<b>INGAUƏE</b>			Moonshine 7					
INGAUJE								
	Latitude:	-34.2407443833 150.675142890	Well spudded: 19/03/1982 Last activity: 08/05/1982		d Level: evation:			m
Ground Level	Longitude:	150.675142890	,	K D ØI		DTH KB	MIN	m MAX
Ground Level	ITEM No		DESCRIPTION		(m)	(m)	I.D.	O.D.
			BRIEF HISTORY ON WELL					
HW Casing Shoe 120.0m	Well Construction Detail: Moonshine 7 was spudded on the 19th of March, 1982, and cored to a final TD of 585.97m. The well was fully cored by New Eurek Exploration Pty. Ltd. for Australian Gas Light Company and Australian Occidental Pty. Ltd. The well was drilled to assess both the methane drainage potential of the major coal seams in the Sydney Sub-group of the Illawarra Coal Measures and the nature of existing geological and groundwater conditions for shaft sinking.					the		
	6" hole was drilled and 4-1/2" HW casing was run and cemented to 120.0m. The well was then HQ cored to final well TD of 585.97m, prior to the well being plugged and abandoned via two cement plugs. It is not clear what geophysical wireline logs were recorded prior to the plug and abandonement activities occuing. There is no data to support that any drill stem testing occurred.							
	Well Inspection	Detail:	ned with two cement plugs over intervals of TD					
	The well was ins	spected on the 29th	n of May, 2015. Subsidence visible at cellar loca	ation but no eviden	ce of we	ll centre a	t surfac	ce.
	CASING	DETAILS	SURFACE	ING DETAILS:				
2	Size:	4-1/2"	No data found in database.					
		11.4 lbs/ft unknown	-					
	Depth Set (m):							
	CASING	DETAILS	INTERMEDIATE	ING DETAILS:				
	Size:							
	Weight: Grade:							
	Depth Set (m):		•					
	CASING	DETAILS	PRODUCTION	ING DETAILS:				
	Size:			ING DETAILO.				
	Weight: Grade:		-					
	Depth Set (m):		-					
	Plug	Top (mMD)	ABANDONMENT PLUGS	omment				
	1	501.93	Cemented over an interval between TD and 501.93m					
	2	0.0	Cemented over an interval of 501.93m - Surface					
		NATION	FORMATION INTERVAL (mMDRT) {Perforations}	GUN: SIZE TYPE	SPF	CHARG TYPE		Г(g)
		a Formation li Coal	Surface - 457.1 457.1 - 460.1					
	Eckersle	y Formation	460.1 - 487.0					
		awilli Coal Sandstone	487.0 - 501.8 501.8 - 508.0	+	<u> </u>			
,	Allens Cre	ek Formation	508.0 - 522.9					
1		est Sandstone	522.9 - 531.94					
		Claystone arra Coal	531.94 - 543.9 543.9 - 546.9		L			
		Formation	546.9 - TD					
		SSURE		+ +				
	TAGGED DEPTH	S:		• •				
	ANNULUS FLUID: INDICATED STRI							
	CALCULATED ST	RING WEIGHT:						
	LANDED WEIGHT	Г: 						
TD: 585.97m	REMARKS: NOT T	O SCALE	WELLSITE SUPERVISOR:	W. Jones, K. Berz	ns.G.Le	e		
	PROPOSED:		LAST WORKOVER					
	COMPLETION:		DRAFTED BY: Nathan Wuttke	DATE:	18 .	lanuary 20 <sup>,</sup>	17	
	RE-COMPLETION OTHER:		REVISED BY: CHECKED BY: Jordan Bunning	DATE: DATE:	12	April 2017		

