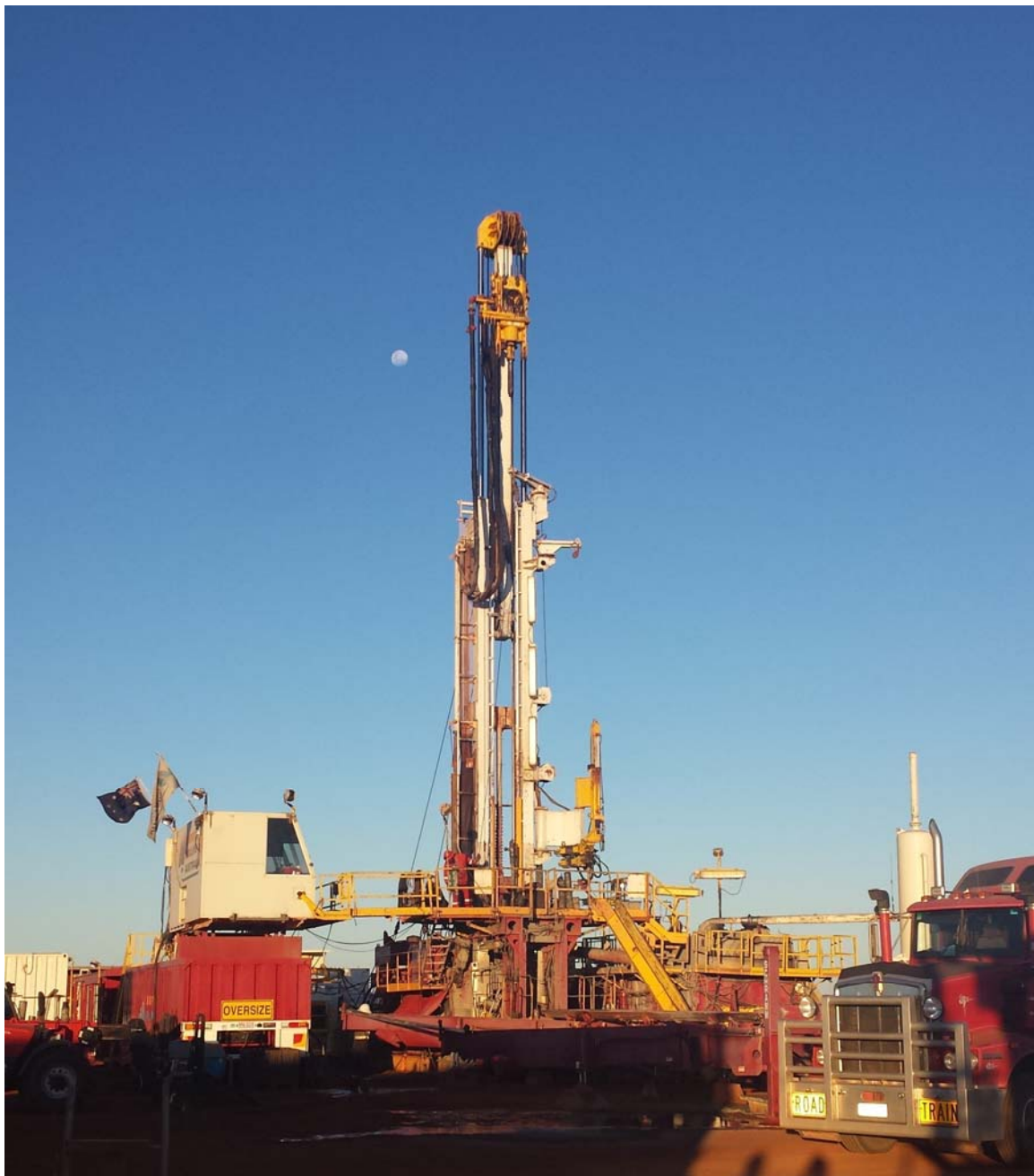


# Basic Well Completion Report

## OzEpsilon-1

South Georgina Basin  
Northern Territory, Australia



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<b>Basic Well Completion Report</b>		
<b>OzEpsilon-1</b>		
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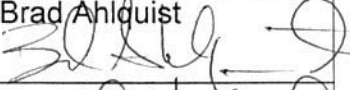

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<b>Expl Manager</b>	<b>Jens-Petter Kvarstein</b>	<b>1/10.14</b> 

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**QUALITY ASSURANCE MATRIX FOR MILESTONE DOCUMENTS**

Document: Basic Well Completion Report

Well: OzEpsilon-1 Date: 10 Oct 2014

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**Enclosures to OzEpsilon-1 Basic Well Completion Report (DVD)**

OzEpsilon-1 Core images, white and UV light

Mudlog and gas recordings (pdf and LAS)

Openhole Wireline logs (pdf and LAS)

Core and Cuttings Sample Manifests



## 1 General Data

### 1.1 Well Objective

The OzEpsilon-1 vertical exploration well was one of five 2014 Statoil wells drilled to de-risk the unconventional play in the Middle Cambrian carbonate deposits; the Arthur Creek Hot Shale and the Thornton Limestone (dolomitized) in the South Georgina Basin. The OzEpsilon-1 well was located in the northern part of EP 128. Permeabilities in these formations are expected to be too low for conventional production methods and the most prospective wells are planned to be stimulated through hydraulic fracturing. OzEpsilon-1 was drilled as a stratigraphic well and was not planned to be stimulated and production tested.

The well was located at a tectonically undisturbed location to best assess the presence of hydrocarbons. Extensive coring and wireline logging were performed to better understand the rock properties and perform a hydrocarbon potential evaluation.

The drilling objective for the OzEpsilon-1 well included two hole sections. The upper section (12 ¼" hole and 9 5/8" surface casing) was designed to be cased and cemented to surface to:

- isolate the aquifers,
- achieve kick tolerance,
- ensure well integrity towards underlying potential hydrocarbon bearing zones.

The lower 7 7/8" drilling section included continuous coring, focusing on the basal Arthur Creek Hot Shale and into the underlying Thornton Limestone.

The final objective of the drilling phase was to permanently plug and abandon the OzEpsilon-1 well according to the requirements of the NT Department of Mines and Energy.

### 1.2 Well Outcome

The conductor was preset at 18.5m MD and 12 ¼" surface hole was drilled to 321.5m MD RKB. 9 5/8" surface casing was run to 319m MD RKB and cemented to surface, isolating the aquifers. Kick tolerance and well integrity were confirmed with a formation integrity test of 13.3 ppg EMW at 325m MD RKB.

7 7/8" production hole was then drilled to coring point at 557m MD RKB. 3 1/2" wireline retrieved coring was conducted using 18m core barrels. Good recovery was achieved through the lower Arthur Creek Formation and the Arthur Creek Hot Shale. On intersecting the Thornton Limestone, core recovery became poor. Broken core packed off the core barrel, resulting in only 0.6m to 1.4m of core recovered per run. Coring was terminated at 607.4m in the Thornton Limestone and conventional drilling was resumed. The well was terminated in granite basement at 665m MD RKB.


Formation tops were encountered within the uncertainties of the prognosed depths. Red Heart Dolomite was penetrated instead of the prognosed Sun Hill Arkose.

Wireline logging was conducted, and numerous core analyses performed.

OzEpsilon-1 was planned as a stratigraphic exploration well and so the well was permanently plugged and abandoned with the drilling rig immediately after the openhole wireline logging (production casing was not run).



### 1.3 Well Summary Table

WELL SUMMARY			
	WELL NAME	OzEpsilon-1	
	OFFSET WELLS	OzDelta-1, Scarr 1, Lake Nash 1 (QLD)	
	WELL CLASS	Exploration	
LOCATION DETAILS			
BASIN	Southern Georgina Basin	NORTHING	7652876.1mN
LICENCE	EP 128	EASTING	699245.4mE
LOCATION	Northern Territory	ZONE	53 S
SEISMIC SURVEY	PFC-12-102	LATITUDE	21°12'53.135"S
SEISMIC REF.	Trace 11807; CDP 11906; SP 6784	LONGITUDE	136°55'10.68"E
ELEVATIONS	Elevation: 247.4 m , Kelly height: 4.2 m	GRID	GDA'94
OPERATION DETAILS			
OPERATOR	Statoil Australia Theta B. V.	DRILLING RIG /	EDA Rig # 2
PRIMARY OBJECTIVE	Arthur Creek Formation 'Hot Shale'	SPUD DATE	02/07/2014
SECONDARY OBJECTIVE	Thorntonia Limestone	RIG RELEASE	11/07/2014
STRUCTURE	Unconventional Stratigraphic	TD DATE	09/07/2014
WELL TYPE	Vertical, Exploration Stratigraphic	OzEpsilon-1	
DRILLER TD	665m MD	OPERATION DAYS	9

HOLE SUMMARY OzEpsilon-1				
HOLE SIZE	HOLE DEPTH	CASING SIZE	SHOE DEPTH	CASING TYPE
15" (381mm)	18.5m MD	13 3/8" (340mm)	18.5m MD	Conductor
12 1/4" (316mm)	321.5m MD	9 5/8" (244mm)	319m MD	36 ppf J-55 BTC
7 7/8" (200mm)	665m MD	No production casing was run as this was a stratigraphic exploration well		

MWD-LWD & LOGGING SUMMARY OzEpsilon-1				
RUN	IN (mMD)	OUT (mMD)	TOOLS STRING	REMARKS
1	665	0	MCG-SGS-MDN-MPD-MLE-MMR High resolution (450-600mMD)	SuperCombo: spontaneous potential, gamma (to surface), spectral gamma, neutron, density, laterolog, microres.
2	665	430	MCG-CMI (image log)-CXD (sonic)	Image log (CMI) run separately. Max. BHT 49°C at TD.
2a	665	300	MCG-CMI (image log)-CXD (sonic)	Sonic log (CXD) to csg shoe

CORING: OzEpsilon-1			
RUN	INTERVAL (mMDKB)	RECOVERY m (%)	COMMENT
1-7	557.5 – 607.4	99%	Wireline retrieved coring

FORMATION TESTS
The well was not production tested as this was a stratigraphic exploration well

The OzEpsilon-1 well is located in the northern part of the EP 128 in the Southern Georgina Basin; see Figure 1 and Figure 2.

