY LTD

Report #	14	Date :	2-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	BING	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY					CASING			MUD VOLUME (BBL)		CIRCULATION DATA		
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION
8.50	SMITH PMO17				SET @	1450	M	644	24	7 X 9	Inches	PRESS (PSI) psi
DRILL PIPE SIZE	TYPE	#	Length	Mtrs	INTERMEDIATE SET @		ft M	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS UP (min)
								923		Triplex3	100 %	min
DRILL PIPE SIZE	TYPE HW		Length	Mtrs	PRODUCTION. or LINER Set @		ft M	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC. TIME (min)
								255		0.0550		min
DRILL COLLAR SIZE (")			Length	Mtrs	MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP (ft/min) DCs Lam Lam
					Water / Gel S/KCLSweeps							

	MUD PROPERTIES			
SAMPLE FROM	Pit		Pit	
TIME SAMPLE TAKEN	9:00		20:00	
DEPTH (ft) - (m) Metres	2,732		2,732	
FLOWLINE TEMPERATURE °C IN OUT	31		32	
WEIGHT ppg / SG	9.10	1.092	9.10	1.092
FUNNEL VISCOSITY (sec/qt) API @ °C	43		41	
PLASTIC VISCOSITY cP @ °C	13		12	
YIELD POINT (lb/100ft²)	19		19	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	19	23	18	22
RHEOLOGY θ 600 / θ 300	45	32	43	31
RHEOLOGY θ 200 / θ 100	25	19	25	18
RHEOLOGY θ 6 / θ 3	8	6	8	5
FILTRATE API (cc's/30 min)	6.5		6.4	
HPHT FILTRATE (cc's/30 min) @ °F	26 mm		24 mm	
CAKE THICKNESS API : HPHT (32nd in)	1		1	
SOLIDS CONTENT (% by Volume)	4.2		4.2	
LIQUID CONTENT (% by Volume) OIL/WATER		95.8		95.8
SAND CONTENT (% by Vol.)	0.80		0.80	
METHYLENE BLUE CAPACITY (ppb equiv.)	8.8		8.6	
pH	9.0		9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)	0.05	0.50	0.05	0.50
CHLORIDE (mg/L)	15,000		15,000	
TOTAL HARDNESS AS CALCIUM (mg/L)	580		560	
SULPHITE (mg/L)	80		80	
K+ (mg/L)	16,275		16,275	
KCl (% by Wt.)	3.1		3.1	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS

Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
KCl	2 %- 3%	PHPA		Sulphites	

OBSERVATIONS

Prepare 100bbls of Gel/KCl/Polymer mud to maintain volume and properties.
Test #2 is after premix additions to surface volume.

OPERATIONS SUMMARY

Continue to POOH laying out 4" DP. Rack back DC.
Change pipe rams to 3 1/2". Conduct full BOP, choke manifold and surface equipment pressure tests.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	100	Desander		INITIAL VOLUME	823
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	0	+ FLUID RECEIVED	100
Direct Recirc Sump		Dumped		- FLUID LOST	0
Other (eg Diesel)		Other		+ FLUID IN STORAGE	255
TOTAL RECEIVED	100	TOTAL LOST	0	FINAL VOLUME	1,178

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Pac L	$ 125.60	2		2		$ 251.20
Aus-Ben	$ 16.50	70		14	56	$ 231.00
Caustic Soda	$ 36.50	26		1	25	$ 36.50
Potassium Chloride	$ 33.60	197		21	176	$ 705.60
Residrill (l)	$ 136.53	209		14	195	$ 1,911.42
Soda Ash	$ 24.10	51		1	50	$ 24.10
Xanbore	$ 188.60	7		2	5	$ 377.20

Solids Analysis

	%	PPB
High Grav solids	0.2	2.86
Total LGS	4.0	38.3
Bentonite	0.6	5.2
Drilled Solids	3.5	31.6
Salt	0.9	8.7
n @ 20:00 Hrs	0.47	
K @ 20:00 Hrs	8.36	

Bit Hydraulics & Pressure Data

Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	643 psi

DAILY COST	CUMULATIVE COST
$3,537.02	$65,901.32

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	15	Date :	3-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	BING
WELL NAME AND No	Surprise1 ST1	FIELD: EP-115 GDA94 Zone 52	LOCATION: Amadeus Basin / STATE: Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA		
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION
8.50	SMITH PMO17				SET @	1450	M	644	14	7 X 9	Inches	PRESS (PSI) psi
DRILL PIPE SIZE	TYPE #	Length		Mtrs	INTERMEDIATE SET @		ft M	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS UP (min)
								908		Triplex3	100 %	min
DRILL PIPE SIZE	TYPE HW	Length		Mtrs	PRODUCTION. or LINER Set @		ft M	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC. TIME (min)
								250		0.0550		min
DRILL COLLAR SIZE (")		Length		Mtrs	MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. (ft/min) DP DCs Lam Lam
					Water / Gel S/KCLSweeps							

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM			Pit	Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN			9:00	20:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)		Metres	2,732	2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C	IN OUT	28	28						
WEIGHT		ppg / SG	9.10 1.092	9.10 1.092						
FUNNEL VISCOSITY (sec/qt) API @		°C	42	42						
PLASTIC VISCOSITY cP @		°C	12	12						
YIELD POINT (lb/100ft²)			19	19						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min			18 22	18 22						
RHEOLOGY θ600 / θ300			43 31	43 31						
RHEOLOGY θ200 / θ100			25 18	25 18						
RHEOLOGY θ6 / θ3			8 5	8 5						
FILTRATE API (cc's/30 min)			6.4	6.4						
HPHT FILTRATE (cc's/30 min) @		°F	24 mm	24 mm						
CAKE THICKNESS API : HPHT (32nd in)			1	1						
SOLIDS CONTENT (% by Volume)			4.2	4.2						
LIQUID CONTENT (% by Volume) OIL/WATER			95.8	95.8						
SAND CONTENT (% by Vol.)			0.80	0.80						
METHYLENE BLUE CAPACITY (ppb equiv.)			8.6	8.6						
pH			9.0	9.0						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)			0.05 0.50	0.05 0.50						
CHLORIDE (mg/L)			15,000	15,000						
TOTAL HARDNESS AS CALCIUM (mg/L)			560	560						
SULPHITE (mg/L)			80	80						
K+ (mg/L)			16,275	16,275						
KCl (% by Wt.)			3.1	3.1						
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Static losses of 0.7bbls/hr.

OPERATIONS SUMMARY

Make up stands of 3 1/2" DP and rack back in derrick.
Rig up loggers.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	923
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	15	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	15
Other (eg Diesel)		Other		+ FLUID IN STORAGE	250
TOTAL RECEIVED		TOTAL LOST	15	FINAL VOLUME	1,158

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis

	%	PPB
High Grav solids	0.2	2.86
Total LGS	4.0	38.3
Bentonite	0.6	5.2
Drilled Solids	3.5	31.6
Salt	0.9	8.7
n @ 20:00 Hrs	0.47	
K @ 20:00 Hrs	8.36	

Bit Hydraulics & Pressure Data

Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	643 psi

DAILY COST	CUMULATIVE COST
	$65,901.32

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	16	Date :	4-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	BING

WELL NAME AND No	FIELD	LOCATION	STATE
Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION	
8.50	SMITH PMO17				SET @	1450	M	644	16	7 X 9	Inches	PRESS (PSI)	psi
DRILL PIPE SIZE	TYPE #	Length		Mtrs	INTERMEDIATE SET @		ft M	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS UP (min)	
								881		Triplex3	97 %		min
DRILL PIPE SIZE	TYPE HW	Length		Mtrs	PRODUCTION. or LINER Set @		ft M	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC. TIME (min)	
								221		0.0550			min
DRILL COLLAR SIZE (")		Length		Mtrs	MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP (ft/min) DCs	Lam Lam
					Water / Gel S/KCLSweeps								

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM			Pit	Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN			9:00	20:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)		Metres	2,732	2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C	IN OUT	26	26						
WEIGHT		ppg / SG	9.10 1.092	9.10 1.092						
FUNNEL VISCOSITY (sec/qt) API @		°C	42	42						
PLASTIC VISCOSITY cP @		°C	12	12						
YIELD POINT (lb/100ft²)			19	19						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min			18 22	18 22						
RHEOLOGY θ 600 / θ 300			43 31	43 31						
RHEOLOGY θ 200 / θ 100			25 18	25 18						
RHEOLOGY θ 6 / θ 3			8 5	8 5						
FILTRATE API (cc's/30 min)			6.4	6.4						
HPHT FILTRATE (cc's/30 min) @		°F	24 mm	24 mm						
CAKE THICKNESS API : HPHT (32nd in)			1	1						
SOLIDS CONTENT (% by Volume)			4.2	4.2						
LIQUID CONTENT (% by Volume) OIL/WATER			95.8	95.8						
SAND CONTENT (% by Vol.)			0.80	0.80						
METHYLENE BLUE CAPACITY (ppb equiv.)			8.6	8.6						
pH			9.0	9.0						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)			0.05 0.50	0.05 0.50						
CHLORIDE (mg/L)			15,000	15,000						
TOTAL HARDNESS AS CALCIUM (mg/L)			560	560						
SULPHITE (mg/L)			80	80						
K+ (mg/L)			16,275	16,275						
KCl (% by Wt.)			3.1	3.1						
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Average static losses of 0.7bbls/hr.

Dump sand trap and clean possum bellies and shaker area of solids.

