



ORIGIN ENERGY CSG LIMITED
DUNBAR 1 DW1
WELL ABANDONMENT REPORT
PPL1 / PPL8 - VICTORIA

Author/Submitted by:

Rosemary Mayers, Technical Assistant

.....*Rosemary Mayers*.....

Approved:

Andrew Mayers, Chief Petroleum Engineer

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Origin Energy CSG Limited
ABN 68 001 646 331
Ground Floor, South Tower
John Oxley Centre
339 Coronation Drive
MILTON QLD 4064
29 August 2008

WELL SUMMARY CARD

General Data	
Well Name	DUNBAR 1 DW1
Well Type	EXPLORATION GAS WELL
Field	OTWAY BASIN, VICTORIA
Petroleum License	PPL1 / PPL8
Location	
GDA94 Latitude	38° 32' 53.791" S
GDA94 Longitude	142° 54' 23.113" E
GDA Zone 56 Easting	666133.3
GDA Zone 56 Northing	5731612.3
Seismic Location	Line: 6470
	CDP: 2620
Elevation	
Ground Level (mAMSL)	76.4
Rotary Table (mAMSL)	82.1
Drilling Rig(s)	
Drilling Rig 1	Century Drilling Rig 11
Date Spudded	9/03/95
Date TD Reached	19/03/95
Date Rig Release	1/04/95
Drilling Rig 2	OD&E Rig 30
Date Spudded	19/03/01
Date TD Reached	23/03/01
Date Rig Release	26/03/01
Total Depth	
Driller 1:	1758 mRT
Logger:	1754 mRT
Driller 2:	1636 mRT
Well Completion Report Lodgement Date	
	Jan-96

Hole		Surface	Intermediate	Production
Size		12-1/4"	8-1/2"	6" Re-entry
Depth from Rotary Table		317 m	1758 m	1636 m
Drilling Fluid (mud)		Water	Water/PHPA/Pa c R	KCL/PHPA
Drill Bits No/Type		1x 12.5" Varel L-114	3 x 8.5" HTC AATJ.05	2X 6" HTC STR-09D

Casing		Surface	Intermediate	Prod.Tubing
Size - Grade		9-5/8" 36-43.5 ppf N80/BTC	7" 23-26 ppf N80/LTC	2-7/8" 6.5 ppf J55/EUE
Shoe Depth (mRT)		312	1210	1636

Cement	Volume - Type - Displacement - Returns
Surface	393 sacks Class A neat cement
Intermediate	447 bbls 2% Gel class "G" cement and 31.4 bbls Class "G" neat cement
Production Tubing	300 sacks class "G" + 1% Halad 322

Cement Plugs	
Interval	Cement volume/Type
1504 - 1294 mRT	8 bbl 15.6 ppg cement
313 - 18 mRT	26 bbl Class A neat cement
8.6 - 5.6 mRT	0.8 bbl cement surface plug

DRILLING AND COMPLETION SUMMARY

The DUNBAR 1 DW1 EXPLORATION GAS WELL was drilled in the PPL1 / PPL8 permit as an exploration well in the northwest of PPL1 in the Otway Basin, Victoria. DUNBAR 1 DW1 is located approximately 1.6 km from Port Campbell, Victoria.

It was anticipated that the wellbore would intersect gas zones in the Waarre Formation. Gas zones were intersected in the Waarre Unit C and Unit A separated by a water transition zone. The total net pay was estimated at 12.95 metres.

While running the 7" production casing it became stuck at 1210 m and was cemented in place and then drilled out to place cement plugs across the reservoir interval and the casing shoe. Details of the drilling, sampling and testing of Dunbar 1 are included in the original Well Completion Report submitted to the DPI Victoria in January 1996.

Dunbar 1 DW1 was re-entered on 19 March 2001 with a 6" steerable drilling assembly and a directional hole was drilled to a total depth of 1636 mRT. A 2-7/8" tubing string was run and cemented in place with the top of cement at 1066 mRT. The Waarre A sand was perforated from 1559 - 1562 and 1564 - 1569 m, however production levels were uneconomic, and in July 2001 the interval was suspended by setting a bridge plug at 1545 m. The Waarre C sand was perforated from 1501 - 1504 m and produced gas until it also became uneconomic. Cumulative gas production from the Dunbar 1 DW1 well was 13.143 million m³ and cumulative condensate production was 714.2 m³ with the production duration from May 2001 to December 2001. From 4 - 6 June 2008 Dunbar 1 DW1 was plugged and abandoned. Details of the drilling, workover, completion and abandonment of this well are included in Appendices 1 - 5.

GEOLOGICAL SAMPLES

Wireline Logs	Date	Log Type	Interval	Contractor
Logging Run 1	20/03/95	Sonic-SP-GR-Cal	1754 - 312 m KB	BPB
Logging Run 2	20/03/95	Acoustic	1737 - 1355 mKB	BPB
Logging Run 3	20/03/95	Neutron-Density-GR	1748 - 800 mKB	BPB
Logging Run 4	21/03/01	Cement Bond Log	1619 - 1025 mKB	Reeves
Logging Run 5	24/03/01	PDS-CNS-GR	1491 - 1589 mKB	Reeves
Logging Run 6	24/03/01	DLL-SLL-MLL-SP-GR-Cal	1491 - 1589 mKB	Reeves
Logs run in 1995 are included in Well Completion Report, while log interpretation of 2001 logs is included in Appendix 7.				

Full Hole Coring	Interval (mGL)	Size	Cut (m)	Recovered (m)
None				

Sidewall Coring	Date	Interval	Lithology
Report dated 16/01/96		1568 - 1401	Included in Well Completion Report

Mudlogging	Date	Interval	Evaluation
9 March - 1 April 1995			Included in Well Completion Report
19 - 23 March 2001		1180 - 1636 mRT	Formation Evaluation Logs (refer to Appendix 7)

Cutting Samples	Date	Interval	Evaluation
9 March - 1 April 1995			Included in Well Completion Report

WELL TESTS

Drill Stem Testing								
Date	Interval (mGL)	Formation (CM)	Gas Flow Rate	Fluid Recovery	Pressures (psig)			
					Initial Flow	Initial Shut In	Final Flow	Final Shut In
17/03/95	1526 -1557	Waarre	None	None	0.00	0.00	0.00	0.00
18/03/95	1526 -1557	Waarre	750	40 m mud/condensate	190.00	1780.00	150.00	1700.00
DST 1 failed due to plugging. DST 2 also partially failed due to plugging.								

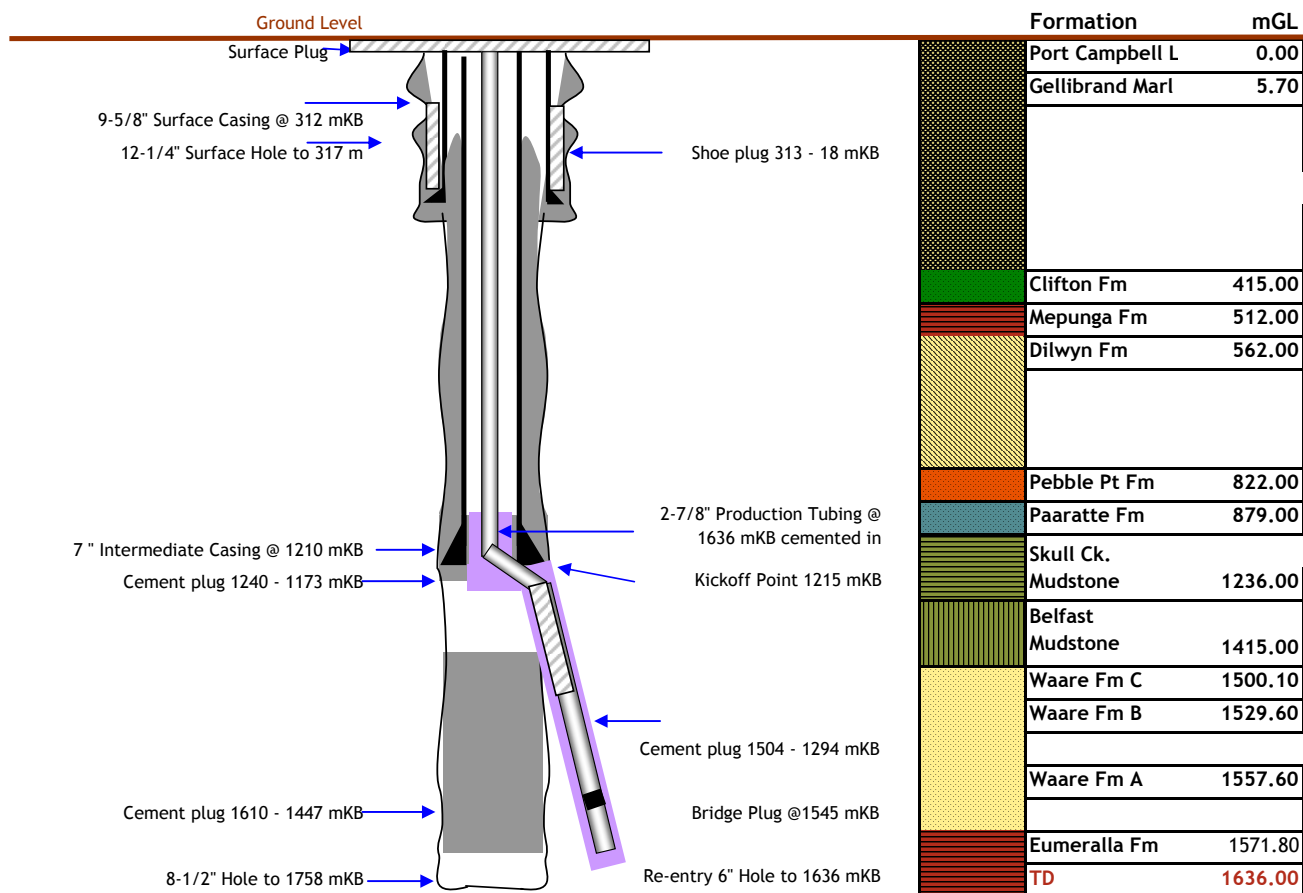
SURVEYS

Well Location					
Date	Latitude	Longitude	Ground Level	Easting	Northing
	38° 32' 53.791" S	142° 54' 23.113" E	76.4	666133.3	5731612.3