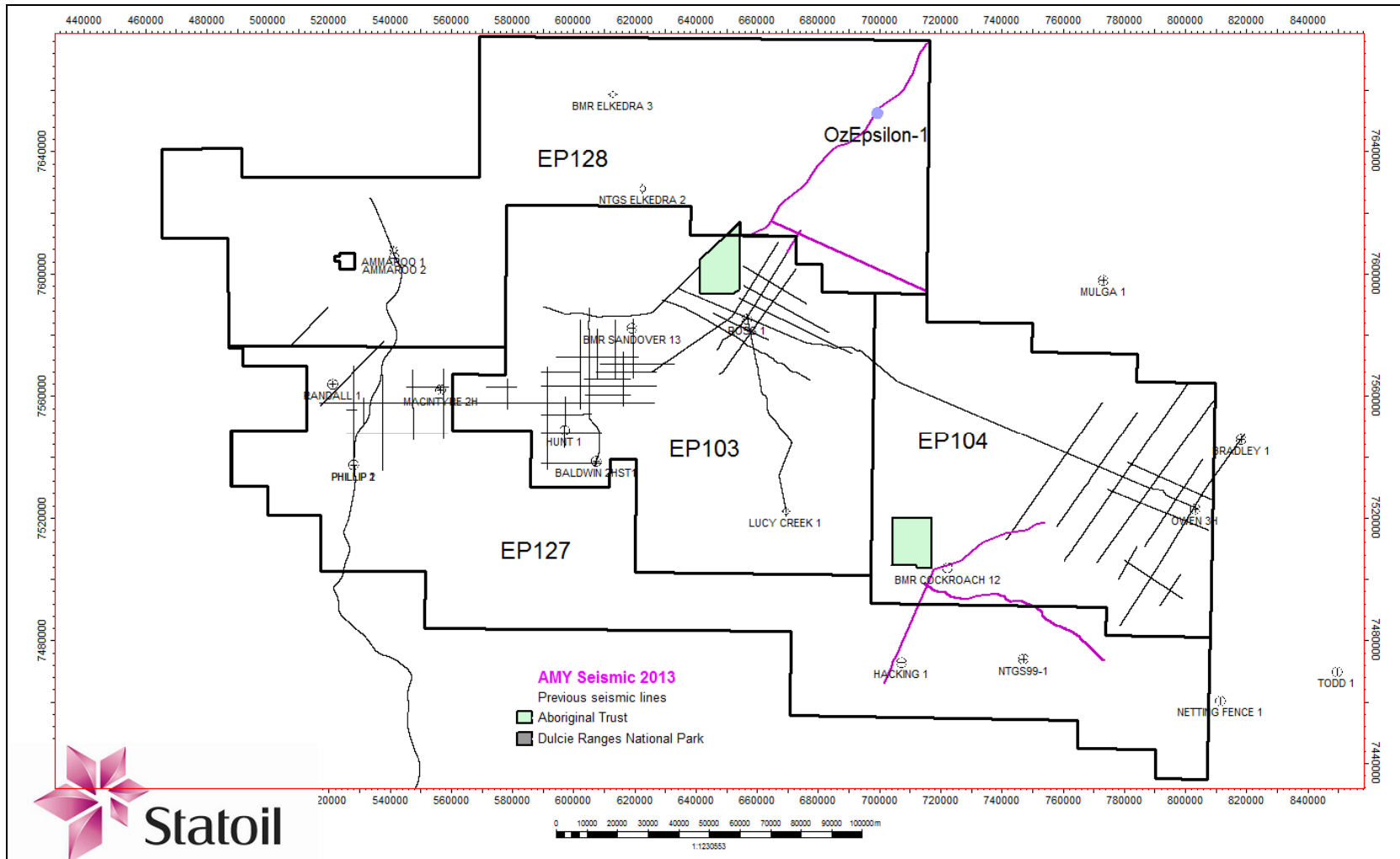


Figure 1 Map of the Statoil licences area and position of the OzEpsilon-1 well location in EP128

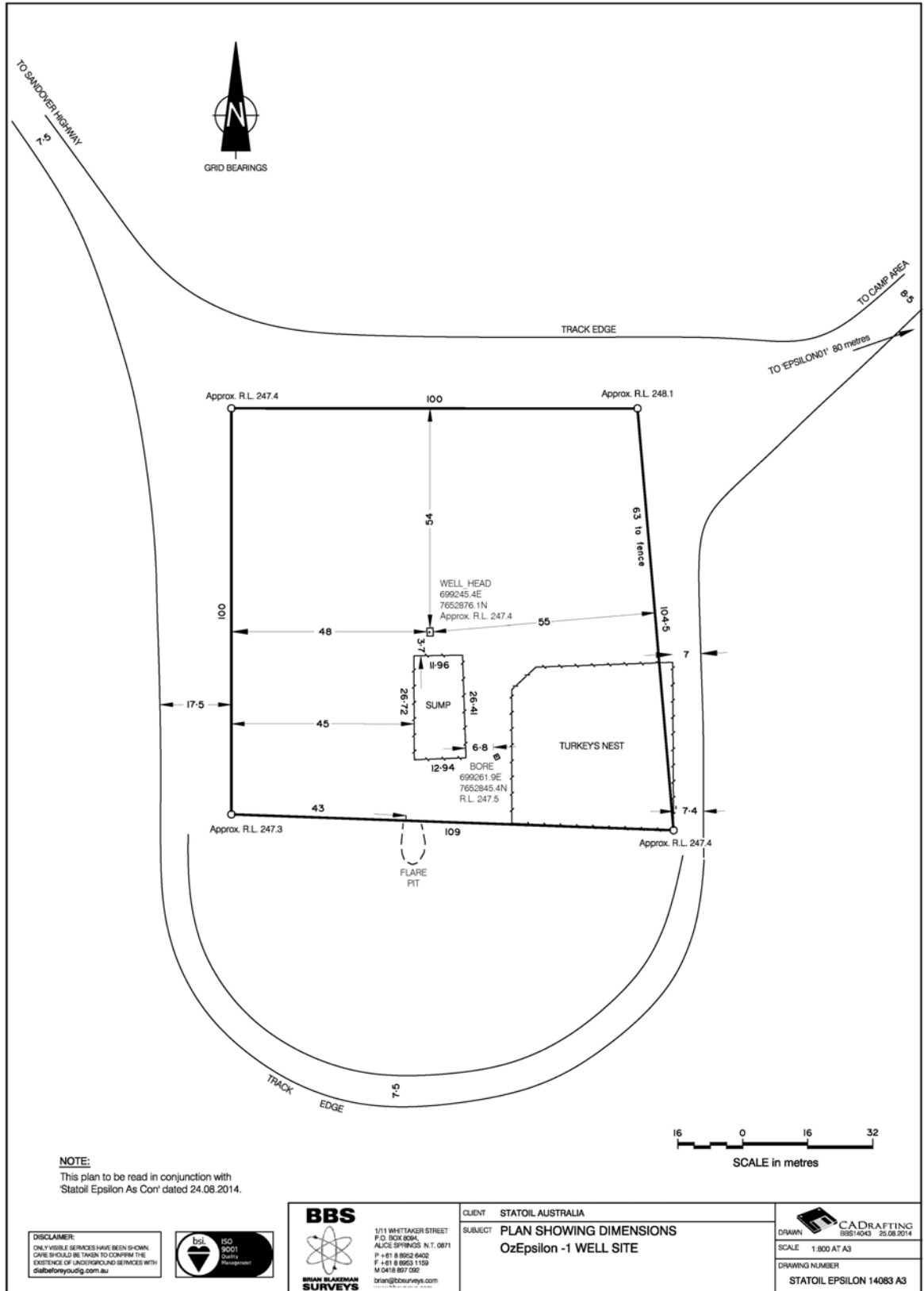


Figure 2 Survey certificate



## 2 Drilling

All depths in this section are measured depths to the kelly bushing height (4.2m AGL), unless otherwise stated.