OPERATIONS SUMMARY

Conduct logging run #1 and logging run #2.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	908
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	15	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped	12	- FLUID LOST	27
Other (eg Diesel)		Other		+ FLUID IN STORAGE	221
TOTAL RECEIVED		TOTAL LOST	27	FINAL VOLUME	1,102

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis	%	PPB
High Grav solids	0.2	2.86
Total LGS	4.0	38.3
Bentonite	0.6	5.2
Drilled Solids	3.5	31.6
Salt	0.9	8.7
n @ 20:00 Hrs	0.47	
K @ 20:00 Hrs	8.36	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	643 psi

DAILY COST	CUMULATIVE COST
	$65,901.32

RMN ENGINEER	W Mills	CITY	Adelaide Office	TELEPHONE	08 8338 7266

DRILLING FLUID REPORT

RMN drilling fluids

AUSTRALIAN MUD COMPANY LTD

Report #	17	Date :	5-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon / Bing	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY			JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	18	18	18	9 5/8	SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION		
8.50	Reed TC11				SET @		1450	M	584	210	7 X 9	Inches	PRESS (PSI)		psi
DRILL PIPE	TYPE		Length			INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS		
SIZE 3.5	#		2552	Mtrs		SET @		M	810		Triplex3	97 %	UP (min)	80	min
DRILL PIPE	TYPE		Length			PRODUCTION. or		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.		
SIZE 4.50	HW		55	Mtrs		LINER Set @		M	16		0.0550	123	TIME (min)	123	min
DRILL COLLAR SIZE (")			Length		MUD TYPE						BBL/MIN	GAL / MIN	ANN VEL. DP	113	Lam
	6.25		125	Mtrs	Water / Gel S/KCLSweeps						6.56	276	(ft/min) DCs	203	Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM			Pit	Fl	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN			9:00	23:30	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)		Metres	2,732	2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C	IN/OUT	26	31 39						
WEIGHT		ppg / SG	9.10 1.092	9.10 1.092						
FUNNEL VISCOSITY (sec/qt) API @		°C	41	46						
PLASTIC VISCOSITY cP @		°C	12	18						
YIELD POINT (lb/100ft²)			19	24						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min			18 22	8 10						
RHEOLOGY θ 600 / θ 300			43 31	60 42						
RHEOLOGY θ 200 / θ 100			25 18	33 24						
RHEOLOGY θ 6 / θ 3			8 5	8 7						
FILTRATE API (cc's/30 min)			6.4	8.5						
HPHT FILTRATE (cc's/30 min) @		°F	24 mm	30 mm						
CAKE THICKNESS API : HPHT (32nd in)			1	1						
SOLIDS CONTENT (% by Volume)			4.2	4.1						
LIQUID CONTENT (% by Volume) OIL/WATER			95.8	95.9						
SAND CONTENT (% by Vol.)			0.80	0.80						
METHYLENE BLUE CAPACITY (ppb equiv.)			8.6	8.6						
pH			9.0	9.0						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)			0.05 0.50	0.05 0.50						
CHLORIDE (mg/L)			15,000	15,200						
TOTAL HARDNESS AS CALCIUM (mg/L)			560	560						
SULPHITE (mg/L)			80	80						
K+ (mg/L)			16,275	16,800						
KCl (% by Wt.)			3.1	3.2						
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Add Biocide and Sodium Sulphite whilst circulating. Prepare hi-vis sweep mud.
Prepare HW pill to slug pipe.
Mud test #2 is bottoms up mud.
Large amount of filter cake noted at shakers on bottoms up.
Filtrate from bottoms up sample yellowed due to polymer degradation by heat.

OPERATIONS SUMMARY

Complete logging run #2, rig down loggers. Conduct wiper trip.
Repair swivel wash pipe connection.
RIH to bottom, pump 20bbls hi-vis sweep, circulate hole clean.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	881
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	36	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped	12	- FLUID LOST	70
Other (eg Diesel)		Other	22	+ FLUID IN STORAGE	16
TOTAL RECEIVED		TOTAL LOST	70	FINAL VOLUME	826

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	2
Degasser			Desilter			Shaker #2	3x50 API	2

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Biocide G	$ 155.65	39		2	37	$ 311.30
Barytes	$ 11.20	720		34	686	$ 380.80
Sodium Sulphite	$ 42.60	63		2	61	$ 85.20
Xanbore	$ 188.60	5		1	4	$ 188.60

Solids Analysis	%	PPB
High Grav solids	0.3	5.03
Total LGS	3.7	35.2
Bentonite	0.6	5.6
Drilled Solids	3.1	28.2
Salt	0.9	8.8
n @ 23:30 Hrs	0.51	
K @ 23:30 Hrs	8.69	

Bit Hydraulics & Pressure Data	
Jet Velocity	118
Impact force	154
HHP	18
HSI	0.3
Bit Press Loss	114
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	643 psi

DAILY COST	CUMULATIVE COST
$965.90	$66,867.22

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

RMN drilling fluids

AUSTRALIAN MUD COMPANY LTD

Report #	18	Date :	6-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon / Bing	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION	
8.50	Reed TC11				SET @	1450	M	644	22	7 X 9	Inches	PRESS (PSI)	psi
DRILL PIPE	TYPE	Length			INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS	
SIZE	#		Mtrs		SET @		M	895		Triplex3	97 %	UP (min)	min
DRILL PIPE	TYPE	Length			PRODUCTION. or		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.	
SIZE	HW		Mtrs		LINER Set @		M	229		0.0550		TIME (min)	min
DRILL COLLAR SIZE (")		Length			MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP	Lam
			Mtrs		Water / Gel S/KCLSweeps							(ft/min) DCs	Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM			Pit	Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN			9:00	20:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)		Metres	2,732	2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C	IN/OUT	33	34						
WEIGHT		ppg / SG	9.10 1.092	9.10 1.092						
FUNNEL VISCOSITY (sec/qt) API @		°C	50	50						
PLASTIC VISCOSITY cP @		°C	12	12						
YIELD POINT (lb/100ft²)			26	26						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min			10 14	10 14						
RHEOLOGY θ600 / θ300			50 38	50 38						
RHEOLOGY θ200 / θ100			31 24	31 24						
RHEOLOGY θ6 / θ3			10 8	10 8						
FILTRATE API (cc's/30 min)			7.2	7.2						
HPHT FILTRATE (cc's/30 min) @		°F	30 mm	30 mm						
CAKE THICKNESS API : HPHT (32nd in)			1	1						
SOLIDS CONTENT (% by Volume)			4.1	4.1						
LIQUID CONTENT (% by Volume) OIL/WATER			95.9	95.9						
SAND CONTENT (% by Vol.)			0.80	0.80						
METHYLENE BLUE CAPACITY (ppb equiv.)			8.2	8.2						
pH			9.0	9.0						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)			0.05 0.50	0.05 0.50						
CHLORIDE (mg/L)			15,200	15,200						
TOTAL HARDNESS AS CALCIUM (mg/L)			560	560						
SULPHITE (mg/L)			80	80						
K+ (mg/L)			16,800	16,800						
KCl (% by Wt.)			3.2	3.2						
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Prepare 100bbls of KCl/Gel/Residrill mud for volume and properties.

OPERATIONS SUMMARY

Continue to circulate hole clean, slug pipe, POOH.
Hole in good condition.
Rig up loggers for logging run #3.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	100	Desander		INITIAL VOLUME	810
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	16	+ FLUID RECEIVED	100
Direct Recirc Sump		Dumped		- FLUID LOST	16
Other (eg Diesel)		Other		+ FLUID IN STORAGE	229
TOTAL RECEIVED	100	TOTAL LOST	16	FINAL VOLUME	1,124

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Aus-Ben	$ 16.50	56		17	39	$ 280.50
Barytes	$ 11.20	686		4	682	$ 44.80
Potassium Chloride	$ 33.60	176		20	156	$ 672.00
Residrill (l)	$ 136.53	195		14	181	$ 1,911.42
Xanbore	$ 188.60	4		2	2	$ 377.20

Solids Analysis	%	PPB
High Grav solids	0.3	4.72
Total LGS	3.8	35.5
Bentonite	0.6	5.1
Drilled Solids	3.2	29.1
Salt	0.9	8.8
n @ 20:00 Hrs	0.40	
K @ 20:00 Hrs	16.46	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	643 psi

DAILY COST	CUMULATIVE COST
$3,285.92	$70,153.14

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	19	Date :	7-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon / Bing	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION	
8.50	Reed TC11				SET @	1450	M	644	19	7 X 9	Inches	PRESS (PSI)	psi
DRILL PIPE	TYPE	Length			INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS	
SIZE	#		Mtrs		SET @		M	880		Triplex3	97 %	UP (min)	min
DRILL PIPE	TYPE	Length			PRODUCTION. or		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.	
SIZE	HW		Mtrs		LINER Set @		M	217		0.0550		TIME (min)	min
DRILL COLLAR SIZE (")		Length			MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP	Lam
			Mtrs		Water / Gel S/KCLSweeps							(ft/min) DCs	Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM		Pit		Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN		9:00		20:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)	Metres	2,732		2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C IN OUT	32		35						
WEIGHT	ppg / SG	9.10	1.092	9.10 1.092						
FUNNEL VISCOSITY (sec/qt) API @	°C	50		50						
PLASTIC VISCOSITY cP @	°C	14		14						
YIELD POINT (lb/100ft²)		24		24						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min		10	14	10 14						
RHEOLOGY θ 600 / θ 300		52	38	52 38						
RHEOLOGY θ 200 / θ 100		31	24	31 24						
RHEOLOGY θ 6 / θ 3		10	8	10 8						
FILTRATE API (cc's/30 min)		7.2		7.2						
HPHT FILTRATE (cc's/30 min) @	°F	30 mm		30 mm						
CAKE THICKNESS API : HPHT (32nd in)		1		1						
SOLIDS CONTENT (% by Volume)		4.1		4.1						
LIQUID CONTENT (% by Volume) OIL/WATER			95.9	95.9						
SAND CONTENT (% by Vol.)		0.80		0.80						
METHYLENE BLUE CAPACITY (ppb equiv.)		8.2		8.2						
pH		9.0		9.0						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)		0.05	0.50	0.05 0.50						
CHLORIDE (mg/L)		15,200		15,200						
TOTAL HARDNESS AS CALCIUM (mg/L)		560		560						
SULPHITE (mg/L)		80		80						
K+ (mg/L)		16,800		16,800						
KCl (% by Wt.)		3.2		3.2						
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Static losses of 0.5 - 0.7bbls/hr.