<b>INGAUƏE</b>			Moonshine 7A					
	Latitude: Longitude:	-34.240669319 150.675210067	Well spudded: 18/09/1982 Last activity: 16/11/1982		d Level: evation:	233	.6	m m
Ground Level	ITEM No		DESCRIPTION		LTH (m)	DTH KB (m)	MIN I.D.	MAX O.D.
					(,	(,		0.51
PW Casing Shoe 3.0m								
			BRIFF HISTORY ON WELL					
HW Casing Shoe 132.0m	BRIEF HISTORY ON WELL           Well Construction Detail:           Moonshine 7A was drilled on the 16th of September, 1982, to a final TD of 799.22m. The well was drilled and cored by New Eureka           Exploration Pty. Ltd. for Australian Gas Light Company and Australian Occidental Pty. Ltd. The well was drilled to further assess           both the methane drainage potential of the major coal seams in the Sydney Sub-group of the Illawarra Coal Measures and the nature of existing geological and groundwater conditions for shaft sinking.							
	of the same type potential of both was run from 3.0	e of testing in Moo the Cumbeland S Om to surface and	ase of the Sydney Sub-group and water inflow test nshine 7. Moonshine 7A was then deepened by Sub-group of the Illawarra Coal Measures and the HW (5") casing was run from 132.0m to surface	coring to assess th top of the Shoalha	e conve ven Gro	ntional pe up. PW (	troleum 6") casi	ו ing
		onine screen was i	ent plugs over intervals of TD to 459.9m and 448 inserted with a Peizometer.	3.3m to surface. Be	fore sett	ing the se	econd p	lug a
			th of May, 2015. Subsidence visible at cellar loca nfrustratucture (including Piezo cable) at location		e of wel	l at surfac	ce. Insp	ection
	CASING	DETAILS	SURFACE CEMENTI	NG DETAILS:				
	Size: Weight:	6" 14.6 lbs/ft	No data found on database					
	Grade:	unknown						
	Depth Set (m):		INTERMEDIATE					
	CASING Size:	5"	CEMENT No data found on database	ING DETAILS:				
Bentonine with		11.4 lbs/ft unknown 132.0						
459.9m TOC		DETAILS	PRODUCTION	NG DETAILS:				
	Size:							
	Weight: Grade:							
	Depth Set (m):		ABANDONMENT PLUGS					
	Plug 1	Top (mMD) 459.9	Co Cemented over an interval of 799.2m (TD) - 459.9m	mment				
	2	0.0	Cemented over an interval of 448.3m - Surface					
			FORMATION INTERVAL	GUN:		CHARG	ES:	
1		ATION a Formation	(mMDRT) {Perforations} Surface - 457.1	SIZE TYPE	SPF	TYPE	WT	(g)
	Bul	li Coal	457.1 - 460.1					
	Wonga	y Formation awilli Coal	460.1 - 487.0 487.0 - 501.8					
		Sandstone	501.8 - 508.0					
		ek Formation est Sandstone	508.0 - 522.9 522.9 - 531.94					
		Claystone	531.94 - 543.9					
	Wilton	arra Coal Formation	543.9 - 546.9 546.9 - 575.5					
		e Formation	575.5 - TD					
		SSURE RATURE						
	TAGGED DEPTH	S:						
TD: 799.2m	INDICATED STRI							
10.733.200	CALCULATED ST							
	LANDED WEIGHT REMARKS:	1:						
	ΝΟΤΤ	O SCALE	WELLSITE SUPERVISOR:	P. Rayment,				
	PROPOSED: COMPLETION:		LAST WORKOVER DRAFTED BY: Nathan Wuttke	DATE:	10 1	anuary 201	17	
	RE-COMPLETION	l:	REVISED BY:	DATE:				
	OTHER:		CHECKED BY: Jordan Bunning	DATE:	12	April 2017		





Hole Name: Moonshine 7			Site ID: 571		Region: Picton - Wollongong	
Database Coordinates Adopted Field I		nspection Coor	on Coordinates (GDA94) Amend D		oordinates	
Lat: -34.24071 , Long: 150.675139 Lat: -34.24		07443833, Long: 1	50.67514289	No		
Integrated Well Score:				7	Well Inspection Date 28 May 2015	
Score Key: 1 - Well found - immediate action required 2 - Well found - Further action required 3 - Well found - Further investigation required 4 - Well site found - Clean up potentially required 5- Well found - only work required is to remove surface casing below ground, little or no concern to land owner. Maybe within an area of potential urban or agricultural use conflict and/or is of low integrity concern		6 - Well found - Well in use by landowner, no work required 7 - Well site found - No work required, isolated well evidence may be still present but not of concern and/or current landowner not concerned 8 - No clear evidence of well site (i.e. site not located or P&A'd below ground and surface remediated)				
concern						
Concern Original Desktop Integrity Score:	25.38		ginal Desktop mental Score:	27.08	Original Desktop Rank:	D1
Original Desktop	Australian Gas	Environ		<b>27.08</b> PEL(H)0255	i š i	<b>D1</b> 1982