### 2.1 Drilling Summary

OzEpsilon-1 was spudded on 2 July 2014 and took a total of 9 days to complete the drilling, logging, and permanent plug and abandonment operations. The well was permanently plugged and abandoned and the rig was released on 11 July 2014.

#### 15" top hole (0 – 18.5m)

15" tophole was pre drilled to 18.5m and 13 3/8" conductor was installed by Western Auger Drilling.

#### 12 1/4" surface hole (18.5m to 321.5m)

The 12 1/4" hole was drilled with severe mud losses from 127m to section TD at 321.5m. 300bbl/hr losses were encountered at 127m and it was decided to pull out of hole to pump and spot 3 x 10 bbl cement plugs. Although an additional 50bbl cement plug was placed, losses of 150bbl/hr persevered until section TD. A total of 33.3 hours non-productive time was recorded during the period of fluid losses.

9 5/8" J55 BTC casing was run to 319m and cementing operations took place with no returns. A cement top-up job was performed to bring cement to surface.

The wellhead was installed and the BOP was nipped up and function tested.

#### 7 7/8" production hole (321.5m – 665m)

An FIT was successfully performed to 13.3ppg EMW at 325m.

Drilling resumed with no issues and coring point was called at 557m based on high gas readings and change in cuttings indicating Arthur Creek Hot Shale. A CorePro 7 7/8" coring assembly with wireline retrieved 18m core barrel for 3 1/2" core was run in the hole and coring commenced. On the third coring run top Thornton Limestone was intersected 55m shallow to prognosis and the core packed off halfway into the run. Four more attempts were made to core the Thornton Limestone, with only 0.6 – 1.4m recovery. The interconnected vugs and weak zones in the Thornton Limestone were believed to be the cause for the core breaking up and jamming inside the core barrel, resulting in short trips and core material of very poor quality. Conventional drilling was recommenced at 607.4m and TD was called at 655m after observing granite basement in the cuttings.

The wireline logging operation was performed according to plan and all logging objectives were achieved.

The permanent plug and abandonment was performed, the BOP was nipped down and the rig was released 11 July 2014. A signpost was installed in accordance with the NT Department of Mines and Energy requirements.



A time overview for the OzEpsilon-1 activities can be seen in Table 2-1.

**Table 2-1** Summary of operations for OzEpsilon-1

Section	Start time	End time	Rig name
AU OZEPSILON-1 Move-In, Rig Up	29.Jun.2014 02:00	02.Jul.2014 07:00	EDA 2
AU OZEPSILON-1 Drilling, Surface	02.Jul.2014 07:00	04.Jul.2014 23:30	EDA 2
AU OZEPSILON-1 Casing, Surface	04.Jul.2014 23:30	06.Jul.2014 10:30	EDA 2
AU OZEPSILON-1 Drilling, Production	06.Jul.2014 10:30	09.Jul.2014 12:45	EDA 2
AU OZEPSILON-1 Formation evaluation, Production	09.Jul.2014 12:45	09.Jul.2014 22:00	EDA 2
AU OZEPSILON-1 Permanent P&A (DP) w/ RIG	09.Jul.2014 22:00	10.Jul.2014 21:00	EDA 2
AU OZEPSILON-1 Rig Down	10.Jul.2014 21:00	11.Jul.2014 09:00	EDA 2

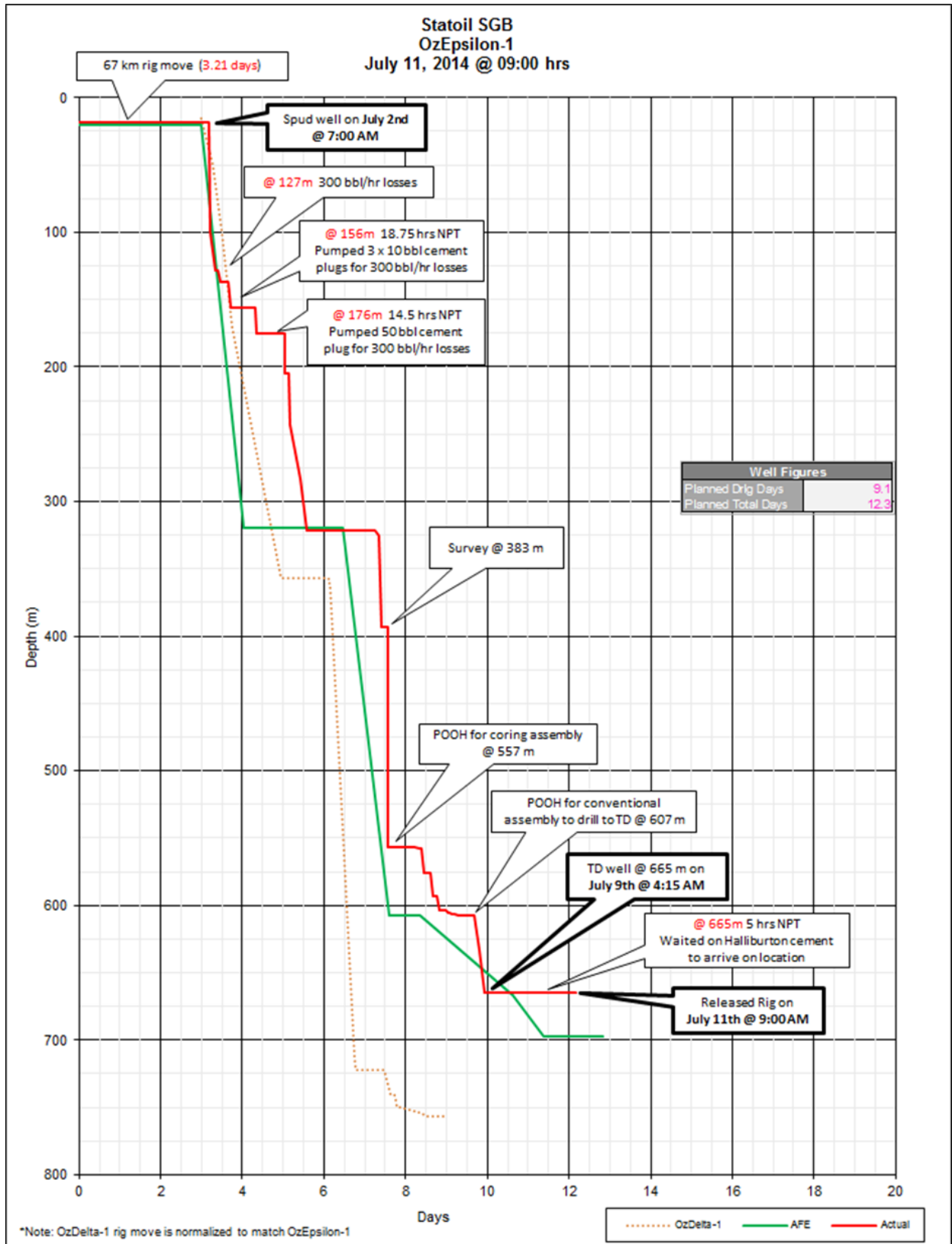
### 2.1.1 Non-productive time summary

**Table 2-2** Summary of the non-productive time for OzEpsilon-1

Well	Date	Incident	Category	Company	Hours
OzEpsilon-1	02.Jul.2014	RIG-06 Lost circulation	Drilling Surface	Statoil	33.3
OzEpsilon-1	10.Jul.2014	CEM-08 Cementer support	Permanent P&A (DP) w/ RIG	Halliburton	5.0
				Total hours :	38.3

### 2.1.2 Time versus Depth Curve

The time versus depth illustration with explanatory remarks can be seen in **Figure 3** on the next page.



## 2.2 Casings

The overview of the run casings in OzEpsilon-1 is presented in the table below.

**Table 2-3** Casing summary for OzEpsilon-1

Category/String type			Diameters	RKB hanger m MD	Air gap m MD	From depth m MD	To depth m MD	Date	Description
Conductor			13 3/8"	4.2	4.2	4.2	18.5	29/06/14	
Item type	No. of joints	Diam. inch	Grade	Coupling	Weight lbs/ft	From depth m MD	To depth m MD	Remarks	
Casing	3	13 3/8"	J55	API5B BTC	54.5	4.2	18.5	Pre-installed by Western Auger Drilling	
Category/String type			Diameters	RKB hanger m MD	Air gap m MD	From depth m MD	To depth m MD	Date	Description
Casing, surface			9 5/8"	4.2	4.2	4.2	319.5	05/0714	
Item type	No. of joints	Diam. inch	Grade	Coupling	Weight lbs/ft	From depth m MD	To depth m MD	Remarks	
Hanger	1	9 5/8"	J55	API5B BTC	36.0	4.2	5.1		
Pup joint	1	9 5/8"	J55	API5B BTC	36.0	5.1	8.0		
Casing	26	9 5/8"	J55	API5B BTC	36.0	8.0	307.2		
Float Collar	1	9 5/8"	J55	API5B BTC	36.0	307.2	307.6		
Casing	1	9 5/8"	J55	API5B BTC	36.0	307.6	319.0		
Shoe	1	9 5/8"	J55	API5B BTC	36.0	319.0	319.5		

## 2.3 Well Path - Directional Data

The well inclination was monitored with single shot surveys. See App A for the inclination measured from the single shot surveys. The verticality analysis from the dipole sonic run shows that the well was turning towards an azimuth of 217deg at 323m, 119deg at 383m, 104 deg at 547m and back towards 114deg at TD.

