

GROUP ANNUAL TECHNICAL REPORT FOR EL27972 "CHARLOTTE" AND EL27974 "CENTRAL RAILROAD" FOR PERIOD ENDING 20TH SEPTEMBER 2016

| 12th December 2016

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Titleholder:	Tellus Holdings Ltd
Operator:	Tellus Holdings Ltd
Tenements:	EL27972 Charlotte, EL27974 Central Railroad
Project Name:	Chandler Project
Report Title:	Group Annual Technical Report for EL27972 "Charlotte" and EL27974 "Central Railroad", for
	the period 21 September 2015 to 20 September 2016
Author:	Jaime Livesey
Target Commodity:	Halite (Sodium chloride) and trace minerals
Date of Report:	12 December 2016
Datum/zone:	GDA94 / zone 53
250K map sheet:	SG5302 Rodinga, SG5305 Kulgera, SG5306 Finke
100K map sheet:	5648 Charlotte, 5748 Rodinga, 5547 Erldunda, 5647 Idracowra
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EXECUTIVE SUMMARY

The Chandler Project consists of five exploration licenses held by Tellus Holdings Ltd ("Tellus"), located in the Amadeus Basin, approximately 130km south of Alice Springs. This group annual report relates to two of the exploration licenses; EL27972 Charlotte and EL27974 Central Railroad for the reporting period ending 20th September 2016.

The Chandler Project is targeting subsurface salt deposits to assess potential evaporitic mineralisation within the Amadeus Basin. Two known salt units are present in the Chandler project area, namely the Chandler Formation and the deeper Gillen Salt Member.

Exploration activities to date indicate a significant thickness of massive to semi massive halite exists within the Chandler Formation at a depth of approximately 700-1000m.

Exploration activities by Tellus over the Chandler Project have included initial assessment of open file geochemical and geophysical data, detailed review of petroleum well data, seismic interpretation and modelling, geochemical analysis and mineralogical investigation of core samples from previously drilled petroleum wells and from two drillholes completed by Tellus in 2013-2014.

During the reporting period Tellus progressed feasibility and environmental activities, to support mine planning studies and environmental impact statement (EIS) studies.



1 INTRODUCTION

The Chandler Project is located in the Amadeus Basin, approximately 130km south of Alice Springs. This group annual report relates to two granted exploration licences EL27972 Charlotte and EL27974 Central Railroad, which are two of five exploration licences held by Tellus which are collectively referred to as the Chandler Project.

2 PROJECT DESCRIPTION

The Chandler Project is targeting subsurface salt deposits to assess potential evaporitic mineralisation within the Amadeus Basin. Two known salt units are present in the Chandler project area, namely the Chandler Formation and the deeper Gillen Salt Member. Exploration activities by Tellus over the Chandler Project have included initial assessment of open file geochemical and geophysical data, detailed review of petroleum well data, seismic interpretation and modelling, geochemical analysis and mineralogical investigation of core samples from previously drilled petroleum wells and from two drillholes completed by Tellus in 2013-2014.

3 LOCATION

The tenements are located in the southern part of the Northern Territory. Alice Springs is the nearest major town, situated approximately 130km north along the Stuart Highway from EL27972. The area can be accessed via graded roads running east from the highway, as well as station tracks to water bores and boundary fences. The Central Australian Railway runs through the middle of EL27974 (Figure 1). The tenements occur on the following 1:250,000 sheet areas; Rodinga SG5302, Kulgera, SG5305; Finke, SG5306 and on the 1:100000 sheet areas; Charlotte (5648), Rodinga (5758), Erldunda (5547) and Idracowra (5647).

4 TENURE

Exploration licence EL27972 "Charlotte" and EL27974 "Central Railroad" were granted to Tellus Holdings Ltd on the 20th October 2010 for a six year (Table 1).

EL27974 was partially relinquished in October 2012 reducing from 285 to sub-blocks to 143 subblocks and in October 2014 reducing to 72 sub-blocks.