Deviation Survey Dunbar DW1				
Survey included in Appendix 6				

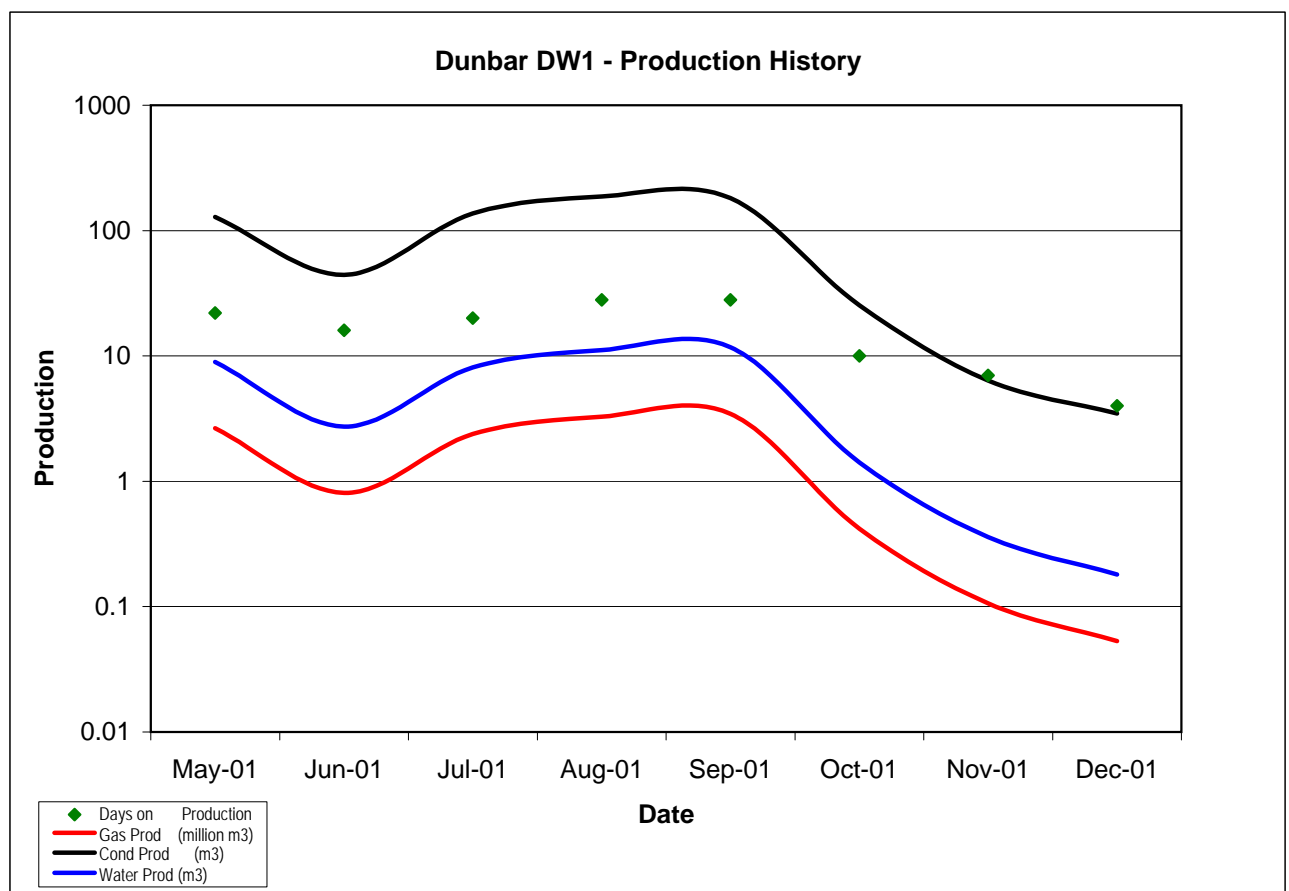
Hole and Casing SchematicStratigraphic Column

Formation tops were picked by Geoscientists from wireline log and ROP curve data. Formation thicknesses not to scale.

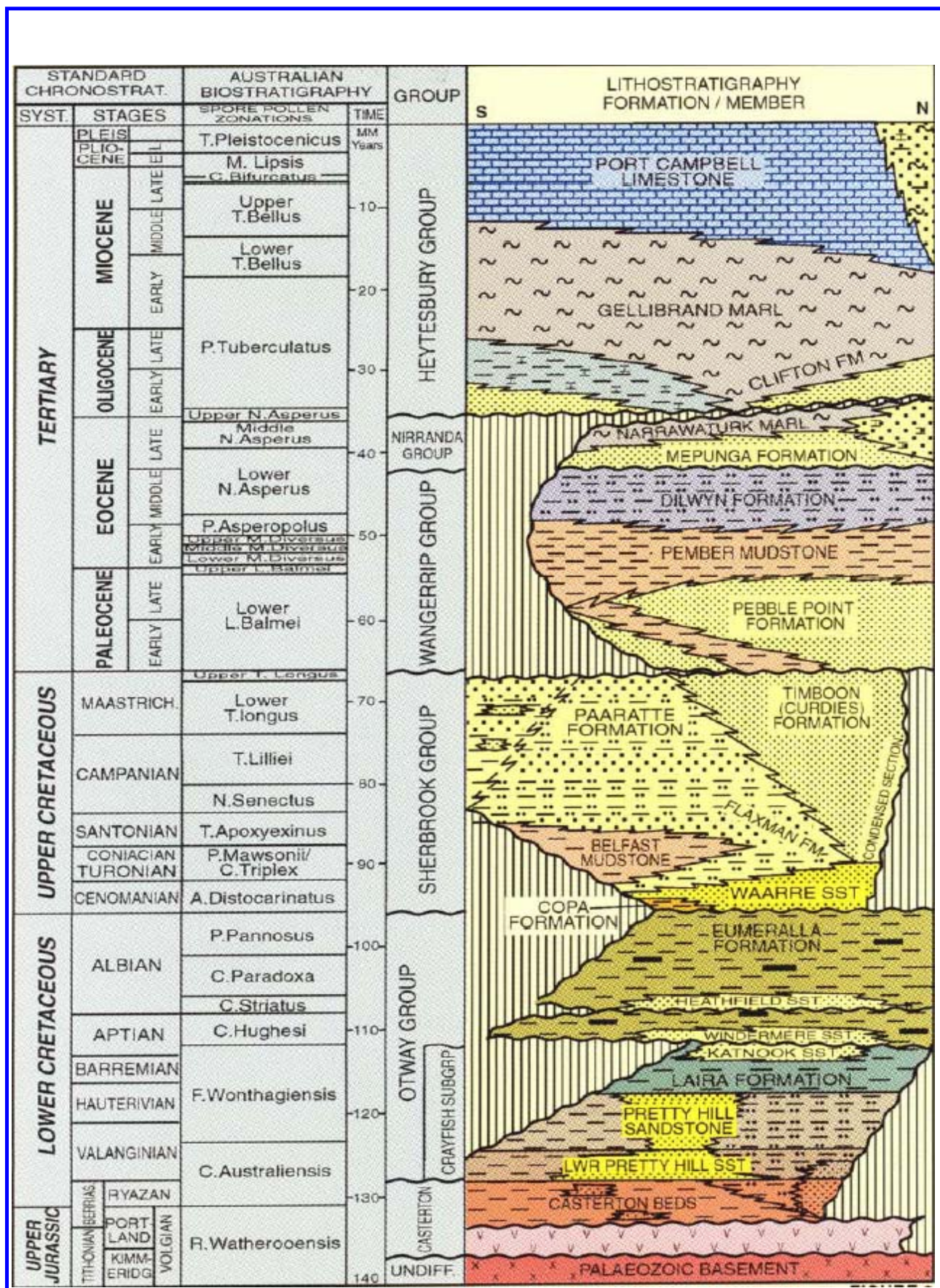


Dunbar DW1 - Production History

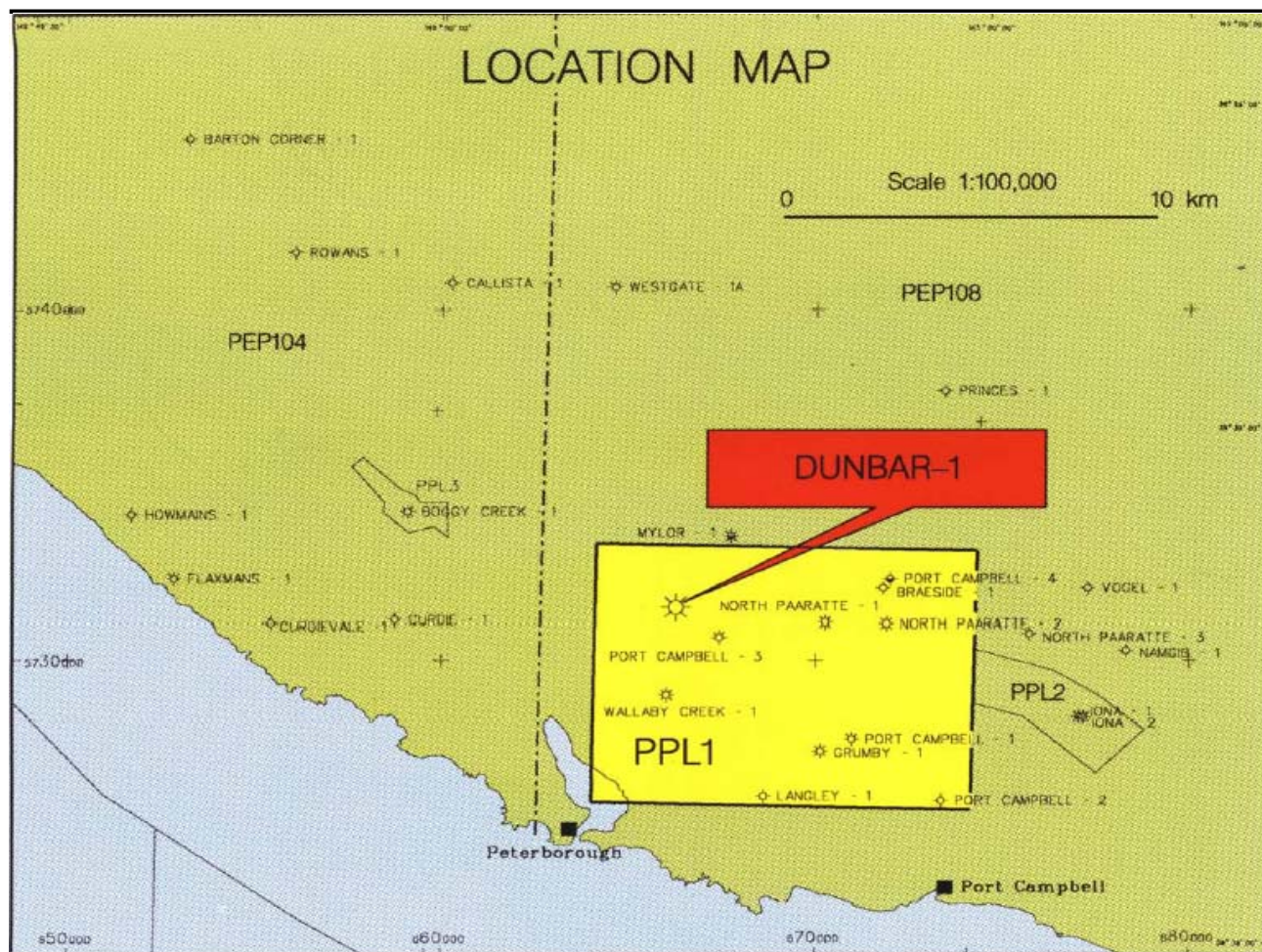
	Days on Production	Gas Prod (million m3)	Cond Prod (m ³)	Water Prod (m ³)
May-01	22	2.648	128.706	8.977
Jun-01	16	0.806	44.320	2.731
Jul-01	20	2.385	137.320	8.085
Aug-01	28	3.274	187.038	11.100
Sep-01	28	3.453	181.671	11.705
Oct-01	10	0.418	25.280	1.417
Nov-01	7	0.106	6.360	0.359
Dec-01	4	0.053	3.482	0.180
Totals	135	13.143	714.177	44.554



OTWAY BASIN STRATIGRAPHIC TABLE



LOCATION MAP



REFERENCES

GFE Resources Ltd. PPL1 OTWAY BASIN, VICTORIA, DUNBAR-1 WELL COMPLETION REPORT, report prepared for GFE Resources Ltd., January 1996.

Origin Energy Ltd. OTWAY BASIN PPL8, DUNBAR 1 DW 1, WORKOVER PROGRAM, - PLUG AND ABANDONMENT - unpublished report prepared for Origin Energy Limited., May 2008.