## 2.4 BHA Records

All the bottom hole assemblies utilized in the OzEpsilon-1 can be viewed on the next pages.

**WELLBORE:** AU OZEPSILON-1

**BHA NO:** 1

**RUN TYPE:** Drilling run

**DESCRIPTION:** 12.25" Surface BHA #1

**RUN NAME:** 1

String component	OD in	ID in	Length m	Acc length m
BIT	12.250	2.750	0.38	0.38
BIT SUB	8.000	2.000	0.92	1.30
SHOCK SUB	8.125	2.500	2.92	4.22
DRILL COLLAR	8.000	3.000	9.04	13.26
STABILIZER	12.250	2.870	2.46	15.72
DRILL COLLAR	8.000	3.000	9.05	24.77
X-OVER	8.000	2.120	0.25	25.02
X-OVER	7.000	2.120	0.38	25.40
DRILL COLLAR	6.250	2.120	92.33	117.73
X-OVER	7.500	2.500	0.21	117.94

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**BHA NO: 2****RUN TYPE:** Drilling run**DESCRIPTION:** 7 7/8" Production BHA #1**RUN NAME:** 2

String component	OD in	ID in	Length m	Acc length m
BIT	7.875	2.250	0.26	0.26
MUD MOTOR	6.750	1.500	8.15	8.41
FLOAT SUB		2.250	0.69	9.10
X-OVER	6.620	2.250	0.81	9.91
STABILIZER	7.750	2.870	1.86	11.77
X-OVER	6.500	2.250	0.88	12.65
DRILL COLLAR	6.250	2.250	101.58	114.23
JAR	6.250	2.250	9.36	123.59
X-OVER	6.250	2.500	0.30	123.89

**BHA NO: 3****RUN TYPE:** Coring run**DESCRIPTION:** 7 7/8" Coring BHA #1**RUN NAME:** 1

String component	OD in	ID in	Length m	Acc length m
BIT	7.875	3.500	0.47	0.47
CORE BARREL		4.600	8.23	8.70
STABILIZER		4.600	0.90	9.60
CORE BARREL		4.600	8.24	17.84
STABILIZER		4.600	0.91	18.75
COREBARREL		4.600	0.73	19.48
COREBARREL		4.600	0.72	20.20
DRILL COLLAR		4.600	94.08	114.28

**BHA NO: 4****RUN TYPE:** Drilling run**DESCRIPTION:** 7 7/8" Production BHA #2**RUN NAME:** 3

String component	OD in	ID in	Length m	Acc length m
BIT	7.875		0.24	0.24
MUD MOTOR	6.750	1.500	8.15	8.39
FLOAT SUB	6.625	2.250	0.69	9.08
DRILL COLLAR	6.250	2.250	9.28	18.36
DRILL COLLAR	6.250	2.250	9.30	27.66
X-OVER	6.500	2.188	0.81	28.47
STABILIZER	7.750	2.870	1.86	30.33





String component	OD in	ID in	Length m	Acc length m
X-OVER	6.500	2.250	0.88	31.21
DRILL COLLAR	6.250	2.250	83.22	114.43
JAR	6.500	2.250	9.08	123.51
DRILL COLLAR	6.250	2.250	9.11	132.62
X-OVER	6.500	2.375	0.59	133.21
HW DRILL PIPE	6.500	3.000	55.90	189.11
X-OVER		2.250	1.21	190.32
X-OVER		2.250	0.60	190.92

## 2.5 Cementing Summary

### Cementing of the 9 5/8" surface casing:

Operation summary: Pumped 1 bbl freshwater spacer, 10bbl Flochek, 10bbl freshwater spacer, 134bbl 13.5ppg Halcem, 135bbl Class G (in attempt to get cement to surface), 80bbl freshwater displacement. No returns throughout job. Top up job required to circulate cement to surface.

Table 2-4 Cementing summary for OzEpsilon-1 Surface casing

Fluids pumped	Type	Density ppg	Volume bbl	Pump Rate gal/min	Pump Press psi	Return
Preflush	Econolite	9.30	10.0	6	15	N
Spacer before	Fresh Water	8.33	10.0	6	15	N
Spacer before #2	Fresh Water	8.33	10.0	6	15	N
Lead	Halcem	13.50	134.0	6	200	N
Tail	Class G	13.50	135.0	6	250	N
Displacement	Fresh Water	8.33	80.0	2	110	N

## 2.6 Bit Records

OzEpsilon-1 bit records can be seen in the tables below.

Tables 2-5 Bit records for OzEpsilon-1 bit runs

Run no	Bit size	Bit no	BHA no	Bit type	IADC code	Bit manufacturer
1	12 1/4"	1	1	MM66		Halliburton
2	7 7/8"	2	2	DSH616M		NOV
3	7 7/8"	3	3	DC613QL		Corpro
4	7 7/8"	4	4	EQH44D2R		Halliburton

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Run no	Bit size	Bit no	BHA no	Serial no	Nozzles (n/32")				Flow area in2
					no x n	no x n	no x n	no x n	
1	12 1/4"	1	1	12421700	6 x 24	x	x	x	2.6510
2	7 7/8"	2	2	A154444	6 x 18	x	x	x	1.4920
3	7 7/8"	3	3	1025	6 x 12	x	x	x	0.6630
4	7 7/8"	4	4	11718567	2 x 16	1 x 20	x	x	0.70

Run no	Bit size	Pump rate gal/min	Pump press psi	Depth in mMD	Depth out mMD	Form drld m	Total drld m	Drld hrs	Circ hrs	ROP m/hr
1	12 1/4"	750.0	928.3	18.50	321.50	303	303	26.8	64.5	11.3
2	7 7/8"	550.0	1200.0	321.50	557.10	235.60	235.60	8.8	1.5	26.8
3	7 7/8"	240.0	505.0	557.50	607.40	49.90	49.90	10.8	35.5	4.6
4	7 7/8"	550.0	1505.0	607.40	665	57.60	57.60	5.1	21.3	11.3

Run no	Bit size	Min WOB kips	Max WOB kips	Min RPM	Max RPM	Torque Min ft*lbf	Torque Max ft*lbf	Con drag Min 1000 kips	Con drag Max 1000 kips
1	12 1/4"	12.3	23.6	60	80	6166.6	9266.6		
2	7 7/8"	14.9	19.9	45	60	6000	7999.9		
3	7 7/8"	2.9	10.4	32.50	50	2.0	5.7	1.0	2.0
4	7 7/8"	24.9	35.4	47.50	70	5000	7400		

Run no	Bit size	I	O	DC	L	B	G	OC	RP
1	12 1/4"	3	2	BT	N	X	I	CT	TD
2	7 7/8"	2	2	WT	G	X	I	CT	CP
3	7 7/8"	1	1	LT	N	X	I	CT	TD
4	7 7/8"	1	1	BT	G	1	I	WT	TD

Run no	Bit size	Remarks
1	12 1/4"	12.25" Surface BHA #1
2	7 7/8"	7 7/8" Production BHA #1
3	7 7/8"	7 7/8" Coring BHA #1
4	7 7/8"	7 7/8" Production BHA #2

## 2.7 Drilling Fluids

The OzEpsilon-1 well was drilled with water based mud. The water to fill the turkeys nest was supplied from the Epsilon water bore drilled on the OzEpsilon-1 well site.

The mud used to drill the surface hole was a Gel Spud mud changing to water at 50m and a Gel/Polymer mud from 322m to total depth. While drilling the 12 1/4" hole section the main problem encountered was related to downhole losses which reached 3661bbl for this interval. Initially 100bbl of LCM was mixed based on 15ppb Gel and 5ppb Frackseal Fine; 5ppb Sandseal Fine; 2ppb Cellplug and 8ppb Mica Coarse. Finally the maximum LCM concentration was increased to 32ppb in the second 100bbl pill. Although 4 cement plugs were pumped, the losses continued until the end of the section and 9 5/8" casing was cemented and an additional top up cement job was performed.

The 7 7/8" hole was drilled without fluid losses to the formation.