OPERATIONS SUMMARY

Continue logging run #3 (MDT).
Tools stuck at 2,544m, attempt to retrieve same.
Wait on fishing tools.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	895
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	15	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	15
Other (eg Diesel)		Other		+ FLUID IN STORAGE	217
TOTAL RECEIVED		TOTAL LOST	15	FINAL VOLUME	1,097

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis	%	PPB
High Grav solids	0.3	4.72
Total LGS	3.8	35.5
Bentonite	0.6	5.1
Drilled Solids	3.2	29.1
Salt	0.9	8.8
n @ 20:00 Hrs	0.45	
K @ 20:00 Hrs	11.57	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	643 psi

DAILY COST	CUMULATIVE COST
	$70,153.14

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	20	Date :	8-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon / Bing	
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52	LOCATION: Amadeus Basin / STATE: Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING		MUD VOLUME (BBL)		CIRCULATION DATA		
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE SET @	4758 ft / 1450 M	HOLE	PITS	PUMP SIZE		CIRCULATION PRESS (PSI)
8.50	Reed TC11						644	23	7 X 9 Inches		psi
DRILL PIPE SIZE	TYPE #	Length Mtrs			INTERMEDIATE SET @	ft / M	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS UP (min)
							915		Triplex3	97 %	min
DRILL PIPE SIZE	TYPE HW	Length Mtrs			PRODUCTION. or LINER Set @	ft / M	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC. TIME (min)
							248		0.0550		min
DRILL COLLAR SIZE (")		Length Mtrs			MUD TYPE				BBL/MIN	GAL / MIN	ANN VEL. (ft/min) DP / DCs Lam / Lam
					Water / Gel S/KCLSweeps						

MUD PROPERTIES				
SAMPLE FROM	Pit		Pit	
TIME SAMPLE TAKEN	9:00		20:00	
DEPTH (ft) - (m) Metres	2,732		2,732	
FLOWLINE TEMPERATURE °C IN/OUT	32		34	
WEIGHT ppg / SG	9.10	1.092	8.90	1.068
FUNNEL VISCOSITY (sec/qt) API @ °C	50		50	
PLASTIC VISCOSITY cP @ °C	14		13	
YIELD POINT (lb/100ft²)	24		22	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	10	14	10	13
RHEOLOGY θ600 / θ300	52	38	48	35
RHEOLOGY θ200 / θ100	31	24	29	21
RHEOLOGY θ6 / θ3	10	8	9	7
FILTRATE API (cc's/30 min)	7.2		7.2	
HPHT FILTRATE (cc's/30 min) @ °F	30 mm		30 mm	
CAKE THICKNESS API : HPHT (32nd in)	1		1	
SOLIDS CONTENT (% by Volume)	4.1		2.7	
LIQUID CONTENT (% by Volume) OIL/WATER		95.9		97.3
SAND CONTENT (% by Vol.)	0.80		0.60	
METHYLENE BLUE CAPACITY (ppb equiv.)	8.2		8.0	
pH	9.0		9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)	0.05	0.50	0.05	0.50
CHLORIDE (mg/L)	15,200		15,000	
TOTAL HARDNESS AS CALCIUM (mg/L)	560		560	
SULPHITE (mg/L)	80		80	
K+ (mg/L)	16,800		16,275	
KCl (% by Wt.)	3.2		3.1	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS

Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
KCl	2 %- 3%	PHPA		Sulphites	

OBSERVATIONS

Prepare un-weightted premix to reduce MW of surface system to 8.9ppg as requested.

Treat surface system with Biocide.

OPERATIONS SUMMARY

Wait on fishing tools.

Perform maintenance on mud pumps and general rig maintenance.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	50	Desander		INITIAL VOLUME	880
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	15	+ FLUID RECEIVED	50
Direct Recirc Sump		Dumped		- FLUID LOST	15
Other (eg Diesel)		Other		+ FLUID IN STORAGE	248
TOTAL RECEIVED	50	TOTAL LOST	15	FINAL VOLUME	1,163

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Biocide G	$ 155.65	37		1	36	$ 155.65
Aus-Ben	$ 16.50	39		10	29	$ 165.00
Residrill (l)	$ 136.53	181		13	168	$ 1,774.89
Soda Ash	$ 24.10	50		1	49	$ 24.10

Solids Analysis

	%	PPB
High Grav solids	0.3	4.46
Total LGS	2.4	22.8
Bentonite	0.7	6.4
Drilled Solids	1.7	15.5
Salt	0.9	8.7
n @ 20:00 Hrs	0.46	
K @ 20:00 Hrs	10.45	

Bit Hydraulics & Pressure Data

Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	693 psi

DAILY COST	CUMULATIVE COST
$2,119.64	$72,272.78

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

RMN drilling fluids

AUSTRALIAN MUD COMPANY LTD

Report #	21	Date :	9-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon / Bing	
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52	LOCATION: Amadeus Basin / STATE: Northern Territory

DRILLING ASSEMBLY		JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8.50	TYPE No Bit		9 5/8 SURFACE SET @ 4758 ft / 1450 M	HOLE 600 / PITS 24	PUMP SIZE 7 X 9 Inches; CIRCULATION PRESS (PSI) psi
DRILL PIPE SIZE 3.5	TYPE #	Length 2518 Mtrs	INTERMEDIATE SET @ ft / M	TOTAL CIRCULATING VOL. 886	PUMP MODEL Triplex3; ASSUMED EFF 97 %
DRILL PIPE SIZE	TYPE HW	Length Mtrs	PRODUCTION. or LINER Set @ ft / M	IN STORAGE 262	BBL/STK 0.0550; STK / MIN 120; BOTTOMS UP (min) 87 min; TOTAL CIRC. TIME (min) 138 min
DRILL COLLAR SIZE (")		Length Mtrs	MUD TYPE Water / Gel S/KCLSweeps		BBL/MIN 6.40; GAL / MIN 269; ANN VEL. (ft/min) DP 110 Lam / DCs Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM			Pit	Fl	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN			9:00	18:30	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)		Metres	2,732	2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C	IN/OUT	34	39						
WEIGHT		ppg / SG	8.90 1.068	8.90 1.068						
FUNNEL VISCOSITY (sec/qt) API @		°C	50	46						
PLASTIC VISCOSITY cP @		°C	13	12						
YIELD POINT (lb/100ft²)			22	21						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min			10 13	9 13						
RHEOLOGY θ600 / θ300			48 35	45 33						
RHEOLOGY θ200 / θ100			29 21	27 19						
RHEOLOGY θ6 / θ3			9 7	8 6						
FILTRATE API (cc's/30 min)			7.2	7.2						
HPHT FILTRATE (cc's/30 min) @		°F	30 mm	30 mm						
CAKE THICKNESS API : HPHT (32nd in)			1	1						
SOLIDS CONTENT (% by Volume)			2.7	2.7						
LIQUID CONTENT (% by Volume) OIL/WATER			97.3	97.3						
SAND CONTENT (% by Vol.)			0.60	0.50						
METHYLENE BLUE CAPACITY (ppb equiv.)			8.0	8.0						
pH			9.0	9.0						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)			0.05 0.50	0.05 0.50						
CHLORIDE (mg/L)			15,000	15,000						
TOTAL HARDNESS AS CALCIUM (mg/L)			560	560						
SULPHITE (mg/L)			80	80						
K+ (mg/L)			16,275	16,275						
KCl (% by Wt.)			3.1	3.1						
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Prepare HW pill to slug pipe.