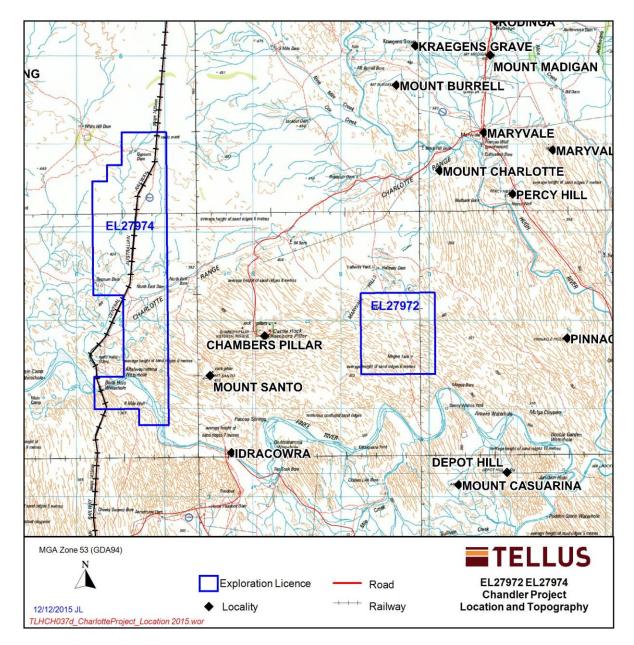
Tellus has submitted applications for waiver of relinquishment and renewal of tenure.



Table 1: Details of Exploration Licence EL27972 and EL27974 held by Tellus Holdings

TENURE	NAME	STATUS	EFFECTIVE_DATE	EXPIRY_DATE	SUBBLOCKS
EL27972	Charlotte	Grant	20/10/2010	19/10/2016	25
EL27974	Central railroad	Grant	20/10/2010	19/10/2016	72

Figure 1: Project Location and Topography





5 REGIONAL GEOLOGY

The Amadeus Basin is an asymmetrical, east-west trending, intracratonic depression covering 155000 sq km of central Australia (Figure 2).

The oldest elements of the Amadeus Basin are Neo-Proterozoic units having a very restricted known extent. These units consist of clastic sedimentary rocks and basalts along the south western margin of the basin (Mount Harris Basalt, Bloods Range Beds, Dixon Range Beds) and an unnamed succession of sedimentary rocks, basalt and dacite near Kintore in the north-west. The units have been interpreted as a rift sequence marking the opening of the Amadeus Basin (Lindsay and Korsch, 1989).

The fluvio-volcanic rift sediments are unconformably overlain by epeirogenic clastics of the Heavitree / Dean quartzites, followed by carbonates and evaporites of the Bitter Springs Formation. The Bitter springs Formation is terminated by an erosional surface upon which shallow marine and glacigene sediments of the Inindia Beds and its equivalents in the northern Amadeus Basin were deposited. An unconformity surface within the Bitter springs Formation at or near the top of the Gillen Member has wide extent and can be used as a seismic marker.

The top of the Inindia Beds is marked by a flooding surface upon which deeper water pelagic and turbiditic sediments accumulated. This deeper marine sequence is known as the Winnall beds in the south and the Pertatataka Formation in the north. It shallows upward into shallow marine and fluvial clastics in the south west and oolitic platform carbonates of the Julie Formation in the north. The Inindia Beds are thickest in the west and centre of the basin and are absent from the eastern margin of the basin.

The Late Proterozoic phase of deposition was terminated in the south by the Petermann Ranges Orogeny, a period of mountain building, recumbent folding and northward overthrusting (Wells et al. 1970). Molasse sediments were shed north and north-east from uplifted areas and accumulated in a foreland style basin immediately before the rising orogen (Mt Currie Conglomerate, Ayers Rock Arkose), bypassed the middle and eastern fringes of the basin, and accumulated as a prograding deltaic sequence in the north (Arumbera Sandstone).

The Petermann Ranges Orogeny shaped the framework of the Palaeozoic basin, and a northern trough initiated at this time persisted through most of the Palaeozoic. The southern central and south eastern parts of the basin remained uplifted. Palaeozoic sequences in these areas are generally thin with common significant breaks in accumulation.

During the early Cambrian, continental sedimentation persisted in the north-west (Cleland Sandstone), while shallow marine shales, carbonates and evaporites were deposited in the northeast (Shannon, Giles Creek and Chandler Formations). A widespread transgressive cycle in the Late Cambrian resulted in the deposition of the Goyder Formation.