Moonshine 7 Site ID: 571

### **Desktop Review Findings**

Hole Name:	Moonshine 7	Year Drilled:	1982
Operator (at time of drilling):	Australian Gas Light Company Ltd / OXY	Did well encounter hydrocarbons?:	Yes
Did well ever produce hydrocarbons (includes production testing)?:	No	Casing depth specificaitons recorded?	Partially
Evidence of setting Isolation Cement Plugs?	Yes	Conductor Casing Size:	Unknown
Conductor Casing Depth:	Unknown	Surface Casing Size:	HW
Surface Casing Shoe Depth:	Unknown	Surface Casing Cement Top:	Unknown
Intermediate Casing Size:	Unknown	Intermediate Casing Shoe Depth:	Unknown
Production Casing Size:	Unknown	Production Casing Shoe Depth:	Unknown
Production Casing Cement Returns Observed?:	Unknown	Is there an open hole interval below last casign shoe:	Yes
Well Depth (MD):	586	Well Depth (TVD):	586
Rig Spud Date:		Well Abandoned Date:	5/8/1982
Well Summary: Drilled and cored, fully cemente encountered.		and abandoned but no evidence	ce of tag & test. HC s
Well Comments:	HC s encountered. Fully cementer inspection.	ed on abandonement. Low risk	well, does not need field
P&A Adequate:	Yes		
In Gauge (Last Recorded Hole	Status): P&A d		
Dept (Last Recorded Hole Statu	us): P&A d		

### **Integrity Inspection Data**

Was the inspector able to fully access the location and surrounds?	Y
Is there access to the site for a rig?	Y
Is access suitable for workover rig in current condition?:	Ν
What is the nature of any work required to prepare access (brief)?:	
400m access track required	
Are there any other constraints to rig access (brief)?	
No	
Is the well pad visible?	Ν
Is the location of the well centre visible?	Y
What term best describes what is at well centre? (e.g. casing stump/wellhead/suspension cap/cement plug/welded plate, etc.)	Subsidence visible in cellar location.
What is your assessment of the current well status?	P&Ad
What is the approximate depth of the uppermost installation at well centre relative to GL (m)?	GL





Is there a barricade and/or fencing around the well?	Ν
Is there a cellar installed?	Ν
Is there an accessible wellhead and tree installed?	Ν
Where no wellhead is installed is there evidence of a suspension cap or device that could contain trapped pressure?	N
Is there existing surface equipment?	Ν
Is the well tied into a pipeline?	Ν





Moonshine 7 Site ID: 571

### **Environmental Inspection Data**

### Agriculture

Is there an impact to agricultural land use, or potential impact from agriculture? Low

Comments: slight depressions not of particular hazard

#### **Ecology and Bushfire**

Is there ecological disturbance evident that is likely to be related to the well? No

Comment:

Is the well in a location of potential bushfire risk? No

Comment:

#### **Natural Hazard**

Is the well in a location of potential risk of flooding or change in creek alignment? No

Comments:

Is the well at risk of land instability? No

Comments:

#### **Surface Condition**

Is there safety hazards present in the area related to the drilling activity? No

Comments:

Is there contamination present in the area likely to be related to the drilling activity? No

Comments:

Is the well at risk of erosion or is the drilling activity the source of erosion? No

Comments:

Is the well or drilling activity still visibile from surrounding lands? No

Comments:

#### People

Is the land owner concerned about the well or its current status? No

Comments: could not speak with owner

Is the well located within 2km of an urban area? No

Comments:

Is the well within 500m of sensitive land use? No

Comments:

Is the well within 200m of a public area? No

Comments:

### Land Use and Water

Is the well likely to be subject to land use change in the future (e.g. development occuring on surrounding lands)? Yes

Comments: near dombarton rail site





Moonshine 7 Site ID: 571

Is the well located within 200m of a creek, river or dam? Yes

Comments: dam to west





Moonshine 7 Site ID: 571

Photos

Well Name	Comments	Photo
Moonshine 7	Well centre	
Moonshine 7		





Well Name	Comments	Photo
Moonshine 7		F
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		A CONTRACT OF THE OWNER OF
		and the second se
Moonshine 7		
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		and the second state of th
		CALLER ST. CONTRACTOR ST. CONTRACTOR
		Enter Antonio Contrational





Well Name	Comments	Photo
Moonshine 7		





Hole Name: Moonshine 7A			Site ID: 572		Region: Picton - We	ollongong
Database Coordinates Adopted Field I		nspection Coordinates (GDA94)		Amend Database Coordinates		
Lat: -34.240636 , Long	: 150.675205	Lat: -34.240	)669319, Long: 15	0.675210067	No	
Integrated Well Score:				7 Well Inspection Date 28 May 2015		
Score Key: 1 - Well found - immediate action required 2 - Well found - Further action required 3 - Well found - Further investigation required 4 - Well site found - Clean up potentially required 5- Well found - only work required is to remove surface casing below ground, little or no concern to land owner. Maybe within an area of potential urban or agricultural use conflict and/or is of low integrity concern		7 - Well site found present but not of	f concern and/or currer ence of well site (i.e. sit	er, no work required solated well evidence may nt landowner not concerned e not located or P&A'd belo	d	
Original Desktop Integrity Score:	64.46		ginal Desktop mental Score:	27.08	Original Desktop Rank:	B2
Licencee:		ralian Gas Light Company Ltd / OXY		PEL(H)0255	Year:	1982
Current Status: P&Ad				Total Depth:	799.22	
Comments: Subsidence visible at cellar location. P&Ad below ground.						