OPERATIONS SUMMARY

Rig up for fishing MDT tools.
P/U 1 stand of 3 1/2" DP and fishing tool, thread cable into stand and connect to in hole cable spearhead. RIH to 2,509m, P/U kelly and circulate, rack back kelly, pull fish into fishing tool.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	915
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	29	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	29
Other (eg Diesel)		Other		+ FLUID IN STORAGE	262
TOTAL RECEIVED		TOTAL LOST	29	FINAL VOLUME	1,148

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	3
Degasser			Desilter			Shaker #2	3x50 API	3

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Barytes	$ 11.20	682		77	605	$ 862.40

Solids Analysis

	%	PPB
High Grav solids	0.3	4.46
Total LGS	2.4	22.8
Bentonite	0.7	6.4
Drilled Solids	1.7	15.5
Salt	0.9	8.7
n @ 18:30 Hrs	0.45	
K @ 18:30 Hrs	10.37	

Bit Hydraulics & Pressure Data

Jet Velocity	
Impact force	#VALUE!
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	693 psi

DAILY COST	CUMULATIVE COST
$862.40	$73,135.18

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	22	Date :	10-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon / Bing	
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52	LOCATION: Amadeus Basin / STATE: Northern Territory

DRILLING ASSEMBLY		JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8.50	TYPE No Bit		9 5/8 SURFACE SET @ 4758 ft / 1450 M	HOLE 644 / PITS 21	PUMP SIZE 7 X 9 Inches; CIRCULATION PRESS (PSI) psi
DRILL PIPE SIZE	TYPE #	Length Mtrs	INTERMEDIATE SET @ ft / M	TOTAL CIRCULATING VOL. 869	PUMP MODEL Triplex3; ASSUMED EFF 97 %; BOTTOMS UP (min) min
DRILL PIPE SIZE	TYPE HW	Length Mtrs	PRODUCTION. or LINER Set @ ft / M	IN STORAGE 204	BBL/STK 0.0550; STK / MIN; TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (")		Length Mtrs	MUD TYPE Water / Gel S/KCLSweeps		BBL/MIN; GAL / MIN; ANN VEL. (ft/min) DP DCs Lam Lam

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM	Pit	Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN	9:00	20:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m) Metres	2,732	2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE °C IN/OUT	34	34						
WEIGHT ppg / SG	8.90 1.068	8.90 1.068						
FUNNEL VISCOSITY (sec/qt) API @ °C	46	46						
PLASTIC VISCOSITY cP @ °C	12	12						
YIELD POINT (lb/100ft²)	21	21						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	9 13	9 13						
RHEOLOGY θ600 / θ300	45 33	45 33						
RHEOLOGY θ200 / θ100	29 19	29 19						
RHEOLOGY θ6 / θ3	8 6	8 6						
FILTRATE API (cc's/30 min)	7.2	7.2						
HPHT FILTRATE (cc's/30 min) @ °F	30 mm	30 mm						
CAKE THICKNESS API : HPHT (32nd in)	1	1						
SOLIDS CONTENT (% by Volume)	2.7	2.7						
LIQUID CONTENT (% by Volume) OIL/WATER	97.3	97.3						
SAND CONTENT (% by Vol.)	0.50	0.50						
METHYLENE BLUE CAPACITY (ppb equiv.)	8.0	8.0						
pH	9.0	9.0						
ALKALINITY MUD (Pm)								
ALKALINITY FILTRATE (Pf / Mf)	0.05 0.50	0.05 0.50						
CHLORIDE (mg/L)	15,000	15,000						
TOTAL HARDNESS AS CALCIUM (mg/L)	560	560						
SULPHITE (mg/L)	80	80						
K+ (mg/L)	16,275	16,275						
KCl (% by Wt.)	3.1	3.1						
PHPA (ppb)								
ECD (ppg)								

OBSERVATIONS

OPERATIONS SUMMARY

POOH with fish. L/O MDT tool. Slip and cut drill line.
Function/pressure test BOP's.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	886
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	17	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	17
Other (eg Diesel)		Other		+ FLUID IN STORAGE	204
TOTAL RECEIVED		TOTAL LOST	17	FINAL VOLUME	1,073

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis	%	PPB
High Grav solids	0.3	4.46
Total LGS	2.4	22.8
Bentonite	0.7	6.4
Drilled Solids	1.7	15.5
Salt	0.9	8.7
n @ 20:00 Hrs	0.45	
K @ 20:00 Hrs	10.37	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	693 psi

DAILY COST	CUMULATIVE COST
	$73,135.18

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	23	Date :	11-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman / Bing	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING		MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE	4758 ft	HOLE	PITS	PUMP SIZE		CIRCULATION	
8.50	Reed TC11				SET @	1450 M	585	22	7 X 9 Inches		PRESS (PSI)	117 psi
DRILL PIPE	TYPE	Length			INTERMEDIATE	ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS	
SIZE 3.5	#	2554 Mtrs			SET @	M	847		Triplex3	97 %	UP (min)	68 min
DRILL PIPE	TYPE	Length			PRODUCTION. or	ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.	
SIZE 4.50	HW	55 Mtrs			LINER Set @	M	240		0.0550	145	TIME (min)	109 min
DRILL COLLAR SIZE (")		Length			MUD TYPE				BBL/MIN	GAL / MIN	ANN VEL. DP	133 Lam
	6.25	122 Mtrs			Water / Gel S/KCLSweeps				7.74	325	(ft/min) DCs	240 Lam

MUD PROPERTIES				
SAMPLE FROM		Pit	Fl	
TIME SAMPLE TAKEN		9:00	16:30	
DEPTH (ft) - (m)	Metres	2,732	2,732	
FLOWLINE TEMPERATURE	°C IN/OUT	34	45	
WEIGHT	ppg / SG	8.90 1.068	8.90 1.068	
FUNNEL VISCOSITY (sec/qt) API @	°C	46	45	
PLASTIC VISCOSITY cP @	°C	12	12	
YIELD POINT (lb/100ft²)		21	21	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min		9 13	9 13	
RHEOLOGY θ 600 / θ 300		45 33	45 33	
RHEOLOGY θ 200 / θ 100		27 17	26 17	
RHEOLOGY θ 6 / θ 3		8 6	8 6	
FILTRATE API (cc's/30 min)		7.2	7.2	
HPHT FILTRATE (cc's/30 min) @	°F	30 mm	30 mm	
CAKE THICKNESS API : HPHT (32nd in)		1	1	
SOLIDS CONTENT (% by Volume)		2.7	2.7	
LIQUID CONTENT (% by Volume) OIL/WATER		97.3	97.3	
SAND CONTENT (% by Vol.)		0.50	0.50	
METHYLENE BLUE CAPACITY (ppb equiv.)		8.0	8.0	
pH		9.0	9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)		0.05 0.50	0.05 0.50	
CHLORIDE (mg/L)		15,000	15,000	
TOTAL HARDNESS AS CALCIUM (mg/L)		560	560	
SULPHITE (mg/L)		80	80	
K+ (mg/L)		16,275	16,275	
KCl (% by Wt.)		3.1	3.1	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS					
Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
KCl	2 %- 3%	PHPA		Sulphites	

OBSERVATIONS

Used 4 sx of Aus-Ben to seal VSP (Checkshot) pit.
Received 17 pallets of mud chemicals.
Prepare 20bbls pumpable of hi-vis sweep mud.
Prepare 20bbls pumpable of HW pill.
Add Biocide and Sodium Sulphite directly to the active while circulating.
Some small pieces of filter cake noted at shakers along with aggregated fines (Barite from previous HW pills).

OPERATIONS SUMMARY

Continue to function/pressure test BOP's. Perform wiper trip.
On bottom pump 20bbls hi-vis sweep. Circulate hole clean. Flow check.
Slug pipe with HW pill. POOH.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	869
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	22	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	22
Other (eg Diesel)		Other		+ FLUID IN STORAGE	240
TOTAL RECEIVED		TOTAL LOST	22	FINAL VOLUME	1,087

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	3
Degasser			Desilter			Shaker #2	3x50 API	3

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Biocide G	$ 155.65	36		2	34	$ 311.30
Aus-Ben	$ 16.50	29	288	4	313	$ 66.00
Barytes	$ 11.20	605		47	558	$ 526.40
Sodium Sulphite	$ 42.60	61		2	59	$ 85.20
Xanbore	$ 188.60	2	40	1	41	$ 188.60

Solids Analysis	%	PPB
High Grav solids	0.3	4.46
Total LGS	2.4	22.8
Bentonite	0.7	6.4
Drilled Solids	1.7	15.5
Salt	0.9	8.7
n @ 16:30 Hrs	0.45	
K @ 16:30 Hrs	10.37	

Bit Hydraulics & Pressure Data	
Jet Velocity	139
Impact force	209
HHP	29
HSI	0.5
Bit Press Loss	156
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	693 psi

DAILY COST	CUMULATIVE COST
$1,177.50	$74,312.68

RMN ENGINEER	W Mills	CITY	Adelaide Office	TELEPHONE	08 8338 7266

DRILLING FLUID REPORT

RMN drilling fluids

AUSTRALIAN MUD COMPANY LTD

Report #	24	Date :	12-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732	to 2732	Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman / Bing

WELL NAME AND No	FIELD	LOCATION	STATE
Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE	18	18	18	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION	
8.50	Reed TC11				SET @	1450	M	585	18	7 X 9	Inches	PRESS (PSI)	psi
DRILL PIPE	TYPE	Length			INTERMEDIATE		ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS	
SIZE 3.5	#	2554	Mtrs		SET @		M	838		Triplex3	97 %	UP (min)	min
DRILL PIPE	TYPE	Length			PRODUCTION. or		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.	
SIZE 4.50	HW	55	Mtrs		LINER Set @		M	235		0.0550		TIME (min)	min
DRILL COLLAR SIZE (")		Length			MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP	Lam
6.25		122	Mtrs		Water / Gel S/KCLSweeps							(ft/min) DCs	Lam