A short summary of the mud properties is given in the table below:

**Table 2-6** Drilling fluids summary

Hole Section	Fluid Type	Mud Weight (ppg)	Viscosity (sec/qt)	PV (cp)	YP (lb/100 ft <sup>2</sup> )	Fluid Loss (bbl/hr)	pH
Surface	Spud Mud	8.4	26-29	1	4	150-300	8.5
Production	Polymer Mud	8.5-8.8	33-36	5-7	9-13	0	9-9.5

## 2.8 Permanent Plug and Abandonment

A 5 hour downtime was recorded because there was not enough cement on the location for the permanent plug and abandonment operations and a new cement bulker had to be summoned.

The lower cement plug was placed in the open hole from 665m to 418m.

Plug number 2 was placed from tagged 424m to inside the 9 5/8" casing at 173m.

Plug number 3 was mixed and pumped to cover the interval 181m to surface.

5.2bbl of cement was observed on surface.

### 2.8.1 Plugging

**Table 2-7** Permanent plug and abandonment cement plugs

Plug top MD	Plug bottom MD	Company	Plug No.	Plug type	Job objective
418	655	Halliburton	1	Open hole	Permanent P&A
Measured plug top MD	Measured by	Hole size	Casing size	Placement method	
		7 7/8"			
Mixed and pumped plug #1 - 50.2bbl of 13.5ppg cement slurry, 5bbl/min. TOC 418m MD.					
Fluids pumped	Type	Density ppg	Volume bbl	Pump rate l/min	Pump pressure psi
Slurry	Class G cement	13.5	50	5.0	200

Plug top MD	Plug bottom MD	Company	Plug No.	Plug type	Job objective
173	424	Halliburton	3	Open hole into casing	Permanent P&A
Measured plug top MD	Measured by	Hole size	Casing size	Placement method	
		7 7/8"	9 5/8"		
Remarks: Mixed and pumped plug #2 - 57.7bbl of 13.5ppg cement slurry, 5.2bbl/min. TOC 173m MD.					
Fluids pumped	Type	Density ppg	Volume bbl	Pump rate l/min	Pump pressure psi
Slurry	Class G cement	13.5	58	5.0	200

Plug top MD	Plug bottom MD	Company	Plug No.	Plug type	Job objective
0	181	Halliburton	3	Casing	Permanent P&A
Measured plug top MD	Measured by	Hole size	Casing size	Placement method	
			9 5/8"		
Remarks: Mixed and pumped plug #3 - 46bbl of 13.5ppg cement slurry, 5.1bbl/min. 5.2bbl cement to surface.					
Fluids pumped	Type	Density ppg	Volume bbl	Pump rate l/min	Pump pressure psi
Slurry	Class G cement	13.5	46	5.1	300

### 3 Well Evaluation Logs

One suite of openhole logs was recorded from TD to the casing shoe (GR to surface). The openhole logging was carried out to provide information on lithology, rock properties (por/permeability), fluid content, parameters to develop stress models, selection of stress test depths and perforation intervals, and imaging of stress directions (breakouts, drilling induced fractures) and natural fracturing.

Lithology and fluid identification tools:

- Spectral-GR
- High Resolution Resistivity
- Density
- Neutron

These logs will provide measurements for clay volume estimation, porosity and saturation calculation and identifying the TOC level (SGR).

The following logs will provide input for stress modelling, stress direction and for the seismic tie/calibration:

- Multiple P&S (waveforms) sonic tool
- Image Scanning Tool combined with Multi-arm caliper for bore hole ovality to estimate the direction of the minimum horizontal stress ( $\sigma_{min}$ )

**Table 3-1** Logging runs for OzEpsilon-1 with Weatherford's open hole wireline tools

Run no	Logging Company	Logged Interval (m MD)	Tools	Temp tool (deg C)	Remarks
1	665	430	MCG-CMI (image log)-CXD (sonic)	49	Image log (CMI) run separately
1a	665	300	MCG-CMI (image log)-CXD (sonic)	49	Sonic log (CXD) to csg shoe
2	665	0	MCG-SGS-MDN-MPD-MLE-MMR High resolution (450-600mMD)	49	SuperCombo: spontaneous potential, gamma (to surface), spectral gamma, neutron, density, laterolog, microres.

## 4 Cores, Cuttings and samples

### 4.1 Coring, cores and samples

A continuous interval of up to 60m of 3 1/2" core was planned and thus a wireline retrieved coring system was found beneficial. Coring commenced at 557m, 35m prior to the planned depth because gas readings while drilling were getting higher and the cuttings indicated the well had entered the Arthur Creek Hot Shale.

High recovery and good progress was achieved throughout the lower Arthur Creek Formation and the Arthur Creek Hot Shale. Core barrels 18m long were utilised and two runs resulted in full recovery until problems arose when intersecting the Thornton Limestone. With the change of formation, numerous pack-offs resulted in very short cores brought to surface. The quality of the cores was typically poor, being mostly gravel and hockey-puck shaped slices. The core competency in this section was generally low and only few intervals from the recovered material were suitable for physical and chemical analysis. After five short core runs in the Thornton, coring was terminated at 607.4m.

A total of 12 core plugs typically 20-30cm in length were selected at site. These were sealed in Mylar bags immediately after the cores were brought to surface.

The whole core has been slabbed and photographed in both white and ultraviolet light.

Core details and preserved samples are listed in App F.

A rig site description of the cores is included at the end of App G.

## 4.2 Cuttings

Cuttings samples were collected at 10m intervals from surface to the 9-5/8" casing shoe and at 5m and 10m intervals depending on ROP from the surface casing shoe to core point, and from cessation of coring to TD. The list of cuttings sampled and descriptions of the cuttings can be seen in App G.

## 5 Pore Pressures and Temperature

See the pore pressure and stress plot in parts per gallon (ppg) in App E.

### 5.1 Pore pressure and stress

No indications of pore pressure were given during drilling because the well was drilled in overbalance.

The formation integrity test at the surface casing shoe @ 325m was done to 13.3ppg EMW, equivalent 0.69psi/ft or 1.59g/cm<sup>3</sup>.

### 5.2 Formation temperature

Formation temperature was recorded during openhole wireline logging and the temperature measured 49 °C at 665m MD, which equals a temperature gradient of 43°C/km (assuming 20 °C at surface).

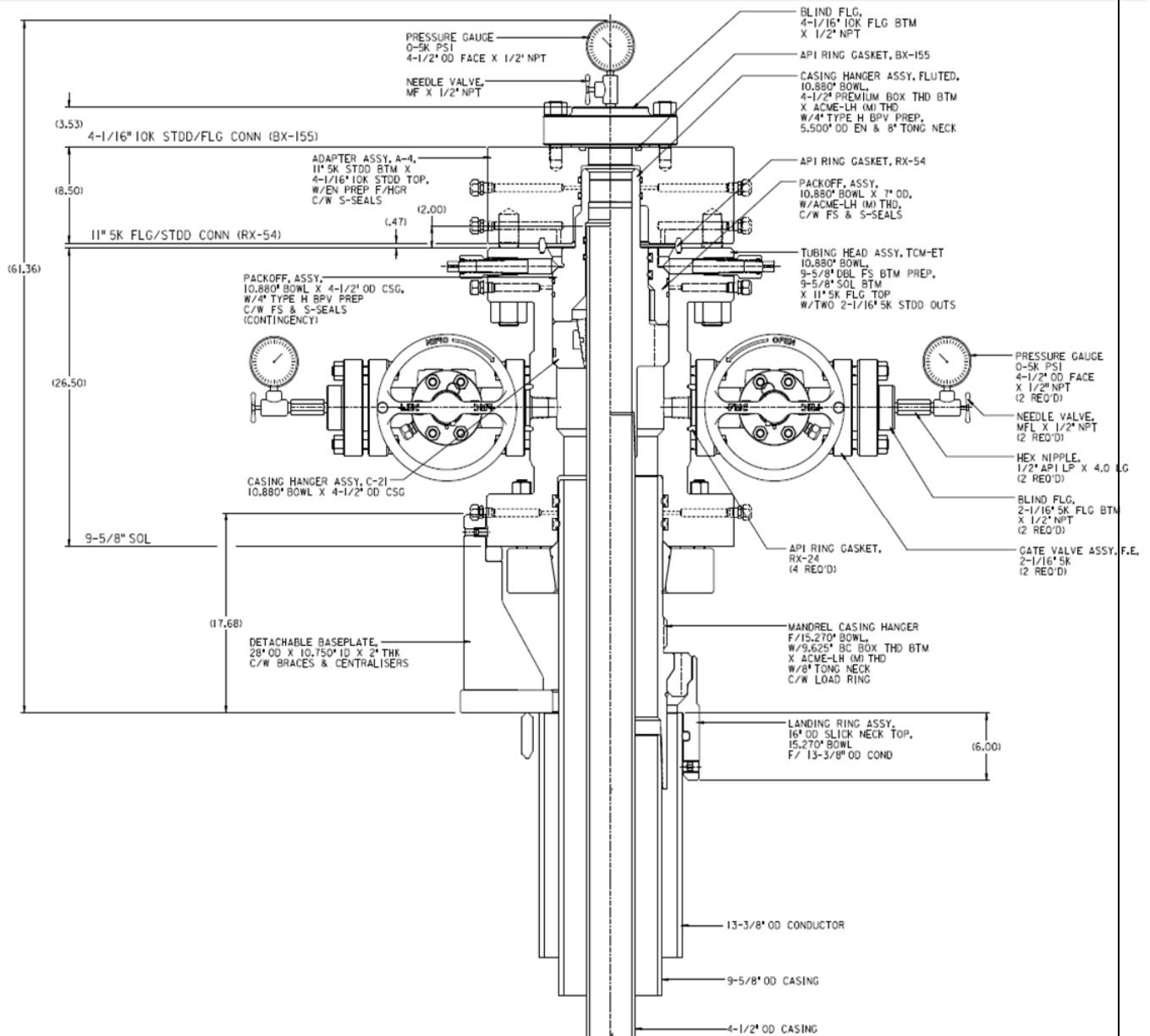
### App A Directional Data – surveys

WELLBORE_ID	Depth MD [m]	Incl deg	Survey instr
AU OZEPSILON-1	193.0	0.25	MSS
AU OZEPSILON-1	383.0	0.75	MSS
AU OZEPSILON-1	547.0	0.25	MSS
AU OZEPSILON-1	665.0	1.70	OH Logging