Two transgressive cycles during the Ordovician resulted in the alternating deposition of tidal flat/barrier bar sands and deeper marine, euxinic muds and silts (Pacoota Sandstone, Horn valley Siltstone, Stairway sandstone, Stokes Siltstone). These sediments form the source-reservoir-seal sequence of the Mereenie and Palm valley hydrocarbon fields in the north-western Amadeus Basin. Of this Larapinta Group, only the Stairway Sandstone persists into the centre and southeast of the basin.

Marine deposition was terminated by the Late Ordovician Rodingan Movement. Uplift of the northeastern basin resulted in the erosion of up to 3000m of Cambro-Ordovician sediments. This area became the source region for the Early Devonian Carmichael and Mereenie Sandstone. Arid climatic conditions prevailed with sediments transported by both aeolian and fluvial action into a shallow sea transgressing from the west.

Major uplift of the Arunta block along the present northern margin of the basin commenced in the Middle Devonian. Continental deposition continued as thick molasse sediments accumulated south of the uplifted area. High depositional loading at this time contributed to movement of the Bitter Springs Formation and Chandler Formation evaporites.

A lacustrine siltstone (Parke Siltstone) was laid down conformably on the Meerenie Sandstone, and after uplift, coarser sediments were deposited (Hermannsburg Sandstone, Brewer Conglomerate). These three units, comprising the Pertnjara Group, thin and become finer grained to the south.

Uplift of the Musgrave Province and deformation of the southern Amadeus sequence culminated in the Early-Middle Devonian Finke Movement (Polly Conglomerate), after which fluvial sands of the Langra Formation and estuarine silts of the Horseshoe Bend Shale accumulated. These sediments comprise the Finke Group, which is the southern time equivalent of the Pertnjara Group, although the former sequence fines upward in contrast.

Regional deposition was terminated in the Late Devonian-Early Carboniferous by the Alice Springs Orogeny. Some earlier structures were reactivated during this period of deformation. Substantial uplift of the basement Arunta block along the current northern margin initiated movement of thrust sheets in the Alice Springs and Altunga regions, and resulted in significant structuring of the basin. North over south thrusting and reverse faulting is typical of Alice Springs orogeny deformation.



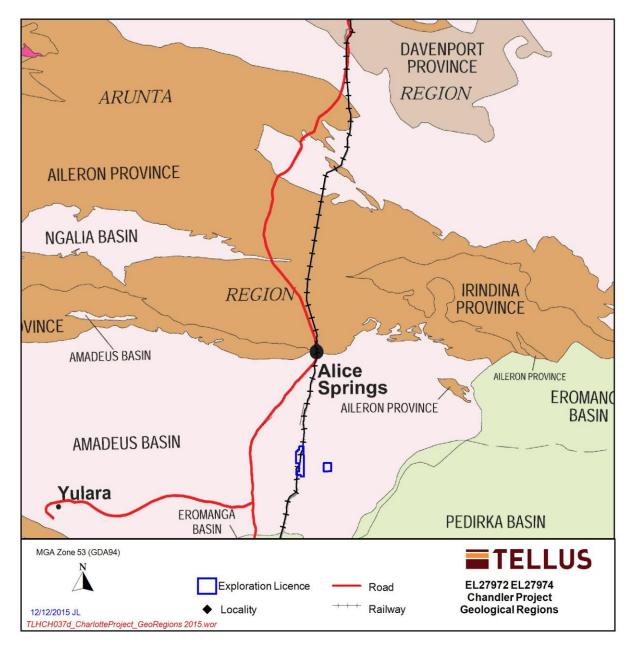


Figure 2: Geological Regions of Northern Territory (adapted from NTGS, 2006)



6 LOCAL GEOLOGY

The project area overlies 1:250K map sheets Rodinga, Finke and Kulgera. Majority of the area lies within the Rodinga mapsheet, which was geologically mapped in 1964 by the Bureau of Mineral Resources. Surface geology is shown in Figure 3 and stratigraphy is included as figure 4.