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM	Pit	Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN	9:00	20:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m) Metres	2,732	2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE °C IN OUT	34	34						
WEIGHT ppg / SG	8.90 1.068	8.90 1.068						
FUNNEL VISCOSITY (sec/qt) API @ °C	45	45						
PLASTIC VISCOSITY cP @ °C	12	12						
YIELD POINT (lb/100ft²)	21	21						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	9 13	9 13						
RHEOLOGY θ600 / θ300	45 33	45 33						
RHEOLOGY θ200 / θ100	26 17	26 17						
RHEOLOGY θ6 / θ3	8 6	8 6						
FILTRATE API (cc's/30 min)	7.2	7.2						
HPHT FILTRATE (cc's/30 min) @ °F	30 mm	30 mm						
CAKE THICKNESS API : HPHT (32nd in)	1	1						
SOLIDS CONTENT (% by Volume)	2.7	2.7						
LIQUID CONTENT (% by Volume) OIL/WATER	97.3	97.3						
SAND CONTENT (% by Vol.)	0.50	0.50						
METHYLENE BLUE CAPACITY (ppb equiv.)	8.0	8.0						
pH	9.0	9.0						
ALKALINITY MUD (Pm)								
ALKALINITY FILTRATE (Pf / Mf)	0.05 0.50	0.05 0.50						
CHLORIDE (mg/L)	15,000	15,000						
TOTAL HARDNESS AS CALCIUM (mg/L)	560	560						
SULPHITE (mg/L)	80	80						
K+ (mg/L)	16,275	16,275						
KCl (% by Wt.)	3.1	3.1						
PHPA (ppb)								
ECD (ppg)								

OBSERVATIONS

Prepare 100bbls of mud due to 'losses' from pill tank while tripping.
Prepare 40bbls of hi-vis sweep mud.

OPERATIONS SUMMARY

Continue to POOH. Rig up loggers for VSP logs. Conduct VSP logs, rig down loggers. RIH for wiper trip. Pump 35bbls hi-vis sweep, circulate hole clean.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	100	Desander		INITIAL VOLUME	847
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	19	+ FLUID RECEIVED	100
Direct Recirc Sump		Dumped		- FLUID LOST	109
Other (eg Diesel)		Other	90	+ FLUID IN STORAGE	235
TOTAL RECEIVED	100	TOTAL LOST	109	FINAL VOLUME	1,073

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Aus-Ben	$ 16.50	313		20	293	$ 330.00
Residrill (l)	$ 136.53	264		12	252	$ 1,638.36
Xanbore	$ 188.60	41		2	39	$ 377.20

Solids Analysis	%	PPB
High Grav solids	0.3	3.94
Total LGS	2.5	23.4
Bentonite	0.7	6.3
Drilled Solids	1.8	16.2
Salt	0.9	8.7
n @ 20:00 Hrs	0.45	
K @ 20:00 Hrs	10.37	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	693 psi

DAILY COST	CUMULATIVE COST
$2,345.56	$76,658.24

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	25	Date :	13-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman / Bing	
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52	LOCATION: Amadeus Basin / STATE: Northern Territory

DRILLING ASSEMBLY		JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8.50	TYPE No Bit		9 5/8 SURFACE 4758 ft; SET @ 1450 M	HOLE 644 / PITS 23	PUMP SIZE 7 X 9 Inches; CIRCULATION PRESS (PSI) psi
DRILL PIPE SIZE	TYPE #	Length Mtrs	INTERMEDIATE ft; SET @ M	TOTAL CIRCULATING VOL. 821	PUMP MODEL Triplex3; ASSUMED EFF 97 %; BOTTOMS UP (min) min
DRILL PIPE SIZE	TYPE HW	Length Mtrs	PRODUCTION. or LINER Set @ ft / M	IN STORAGE 154	BBL/STK 0.0550; STK / MIN; TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (")		Length Mtrs	MUD TYPE: Water / Gel S/KCLSweeps		BBL/MIN; GAL / MIN; ANN VEL. (ft/min) DP DCs; Lam Lam

MUD PROPERTIES		
SAMPLE FROM	Pit	Pit
TIME SAMPLE TAKEN	9:00	20:00
DEPTH (ft) - (m) Metres	2,732	2,732
FLOWLINE TEMPERATURE °C IN/OUT	34	34
WEIGHT ppg / SG	8.90 1.068	8.90 1.068
FUNNEL VISCOSITY (sec/qt) API @ °C	45	45
PLASTIC VISCOSITY cP @ °C	12	12
YIELD POINT (lb/100ft²)	21	21
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	9 13	9 13
RHEOLOGY θ600 / θ300	45 33	45 33
RHEOLOGY θ200 / θ100	26 17	26 17
RHEOLOGY θ6 / θ3	8 6	8 6
FILTRATE API (cc's/30 min)	7.2	7.2
HPHT FILTRATE (cc's/30 min) @ °F	30 mm	30 mm
CAKE THICKNESS API : HPHT (32nd in)	1	1
SOLIDS CONTENT (% by Volume)	2.7	2.7
LIQUID CONTENT (% by Volume) OIL/WATER	97.3	97.3
SAND CONTENT (% by Vol.)	0.50	0.50
METHYLENE BLUE CAPACITY (ppb equiv.)	8.0	8.0
pH	9.0	9.0
ALKALINITY MUD (Pm)		
ALKALINITY FILTRATE (Pf / Mf)	0.05 0.50	0.05 0.50
CHLORIDE (mg/L)	15,000	15,000
TOTAL HARDNESS AS CALCIUM (mg/L)	560	560
SULPHITE (mg/L)	80	80
K+ (mg/L)	16,275	16,275
KCl (% by Wt.)	3.1	3.1
PHPA (ppb)		
ECD (ppg)		

MUD PROPERTY SPECIFICATIONS

Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
KCl	2 %- 3%	PHPA		Sulphites	

OBSERVATIONS

Prepare HW pill to slug pipe. Add biocide to active while circulating.

OPERATIONS SUMMARY

Continue to circulate hole clean. POOH. L/O excess 3 1/2" DP, rack back stands of 3 1/2" DP, L/O HWDP, 6 1/4" DC and kelly.
Rig up and run 7" casing.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	838
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	17	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	17
Other (eg Diesel)		Other		+ FLUID IN STORAGE	154
TOTAL RECEIVED		TOTAL LOST	17	FINAL VOLUME	975

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
AMC Biocide G	$ 155.65	34		1	33	$ 155.65
Barytes	$ 11.20	558		30	528	$ 336.00

Solids Analysis

	%	PPB
High Grav solids	0.3	3.94
Total LGS	2.5	23.4
Bentonite	0.7	6.3
Drilled Solids	1.8	16.2
Salt	0.9	8.7
n @ 20:00 Hrs	0.45	
K @ 20:00 Hrs	10.37	

Bit Hydraulics & Pressure Data

Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	693 psi

DAILY COST	CUMULATIVE COST
$491.65	$77,149.89

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	26	Date :	14-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Coleman / Bing	
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52	LOCATION: Amadeus Basin / STATE: Northern Territory

DRILLING ASSEMBLY		JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8.50	TYPE No Bit		9 5/8 SURFACE 4758 ft; SET @ 1450 M	HOLE 644 / PITS 152	PUMP SIZE 7 X 9 Inches; CIRCULATION PRESS (PSI) psi
DRILL PIPE SIZE	TYPE #	Length Mtrs	INTERMEDIATE ft; SET @ M	TOTAL CIRCULATING VOL. 807	PUMP MODEL Triplex3; ASSUMED EFF 97 %; BOTTOMS UP (min) min
DRILL PIPE SIZE	TYPE HW	Length Mtrs	PRODUCTION. or LINER Set @ ft / M	IN STORAGE 11	BBL/STK 0.0550; STK / MIN; TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (")		Length Mtrs	MUD TYPE: Water / Gel S/KCLSweeps		BBL/MIN; GAL / MIN; ANN VEL. (ft/min) DP / DCs; Lam / Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM	Pit		Pit		Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN	9:00		20:00		Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m) Metres	2,732		2,732		KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE °C IN/OUT	32		32							
WEIGHT ppg / SG	8.90	1.068	8.90	1.068						
FUNNEL VISCOSITY (sec/qt) API @ °C	45		45							
PLASTIC VISCOSITY cP @ °C	12		12							
YIELD POINT (lb/100ft²)	21		21							
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	9	13	9	13						
RHEOLOGY θ600 / θ300	45	33	45	33						
RHEOLOGY θ200 / θ100	26	17	26	17						
RHEOLOGY θ6 / θ3	8	6	8	6						
FILTRATE API (cc's/30 min)	7.2		7.2							
HPHT FILTRATE (cc's/30 min) @ °F	30 mm		30 mm							
CAKE THICKNESS API : HPHT (32nd in)	1		1							
SOLIDS CONTENT (% by Volume)	2.7		2.7							
LIQUID CONTENT (% by Volume) OIL/WATER		97.3		97.3						
SAND CONTENT (% by Vol.)	0.50		0.50							
METHYLENE BLUE CAPACITY (ppb equiv.)	8.0		8.0							
pH	9.0		9.0							
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)	0.05	0.50	0.05	0.50						
CHLORIDE (mg/L)	15,000		15,000							
TOTAL HARDNESS AS CALCIUM (mg/L)	560		560							
SULPHITE (mg/L)	80		80							
K+ (mg/L)	16,275		16,275							
KCl (% by Wt.)	3.1		3.1							
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

OPERATIONS SUMMARY

Continue to run 7" casing to 2729m. Circulate hole clean.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	821
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	14	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	14
Other (eg Diesel)		Other		+ FLUID IN STORAGE	11
TOTAL RECEIVED		TOTAL LOST	14	FINAL VOLUME	818

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Barytes	$ 11.20	528		28	500	$ 313.60