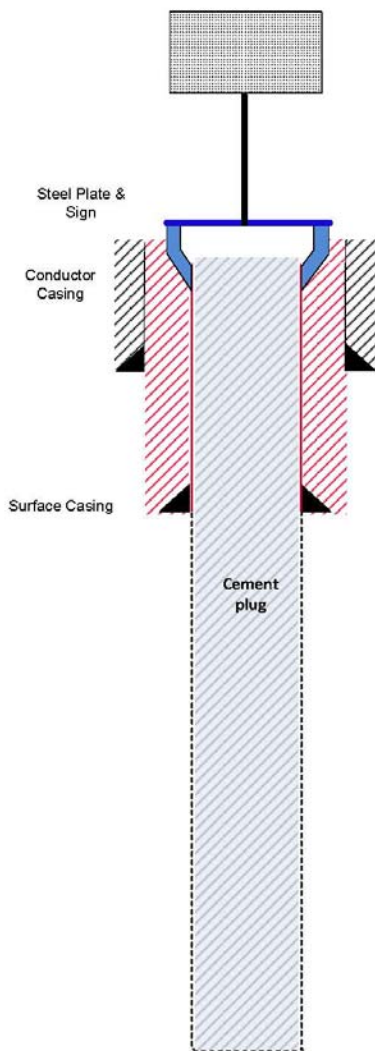
**App C Wellhead** (Used for the drilling phase and removed after P&A performed)



## App D Well Barriers

### WELL BARRIER SCHEMATIC

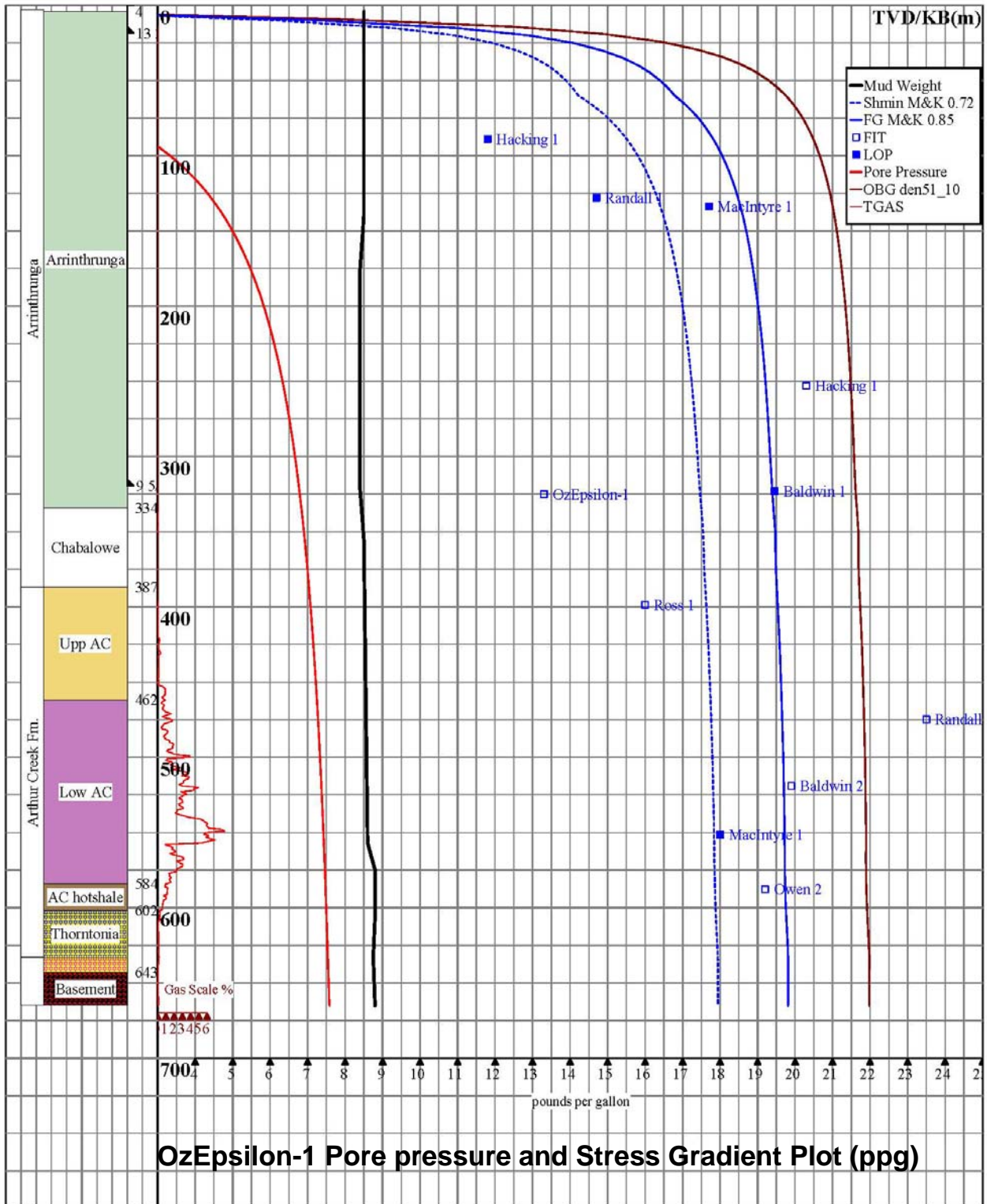
P&A with drilling rig. No production string



Well data		
Installation:	South Georgina Basin - Australia	
Well no:	OzEpsilon-1	
Well type:	SGB Exploration	
Revision no:	0	Date: 04.15.14
Prepared:	Luis Tarazona	
Verified:		
Well barrier elements	Ref. WBEAC tables	Verification of barrier elements
<b>PRIMARY</b>		
Continuous cement plugs		TOC surface
Steel Plate		
<b>SECONDARY</b>		
Surface casing cement		TOC: TOC @ surface Method: volume control
Surface casing		PT: 2000 psi
Notes:		
<ul style="list-style-type: none"> <li>Pore Pressure: 7.8 ppg</li> </ul>		
Disp. no.	Comment	
well integrity issues		
None		



App E Pore Pressure and Fracture Gradient Plot



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App F Core Intervals and Preserved Samples

OzEpsilon-1 Core Interval and Preserved Samples

Core nr	Bit no	Formation	Interval from MD(m)	Interval to MD(m)	Cut	Recovery (m)	Recovery %	Barrel length (m)	Barrel utilisation %	Barrel type	Core company	Preserv. Method	Preserved samples *
1	3	Lower Arthur Creek	557.5	575.5	18	18	100.0	18	100.0	Aluminum	Corepro	Mylar	558.17 - 558.49 m 562.79 - 562.99 m 567.11 - 567.38 m 571.32 - 571.55 m 574.96 - 575.18 m
2	3	Lower Arthur Creek & Arthur Creek Hot Shale	575.5	593.5	18	18.2	101.1	18	101.1	Aluminum	Corepro	Mylar	580.58 - 580.96 m 584.66 - 584.89 m 589.50 - 589.74 m 593.43 - 593.63 m
3	3	AC Hot Shale & Thornton Fm.	593.5	603.2	9.7	9.6	99.0	18	53.3	Aluminum	Corepro	Mylar	598.42 - 598.62 m 601.23 - 601.45 m
4	3	Thorntonia Fm.	603.2	603.95	0.75	0.6	80.0	18	3.3	Aluminum	Corepro		No suitable sample
5	3	Thorntonia Fm.	603.95	605.3	1.35	1	74.1	18	5.6	Aluminum	Corepro		No suitable sample
6	3	Thorntonia Fm.	605.3	606.65	1.35	1.35	100.0	18	7.5	Aluminum	Corepro	Mylar	605.40 - 605.54 m
7	3	Thorntonia Fm.	606.65	607.4	0.75	0.66	88.0	18	3.7	Aluminum	Corepro		No suitable sample

\* Some preserved samples may be shifted 1-10 cm compared to slabbed core photographs as the cores were re-stacked in core trays after slabbing.