The stratigraphy within the Charlotte area has been well defined from drilling of petroleum wells Mt Charlotte 1 and Magee 1, the generalised local stratigraphy is given in Table 2 and published stratigraphic correlation across the Southern Amadeus basin is shown in figure 5.

,433 Oa MGA Zone 53 (GDA94) US FI EL27972 EL27974 Exploration Licence Road **Chandler Project** +-+-+ Railway Locality **Regional Geology** 12/12/2015 JL TLHCH037d_CharlotteProject_RegGeo 2015.wo

Figure 3: Geology over EL27972 and EL27974



Undifferentiated Q Alluvium, sand, travertine, gypsum, conglomerate (section only) Qa Alluvial gravel, sand and silt Qs Aeolian sand QUATERNARY Travertine QI Qo Gypsum Qc Conglom Undifferentiated Sandstone, calcareous silly sandstone, conglomerate, limestone (section and rock relationship diagram only) onic limestone, siltstone and calcareous sandstone ng freshwater gastropods To Conglomerate TERTIARY Th Silcrete (grey billy) Ta Laterite, ferricrete Ts stone, siltstone, conglomerate, clay and some lignite CRETACEOUS Rumbalara Shale Kir us shale, siltstone, porcellanite, sandstone JURASSIC ? De Souza Sandstone Md Sandstone, pebbly sandstone, conglomerate and siltstone Santo Sandstone Pzt stone, pebbly sandstone, minor claystone Horseshoe Bend Shale Pzh Red-brown biotite shale, grey-green calcareous siltstone inke Langra Formation Pzn ne, pebbly sandstone, conglomerate, siltstone (section only) DEVONIAN TO CARBONIFEROUS Undifferentiated Pzp Sandstone, pebbly sandstone, conglomerate and siltstone Group Brewer Conglomerate Prb Coarse conglomerate njare Hermannsburg Sandstone Pzz Red-brown sandstone, pebbly sandstone, minor siltstone Parke Siltstone Siltstone, calcareous siltstone and fine silty sandstone interbeds Pzk SILURIAN? TO CARBONIFEROUS Undifferentiated Pz Sandstone, pebbly sandstone SILURIAN? TO Mereenie Sandstone Pzm White cross-bedded sandstone DEVONIAN Undifferentiated ferous sandstone, siltstone, shale, limestone Stokes Siltstone Ot dno Siltstone, shale, fossiliferous limestone CAMBRIAN TO ORDOVICIAN siliferous sandstone, silly sandstone, sillstone and limestone; re phosphoride Stairway Sandstone Os tra Horn Valley Siltstone Fossiliferous siltstone, shale and limestone €-Op Pacoota Sandstone Fossiliferous sandstone and silty sandstone Undifferentiated Cp ndstone, siltatone, shale, dolomite, limest Goyder Formation Cg ous silly sandstone, sillstone and limesto Jay Creek Limestone Ci ferous limestone, shale and dolomite Shannon Formation Cs rous sillstone, shale and limestone CAMBRIAN Giles Creek Dolomite -Ek rous dolomite, limestone, siltstone, and shale CI Chandler Limestone ne and dolomite with chert laminae us glauconitic dolomite, minor shale Todd River Dolomite Gr Arumbera Sandstone €a wn sandstone, conglo Red-b trace t ieratic san Siltstone and shale with lenses of limestone and conglomerate Pup Pertatataka Formation Pupe ratic sandstone Julie Member Puj e, lenses of calcareous sandstone Waldo-Pedlar Member Pul ne, shale and fine-grained thin-bedded sandstone Olympic Member Puf ste, siltstone, sandstone, dolomite PROTEROZOIC Limbla Member Pun d sandstone, calcarenite, siltston Pur Ringwood Member Algal dolomite, limestone and siltstone Areyonga Formation Conglomeratic siltstone, sandstone, conglomerate, minor dolomite with red chert Bitter Springs Formation Pub te, limestone, siltstone, sandstone, shale; some volcanics