Solids Analysis

	%	PPB
High Grav solids	0.3	3.94
Total LGS	2.5	23.4
Bentonite	0.7	6.3
Drilled Solids	1.8	16.2
Salt	0.9	8.7
n @ 20:00 Hrs	0.45	
K @ 20:00 Hrs	10.37	

Bit Hydraulics & Pressure Data

Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	693 psi

DAILY COST	CUMULATIVE COST
$313.60	$77,463.49

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	27	Date :	15-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE	CASING			MUD VOLUME (BBL)		CIRCULATION DATA		
BIT SIZE 6.00	TYPE No Bit		9 5/8 SURFACE SET @	4758 ft / 1450 M		HOLE 353	PITS 350	PUMP SIZE 7 X 9 Inches		CIRCULATION PRESS (PSI) psi
DRILL PIPE SIZE	TYPE #	Length Mtrs	7 INTERMEDIATE SET @	8953 ft / 2729 M		TOTAL CIRCULATING VOL. 703		PUMP MODEL Triplex3	ASSUMED EFF 97 %	BOTTOMS UP (min) min
DRILL PIPE SIZE	TYPE HW	Length Mtrs	PRODUCTION. or LINER Set @	ft / M		IN STORAGE		BBL/STK 0.0550	STK / MIN	TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (")		Length Mtrs	MUD TYPE	Water / Gel S/KCLSweeps				BBL/MIN	GAL / MIN	ANN VEL. (ft/min) DP DCs Lam Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM			Pit	Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN			9:00	20:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)		Metres	2,732	2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C	IN/OUT	32	32						
WEIGHT		ppg / SG	8.90 1.068	8.90 1.068						
FUNNEL VISCOSITY (sec/qt) API @		°C	44	44						
PLASTIC VISCOSITY cP @		°C	12	12						
YIELD POINT (lb/100ft²)			19	19						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min			9 13	9 13						
RHEOLOGY θ 600 / θ 300			43 31	43 31						
RHEOLOGY θ 200 / θ 100			25 17	25 17						
RHEOLOGY θ 6 / θ 3			8 5	8 5						
FILTRATE API (cc's/30 min)			7.4	7.4						
HPHT FILTRATE (cc's/30 min) @		°F	30 mm	30 mm						
CAKE THICKNESS API : HPHT (32nd in)			1	1						
SOLIDS CONTENT (% by Volume)			2.7	2.7						
LIQUID CONTENT (% by Volume) OIL/WATER			97.3	97.3						
SAND CONTENT (% by Vol.)			0.50	0.50						
METHYLENE BLUE CAPACITY (ppb equiv.)			8.0	8.0						
pH			9.0	9.0						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)			0.05 0.50	0.05 0.50						
CHLORIDE (mg/L)			15,000	15,000						
TOTAL HARDNESS AS CALCIUM (mg/L)			560	560						
SULPHITE (mg/L)			80	80						
K+ (mg/L)			16,275	16,275						
KCl (% by Wt.)			3.1	3.1						
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Trican used Barite for weighted pre-flush. Dump 104bbls of mud during cementing due to volume constraints. Mud will be used to mill out window in 7" casing.

OPERATIONS SUMMARY

Circulate and condition mud. Conduct cement job, good returns throughout.
Wait on cement, nipple down BOP's.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	807
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	0	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped	104	- FLUID LOST	104
Other (eg Diesel)		Other		+ FLUID IN STORAGE	
TOTAL RECEIVED		TOTAL LOST	104	FINAL VOLUME	703

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Barytes	$ 11.20	500		68	432	$ 761.60

Solids Analysis	%	PPB
High Grav solids	0.3	3.94
Total LGS	2.5	23.4
Bentonite	0.7	6.3
Drilled Solids	1.8	16.2
Salt	0.9	8.7
n @ 20:00 Hrs	0.47	
K @ 20:00 Hrs	8.36	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	1304 psi

DAILY COST	CUMULATIVE COST
$761.60	$78,225.09

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	28	Date :	16-Dec-2012
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon	
WELL NAME AND No	Surprise1 ST1	FIELD	EP-115 GDA94 Zone 52	LOCATION: Amadeus Basin / STATE: Northern Territory

DRILLING ASSEMBLY		JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 6.00	TYPE No Bit		9 5/8 SURFACE SET @ 4758 ft / 1450 M	HOLE 353 / PITS 350	PUMP SIZE 7 X 9 Inches; CIRCULATION PRESS (PSI) psi
DRILL PIPE SIZE	TYPE #	Length Mtrs	7 INTERMEDIATE SET @ 8953 ft / 2729 M	TOTAL CIRCULATING VOL. 703	PUMP MODEL Triplex3; ASSUMED EFF 97 %; BOTTOMS UP (min) min
DRILL PIPE SIZE	TYPE HW	Length Mtrs	PRODUCTION. or LINER Set @ ft / M	IN STORAGE	BBL/STK 0.0550; STK / MIN; TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (")		Length Mtrs	MUD TYPE: Water / Gel S/KCLSweeps		BBL/MIN; GAL / MIN; ANN VEL. (ft/min) DP DCs Lam Lam

MUD PROPERTIES

SAMPLE FROM		Pit	Pit	
TIME SAMPLE TAKEN		9:00	20:00	
DEPTH (ft) - (m)	Metres	2,732	2,732	
FLOWLINE TEMPERATURE	°C IN/OUT	30	30	
WEIGHT	ppg / SG	8.90 1.068	8.90 1.068	
FUNNEL VISCOSITY (sec/qt) API @	°C	44	44	
PLASTIC VISCOSITY cP @	°C	12	12	
YIELD POINT (lb/100ft²)		19	19	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min		9 13	9 13	
RHEOLOGY θ600 / θ300		43 31	43 31	
RHEOLOGY θ200 / θ100		25 17	25 17	
RHEOLOGY θ6 / θ3		8 5	8 5	
FILTRATE API (cc's/30 min)		7.4	7.4	
HPHT FILTRATE (cc's/30 min) @	°F	30 mm	30 mm	
CAKE THICKNESS API : HPHT (32nd in)		1	1	
SOLIDS CONTENT (% by Volume)		2.7	2.7	
LIQUID CONTENT (% by Volume) OIL/WATER		97.3	97.3	
SAND CONTENT (% by Vol.)		0.50	0.50	
METHYLENE BLUE CAPACITY (ppb equiv.)		8.0	8.0	
pH		9.0	9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)		0.05 0.50	0.05 0.50	
CHLORIDE (mg/L)		15,000	15,000	
TOTAL HARDNESS AS CALCIUM (mg/L)		560	560	
SULPHITE (mg/L)		80	80	
K+ (mg/L)		16,275	16,275	
KCl (% by Wt.)		3.1	3.1	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS

Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
KCl	2 %- 3%	PHPA		Sulphites	

OBSERVATIONS

OPERATIONS SUMMARY

Nipple up BOP's. Install hard line and shock hose from mud pump.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	703
Premix (recirc from sump)		Desilter			
Drill Water		Downhole		+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	
Other (eg Diesel)		Other		+ FLUID IN STORAGE	
TOTAL RECEIVED		TOTAL LOST		FINAL VOLUME	703

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis

	%	PPB
High Grav solids	0.3	3.94
Total LGS	2.5	23.4
Bentonite	0.7	6.3
Drilled Solids	1.8	16.2
Salt	0.9	8.7
n @ 20:00 Hrs	0.47	
K @ 20:00 Hrs	8.36	

Bit Hydraulics & Pressure Data

Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	1304 psi

DAILY COST	CUMULATIVE COST
	$78,225.09

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	29	Date :	17-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon	
WELL NAME AND No		FIELD	LOCATION	STATE
Surprise1 ST1		EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE	CASING			MUD VOLUME (BBL)		CIRCULATION DATA		
BIT SIZE 6.00	TYPE No Bit		9 5/8 SURFACE SET @	4758 ft / 1450 M		HOLE 353	PITS 350	PUMP SIZE 7 X 9 Inches		CIRCULATION PRESS (PSI) psi
DRILL PIPE SIZE	TYPE #	Length Mtrs	7 INTERMEDIATE SET @	8953 ft / 2729 M		TOTAL CIRCULATING VOL. 703		PUMP MODEL Triplex3	ASSUMED EFF 97 %	BOTTOMS UP (min) min
DRILL PIPE SIZE	TYPE HW	Length Mtrs	PRODUCTION. or LINER Set @	ft / M		IN STORAGE		BBL/STK 0.0550	STK / MIN	TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (")		Length Mtrs	MUD TYPE Water / Gel S/KCLSweeps					BBL/MIN	GAL / MIN	ANN VEL. (ft/min) DP DCs Lam Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM	Pit		Pit		Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN	9:00		20:00		Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m) Metres	2,732		2,732		KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE °C IN/OUT	30		30							
WEIGHT ppg / SG	8.90	1.068	8.90	1.068						
FUNNEL VISCOSITY (sec/qt) API @ °C	44		44							
PLASTIC VISCOSITY cP @ °C	12		12							
YIELD POINT (lb/100ft²)	19		19							
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	9	13	9	13						
RHEOLOGY θ600 / θ300	43	31	43	31						
RHEOLOGY θ200 / θ100	25	17	25	17						
RHEOLOGY θ6 / θ3	8	6	8	6						
FILTRATE API (cc's/30 min)	7.4		7.4							
HPHT FILTRATE (cc's/30 min) @ °F	30 mm		30 mm							
CAKE THICKNESS API : HPHT (32nd in)	1		1							
SOLIDS CONTENT (% by Volume)	2.7		2.7							
LIQUID CONTENT (% by Volume) OIL/WATER		97.3		97.3						
SAND CONTENT (% by Vol.)	0.50		0.50							
METHYLENE BLUE CAPACITY (ppb equiv.)	8.0		8.0							
pH	9.0		9.0							
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)	0.05	0.50	0.05	0.50						
CHLORIDE (mg/L)	15,000		15,000							
TOTAL HARDNESS AS CALCIUM (mg/L)	560		560							
SULPHITE (mg/L)	80		80							
K+ (mg/L)	16,275		16,275							
KCl (% by Wt.)	3.1		3.1							
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