Taylor, Anne PPL8 ONSHORE OTWAY BASIN, Six Monthly Report to DNRE, Victoria, For the Period 1 July 2006 - 31 December 2006, unpublished report prepared for Origin Energy Limited. Jan 2007

APPENDIX 1 - DW1 DAILY DRILLING REPORTS

19/03/01

REPORT # 1

WELL	Dunbar 1 DW 1	24:00 DEPTH	1178m	24 HR PROG	1178m	CUM. COSTS	\$337,785
RIG	OD&E # 30	FORMATION		PTD	1622m	DAILY COSTS	\$337,784.94
OP's TO 06:00	Nipple up BOP's, Rig move 7Klm						
REMARKS:	BOP stack too large for "B" section hookup, need to modify flowline severely, hopefully can procede with this stackup						
LAST CASING	7 "	SET AT	1209.8m	LOT		MAASP	
		BOP TEST	NIL	TEST DUE			
AFD's: 461	SAFETY	1. Prespud operations and environmental guidelines				WEATHER AM	Overcast, Bleak
		2.					PM

BIT INFORMATION						MUD PROPERTIES		OPERATION		HRS	CUM					
WOB(kLb)		JET V(fps)		#N/A		TOOL		LENGTH		Time		1. Air Rig up				
RPM		H S I		#N/A						Depth (m)		2. Casing				
BIT NUMBER		#N/A								Temp (° C)		3. Cementing				
Size (in)		#N/A								Mud Type		4. Circ & Condition				
Make		#N/A								Density (ppg)		5. Coring				
Type		#N/A								ECD (ppg)		6. Drill Out				
IADC Code		#N/A								Viscosity (sec)		7. Drilling				
Serial Number		#N/A								PV / YP (cp/lb)		8. Handle BHA				
Nozzles		#N/A								Gells (s/m)		9. LOT / FIT				
Depth In (m)										API Filt. (cc)		10. Nipple up BOP's		8.0	8.0	
Depth Out (m)		#N/A								Cake (/32")		11. P & A				
Total Metres		#N/A								Solids (% Vol)		12. Repairs				
Hours		#N/A								Sand (% Vol)		13. Rig Service				
ROP		#N/A								MBT		14. Safety				
Condition Out				#N/A		BHA LENGTH (m)						pH (strip)		15. Survey		
FLOW DATA				BHA WEIGHT(kLb)						Chlorides (mg/l)		16. Test BOP				
CIRC. RATE (gpm)								STRING WT (kLb)						17. Tight hole / Fishing		
AV - DP (fpm)				#N/A				HOOK LOAD (kLb)						18. Tripping		
AV - DC (fpm)				#N/A				WT BELOW JARS (kLb)						19. Wait on Cement		
SPP (psi)								DRAG UP (kLb)						20. Wash / Ream		
SPP (calculated)								DRAG DOWN (kLb)						21. Well Control		
PUMP #1				PUMP #2				TORQUE ON (Amps/Rel.)						22. Well Test		
GD PZ-8				GD PZ-8				TORQUE OFF (Amps/Rel.)						23. Wiper Trip		
RATE				RATE				ENVIRONMENTAL DATA						24. Wireline		
LINER		5.5"		LINER		5.5"		FUEL ON SITE				11500 Litres		25. Other		
STROKE		8.0"		STROKE		8.0"		DAILY USAGE				4000 Litres		TOTALS		
								CUM. FUEL USED				4000 Litres		8.0		8.0
SURVEYS								CUM. MUD MIXED						DAILY MUD COSTS		\$348.94
								CUM. MUD LOSSES						CUM. MUD COSTS		\$348.94
								CUM. GEL						EST. COST - C&S		\$1,004,235
								CUM. BARITES						EST. COST - P&A		\$897,635
														EST. COST - C&C		

HOURLY OPERATIONS SUMMARY 0000 to 2400

[illegible]

SUPERVISOR: Barry Beetson

GEOLOGIST: Doug Short

MUD CO: HALLIBURTON

Dunbar 1 DW 1 REPORT #1

20/03/01

REPORT # 2

WELL	Dunbar 1 DW 1	24:00 DEPTH	1178m	24 HR PROG		CUM. COSTS	\$402,984				
RIG	OD&E # 30	FORMATION		PTD	1622m	DAILY COSTS	\$65,198.82				
OP's TO 06:00	Pressure testing pipe ramsand hydril at 1158m										
REMARKS:	Tong jaws arriving ex TWBA this morning										
LAST CASING	7 "	SET AT	1209.8m	LOT		MAASP		BOP TEST	20/03/01	TEST DUE	03/04/01
AFD's: 462	SAFETY	1. Nippling up BOP's							WEATHER AM	Overcast, fine	
		2. Picking up drillpipe								PM	Overcast, raining

BIT INFORMATION				BHA # 1		MUD PROPERTIES		OPERATION	HRS	CUM
WOB(kLb)		JET V(fps)		TOOL	LENGTH	Time 2100		1. Air Rig up		
RPM		H S I		Bit	0.25	Depth (m) 1178		2. Casing		
BIT NUMBER		1		Bit Sub	0.92	Temp (° C)		3. Cementing		
Size (in)		6.0		30 x 3.5" HWDP	279.40	Mud Type		4. Circ & Condition		
Make		HTC				Density (ppg) 8.50		5. Coring		
Type		STR-09D				ECD (ppg)		6. Drill Out		
IADC Code		437				Viscosity (sec) 60		7. Drilling		
Serial Number		B09ZW				PV / YP (cp/lb)		8. Handle BHA		
Nozzles		12,12,12				Gells (s/m)		9. LOT / FIT		
Depth In (m)						API Filt. (cc)		10. Nipple up BOP's	11.5	19.5
Depth Out (m)						Cake (/32")		11. P & A		
Total Metres						Solids (% Vol)		12. Repairs	2.0	2.0
Hours						Sand (% Vol)		13. Rig Service		
ROP						MBT		14. Safety		
Condition Out				BHA LENGTH (m)	280.57	pH (strip) 9.5		15. Survey		
FLOW DATA				BHA WEIGHT(kLb)	17.4	Chlorides (mg/l)		16. Test BOP	3.5	3.5
CIRC. RATE (gpm)				STRING WT (kLb)	13.1	KCL (%) 4		17. Tight hole / Fishing		
AV - DP (fpm)				HOOK LOAD (kLb)	40.0	PHPA (ppb)		18. Tripping	5.0	5.0
AV - DC (fpm)				WT BELOW JARS (kLb)		ALC - 50 (K)		19. Wait on Cement		
SPP (psi)				DRAG UP (kLb)		Circ. Vol. (Bbl) 480		20. Wash / Ream		
SPP (calculated)				DRAG DOWN (kLb)		CHEMICAL USAGE		21. Well Control		
PUMP #1		PUMP #2		TORQUE ON (Amps/Rel.)		Caustic Potash	1	22. Well Test		
GD PZ-8		GD PZ-8		TORQUE OFF (Amps/Rel.)		KCL	140	23. Wiper Trip		
RATE		RATE		ENVIRONMENTAL DATA		PAC-R	8	24. Wireline		
LINER	5.5"	LINER	5.5"	FUEL ON SITE	9500 Litres	PHPA - DP	12	25. Other	2.0	2.0
STROKE	8.0"	STROKE	8.0"	DAILY USAGE	2000 Litres			TOTALS		24.0 32.0
				CUM. FUEL USED	6000 Litres			DAILY MUD COSTS		\$4,968.82
SURVEYS				CUM. MUD MIXED	480 Bbls			CUM. MUD COSTS		\$5,317.76
				CUM. MUD LOSSES				EST. COST - C&S		\$1,004,235
				CUM. GEL				EST. COST - P&A		\$897,635
				CUM. BARITES				EST. COST - C&C		

HOURLY OPERATIONS SUMMARY 0000 to 2400

[illegible]

SUPERVISOR: Barry Beetson

GEOLOGIST: Doug Short

MUD CO: HALLIBURTON

Dunbar 1 DW 1 REPORT #2

21/03/01

REPORT # 3

WELL	Dunbar 1 DW 1	24:00 DEPTH	1217m	24 HR PROG	2m	CUM. COSTS	\$450,450				
RIG	OD&E # 30	FORMATION	Paaratte	PTD	1622m	DAILY COSTS	\$47,466.17				
OP's TO 06:00	Directionally drilling at 1236m										
REMARKS:	Kickoff went OK										
LAST CASING	7 "	SET AT	1209.8m	LOT	10.1ppg	MAASP	300psi	BOP TEST	20/03/01	TEST DUE	03/04/01
AFD's: 463	SAFETY	1. Handling tubulars							WEATHER AM	Overcast raining	
		2. wireline								PM	Overcast raining

BIT INFORMATION				BHA # 2		MUD PROPERTIES		OPERATION	HRS	CUM
WOB(kLb)	2	JET V(fps)	204	TOOL	LENGTH	Time 2400		1. Air Rig up		
RPM	105	H S I	1.40	Bit	0.25	Depth (m) 1217		2. Casing		
BIT NUMBER		1		4 3/4" Motor, 1.15 Str	5.96	Temp (° C)		3. Cementing		
Size (in)		6.0		Float Sub	0.76	Mud Type KCL/PHPA		4. Circ & Condition	2.5	2.5
Make		HTC		5.5" String Stabilizer	1.52	Density (ppg) 8.60		5. Coring		
Type		STR-09D		NonMag Dbl Pin Sub	0.63	ECD (ppg)		6. Drill Out	2.5	2.5
IADC Code		437		Hang Off Collar	9.56	Viscosity (sec) 50		7. Drilling	1.5	1.5
Serial Number		BO9ZW		4 3/4" UBHO Sub	0.59	PV / YP (cp/lb)		8. Handle BHA	2.0	2.0
Nozzles		12,12,12		Pony Flex NM DC	6.19	Gells (s/m)		9. LOT / FIT		
Depth In (m)		1215		27 x HWDP	251.60	API Filt. (cc)		10. Nipple up BOP's		19.5
Depth Out (m)		IN		Dailey Jars	9.09	Cake (/32")		11. P & A		
Total Metres		2		8 x HWDP	73.27	Solids (% Vol)		12. Repairs		2.0
Hours		1.5				Sand (% Vol)		13. Rig Service		
ROP		1.3				MBT		14. Safety		
Condition Out				BHA LENGTH (m)	359.42	pH (strip) 10		15. Survey	4.5	4.5
FLOW DATA				BHA WEIGHT(kLb)	24.4	Chlorides (mg/l)		16. Test BOP	2.0	5.5
CIRC. RATE (gpm)		211		STRING WT (kLb)	65.6	KCL (%) 4		17. Tight hole / Fishing		
AV - DP (fpm)		193		HOOK LOAD (kLb)	70.0	PHPA (ppb)		18. Tripping	7.0	12.0
AV - DC (fpm)		193		WT BELOW JARS (kLb)		ALC - 50 (K)		19. Wait on Cement		
SPP (psi)		1100		DRAG UP (kLb)	1.0	Circ. Vol. (Bbl) 600		20. Wash / Ream		
SPP (calculated)				DRAG DOWN (kLb)	1.0	CHEMICAL USAGE		21. Well Control		
PUMP #1		PUMP #2		TORQUE ON (Amps/Rel.)		Barite	10	22. Well Test		
GD PZ-8		GD PZ-8		TORQUE OFF (Amps/Rel.)		KCL	35	23. Wiper Trip		
RATE		90		ENVIRONMENTAL DATA		PAC-R	2	24. Wireline		
LINER		5.5"		FUEL ON SITE 19000 Litres		PHPA - DP	4	25. Other	2.0	4.0
STROKE		8.0"		DAILY USAGE 3500 Litres				TOTALS	24.0	56.0
				CUM. FUEL USED 9500 Litres				DAILY MUD COSTS		\$1,426.17
SURVEYS				CUM. MUD MIXED 600 Bbls				CUM. MUD COSTS		\$6,743.93
0.29;38.4° at 300m		1.4;97.1° at 1205.9m		CUM. MUD LOSSES				EST. COST - C&S		\$1,004,235
.25;44.78° at 600m				CUM. GEL				EST. COST - P&A		\$897,635
.5;61.37° at 900m				CUM. BARITES 250 kg				EST. COST - C&C		