### App G Cuttings and Core Descriptions

From	To	%	Lith.	OzEpsilon-1 Cuttings descriptions
4.2	20.0	70	Sst:	rd brn, qtz, m-vf, sbrnd, pr srt, fri, fr vis por
		30	Dol:	rd brn-dk gry, microxln, hd, nil vis por
20.0	30.0	80	Sst:	rd brn, qtz, m-vf, sbrnd, pr srt, fri, fr vis por
		20	Dol:	rd brn-dk gry, microxln, hd, nil vis por
30.0	40.0	70	Sst:	rd brn, qtz, m-vf, sbrnd, pr srt, dol cmt, hd, fr vis por
		30	Dol:	rd brn-dk gry, microxln, hd, nil vis por
40.0	50.0	90	Sst:	rd brn, qtz, m-vf, sbrnd, pr srt, dol cmt, hd, fr vis por
		10	Dol:	rd brn-dk gry, microxln, hd, nil vis por
50.0	60.0	100	Sst:	rd brn, qtz, m-vf, sbang, pr srt, dol cmt, hd, pr vis por
60.0	70.0	80	Sst:	rd brn, qtz, m-vf, sbang, pr srt, dol cmt, hd, pr vis por
		10	Dol:	rd brn-dk gry, microxln, hd, nil vis por
		10	Cht:	lt yel gry, crpxln, v hd
70.0	80.0	70	Sst:	rd brn-lt gry, qtz, m-vf, sbang, pr srt, dol cmt, hd, pr vis por
		20	Dol:	dk gry, microxln, hd, nil vis por
		10	Cht:	lt yel gry, crpxln, v hd
80.0	90.0	60	Dol:	lt gry-wh, microxln, hd, nil vis por
		40	Sst:	lt gry-wh, qtz, c-m, sbang, mod srt, dol cmt, hd, nil vis por,
90.0	100.0	60	Sst:	lt gry-wh, qtz, c-m, sbang, mod srt, dol cmt ip, fri-hd, nil vis por
		40	Dol:	lt gry-wh, microxln, hd, nil vis por
100.0	110.0	70	Sst:	lt gry-wh, qtz, c-m, sbang, mod srt, dol cmt ip, fri-hd, nil vis por
		30	Dol:	lt gry-wh, microxln, hd, nil vis por
110.0	120.0	60	Dol:	lt gry-wh, microxln, hd, nil vis por
		40	Sst:	lt gry-wh, qtz, vf-m, sbang, pr srt, dol cmt, fri-hd, nil vis por, n/s.
120.0	130.0	70	Dol:	lt gry-wh, microxln, hd, nil vis por
		30	Sst:	lt gry-wh, qtz, vf-m, sbang, pr srt, dol cmt, fri-hd, nil vis por
130.0	140.0	80	Dol:	lt gry-wh, microxln, hd, nil vis por
		20	Cht:	lt yel, crpxln, v hd

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140.0	150.0	50	Dol:	lt gry-wh, microxln, hd, nil vis por
		30	Sltst:	med gry gn, arg, hd, nil vis por
		20	Cht:	lt yel, crpxln, v hd
150.0	160.0	60	Dol:	lt gry-wh, microxln, hd, nil vis por
		30	Sltst:	med gry gn, arg, hd, nil vis por
		10	Cht:	lt yel, crpxln, v hd
160.0	170.0	40	Dol:	lt gry-wh, microxln, hd, nil vis por
		30	Sltst:	med gry gn, arg, hd, nil vis por
		20	Clst:	lt gn gry, hd, nil vis por
		10	Cht:	lt yel, crpxln, v hd
170.0	180.0	40	Dol:	lt gry-wh, microxln, hd, nil vis por
		30	Clst:	lt gn gry, hd, nil vis por
		20	Cht:	lt yel, crpxln, v hd
		10	Sltst:	med gry gn, arg, hd, nil vis por
180.0	190.0	40	Dol:	lt gry-wh, microxln, hd, nil vis por
		20	Clst:	lt gn gry-brn gry, hd, nil vis por
		20	Sltst:	med gry gn, arg, hd, nil vis por
		20	Cht:	lt yel, crpxln, v hd
190.0	200.0	50	Dol:	lt gry-wh, microxln, hd, nil vis por
		30	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
		20	Sltst:	med gry gn, dol, hd, nil vis por
200.0	210.0	40	Dol:	med olv gry-wh, microxln, hd, nil vis por
		30	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
		30	Sltst:	med gry gn, dol, hd, nil vis por
210.0	220.0	30	Dol:	med olv gry-wh, microxln, hd, nil vis por
		30	Cht:	lt yel, crpxln, v hd
		20	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
		20	Sltst:	med gry gn, dol, hd, nil vis por
220.0	230.0	40	Dol:	med olv gry-wh, microxln, hd, nil vis por
		30	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
		20	Sltst:	med gry gn, dol, hd, nil vis por
		10	Cht:	lt olv gry, crpxln, v hd
230.0	240.0	40	Dol:	med olv gry-wh, microxln, hd, nil vis por
		40	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
		20	Sltst:	med gry gn, dol, hd, nil vis por
240.0	250.0	70	Dol:	med olv gry-wh, microxln, hd, nil vis por
		20	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
		10	Sltst:	med gry-dk gry, dol, hd, nil vis por

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250.0	260.0	80	Dol:	med olv gry-wh, microxln, hd, nil vis por
		20	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
260.0	270.0	80	Dol:	med olv gry-wh, microxln, hd, nil vis por
		20	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
270.0	280.0	80	Dol:	med olv gry-wh, microxln, hd, nil vis por
		10	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
		10	Sst:	lt gry, vfsbrnd, wl srt, dol, hd, nil vis por
280.0	290.0	70	Dol:	med olv gry-wh, microxln, hd, nil vis por
		20	Sst:	lt gry, vfsbrnd, wl srt, dol, hd, nil vis por
		10	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
290.0	300.0	60	Dol:	med olv gry-wh, microxln, hd, nil vis por
		30	Sst:	lt gry, f-m, sbrnd, pr srt, dol, hd, nil vis por
		10	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
300.0	310.0	70	Dol:	med olv gry-wh, microxln, hd, nil vis por
		20	Sst:	lt gry, f-m, sbrnd, pr srt, dol, hd, nil vis por
		10	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
310.0	321.5	60	Dol:	med olv gry-wh, microxln, hd, nil vis por
		20	Sst:	lt gry, f-m, sbrnd, pr srt, dol, hd, nil vis por
		10	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
		10	Ls:	lt gry-wh, f-microxln, hd, nil vis por
321.5	325.0	60	Dol:	med olv gry, microxln, hd, nil vis por
		20	Sst:	lt gry, f-m, sbrnd, pr srt, dol, hd, nil vis por
		10	Clst:	lt gn gry-brn gry, arg, hd, nil vis por
		10	Ls:	lt gry-wh, f-microxln, hd, nil vis por
325.0	330.0	40	Dol:	med olv gry, microxln, hd, nil vis por
		30	Sst:	lt gry, f-m, sbrnd, pr srt, dol, hd, nil vis por
		30	Ls:	lt gry-wh, f-microxln, hd, nil vis por
330.0	340.0	80	Ls:	med bl gry-lt olv gry, fxln, v hd, nil vis por
		20	Sst:	lt gry, f-m, sbrnd, pr srt, dol, hd, nil vis por
340.0	350.0	80	Ls:	med bl gry-brn olv gry, fxln, v hd, nil vis por
		20	Dol:	lt gry-brn gry, mcroxln, suc ip, v hd, ab dessim qtz gr m sbrd, nil vis por
350.0	360.0	70	Calc Sst:	lt bl gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
		30	Ls:	med bl gry-brn olv gry, fxln, v hd, nil vis por



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360.0	370.0	60	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
		40	Ls:	med bl gry-brn olv gry, fxln, v hd, nil vis por
370.0	380.0	60	Ls:	med bl gry-brn olv gry, fxln, v hd, nil vis por
		40	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
380.0	390.0	80	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		20	Dol:	med yel gry, microxln, v hd, nil vis por
390.0	400.0	60	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		40	Dol:	med yel gry, microxln, v hd, nil vis por
400.0	410.0	70	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
		30	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
410.0	420.0	80	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		20	Dol:	med yel gry, microxln, v hd, nil vis por
420.0	430.0	60.00	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		30	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
		10	Dol:	med yel gry, microxln, v hd, nil vis por
430.0	440.0	40	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		20	Dol:	med yel gry, microxln, v hd, nil vis por
		40	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
440.0	450.0	50	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		30	Dol:	med yel gry, microxln, v hd, nil vis por
		20	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
450.0	460.0	40	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		30	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
		20	Sltst:	dk gry-blk, calc, hd, micromic, nil vis por
		10	Dol:	med yel gry, microxln, v hd, nil vis por
460.0	470.0	40	Ls:	dk gry-olv gry, fxln, v hd, nil vis por, sps bri bl gn fluor, no cut.
		30	Sltst:	dk gry-blk, calc, hd, micromic, nil vis por
		20	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
		10	Dol:	med yel gry, microxln, v hd, nil vis por
470.0	480.0	50	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
		30	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		10	Sltst:	dk gry-blk, calc, hd, micromic, nil vis por
		10	Dol:	med yel gry, microxln, v hd, nil vis por