OPERATIONS SUMMARY

Continue to rig up to drill 6" horizontal section. Function/pressure test BOP's.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	703
Premix (recirc from sump)		Desilter			
Drill Water		Downhole		+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	
Other (eg Diesel)		Other		+ FLUID IN STORAGE	
TOTAL RECEIVED		TOTAL LOST		FINAL VOLUME	703

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis	%	PPB
High Grav solids	0.3	3.94
Total LGS	2.5	23.4
Bentonite	0.7	6.3
Drilled Solids	1.8	16.2
Salt	0.9	8.7
n @ 20:00 Hrs	0.47	
K @ 20:00 Hrs	8.36	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	1304 psi

DAILY COST	CUMULATIVE COST
	$78,225.09

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	30	Date :	18-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon	
WELL NAME AND No		FIELD	LOCATION	STATE
Surprise1 ST1		EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE	CASING			MUD VOLUME (BBL)		CIRCULATION DATA		
BIT SIZE 6.00	TYPE No Bit		9 5/8 SURFACE SET @	4758 ft / 1450 M		HOLE 353	PITS 350	PUMP SIZE 7 X 9 Inches		CIRCULATION PRESS (PSI) psi
DRILL PIPE SIZE	TYPE #	Length Mtrs	7 INTERMEDIATE SET @	8953 ft / 2729 M		TOTAL CIRCULATING VOL. 703		PUMP MODEL Triplex3	ASSUMED EFF 97 %	BOTTOMS UP (min) min
DRILL PIPE SIZE	TYPE HW	Length Mtrs	PRODUCTION. or LINER Set @	ft / M		IN STORAGE		BBL/STK 0.0550	STK / MIN	TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (")		Length Mtrs	MUD TYPE Water / Gel S/KCLSweeps					BBL/MIN	GAL / MIN	ANN VEL. (ft/min) DP DCs Lam Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM	Pit		Pit		Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN	9:00		20:00		Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m) Metres	2,732		2,732		KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE °C IN/OUT	30		30							
WEIGHT ppg / SG	8.90	1.068	8.90	1.068						
FUNNEL VISCOSITY (sec/qt) API @ °C	44		44							
PLASTIC VISCOSITY cP @ °C	12		12							
YIELD POINT (lb/100ft²)	19		19							
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	9	13	9	13						
RHEOLOGY θ600 / θ300	43	31	43	31						
RHEOLOGY θ200 / θ100	25	17	25	17						
RHEOLOGY θ6 / θ3	8	5	8	5						
FILTRATE API (cc's/30 min)	7.4		7.4							
HPHT FILTRATE (cc's/30 min) @ °F	30 mm		30 mm							
CAKE THICKNESS API : HPHT (32nd in)	1		1							
SOLIDS CONTENT (% by Volume)	2.7		2.7							
LIQUID CONTENT (% by Volume) OIL/WATER		97.3		97.3						
SAND CONTENT (% by Vol.)	0.50		0.50							
METHYLENE BLUE CAPACITY (ppb equiv.)	8.0		8.0							
pH	9.0		9.0							
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)	0.05	0.50	0.05	0.50						
CHLORIDE (mg/L)	15,000		15,000							
TOTAL HARDNESS AS CALCIUM (mg/L)	560		560							
SULPHITE (mg/L)	80		80							
K+ (mg/L)	16,275		16,275							
KCl (% by Wt.)	3.1		3.1							
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Backload excess mud chemicals to Alice Springs, 2 pallets AMC Pac-L (64sx), 2 pallets Residrill (98sx) and 6 pallets Ausben (288sx).
Transfer mud to frac tank to facilitate cleaning of shaker tank prior to mixing of brine. Window to be milled out with mud on short system.

OPERATIONS SUMMARY

Work on choke manifold, pressure test same. P/U MWD tool and function test. Change out swivel packing. Troubleshoot MWD problem. P/U whipstock and RIH.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	703
Premix (recirc from sump)		Desilter			
Drill Water		Downhole		+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	
Other (eg Diesel)		Other		+ FLUID IN STORAGE	
TOTAL RECEIVED		TOTAL LOST		FINAL VOLUME	703

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	
Degasser			Desilter			Shaker #2	3x50 API	

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis	%	PPB
High Grav solids	0.3	3.94
Total LGS	2.5	23.4
Bentonite	0.7	6.3
Drilled Solids	1.8	16.2
Salt	0.9	8.7
n @ 20:00 Hrs	0.47	
K @ 20:00 Hrs	8.36	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	1304 psi

DAILY COST	CUMULATIVE COST
	$78,225.09

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

RMN drilling fluids

AUSTRALIAN MUD COMPANY LTD

Report #	31	Date :	19-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2732 to 2732		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING				MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	18	18	18	9 5/8	SURFACE SET @	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION		
6.50	Tri-Mill						1450	M	303	55	7 X 9	Inches	PRESS (PSI)	1120	psi
DRILL PIPE	TYPE	Length			7	INTERMEDIATE SET @	8953	ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS		
SIZE 3.5	#	2664	Mtrs				2729	M	408		Triplex3	97 %	UP (min)	43	min
DRILL PIPE	TYPE	Length				PRODUCTION. or		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.		
SIZE 4.75	HW	68	Mtrs			LINER Set @		M	50		0.0550	110	TIME (min)	70	min
DRILL COLLAR SIZE (")		Length			MUD TYPE						BBL/MIN	GAL / MIN	ANN VEL. DP	201	Lam
			Mtrs		Water / Gel S/KCLSweeps						5.87	246	(ft/min) DCs		Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM		Pit		Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN		9:00		20:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)	Metres	2,732		2,732	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C IN/OUT	30		35						
WEIGHT	ppg / SG	8.90	1.068	8.90 1.068						
FUNNEL VISCOSITY (sec/qt) API @	°C	44		44						
PLASTIC VISCOSITY cP @	°C	12		12						
YIELD POINT (lb/100ft²)		19		19						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min		9	13	9 13						
RHEOLOGY θ600 / θ300		43	31	43 31						
RHEOLOGY θ200 / θ100		25	17	25 17						
RHEOLOGY θ6 / θ3		8	5	8 5						
FILTRATE API (cc's/30 min)		7.4		7.4						
HPHT FILTRATE (cc's/30 min) @	°F	30 mm		30 mm						
CAKE THICKNESS API : HPHT (32nd in)		1		1						
SOLIDS CONTENT (% by Volume)		2.7		2.7						
LIQUID CONTENT (% by Volume) OIL/WATER			97.3	97.3						
SAND CONTENT (% by Vol.)		0.50		0.50						
METHYLENE BLUE CAPACITY (ppb equiv.)		8.0		8.0						
pH		9.0		9.0						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)		0.05	0.50	0.05 0.50						
CHLORIDE (mg/L)		15,000		15,000						
TOTAL HARDNESS AS CALCIUM (mg/L)		560		560						
SULPHITE (mg/L)		80		80						
K+ (mg/L)		16,275		16,275						
KCl (% by Wt.)		3.1		3.1						
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Dump and clean shaker tank, premix and pill tanks.

OPERATIONS SUMMARY

RIH to 1,781m where it was noted no DC had been picked up, POOH,
P/U DC, RIH to set whipstock. Attempting to set whipstock at report time.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	703
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	0	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped	295	- FLUID LOST	295
Other (eg Diesel)		Other		+ FLUID IN STORAGE	50
TOTAL RECEIVED		TOTAL LOST	295	FINAL VOLUME	458

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	2
Degasser			Desilter			Shaker #2	3x50 API	2

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis

	%	PPB
High Grav solids	0.3	3.94
Total LGS	2.5	23.4
Bentonite	0.7	6.3
Drilled Solids	1.8	16.2
Salt	0.9	8.7
n @ 20:00 Hrs	0.47	
K @ 20:00 Hrs	8.36	

Bit Hydraulics & Pressure Data

Jet Velocity	106
Impact force	120
HHP	13
HSI	0.4
Bit Press Loss	90
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	1304 psi

DAILY COST	CUMULATIVE COST
	$78,225.09

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	32	Date :	20-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2429 to 2429		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy	
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon	
WELL NAME AND No		FIELD	LOCATION	STATE
	Surprise1 ST1	EP-115 GDA94 Zone 52	Amadeus Basin	Northern Territory