HOURLY OPERATIONS SUMMARY 0000 to 2400

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Dunbar 1 DW 1 REPORT #3

22/03/01

REPORT # 4

WELL	Dunbar 1 DW 1	24:00 DEPTH	1395m	24 HR PROG	178m	CUM. COSTS	\$500,005				
RIG	OD&E # 30	FORMATION	Belfast	PTD	1622m	DAILY COSTS	\$49,554.95				
OP's TO 06:00	Directionally drilling at 1457m										
REMARKS:	Should intersect Waarre at 0900hrs apprx										
LAST CASING	7 "	SET AT	1209.8m	LOT	10.1ppg	MAASP	269psi	BOP TEST	20/03/01	TEST DUE	03/04/01
AFD's: 464	SAFETY	1. Blow out prevention							WEATHER AM	Overcast, raining	
		2. Blowout prevention								PM	Overcast, showers

BIT INFORMATION				BHA # 2		MUD PROPERTIES		OPERATION	HRS	CUM
WOB(kLb)	15	JET V(fps)	238	TOOL	LENGTH	Time 2400		1. Air Rig up		
RPM	165	H S I	2.26	Bit	0.25	Depth (m) 1395		2. Casing		
BIT NUMBER		1		4 3/4" Motor, 1.15 Str	5.96	Temp (° C)		3. Cementing		
Size (in)		6.0		Float Sub	0.76	Mud Type KCL/PHPA		4. Circ & Condition		2.5
Make		HTC		5.5" String Stabilizer	1.52	Density (ppg) 8.75		5. Coring		
Type		STR-09D		NonMag Dbl Pin Sub	0.63	ECD (ppg) 9.46		6. Drill Out		2.5
IADC Code		437		Hang Off Collar	9.56	Viscosity (sec) 48		7. Drilling	20.5	22.0
Serial Number		BO9ZW		4 3/4" UBHO Sub	0.59	PV / YP (cp/lb) 15 / 20		8. Handle BHA		2.0
Nozzles		12,12,12		Pony Flex NM DC	6.19	Gells (s/m) 2 / 4		9. LOT / FIT		
Depth In (m)		1215		27 x HWDP	251.60	API Filt. (cc) 8		10. Nipple up BOP's		19.5
Depth Out (m)		IN		Dailey Jars	9.09	Cake (/32") 1		11. P & A		
Total Metres		180		8 x HWDP	73.27	Solids (% Vol) 1		12. Repairs		2.0
Hours		22				Sand (% Vol) tr		13. Rig Service	0.5	0.5
ROP		8.2				MBT		14. Safety		
Condition Out				BHA LENGTH (m)	359.42	pH (strip) 9.5		15. Survey	2.5	7.0
FLOW DATA				BHA WEIGHT(kLb)	24.3	Chlorides (mg/l) 20000		16. Test BOP		5.5
CIRC. RATE (gpm)		246		STRING WT (kLb)	74.0	KCL (%) 4.1		17. Tight hole / Fishing		
AV - DP (fpm)		127		HOOK LOAD (kLb)	75.0	PHPA (ppb) 1.5		18. Tripping		12.0
AV - DC (fpm)		225		WT BELOW JARS (kLb)		ALC - 50 (K) 100		19. Wait on Cement		
SPP (psi)		2000		DRAG UP (kLb)	4.0	Circ. Vol. (Bbl) 545		20. Wash / Ream		
SPP (calculated)		1650		DRAG DOWN (kLb)	4.0	CHEMICAL USAGE		21. Well Control		
PUMP #1		PUMP #2		TORQUE ON (Amps/Rel.)	450	AQUAGEL	15	22. Well Test		
GD PZ-8		GD PZ-8		TORQUE OFF (Amps/Rel.)	250	PAC-R	5	23. Wiper Trip		
RATE		105		ENVIRONMENTAL DATA				24. Wireline		
LINER		5.5"		FUEL ON SITE 16000 Litres				25. Other	0.5	4.5
STROKE		8.0"		DAILY USAGE 3000 Litres				TOTALS		24.0 80.0
SCR: 380 @ 60		SCR: 630 @ 60		CUM. FUEL USED 12500 Litres				DAILY MUD COSTS \$1,022.95		
SURVEYS				CUM. MUD MIXED 625 Bbls				CUM. MUD COSTS \$7,766.88		
8.1;327.7° at 1253m 28.7;317.9° at 1446.7m				CUM. MUD LOSSES 10 Bbls				EST. COST - C&S \$1,004,235		
17.6;314.2° at 1311.4m				CUM. GEL 375 kg				EST. COST - P&A \$897,635		
28.6;314.4° at 1378.4m				CUM. BARITES 250 kg				EST. COST - C&C		

HOURLY OPERATIONS SUMMARY 0000 to 2400[illegible]

SUPERVISOR: Barry Beetson

GEOLOGIST: Doug Short

MUD CO: HALLIBURTON

Dunbar 1 DW 1 REPORT #4

23/03/01

REPORT # 5

WELL	Dunbar 1 DW 1	24:00 DEPTH	1636m	24 HR PROG	241m	CUM. COSTS	\$549,723				
RIG	OD&E # 30	FORMATION	Eumeralla	PTD	1622m	DAILY COSTS	\$49,718.12				
OP's TO 06:00	Layout directional tools										
REMARKS:	TD at 2300hrs,23-3-01										
LAST CASING	7 "	SET AT	1209.8m	LOT	10.1ppg	MAASP	197psi	BOP TEST	20/03/01	TEST DUE	03/04/01
AFD's: 465	SAFETY	1. Planning ahead						WEATHER AM	Fine		
		2. Planning ahead							PM	Fine	

BIT INFORMATION				BHA # 2		MUD PROPERTIES		OPERATION	HRS	CUM		
WOB(kLb)	15	JET V(fps)	238	TOOL		Time		2400	1. Air Rig up			
RPM	185	H S I	2.35	Bit		Depth (m)		1636	2. Casing			
BIT NUMBER		1		4 3/4" Motor, 1.15 Str		Temp (° C)			3. Cementing			
Size (in)		6.0		Float Sub		Mud Type		KCL/PHPA	4. Circ & Condition	0.5	3.0	
Make		HTC		5.5" String Stabilizer		Density (ppg)		9.10	5. Coring			
Type		STR-09D		NonMag Dbl Pin Sub		ECD (ppg)		9.87	6. Drill Out		2.5	
IADC Code		437		Hang Off Collar		Viscosity (sec)		47	7. Drilling	23.0	45.0	
Serial Number		BO9ZW		4 3/4" UBHO Sub		PV / YP (cp/lb)		17 / 22	8. Handle BHA		2.0	
Nozzles		12,12,12		Pony Flex NM DC		Gells (s/m)		2 / 4	9. LOT / FIT			
Depth In (m)		1209		27 x HWDP		API Filt. (cc)		6.5	10. Nipple up BOP's		19.5	
Depth Out (m)		1636		Dailey Jars		Cake (/32")		1	11. P & A			
Total Metres		427		8 x HWDP		Solids (% Vol)		3.5	12. Repairs		2.0	
Hours		45				Sand (% Vol)		tr	13. Rig Service		0.5	
ROP		9.5				MBT			14. Safety			
Condition Out 3 4 WT A E 1 ER TD				BHA LENGTH (m)		359.42		pH (strip)	9.5	15. Survey	7.0	
FLOW DATA				BHA WEIGHT(kLb)		24.2		Chlorides (mg/l)	19000	16. Test BOP	5.5	
CIRC. RATE (gpm)		246		STRING WT (kLb)		85.0		KCL (%)	4	17. Tight hole / Fishing		
AV - DP (fpm)		127		HOOK LOAD (kLb)		85.0		PHPA (ppb)	1.5	18. Tripping	0.5	12.5
AV - DC (fpm)		225		WT BELOW JARS (kLb)				ALC - 50 (K)	100	19. Wait on Cement		
SPP (psi)		2150		DRAG UP (kLb)		6.0		Circ. Vol. (Bbl)	545	20. Wash / Ream		
SPP (calculated)		1950		DRAG DOWN (kLb)		6.0		CHEMICAL USAGE		21. Well Control		
PUMP #1		PUMP #2		TORQUE ON (Amps/Rel.)		100		ALDACIDE-G	1	22. Well Test		
GD PZ-8		GD PZ-8		TORQUE OFF (Amps/Rel.)		80		Barite	175	23. Wiper Trip		
RATE		105		ENVIRONMENTAL DATA				Caustic Potash	1	24. Wireline		
LINER		5.5"		FUEL ON SITE		12500 Litres		KCL	25	25. Other		4.5
STROKE		8.0"		DAILY USAGE		3500 Litres		PAC-R	1	TOTALS	24.0	104.0
SCR: 600 @ 40				CUM. FUEL USED		16000 Litres		PHPA - DP	3	DAILY MUD COSTS	\$2,609.12	
SURVEYS				CUM. MUD MIXED		685 Bbbls				CUM. MUD COSTS	\$10,376.00	
28.01;320.6° at 1494.9m				CUM. MUD LOSSES		20 Bbbls				EST. COST - C&S	\$1,004,235	
28.4;323.02° at 1543.4m				CUM. GEL		375 kg				EST. COST - P&A	\$897,635	
28.3;323.7° at 1582.3m				CUM. BARITES		4625 kg				EST. COST - C&C		

HOURLY OPERATIONS SUMMARY 0000 to 2400

[illegible]

SUPERVISOR: Barry Beetson

GEOLOGIST: Doug Short

MUD CO: HALLIBURTON

Dunbar 1 DW 1 REPORT #5

24/03/01

REPORT # 6

WELL	Dunbar 1 DW 1	24:00 DEPTH	1636m	24 HR PROG		CUM. COSTS	\$618,046				
RIG	OD&E # 30	FORMATION	Eumeralla	PTD	1622m	DAILY COSTS	\$68,322.67				
OP's TO 06:00	Running 2 7/8" production tubing										
REMARKS:	Incorrect 2 7/8" elevators on location, awaiting elevators										
LAST CASING	7 "	SET AT	1209.8m	LOT	10.1ppg	MAASP	197psi	BOP TEST	20/03/01	TEST DUE	03/04/01
AFD's: 466	SAFETY	1. Radioactive sources							WEATHER AM	Overcast, showers	
		2. Layout drillstring								PM	Fine,cool