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480.0	490.0	50	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		30	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
		20	Sltst:	dk gry-blk, calc, hd, micromic, nil vis por
490.0	500.0	40	Ls:	dk gry-olv gry, fxln, v hd, nil vis por
		40	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
		20	Sltst:	dk gry-blk, aren,calc, tr dol, hd, micromic, nil vis por
500.0	510.0	40	Ls:	dk gry-olv gry, fxln, v hd, nil vis por,
		40	Sltst:	dk gry-blk, aren, calc, tr dol, hd, micromic, nil vis por
		20	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, hd, pr vis por
510.0	520.0	60	Sltst:	dk gry-blk, com v aren, calc, tr dol, hd, micromic, nil vis por
		20	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, tr dol cmt, hd, pr vis por, n/s.
		20	Ls:	dk gry-olv gry-lt gry, fxln, v hd, nil vis por
520.0	530.0	70	Sltst:	
		20	Calc Sst:	lt bl gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, tr dol cmt, hd, pr vis por
		10	Ls:	dk gry-olv gry-lt gry, fxln, v hd, tr slt, nil vis por
530.0	540.0	60	Sltst:	dk gry-blk, com v aren, calc, tr dol, hd, micromic, nil vis por
		40	Ls:	dk gry-olv gry-lt gry, fxln, v hd, tr slt, nil vis por
540.0	550.0	100	Sltst:	blk, blk gry, com v aren, calc, tr dol, hd, micromic, nil vis por
550.0	557.0	90	Sltst:	blk, blk gry, com v aren, calc, tr dol, hd, micromic, nil vis por
		10	Calc Sst:	lt gry-med gry, f-vf, rnd-sbrnd, mod srt, calc, tr dol cmt, hd, pr vis por
<b>CORING POINT</b>	<b>CORING POINT</b>	<b>CORING POINT</b>	<b>CORING POINT</b>	<b>CORING POINT</b>
557.50	563.43	100	Sltst:	blk, blk gry, com v aren, calc cmt, hd, micromic, r cm olv gry m-fxln Ls lam, nil vis por
563.43	564.51	100	Ls:	olv gry, m-fxln, v hd, com cm-mm blk gry Sltst lam, r cm sb vrt frac calc fld, nil vis por
564.51	568.37	100	Sltst:	blk, blk gry, com v aren, calc cmt, hd, micromic, com sb mm lam, nil vis por

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568.37	569.65	100	Sltst:	blk, blk gry, com v aren, calc cmt, hd, micromic, r cm olv gry m-fxln Ls lam, rr sft sed def, nil vis por
569.65	575.56	100	Sltst:	blk, blk gry, com v aren, calc cmt, hd, micromic, ab sb mm lam, sps cm sb vrt frac calc fld, nil vis por
575.56	581.00	100	Sltst:	blk, blk gry, dol cmt,hd, micromic, ab sb mm lam, sps cm sb vrt frac calc fld, nil vis por
581.00	584.00	100	Dol:	bl gry, micrxln, hd, thn lam, nil vis por
584.00	589.70	100	Ls:	dk gry - olv gry, micrxln, hd, thn lam, nil vis por
589.70	591.50	100	Ls:	dk gry - olv gry, micrxln, hd, thn lam, nil vis por
591.50	593.70	100	Dol:	dk gry, micrxln, hd, thn lam, nil vis por
595.00	599.00	100	Dol:	dk gry, micrxln, hd, tr-com anhy, thn lam, nil vis por, sps dll grn yel fluor, tr mod bri grn yel pp fluor, nil cut.
600.08	601.00	100	Dol:	dk gry, micrxln, hd, rr vug bands, nil vis por, sps-com
602.60	606.40	100	Dol:	med olv gry, m-fxln, hd, com cm-mm anhy fld vugs, pr vuggy por
606.40	607.40	100	Dol:	dk olv gry, c-mxln, v hd, ab mm vugs calc fld, pr vuggy por
616.00	610.00	50	Cvgs?	
		50	Dol:	lt gry -lt brn, mxln, hd, nil vis por
610.00	615.00	100	Dol:	v lt gry -lt brn, mxln, hd, nil vis por
		tr	cvgs	
615.00	620.00	60	Ls:	brn gry, mxln, tr slit, tr calc, hd, nil vis por
		30	Dol:	v lt gry - lt brn, mxln, hd, nil vis por
		10	Sltst:	dk gry - gry blk, mnr aren, mnr arg, hd, sb fiss, nil vis por
620.00	625.00	100	Dol:	brn gry, mxln, tr slit, hd, nil vis por
625.00	630.00	100	Dol:	olv gry - brn gry, f-mxln, hd, nil vis por
630.00	635.00	90	Dol:	olv gry - brn gry, f-mxln, hd, nil vis por
		10	Sltst:	dk gry - gry blk, mnr aren, mnr arg, hd, sb fiss, nil vis por



From	To	%	Lith.	OzEpsilon-1 Cuttings descriptions
634.00	640.00	80	Dol:	lt bl gry-wh, micro-fxln, v hd, com dessim f sbrnd qtz grn, sps pyr, nil vis por
		10	Sltst:	dk gry - gry blk, mnr aren, mnr arg, hd, sb fiss, nil vis por
		10	Sst:	lt brn gry, vf, sbrnd, mod srt, dol, v hd, nil vis por
640.0	645.0	90	Sst:	lt brn gry-wh, vf-c, sbrnd-sbang, pr srt, dol, hd, r musc, chlor, pyr, nil vis por
		10	Sltst:	dk gry - dk gn, arg, hd, micromic, nil vis por
645.0	650.0	50	Sst:	lt brn gry-wh, vf-c, sbrnd-sbang, pr srt, dol, hd, r musc, chlor, pyr, nil vis por
		50	Granite:	pkish rd-dk gn, v hd,ab musc, chlor, biot, pkish stn qtz (paleo weathering?), nil vis por
650.0	655.0	90	Granite:	pkish rd-dk gn, v hd,ab musc, chlor, biot, pkish stn qtz (paleo weathering?), nil vis por
		10	Sst:	lt brn gry-wh, vf-c, sbrnd-sbang, pr srt, dol, hd, r musc, chlor, pyr, nil vis por
655.0	660.0	100	Granite:	pkish rd-dk gn, v hd,ab musc, chlor, biot, pkish k fldsp (paleo weathering?), nil vis por
660.0	665.0	100	Granite:	pkish rd-dk gn, v hd,ab musc, chlor, biot, pkish k fldsp (paleo weathering?), nil vis por

### OzEpsilon-1 Core Chip Descriptions

From	To	Lith.	OzEpsilon-1 Corechips descriptions
557.50	563.43	Sltst:	blk, blk gry, com v aren, calc cmt, hd, micromic, r cm olv gry m-fxln Ls lam, nil vis por
563.43	564.51	Ls:	olv gry, m-fxln, v hd, com cm-mm blk gry Sltst lam, r cm sb vrt frac calc fld, nil vis por
564.51	568.37	Sltst:	blk, blk gry, com v aren, calc cmt, hd, micromic, com sb mm lam, nil vis por
568.37	569.65	Sltst:	blk, blk gry, com v aren, calc cmt, hd, micromic, r cm olv gry m-fxln Ls lam, rr sft sed def, nil vis por
569.65	575.56	Sltst:	blk, blk gry, com v aren, calc cmt, hd, micromic, ab sb mm lam, sps cm sb vrt frac calc fld, nil vis por
575.56	581.00	Sltst:	blk, blk gry, dol cmt,hd, micromic, ab sb mm lam, sps cm sb vrt frac calc fld, nil vis por
581.00	584.00	Dol:	bl gry, micrxln, hd, thn lam, nil vis por
584.00	589.70	Ls:	dk gry - olv gry, micrxln, hd, thn lam, nil vis por
589.70	591.50	Ls:	dk gry - olv gry, micrxln, hd, thn lam, nil vis por
591.50	593.70	Dol:	dk gry, micrxln, hd, thn lam, nil vis por
595.00	599.00	Dol:	dk gry, micrxln, hd, tr-com anhy, thn lam, nil vis por, sps dll grn yel fluor, tr mod bri grn yel pp fluor, nil cut.
600.08	601.00	Dol:	dk gry, micrxln, hd, rr vug bands, nil vis por, sps-com
602.60	606.40	Dol:	med olv gry, m-fxln, hd, com cm-mm anhy fld vugs, pr vuggy por
606.40	607.40	Dol:	dk olv gry, c-mxln, v hd, ab mm vugs calc fld, pr vuggy por