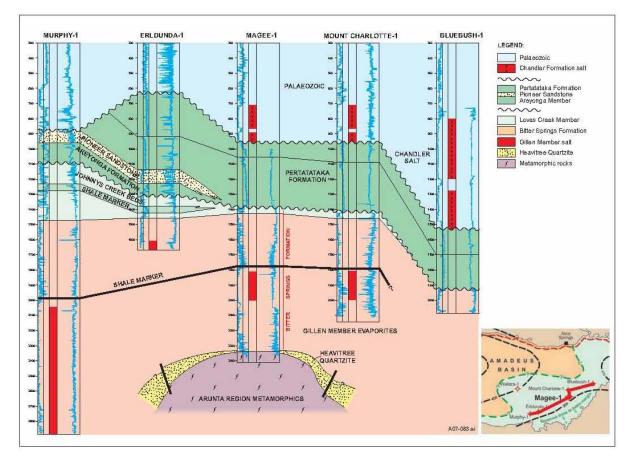
Figure 4: Stratigraphy (from Rodinga SG5302 1:250K map sheet)



Table 2: Generalised stratigraphy for the Chandler Project area

AGE		STRATIGRAPHY			
Cainozoic	Quaternary		undifferentiated		
	Tertiary		undifferentiated		
Palaeozoic	Devonian		Santo Sandstone		
		Finke Group			
		Pertnjara Group	Pertnjara Formation		
	Ordovician	Larapinta Group	Stairway Sandstone		
	Cambrian Pertaoorrta		Jay Creek Limestone		
	Group	Group	Chandler Formation		
			Arumbera Formation		
Precambrian	Upper		Winnall Beds	Pertatataka Formation	
	Proterozoic		Bitter Springs Formation	Loves Creek Member	
				Gillen Member	Upper Gillen
					Gillen Salt
				Lower Gillen	
			Heavitree Quartzite		
	Middle	Musgrave Block	Arunta Complex		
	Proterozoic				

Figure 5: Correlation between wells (from Young and Ambrose, 2007)





7 EXPLORATION ACTIVITES CONDUCTED DURING 2010-2011

Exploration activities were carried out by Terra Search for Tellus. Initial activities included geophysical review of open file datasets, seismic interpretation and modelling, visit to NTGS core facility to collect samples from previously drilled petroleum wells. Drill samples were analysed by portable XRF, geochemical analysis and mineralogical investigation.

8 EXPLORATION ACTIVITES CONDUCTED DURING 2011-2012

During the second year of tenure, Tellus completed the requirements for the Mine Management Plan ("MMP") for exploration operations for the Chandler Project.

Tellus signed an exploration agreement with traditional owners, through the Central Land Council ("CLC") and obtained a CLC Sacred Site Clearance Certificate for proposed seismic and drilling activities.

Tellus commissioned URS to complete a Prefeasibility Study (PFS) on the Chandler salt mine project that was finalised in June 2012.

Tellus conducted a thorough review of all target sites, short listing the most prospective sites for a mine site and recommending the least prospective for relinquishment. It was been recommended that EL27972 be retained and EL27974 be partially relinquished.

9 EXPLORATION ACTIVITES CONDUCTED DURING 2012-2013

9.1 Onsite Geological and Geotechnical Assessment

A site visit was conducted on 25th to 26th February 2013 by Duncan van der Merwe and Joe Luxford from Tellus and John Braybrooke from Douglas Partners Pty Ltd. The aim of the visit was to assess the geology and ground conditions to assist with drill planning.

As part of the on-going studies for the project Douglas Partners completed a brief report describing the likely geotechnical properties of the rock formations in the area of the Charlotte Range and Maryvale Hills, Southeast Amadeus Basin, Northern Territory.



9.2 Chandler Seismic Review

Tellus commissioned RPS Group Canada to review available open file 2D seismic data to assess salt extent and thickness of the Chandler Formation, within the Tellus project area.

RPS concluded that;

- Average Chandler Isopach 200m 250m thick.
- Calculated Chandler Isopach ranges from 0m 380m thick.
- Chandler formation flat lying with an average dip of less than one degree regionally.

10EXPLORATION ACTIVITES CONDUCTED 2013-2014

10.1 Drilling program on adjacent tenement EL29018

To confirm the depth and thickness of the Chandler salt Formation over the project area, two deep diamond drillholes (CH001A, CH003) were completed on adjoining tenement EL29018 (Figure 6). The locations were selected based on combination of factors included proximity to existing seismic lines, interpreted depth and thickness of Chandler Formation. The drilling program took place from November 2013 to January 2014. The Chandler Formation was intersected in both drillholes, with high recovery of core achieved. Samples have been sent for chemical and mineralogical analysis, results pending.