Moonshine 7A Site ID: 572

### **Desktop Review Findings**

Hole Name:	Moonshine 7A	Year Drilled:	1982
Operator (at time of drilling):	Australian Gas Light Company Ltd / OXY	Did well encounter hydrocarbons?:	Yes
Did well ever produce hydrocarbons (includes production testing)?:	Yes	Casing depth specificaitons recorded?	Partially
Evidence of setting Isolation Cement Plugs?	Yes	Conductor Casing Size:	PW
Conductor Casing Depth:	3	Surface Casing Size:	HW
Surface Casing Shoe Depth:	Unknown	Surface Casing Cement Top:	Unknown
Intermediate Casing Size:	NA	Intermediate Casing Shoe Depth:	
Production Casing Size:	NA	Production Casing Shoe Depth:	
Production Casing Cement Returns Observed?:		Is there an open hole interval below last casign shoe:	Yes
Well Depth (MD):	799.22	Well Depth (TVD):	799.22
Rig Spud Date:		Well Abandoned Date:	11/16/1982
Well Summary: Complimentary to Moonshine 7 requested, hence the conversion		Further geotechnical and hydrog to a water monitoring bore.	geological information
Well Comments:	Water monitoring bore - piezome leaves open channel of HC s to s		
P&A Adequate:	NA		
In Gauge (Last Recorded Hole	Status): Suspended		
Dept (Last Recorded Hole Statu	us): P&A d		

### **Integrity Inspection Data**

Was the inspector able to fully access the location and surrounds?	Y
Is there access to the site for a rig?	Υ
Is access suitable for workover rig in current condition?:	Ν
What is the nature of any work required to prepare access (brief)?:	
N/A	
Are there any other constraints to rig access (brief)?	
No	
Is the well pad visible?	Ν
Is the location of the well centre visible?	Υ
What term best describes what is at well centre? (e.g. casing stump/wellhead/suspension cap/cement plug/welded plate, etc.)	Subsidence visible at cellar location.
What is your assessment of the current well status?	P&Ad
What is the approximate depth of the uppermost installation at well centre relative to GL (m)?	At GL





Is there a barricade and/or fencing around the well?	Ν
Is there a cellar installed?	Ν
Is there an accessible wellhead and tree installed?	Ν
Where no wellhead is installed is there evidence of a suspension cap or device that could contain trapped pressure?	N
Is there existing surface equipment?	Ν
Is the well tied into a pipeline?	Ν





Moonshine 7A Site ID: 572

### **Environmental Inspection Data**

### Agriculture

Is there an impact to agricultural land use, or potential impact from agriculture? Low

Comments: some subsided areas though not problematic

#### **Ecology and Bushfire**

Is there ecological disturbance evident that is likely to be related to the well? No

Comment:

Is the well in a location of potential bushfire risk? No

Comment:

#### **Natural Hazard**

Is the well in a location of potential risk of flooding or change in creek alignment? No

Comments:

Is the well at risk of land instability? No

Comments:

#### **Surface Condition**

Is there safety hazards present in the area related to the drilling activity? No

Comments:

Is there contamination present in the area likely to be related to the drilling activity? No

Comments:

Is the well at risk of erosion or is the drilling activity the source of erosion? No

Comments:

Is the well or drilling activity still visibile from surrounding lands? No

Comments:

#### People

Is the land owner concerned about the well or its current status? No

Comments: could not speak with owner

Is the well located within 2km of an urban area? No

Comments:

Is the well within 500m of sensitive land use? No

Comments:

Is the well within 200m of a public area? No

Comments:

### Land Use and Water

Is the well likely to be subject to land use change in the future (e.g. development occuring on surrounding lands)? Yes

Comments: site of dombarton rail interchange





Moonshine 7A Site ID: 572

Is the well located within 200m of a creek, river or dam? Yes

Comments: dam to west





Moonshine 7A Site ID: 572

Photos

Well Name	Comments	Photo
Moonshine 7A	Well centre	
Moonshine 7A		
Moonsnine 7A		





Well Name	Comments	Photo
Moonshine 7A		
Moonshine 7A		





Well Name	Comments	Photo
Moonshine 7A		all steps
		The second se