DRILLING ASSEMBLY		JET SIZE			CASING			MUD VOLUME (BBL)		CIRCULATION DATA				
BIT SIZE	TYPE	15	15	15	9 5/8 SURFACE	4758	ft	HOLE	PITS	PUMP SIZE		CIRCULATION		
6.50	Tri-Mill				SET @	1450	M	268	105	7 X 9	Inches	PRESS (PSI)	1115	psi
DRILL PIPE	TYPE	Length			7 INTERMEDIATE	8953	ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS		
SIZE 3.5	#	2359	Mtrs		SET @	2729	M	373		Triplex3	97 %	UP (min)	42	min
DRILL PIPE	TYPE	Length			PRODUCTION. or		ft	IN STORAGE		BBL/STK	STK / MIN	TOTAL CIRC.		
SIZE 4.00	HW	14	Mtrs		LINER Set @		M			0.0550	100	TIME (min)	70	min
DRILL COLLAR SIZE (")		Length			MUD TYPE					BBL/MIN	GAL / MIN	ANN VEL. DP	183	Lam
4.75		56	Mtrs		Water / Gel S/KCLSweeps					5.34	224	(ft/min) DCs	279	Lam

MUD PROPERTIES					MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM		Pit		Pit	Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
TIME SAMPLE TAKEN		9:00		20:00	Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
DEPTH (ft) - (m)	Metres	2,429		2,429	KCl	2 %- 3%	PHPA		Sulphites	
FLOWLINE TEMPERATURE	°C IN OUT	34		34						
WEIGHT	ppg / SG	8.90	1.068	8.90 1.068						
FUNNEL VISCOSITY (sec/qt) API @	°C	44		44						
PLASTIC VISCOSITY cP @	°C	12		12						
YIELD POINT (lb/100ft²)		19		19						
GEL STRENGTHS (lb/100ft²) 10 sec/10 min		9	13	9 13						
RHEOLOGY θ 600 / θ 300		43	31	43 31						
RHEOLOGY θ 200 / θ 100		25	17	25 17						
RHEOLOGY θ 6 / θ 3		8	5	8 5						
FILTRATE API (cc's/30 min)		7.4		7.4						
HPHT FILTRATE (cc's/30 min) @	°F	30 mm		30 mm						
CAKE THICKNESS API : HPHT (32nd in)		1		1						
SOLIDS CONTENT (% by Volume)		2.7		2.7						
LIQUID CONTENT (% by Volume) OIL/WATER			97.3	97.3						
SAND CONTENT (% by Vol.)		0.50		0.50						
METHYLENE BLUE CAPACITY (ppb equiv.)		8.0		8.0						
pH		9.0		9.0						
ALKALINITY MUD (Pm)										
ALKALINITY FILTRATE (Pf / Mf)		0.05	0.50	0.05 0.50						
CHLORIDE (mg/L)		15,000		15,000						
TOTAL HARDNESS AS CALCIUM (mg/L)		560		560						
SULPHITE (mg/L)		80		80						
K+ (mg/L)		16,275		16,275						
KCl (% by Wt.)		3.1		3.1						
PHPA (ppb)										
ECD (ppg)										

OBSERVATIONS

Received 21 pallets Flossy Salt (1008 sx), 5 pallets of KCl (240 sx), 35 boxes of Xtra-Sweep, 12 drumms of Liquipol.
Returned excess nud to Alice 9 pallets of Barite (432 sx), 3 pallets of Fracseal
1 pallet of Residrill (48 sx) as requested.

OPERATIONS SUMMARY

Set whipstock at 2429m. BPV would not function, POOH, L/O MWD tools, RIH with dumb iron, pressure test upper kelly cock. Install rotating head rubber. Mill out window.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	372
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	0	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped		- FLUID LOST	0
Other (eg Diesel)		Other		+ FLUID IN STORAGE	
TOTAL RECEIVED		TOTAL LOST	0	FINAL VOLUME	373

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	2
Degasser			Desilter			Shaker #2	3x50 API	2

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost

Solids Analysis

	%	PPB
High Grav solids	0.3	3.94
Total LGS	2.5	23.4
Bentonite	0.7	6.3
Drilled Solids	1.8	16.2
Salt	0.9	8.7
n @ 20:00 Hrs	0.47	
K @ 20:00 Hrs	8.36	

Bit Hydraulics & Pressure Data

Jet Velocity	138
Impact force	143
HHP	20
HSI	0.6
Bit Press Loss	153
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	1304 psi

DAILY COST	CUMULATIVE COST
	$78,225.09

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266

DRILLING FLUID REPORT

Report #	33	Date :	21-Dec-2011
Rig No	Rig#3	Spud :	19-Nov-2011
Depth	2429 to 2429		Metres

OPERATOR	Central Petroleum Ltd	CONTRACTOR	Hunt Energy
REPORT FOR	R Miller / D Castles	REPORT FOR	M Damon
WELL NAME AND No	Surprise1 ST1	FIELD: EP-115 GDA94 Zone 52	LOCATION: Amadeus Basin / STATE: Northern Territory

DRILLING ASSEMBLY		JET SIZE	CASING			MUD VOLUME (BBL)		CIRCULATION DATA		
BIT SIZE 6.00	TYPE No Bit		9 5/8 SURFACE SET @	4758 ft / 1450 M		HOLE 318	PITS	PUMP SIZE 7 X 9 Inches		CIRCULATION PRESS (PSI) psi
DRILL PIPE SIZE	TYPE #	Length Mtrs	7 INTERMEDIATE SET @	8953 ft / 2729 M		TOTAL CIRCULATING VOL. 318		PUMP MODEL Triplex3	ASSUMED EFF 97 %	BOTTOMS UP (min) min
DRILL PIPE SIZE	TYPE HW	Length Mtrs	PRODUCTION. or LINER Set @	ft / M		IN STORAGE		BBL/STK 0.0550	STK / MIN	TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (")		Length Mtrs	MUD TYPE: Water / Gel S/KCLSweeps					BBL/MIN	GAL / MIN	ANN VEL. (ft/min) DP DCs Lam Lam

MUD PROPERTIES				
SAMPLE FROM	Pit		Pit	
TIME SAMPLE TAKEN	9:00		15:00	
DEPTH (ft) - (m) Metres	2,429		2,429	
FLOWLINE TEMPERATURE °C IN/OUT	38		36	
WEIGHT ppg / SG	8.90	1.068	8.90	1.068
FUNNEL VISCOSITY (sec/qt) API @ °C	42		42	
PLASTIC VISCOSITY cP @ °C	12		12	
YIELD POINT (lb/100ft²)	18		18	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min	8	11	8	11
RHEOLOGY θ600 / θ300	42	30	42	30
RHEOLOGY θ200 / θ100	23	16	23	16
RHEOLOGY θ6 / θ3	7	5	7	5
FILTRATE API (cc's/30 min)	7.6		7.6	
HPHT FILTRATE (cc's/30 min) @ °F	30 mm		30 mm	
CAKE THICKNESS API : HPHT (32nd in)	1		1	
SOLIDS CONTENT (% by Volume)	2.8		2.8	
LIQUID CONTENT (% by Volume) OIL/WATER		97.2		97.2
SAND CONTENT (% by Vol.)	0.50		0.50	
METHYLENE BLUE CAPACITY (ppb equiv.)	8.0		8.0	
pH	9.0		9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)	0.05	0.50	0.05	0.50
CHLORIDE (mg/L)	15,000		15,000	
TOTAL HARDNESS AS CALCIUM (mg/L)	560		560	
SULPHITE (mg/L)	80		80	
K+ (mg/L)	16,275		16,275	
KCl (% by Wt.)	3.1		3.1	
PHPA (ppb)				
ECD (ppg)				

MUD PROPERTY SPECIFICATIONS					
Mud Weight	8.6 - 9.2	API Filtrate	6 --10	HPHT Filtrate	<25 mm
Plastic Vis	ALAP	Yield Point	8-- 15	pH	9.0 --10
KCl	2 %- 3%	PHPA		Sulphites	

OBSERVATIONS

Prepare 50bbls of mud for volume whilst milling.
Dump all surface mud and ensure tanks are clean. Prepare 3% KCl brine for drilling horizontal section.
All mud products and volumes included on tomorrows report due to change in well name.

OPERATIONS SUMMARY

Continue to mill window in 7" casing. POOH with milling assembly. L/O BHA. P/U mud motor, NMDC and conduct MWD shallow pulse tests. M/U bit and directional BHA. RIH.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)	50	Desander		INITIAL VOLUME	373
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	0	+ FLUID RECEIVED	50
Direct Recirc Sump		Dumped	104	- FLUID LOST	104
Other (eg Diesel)		Other		+ FLUID IN STORAGE	
TOTAL RECEIVED	50	TOTAL LOST	104	FINAL VOLUME	318

Solids Control Equipment

	Type	Hrs		Cones	Hrs		Size	Hrs
Centrifuge			Desander			Shaker #1	3x70 API	5
Degasser			Desilter			Shaker #2	3x50 API	5

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander		0	
Desilter		0	

Product	Price	Start	Received	Used	Close	Cost
Xanbore	$ 11.00	39		2	37	$ 22.00

Solids Analysis	%	PPB
High Grav solids	0.2	3.37
Total LGS	2.5	24.1
Bentonite	0.7	6.2
Drilled Solids	1.9	17.0
Salt	0.9	8.7
n @ 15:00 Hrs	0.49	
K @ 15:00 Hrs	7.44	

Bit Hydraulics & Pressure Data	
Jet Velocity	
Impact force	
HHP	
HSI	
Bit Press Loss	
CSG Seat Frac Press	700 psi
Equiv. Mud Wt.	11.7 ppg
Max Pressure @ Shoe :	1304 psi

DAILY COST	CUMULATIVE COST
$377.20	$78,602.29

RMN ENGINEER W Mills CITY Adelaide Office TELEPHONE 08 8338 7266