10.2 Wireline Survey

A downhole wireline survey was run on drillhole CH001A, with data collected from the depth interval 316m – 1089m. The following down hole acquisition took place;

- Multi Survey Tool
- Natural Gamma (g)
- Spontaneous Potential (SP)
- 16"N and 42'Resistivity
- Point Resistance
- Mag Deviation/Gyro
- Temperature
- Full Wave Sonic
- Magnetic Susceptibility/Conductivity
- Acoustic Televiewer

The formation tops were interpreted from wireline data and used to correlate formations with petroleum wells Mt Charlotte 1 and Magee 1.



10.3 Seismic review and modelling

Six seismic lines fall with EL27972 and four within EL27974 (Figure 7) and are part of the Chandler Project seismic model.

RPS Canada reviewed the newly acquired drillhole and wireline data. The full wave sonic data was used to tie the drillhole to the seismic survey lines. The time - depth relationship was calculated for intersected marker beds and used to convert the seismic from time domain to depth domain.

The interpretive geological model over the project area has been updated and refined (Figure 6).

Figure 6: seismic modelling of Chandler Formation extent

11EXPLORATION ACTIVITES CONDUCTED 2014-2015

11.1 Groundwater Investigation

A survey reconnaissance of water and exploration bores located on Maryvale Pastoral Station was conducted on behalf of Ride Consulting for Tellus Holdings from 25th to 27th April 2015.

The field program aimed to locate and document 13 selected water and exploration bores at various locations on Maryvale station and Titjikala town site which had been selected prior to the program



for the purpose of conducting a regional hydrological survey as part of the future proposed development of the Chandler Salt Mine project.

Field notes and photographs were documented during the survey to record important features which may impact on future monitoring activities including; track availability, distances and ease of site access, track condition, nature of landscape (flora, regolith, drainage and geology), location of station or town infrastructure and state of repair/condition, plus any other features or information considered relevant.

11.2 Feasibility Studies

Tellus progressed definitive feasibility (FEL2) studies for the Chandler Project. This included site reconnaissance of ground adjacent to the Central Australian railway, within EL27974.

The site was assessed for potential suitability for proposed development of a rail siding location. Site visits were undertaken with representatives from the Department of Environment (Federal) and Department of Transport (NT) (Figure 7).

Figure 7: Site visit to EL27974 with representatives from Department of Environment





12EXPLORATION ACTIVITIES CONDUCTED DURING CURRENT REPORTING PERIOD

12.1 Environmental Studies

Tellus completed environmental studies in support of the Environmental Impact Study (EIS). This included flora and fauna studies and site investigation over EL27974. The EIS has been submitted to the NTEPA for adequacy and is currently being updated for final submission and public release during early 2017.

12.2 Feasibility Studies

Tellus progressed definitive feasibility (FEL2) studies for the Chandler Project. This included site visits to the Magee stockyard area within EL27972. This location was selected as a potential alternative for proposed mine development.

Area adjacent to the railway within EL27974 was investigated for suitability of surface infrastructure development to support proposed Chandler mine.

12.3 Review of Target Sites

Tellus conducted a thorough review of all target sites, short listing the most prospective sites for future exploration and recommending the least prospective for relinquishment. It was recommended that EL27972 and EL27974 be retained.

13PROPOSED EXPLORATION

Tellus have progressed the definitive feasibility study to FEL2 standard for the Chandler Project, during 2017 a bankable feasibility study (FEL3) will commence. Onsite work will focus on geotechnical studies and engineering. EIS studies for Chandler Project are continuing, additional site work may include further water investigation, monitoring and modelling and seasonal ecology surveys.



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Young IF, Ambrose GJ, 2007. Petroleum geology of the southeastern Amadeus Basin: the search for sub-salt hydrocarbons. In Munson TJ and Ambrose GL (editors) 'Proceedings of the Central Australian Basin Symposium, Alice Springs, Northern Territory, 16/18 August 2005'. NTGS Special Publication 2, 183-20