BIT INFORMATION				BHA # 3		MUD PROPERTIES		OPERATION	HRS	CUM
WOB(kLb)		JET V(fps)		TOOL	LENGTH	Time 1730		1. Air Rig up		
RPM		H S I		Bit	0.25	Depth (m) 1636		2. Casing		
BIT NUMBER				Bit Sub	0.92	Temp (° C)		3. Cementing		
Size (in)				27 x 3.5" HWDP	251.60	Mud Type KCL/PHPA		4. Circ & Condition	2.0	5.0
Make				Drilling Jars	9.09	Density (ppg) 9.10		5. Coring		
Type				8 x 3.5"HWDP	73.27	ECD (ppg)		6. Drill Out		2.5
IADC Code						Viscosity (sec) 47		7. Drilling		45.0
Serial Number						PV / YP (cp/lb) 17 / 22		8. Handle BHA	1.5	3.5
Nozzles						Gells (s/m) 2 / 4		9. LOT / FIT		
Depth In (m)						API Filt. (cc) 6.5		10. Nipple up BOP's		19.5
Depth Out (m)						Cake (/32") 1		11. P & A		
Total Metres						Solids (% Vol) 3.5		12. Repairs		2.0
Hours						Sand (% Vol) tr		13. Rig Service		0.5
ROP						MBT		14. Safety		
Condition Out				BHA LENGTH (m)	335.13	pH (strip) 9.5		15. Survey		7.0
FLOW DATA				BHA WEIGHT(kLb)	21.2	Chlorides (mg/l) 19000		16. Test BOP		5.5
CIRC. RATE (gpm)				STRING WT (kLb)	72.0	KCL (%) 4		17. Tight hole / Fishing		
AV - DP (fpm)				HOOK LOAD (kLb)	83.0	PHPA (ppb) 1.5		18. Tripping	11.0	23.0
AV - DC (fpm)				WT BELOW JARS (kLb)	15.5	ALC - 50 (K) 100		19. Wait on Cement		
SPP (psi)		1200		DRAG UP (kLb)	5.0	Circ. Vol. (Bbl) 545		20. Wash / Ream		
SPP (calculated)				DRAG DOWN (kLb)	5.0	CHEMICAL USAGE		21. Well Control		
PUMP #1		PUMP #2		TORQUE ON (Amps/Rel.)		AQUAGEL	5	22. Well Test		
GD PZ-8		GD PZ-8		TORQUE OFF (Amps/Rel.)		Barite	40	23. Wiper Trip	1.5	2.0
RATE		RATE		ENVIRONMENTAL DATA		PAC-R	1	24. Wireline	7.0	7.0
LINER	5.5"	LINER	5.5"	FUEL ON SITE	10000 Litres			25. Other	1.0	5.5
STROKE	8.0"	STROKE	8.0"	DAILY USAGE	2500 Litres			TOTALS	24.0	128.0
				CUM. FUEL USED	18500 Litres			DAILY MUD COSTS \$562.67		
SURVEYS				CUM. MUD MIXED	685 Bbls			CUM. MUD COSTS \$10,938.67		
				CUM. MUD LOSSES	20 Bbls			EST. COST - C&S \$1,004,235		
				CUM. GEL	500 kg			EST. COST - P&A \$897,635		
				CUM. BARITES	5625 kg			EST. COST - C&C		

HOURLY OPERATIONS SUMMARY 0000 to 2400

[illegible]

Dunbar 1 DW 1 REPORT #6

25/03/01

REPORT # 7

WELL	Dunbar 1 DW 1	24:00 DEPTH	1636m	24 HR PROG		CUM. COSTS	\$684,311				
RIG	OD&E # 30	FORMATION		PTD	1622m	DAILY COSTS	\$66,265.23				
OP's TO 06:00	Installing xmas tree										
REMARKS:	should be released at 0700hrs, Doug and Ben out 1400hrs Sunday, PBSD at 1624m										
LAST CASING	2 7/8"	SET AT	1634.5m	LOT		MAASP		BOP TEST	20/03/01	TEST DUE	03/04/01
AFD's: 467	SAFETY	1. Tubing						WEATHER AM	Overcast, showers		
		2. cementing							PM	Fine, cool	

BIT INFORMATION				BHA # 40		MUD PROPERTIES		OPERATION	HRS	CUM
WOB(kLb)		JET V(fps)	193	TOOL	LENGTH	Time 1600		1. Air Rig up		
RPM		H S I				Depth (m) 1636		2. Casing	12.5	12.5
BIT NUMBER						Temp (° C)		3. Cementing	2.0	2.0
Size (in)						Mud Type KCL/PHPA		4. Circ & Condition	0.5	5.5
Make						Density (ppg) 9.10		5. Coring		
Type						ECD (ppg)		6. Drill Out		2.5
IADC Code						Viscosity (sec) 47		7. Drilling		45.0
Serial Number						PV / YP (cp/lb) 17 / 22		8. Handle BHA		3.5
Nozzles						Gells (s/m) 2 / 4		9. LOT / FIT		
Depth In (m)						API Filt. (cc) 6.5		10. Nipple up BOP's	5.5	25.0
Depth Out (m)						Cake (/32") 1		11. P & A		
Total Metres						Solids (% Vol) 3.5		12. Repairs	2.0	4.0
Hours						Sand (% Vol) tr		13. Rig Service		0.5
ROP						MBT		14. Safety		
Condition Out				BHA LENGTH (m)		pH (strip) 10		15. Survey		7.0
FLOW DATA				BHA WEIGHT(kLb)		Chlorides (mg/l) 19000		16. Test BOP		5.5
CIRC. RATE (gpm)		199		STRING WT (kLb)		KCL (%) 4		17. Tight hole / Fishing		
AV - DP (fpm)		68		HOOK LOAD (kLb)		PHPA (ppb) 1.5		18. Tripping	1.0	24.0
AV - DC (fpm)		68		WT BELOW JARS (kLb)		ALC - 50 (K) 100		19. Wait on Cement		
SPP (psi)				DRAG UP (kLb) 40.0		Circ. Vol. (Bbl) 550		20. Wash / Ream		
SPP (calculated)				DRAG DOWN (kLb) 43.0		CHEMICAL USAGE		21. Well Control		
PUMP #1		PUMP #2		TORQUE ON (Amps/Rel.)		Caustic Potash 1		22. Well Test		
GD PZ-8		GD PZ-8		TORQUE OFF (Amps/Rel.)		KCL 25		23. Wiper Trip		2.0
RATE 85		RATE		ENVIRONMENTAL DATA		SAPP 6		24. Wireline		7.0
LINER 5.5"		LINER 5.5"		FUEL ON SITE 8000 Litres				25. Other	0.5	6.0
STROKE 8.0"		STROKE 8.0"		DAILY USAGE 2000 Litres				TOTALS		24.0 152.0
				CUM. FUEL USED 20500 Litres				DAILY MUD COSTS		\$735.23
SURVEYS				CUM. MUD MIXED 685 Bbls				CUM. MUD COSTS		\$11,673.90
				CUM. MUD LOSSES 30 Bbls				EST. COST - C&S		\$1,004,235
				CUM. GEL 500 kg				EST. COST - P&A		\$897,635
				CUM. BARITES 5625 kg				EST. COST - C&C		

HOURLY OPERATIONS SUMMARY 0000 to 2400

[illegible]

SUPERVISOR: Barry Beetson

GEOLOGIST: Doug Short

MUD CO: HALLIBURTON

Dunbar 1 DW 1 REPORT #7

WELL	Dunbar 1 DW 1	24:00 DEPTH	1636m	24 HR PROG	0m	CUM. COSTS	\$728,559				
RIG	OD&E # 30	FORMATION		PTD	1622m	DAILY COSTS	\$44,248.00				
OP's TO 06:00	Rig down and move										
REMARKS:	rig released at 0700hrs, 26-3-01										
LAST CASING	2 7/8"	SET AT	1634.5m	LOT	0.0ppg	MAASP		BOP TEST	20/03/01	TEST DUE	03/04/01
AFD's: 468	SAFETY	1.							WEATHER AM	Overcast, cold	
		2.								PM	Showers, cold

BIT INFORMATION						MUD PROPERTIES		OPERATION		HRS	CUM
WOB(kLb)	0	JET V(fps)		TOOL	LENGTH	Time		1. Air Rig up			0.0
RPM	0	H S I				Depth (m)		2. Casing			12.5
BIT NUMBER			0			Temp (° C)		3. Cementing			2.0
Size (in)						Mud Type		4. Circ & Condition			5.5
Make						Density (ppg) 0.00		5. Coring			0.0
Type						ECD (ppg)		6. Drill Out			2.5
IADC Code						Viscosity (sec)		7. Drilling			45.0
Serial Number						PV / YP (cp/lb)		8. Handle BHA			3.5
Nozzles						Gells (s/m)		9. LOT / FIT			0.0
Depth In (m)						API Filt. (cc)		10. Nipple up BOP's		2.0	27.0
Depth Out (m)						Cake (/32")		11. P & A			0.0
Total Metres						Solids (% Vol)		12. Repairs			4.0
Hours						Sand (% Vol)		13. Rig Service			0.5
ROP						MBT		14. Safety			0.0
Condition Out				BHA LENGTH (m)		0.00	pH (strip)	15. Survey			7.0
FLOW DATA				BHA WEIGHT(kLb)		0.0	Chlorides (mg/l)	16. Test BOP			5.5
CIRC. RATE (gpm)		0		STRING WT (kLb)			KCL (%)	17. Tight hole / Fishing			0.0
AV - DP (fpm)		0		HOOK LOAD (kLb)			PHPA (ppb)	18. Tripping			24.0
AV - DC (fpm)		0		WT BELOW JARS (kLb)		0.0	ALC - 50 (K)	19. Wait on Cement			0.0
SPP (psi)				DRAG UP (kLb)			Circ. Vol. (Bbl)	20. Wash / Ream			0.0
SPP (calculated)				DRAG DOWN (kLb)			CHEMICAL USAGE		21. Well Control		0.0
PUMP #1		PUMP #2		TORQUE ON (Amps/Rel.)				22. Well Test			0.0
GD PZ-8		GD PZ-8		TORQUE OFF (Amps/Rel.)				23. Wiper Trip			2.0
RATE 0		RATE 0		ENVIRONMENTAL DATA				24. Wireline			7.0
LINER 5.5"		LINER 5.5"		FUEL ON SITE 7000 Litres				25. Other		5.0	11.0
STROKE 8.0"		STROKE 8.0"		DAILY USAGE 1000 Litres				TOTALS		7.0	159.0
				CUM. FUEL USED 21500 Litres				DAILY MUD COSTS			
				CUM. MUD MIXED 685 Bbls				CUM. MUD COSTS \$11,673.90			
				CUM. MUD LOSSES 30 Bbls				EST. COST - C&S \$1,004,235			
				CUM. GEL 500 kg				EST. COST - P&A \$897,635			
				CUM. BARITES 5625 kg				EST. COST - C&C \$0			

HOURLY OPERATIONS SUMMARY 0000 to 2400

[illegible]

SUPERVISOR: Barry Beetson

GEOLOGIST:

MUD CO: HALLIBURTON

APPENDIX 2 - DW1 DAILY COMPLETION REPORTS

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Dunbar 1DW 1	REPORT No.:	1
DATE:	6-4-2001	CONTRACTOR:	Expertest
OBJECTIVE:	To perforate and complete as a 2 7/8" monobore Waarre Formation gas producer		
0700 STATUS:	Rigging to swab well in		

[illegible]

SUPERVISOR: Barry Beetson

DAILY COST \$A: 5500

CUM. COST \$A: _____

BUDGET \$A: _____

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Dunbar 1DW 1	REPORT No.:	2
DATE:	7-4-2001	CONTRACTOR:	Expertest
OBJECTIVE:	To perforate and complete as a 2 7/8" monobore Waarre Formation gas producer		
0700 STATUS:	Rigging to run Pressure survey		

[illegible]

SUPERVISOR: Barry Beetson

DAILY COST \$A:	5500
CUM. COST \$A:	11000
BUDGET \$A:	



PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Dunbar 1DW 1	REPORT No.:	3
DATE:	8-4-01	CONTRACTOR:	Expertest
OBJECTIVE:	To perforate and complete as a 2 7/8" monobore Waarre Formation gas producer		
0700 STATUS:	Pulling Tubing stop		

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
0000	0700	Arrive at location
0700	0715	Hold onsite safety meeting, discuss wet, slippery conditions, slips, trips and falls
0715	0945	Makeup temperature-pressure tool RIH to obtain parameters for perforating system
		Tag tubing stop, POH to 1557m RT, hang for 15min, POH to 1526m, hand for 15mins
		POH
0945	1200	Download data, rig up 21meters lubricator and pressure test to 2000psi, OK, attach
		2.1/8" SDP-2125-402NTX casing guns loaded 6 spf, 60 degree phasing to perforate
		Waarre "A" sand interval 1559.0–1562.0 to 1564.0-1569.0 mRT with micro smart
		programmable firing head
1200	1300	RIH with guns (200'/min max), guns on depth at 1569mtr RT
1300	1330	Wait for sampler to open, wait 4 mins for guns to fire, wait 15 mins to collect firing data
1330	1400	POH with perforating assy. All guns fired, 424 psi wellhead pressure
1400	1500	Rig down lubricator and gun assy.
1500	1545	Rig up to flow down flare line
1545	1745	Flow test well thru 3/4" choke, final flow pressure 1132psi at 29Deg C
1745	1800	Rig down flow line install tree cap, At 1800hrs SITHP 1800 psi
		SDFN
		Final Flowrate calculates at 17.6 MMscfd @ 1132 psig.

SUPERVISOR:	Barry Beetson		DAILY COST \$A:	5500
			CUM. COST \$A:	16500
			BUDGET \$A:	

SUPERVISOR: Barry Beetson

APPENDIX 3 - DW1 DAILY WORKOVER REPORTS

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL :	Dunbar #1	REPORT No. :	1
DATE :	1/7/01	CONTRACTOR :	Expertest
OBJECTIVE :	Bridge plug Waarre 'A' sand and perforate Waare 'C' sand		
0700 STATUS :	R/U and pressure test wellhead and lubricator		

[illegible]

SUPERVISOR : Adrian Stallman

DAILY COST \$A :	6,500
CUM. COST \$A :	6,500
BUDGET \$A :	40,000

SUPERVISOR : Adrian Stallman

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Dunbar #1	REPORT No.:	3
DATE:	3/7/01	CONTRACTOR:	Expertest
OBJECTIVE:	Bridge plug Waarre 'A' sand and perforate Waare 'C' sand		
0700 STATUS:	Continue to fill well to 260mRT with water.		

[illegible]

SUPERVISOR : Adrian Stallman

DAILY COST \$A :	7,800
CUM. COST \$A :	22,800
BUDGET \$A :	40,000

SUPERVISOR: Adrian Stallman

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Dunbar #1	REPORT No.:	5
DATE:	5/7/01	CONTRACTOR:	Expertest
OBJECTIVE:	Bridge plug Waarre 'A' sand and perforate Waarre 'C' sand		
0700 STATUS:	Job Complete		

[illegible]

SUPERVISOR: Adrian Stallman

DAILY COST \$A:	8,700
CUM. COST \$A:	38,200
BUDGET \$A:	40,000

APPENDIX 4 - DW1 DAILY ABANDONMENT REPORTS



COMPLETION / WORKOVER DAILY REPORT

WELL:	Dunbar 1	REPORT No.:	01
DATE:	4-06-2008	CONTRACTOR:	HES/SGS
WEATHER:	Fine	LTI FREE DAYS:	
OBJECTIVE:	Plug and abandon well		
0700 STATUS:			

[illegible]

CUM. INJECTED WATER		CUM. FOAM USED		RIG TRAVEL HOURS	
CUM. PRODUCED WATER		FUEL ON SITE		RIG STANDBY HOURS	
NET WATER LOSS		FUEL DAILY USAGE		RIG REPAIR HOURS	
H ₂ O DELIVERED TO SITE		CREW TRAVEL HRS.		RIG WORKING HOURS	

SUPERVISOR: Ben Corbett
CONTACT NUMBER: 0427 692 909

DAILY COST \$A: _____
CUM. COST \$A: _____
BUDGET \$A: _____



COMPLETION / WORKOVER DAILY REPORT

WELL:	Dunbar 1	REPORT No.:	02
DATE:	5-06-2008	CONTRACTOR:	HES/SGS
WEATHER:	Scattered showers	LTI FREE DAYS:	
OBJECTIVE:	Plug and abandon well		
0700 STATUS:			

[illegible]

CUM. INJECTED WATER		CUM. FOAM USED		RIG TRAVEL HOURS	
CUM. PRODUCED WATER		FUEL ON SITE		RIG STANDBY HOURS	
NET WATER LOSS		FUEL DAILY USAGE		RIG REPAIR HOURS	
H ₂ O DELIVERED TO SITE		CREW TRAVEL HRS.		RIG WORKING HOURS	

SUPERVISOR: Ben Corbett
CONTACT NUMBER: 0427 692 909

DAILY COST \$A: _____
CUM. COST \$A: _____
BUDGET \$A: _____



COMPLETION / WORKOVER DAILY REPORT

WELL:	Dunbar 1	REPORT No.:	03
DATE:	6-06-2008	CONTRACTOR:	HES/SGS
WEATHER:	Fine	LTI FREE DAYS:	
OBJECTIVE:	Plug and abandon well		
0700 STATUS:			

[illegible]

CUM. INJECTED WATER		CUM. FOAM USED		RIG TRAVEL HOURS	
CUM. PRODUCED WATER		FUEL ON SITE		RIG STANDBY HOURS	
NET WATER LOSS		FUEL DAILY USAGE		RIG REPAIR HOURS	
H ₂ O DELIVERED TO SITE		CREW TRAVEL HRS.		RIG WORKING HOURS	

SUPERVISOR: Ben Corbett
CONTACT NUMBER: 0427 692 909

DAILY COST \$A: _____
CUM. COST \$A: _____
BUDGET \$A: _____

APPENDIX 5 - SURFACE REHABILITATION PHOTOS

Photos

1. Disinfectant being applied to the earthmoving equipment prior to starting this work.
2. An excavator removing the access road at Dunbar #1 and loading dump trucks. (This rock was used to improve existing roads on the farm. No material left the farm)
3. Dunbar 1 rehabilitated surface according to the wishes of the land owner.
4. Dunbar 1 rehabilitated surface according to the wishes of the land owner.
5. Dunbar 1 rehabilitated surface according to the wishes of the land owner.





APPENDIX 6 - DW1 DEVIATION SURVEY

Well: Dunbar-1 DW-1
Company: Origin Energy Ltd
Co-ordinates: 38 deg 32 min 53.790 sec South
142 deg 54 min 23.117 sec East
Total Correction: 12.060
Dip Angle: -69.813
North Reference: Grid
Logging Dates: 21/03/01 - 23/03/01
Version of Data: 1
Contractor: Sperry-Sun
Survey Type: MWD
Creation Date: 23-03-01

Warranty:

Sperry-Sun Drilling Services will use its best efforts to provide customers with accurate information and interpretation that are part of, and incidental to, the services provided. However, Sperry-Sun Drilling services cannot and does not warrant the accuracy or correctness of such information and interpretation. Under no circumstances should any such information or interpretation be relied upon as the sole basis for any drilling, completion and production procedures, and all other activities related to drilling, completion, production, or financial decision or any procedure involving any risk to the safety of any drilling venture, drilling rig, its crew or any third party. The customer has full responsibility for all drilling, completion and production procedures, and all other activities relating to drilling, completion, or production operation. Sperry-Sun Drilling Services makes no warranties, either express or implied, including but not limited to the implied warranty of merchantability or fitness for a particular purpose, with respect to the services rendered. In no way shall Sperry-Sun Drilling Services be liable for any damages, resulting from the use of any information or interpretation provided by Sperry-Sun Drilling Services.

Depth	Inc	Azimuth	TVD	N/S Departure	E/W Departure	Vertical Sec	DogLeg Severity
(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(dptm)
0	0.00	360.00	0.00	0.00	0.00	0.00	0.00
60	0.14	45.66	60.00	0.05	0.05	0.01	0.07
90	0.19	43.10	90.00	0.11	0.11	0.02	0.05
120	0.28	42.44	120.00	0.20	0.20	0.03	0.09
150	0.29	43.05	150.00	0.31	0.30	0.05	0.01
180	0.25	42.75	180.00	0.42	0.39	0.07	0.04
210	0.23	48.53	210.00	0.50	0.48	0.08	0.03
240	0.17	49.50	240.00	0.57	0.56	0.09	0.06
270	0.19	45.93	270.00	0.64	0.63	0.09	0.02
300	0.29	38.40	300.00	0.73	0.71	0.11	0.10
330	0.53	39.66	330.00	0.90	0.85	0.15	0.24
360	0.51	54.37	360.00	1.08	1.05	0.17	0.13
390	0.53	39.38	389.99	1.27	1.24	0.19	0.14
420	0.57	35.14	419.99	1.50	1.42	0.26	0.06
450	0.50	38.99	449.99	1.72	1.59	0.32	0.08
480	0.34	44.18	479.99	1.89	1.73	0.36	0.16
510	0.48	33.76	509.99	2.05	1.86	0.41	0.16
540	0.42	46.18	539.99	2.23	2.01	0.45	0.11
570	0.24	50.21	569.99	2.35	2.14	0.46	0.18
600	0.25	44.78	599.99	2.44	2.23	0.47	0.03
630	0.33	50.79	629.99	2.54	2.35	0.47	0.09
660	0.27	47.66	659.99	2.64	2.47	0.48	0.06
690	0.29	29.86	689.99	2.75	2.56	0.51	0.09
720	0.21	37.81	719.99	2.86	2.63	0.55	0.09
750	0.20	38.22	749.99	2.95	2.69	0.57	0.01
780	0.23	50.06	779.99	3.03	2.77	0.58	0.05
810	0.20	45.11	809.99	3.10	2.86	0.59	0.04
840	0.25	61.05	839.99	3.17	2.95	0.58	0.08
870	0.37	53.64	869.99	3.26	3.08	0.57	0.13
900	0.50	61.37	899.99	3.38	3.28	0.54	0.14
930	0.37	54.49	929.98	3.50	3.47	0.51	0.14
960	0.20	75.68	959.98	3.57	3.60	0.48	0.20
990	0.32	67.99	989.98	3.61	3.73	0.43	0.12
1020	0.31	69.90	1019.98	3.67	3.88	0.38	0.01
1050	0.58	87.54	1049.98	3.71	4.11	0.26	0.30
1080	0.77	90.36	1079.98	3.71	4.46	0.04	0.19
1110	0.88	90.79	1109.98	3.71	4.90	-0.24	0.11
1140	1.04	94.50	1139.97	3.68	5.40	-0.57	0.17
1170	1.34	93.71	1169.97	3.64	6.02	-1.00	0.30
1186	1.41	94.61	1185.96	3.61	6.40	-1.27	0.14

1205.5	1.41	97.10	1205.46	3.56	6.88	-1.61	0.09
1224.9	2.69	346.02	1224.85	3.98	7.01	-1.37	5.35
1244.2	6.42	334.79	1244.08	5.39	6.44	0.09	5.92
1253.1	8.17	327.76	1252.91	6.38	5.89	1.20	6.63
1262.9	9.49	323.54	1262.60	7.62	5.04	2.70	4.49
1272.6	11.51	318.97	1272.13	8.99	3.93	4.46	6.76
1282.2	13.01	315.99	1281.51	10.49	2.55	6.50	5.07
1291.9	15.03	315.11	1290.92	12.17	0.90	8.84	6.29
1301.7	16.79	315.11	1300.35	14.07	-1.00	11.51	5.38
1311.4	17.58	314.23	1309.62	16.08	-3.03	14.36	2.57
1321	18.63	315.11	1318.74	18.18	-5.16	17.33	3.40
1330.7	19.78	316.69	1327.90	20.47	-7.37	20.51	3.88
1340.5	21.27	317.22	1337.08	22.98	-9.72	23.94	4.61
1350.2	23.47	315.81	1346.05	25.66	-12.26	27.62	6.99
1359.9	25.65	314.39	1354.87	28.51	-15.11	31.63	6.99
1369.7	27.98	313.61	1363.62	31.58	-18.29	36.02	7.22
1379.4	28.61	314.40	1372.16	34.78	-21.60	40.59	2.28
1388.4	28.83	314.73	1380.05	37.81	-24.68	44.89	0.90
1398.1	28.76	315.45	1388.55	41.12	-27.98	49.54	1.09
1407.7	28.81	315.60	1396.96	44.42	-31.21	54.14	0.28
1417.4	28.89	316.01	1405.46	47.78	-34.48	58.80	0.66
1446.7	28.75	317.95	1431.13	58.10	-44.11	72.90	0.97
1455.9	28.79	317.75	1439.20	61.38	-47.08	77.32	0.35
1465.7	28.56	318.62	1447.79	64.89	-50.22	82.02	1.46
1475.4	28.30	318.80	1456.32	68.36	-53.27	86.63	0.86
1484.9	28.22	319.87	1464.69	71.77	-56.20	91.13	1.62
1494.9	28.01	320.57	1473.51	75.39	-59.21	95.84	1.18
1504.5	28.21	320.38	1481.98	78.88	-62.09	100.37	0.69
1514.3	28.35	320.66	1490.61	82.46	-65.04	105.01	0.59
1524	28.30	321.61	1499.15	86.05	-67.93	109.61	1.40
1533.7	28.30	322.84	1507.69	89.68	-70.75	114.21	1.80
1543.4	28.39	323.02	1516.23	93.36	-73.52	118.81	0.37
1553.1	28.21	323.19	1524.77	97.03	-76.28	123.40	0.60
1562.9	28.12	323.02	1533.41	100.73	-79.06	128.03	0.37
1572.6	28.12	323.19	1541.96	104.39	-81.81	132.59	0.26
1582.3	28.30	323.72	1550.51	108.07	-84.54	137.17	0.94
1619.4	29.53	323.54	1582.98	122.52	-95.17	155.09	1.00

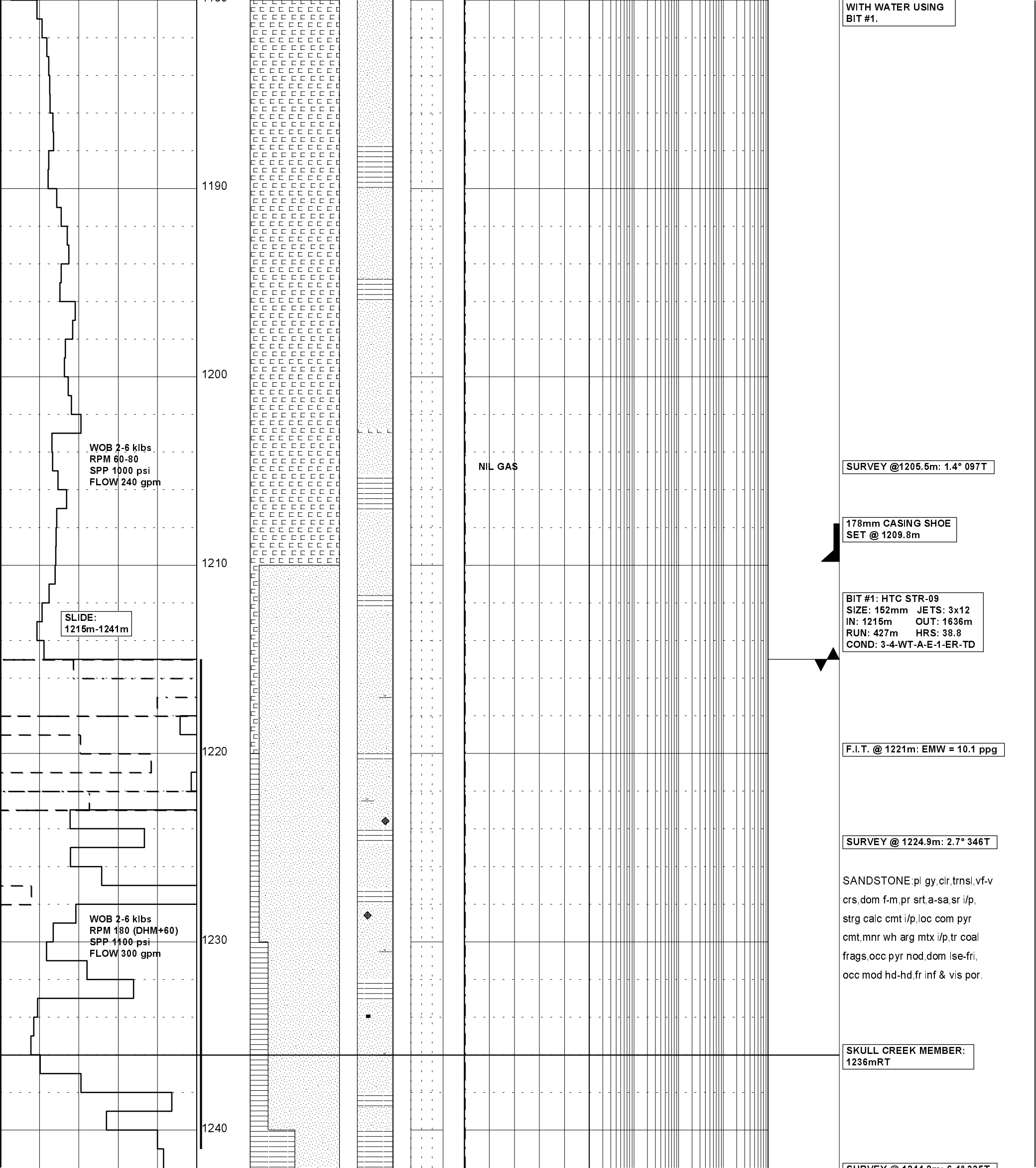
APPENDIX 7 - DW1 WIRELINE LOGS

SPUD DATE	19-03-2001
TD DATE	23-03-2001
TD DRILLER	1636.0mRT
TD WIRELINE	1635.7mRT
LOGGED FROM	1180.0mRT
LOGGED TO	1636.0mRT
STATUS	CASED & SUSPENDED

DEPTH SCALE 1/ 200

W	WEIGHT	lb/gal
MG	MUD GRADIENT	psi/kft
V	VISCOSITY	s/qt
PV	PLASTIC VISCOSITY	Cp
YP	YIELD POINT	
GEL	GEL STRENGTH	lb/cf ²
pH	ACIDITY	lb/cf ²
F	FILTRATE	cm ³ /30
CK	CAKE THICKNESS	in/32
S	SALINITY	kg/m ³
SD	SAND CONTENT	%
O	OIL CONTENT	%
WL	WATER LOSS	cm ³ /30
SOL	SOLIDS CONTENT	%
pF	FILTRATE ALKALINITY	%
GYP	GYPSUM CONTENT	lb/bbl

[illegible]



WITH WATER USING
BIT #1.

SURVEY @1205.5m: 1.4° 097T

178mm CASING SHOE
SET @ 1209.8m

BIT #1: HTC STR-09
SIZE: 152mm JETS: 3x12
IN: 1215m OUT: 1636m
RUN: 427m HRS: 38.8
COND: 3-4-WT-A-E-1-ER-TD

F.I.T. @ 1221m: EMW = 10.1 ppg

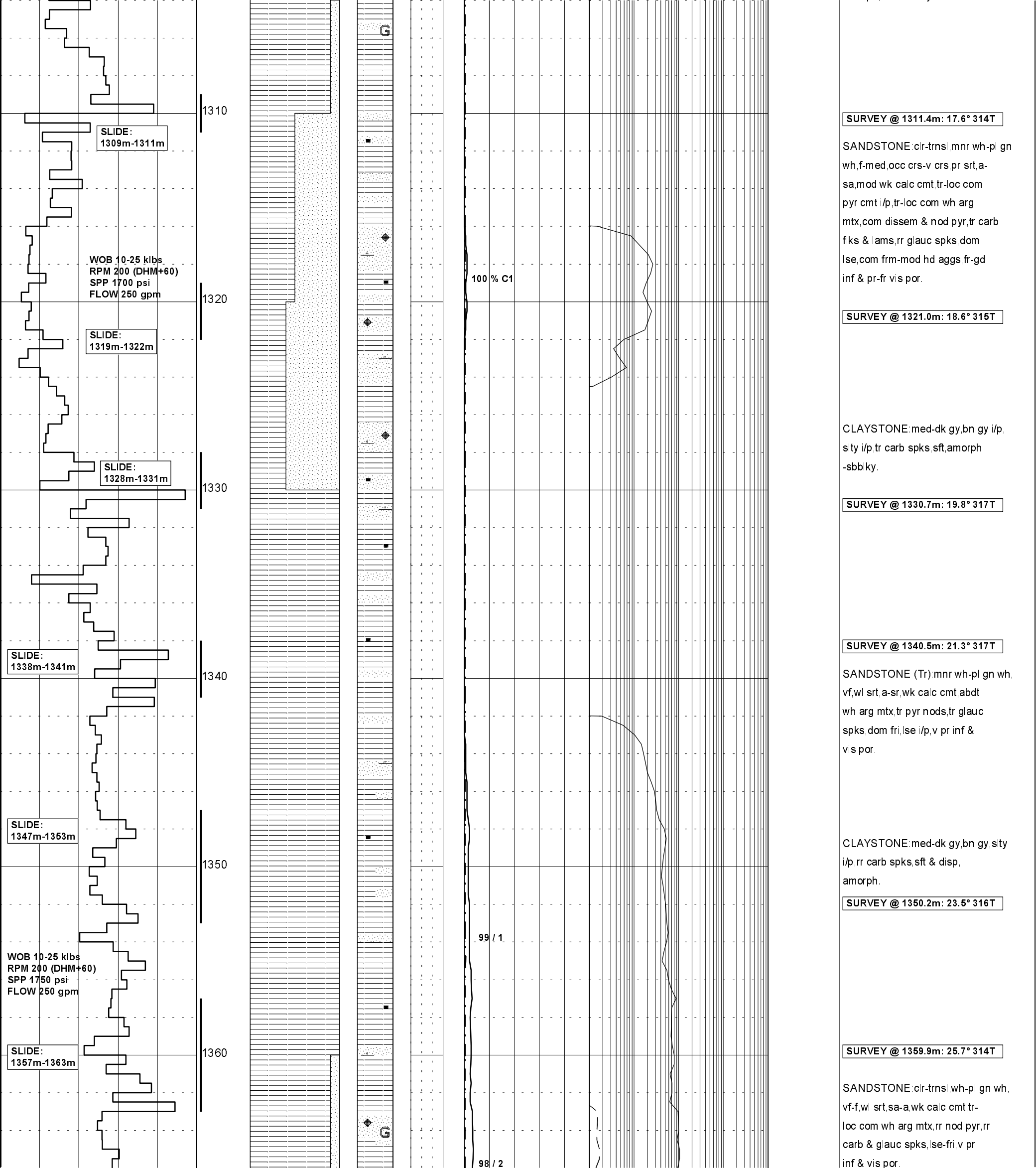
SURVEY @ 1224.9m: 2.7° 346T

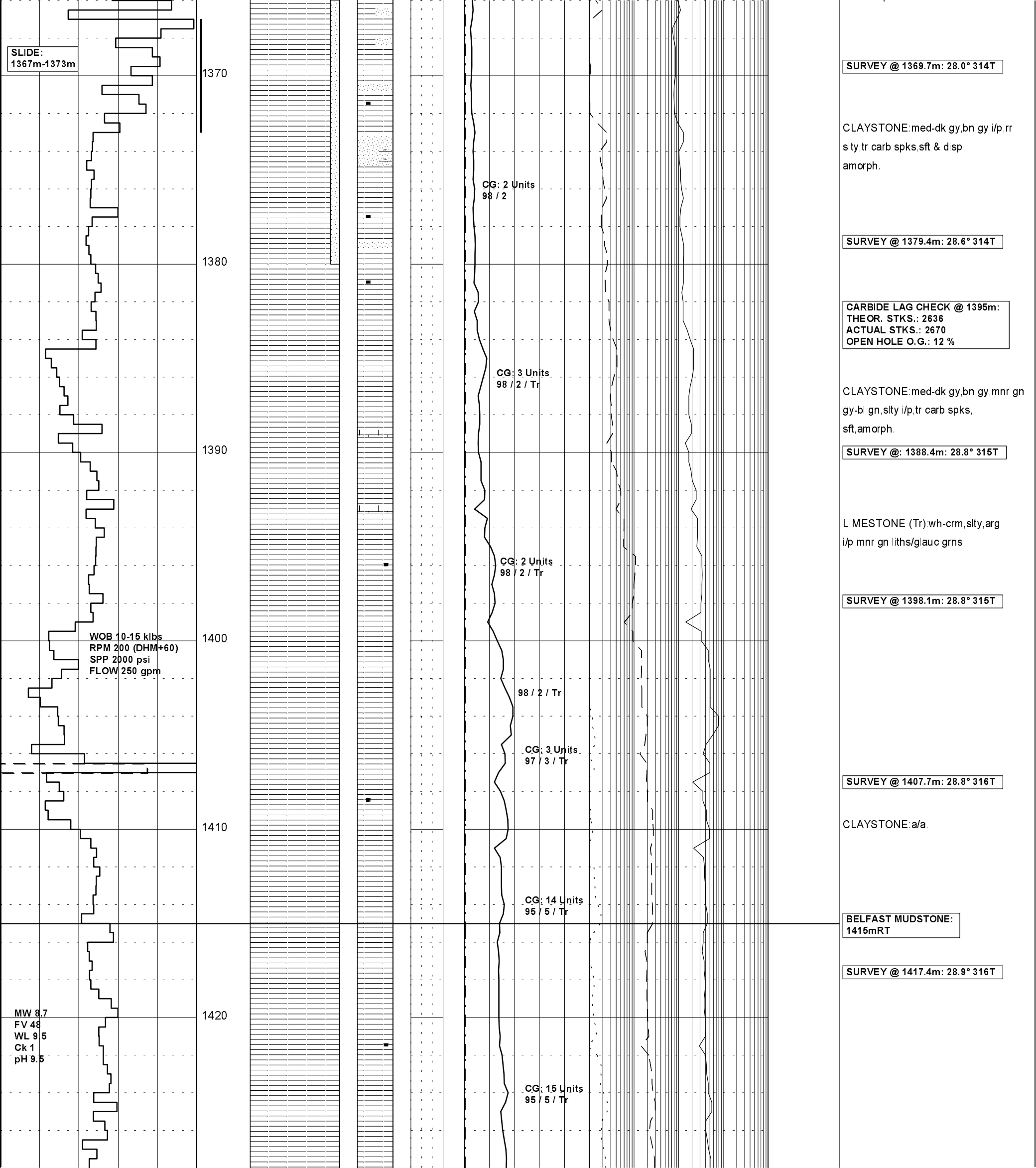
SANDSTONE:pl gy,clr,trnsi,vf-v
crs,dom f-m,pr srt,a-sa,sr i/p,
strg calc cmt i/p,loc com pyr
cmt,mnr wh arg mtx i/p,tr coal
frags,occ pyr nod,dom lse-fri,
occ mod hd-hd,fr inf & vis por.

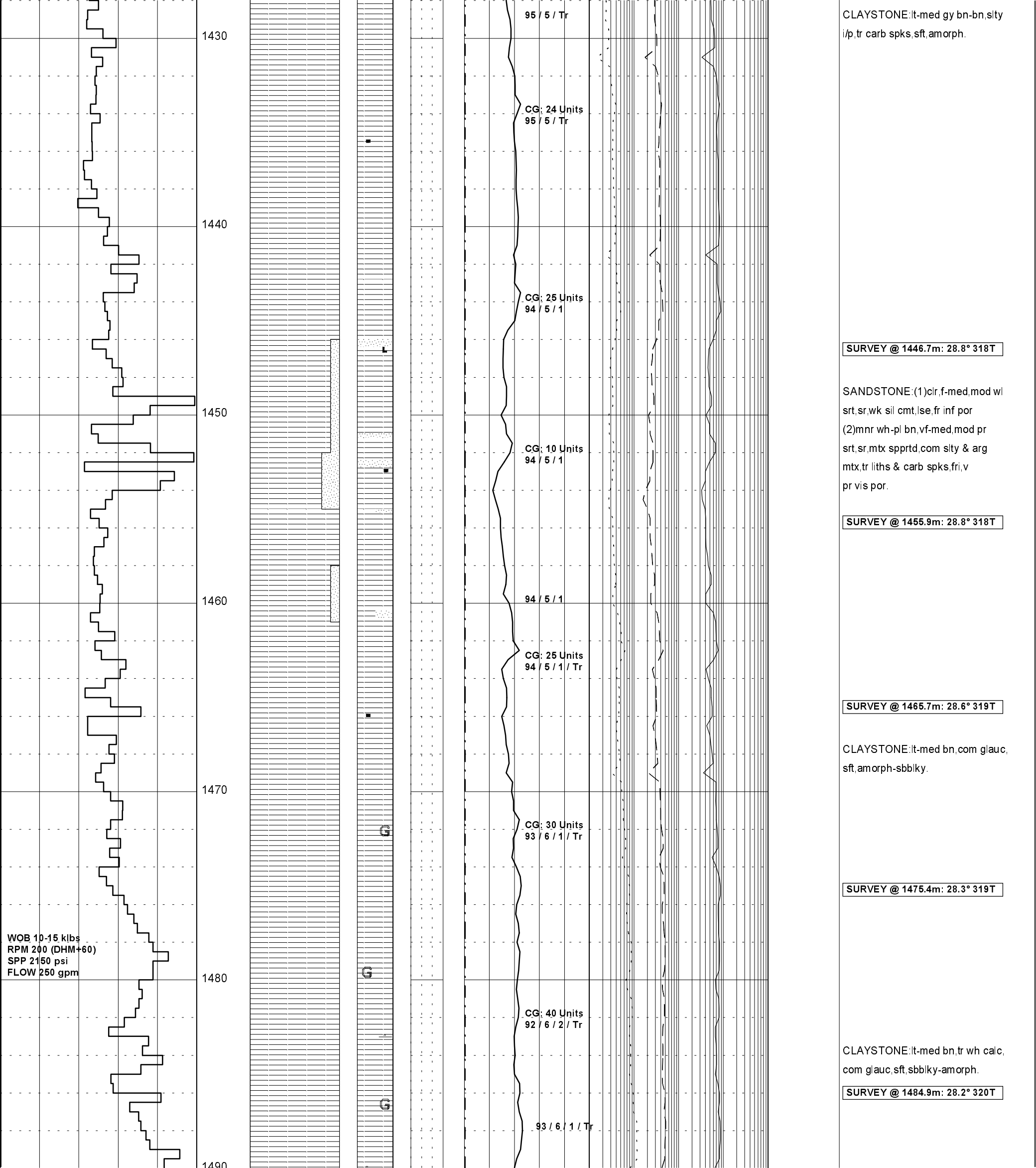
SKULL CREEK MEMBER:
1236mRT

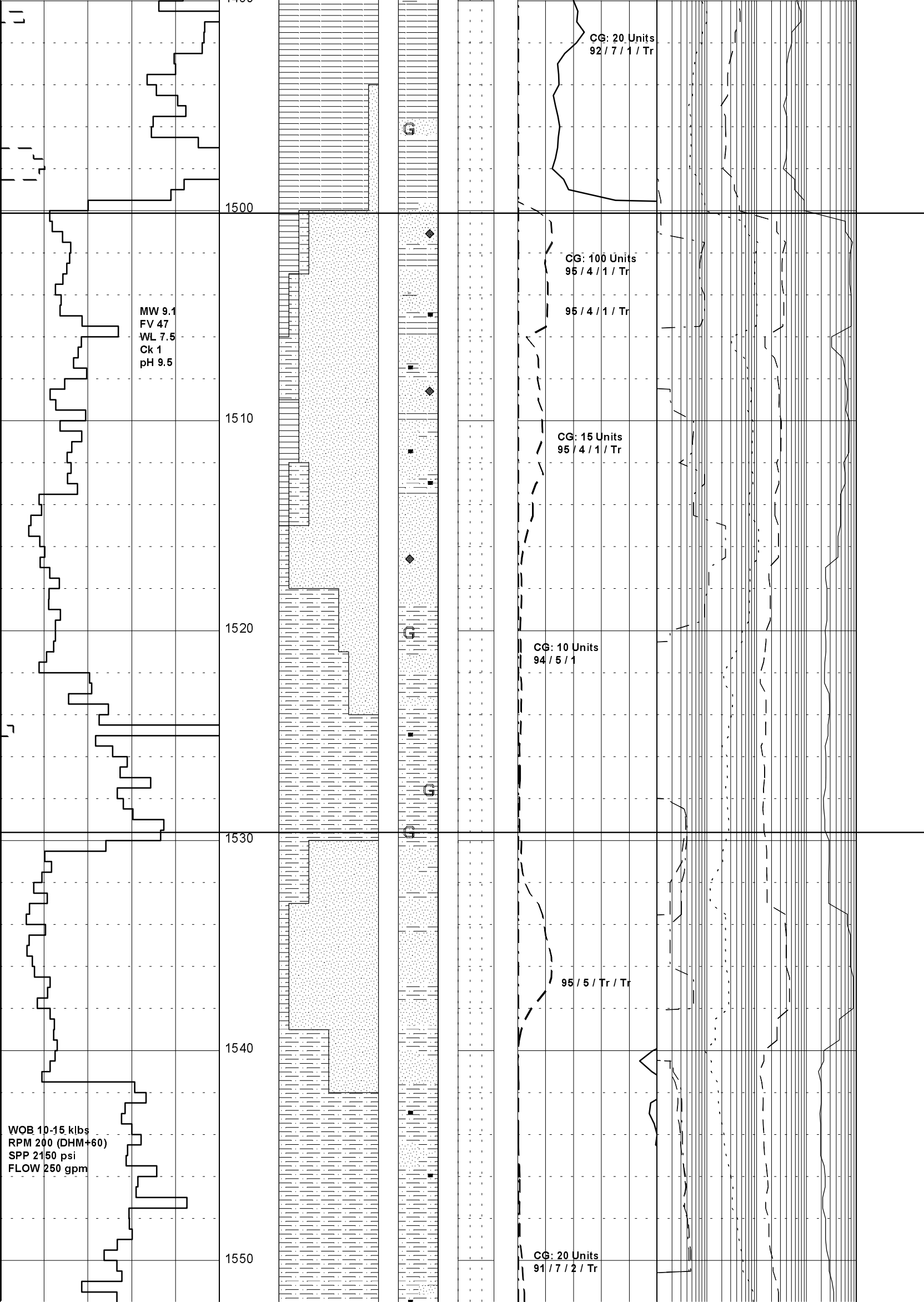
SURVEY @ 1244.2m: 6.48° 225T

Trace C1









SURVEY @ 1494.9m: 28.0° 321T

WAARRE FM (C' SAND):
1500.1mRT

SANDSTONE:clr-trnsl,mnr off wh-
lt gn,f-v crs,pr srt,sa-sr,wk
calc cmt,tr arg mtx,com-loc abnt
glauc,tr nod pyr,dom lse,mnr mod
hd,fr inf & pr vis por.

SURVEY @ 1504.5m: 28.2° 320T

CLAYSTONE:lt-med gy,rr glauc grs
sft,amorph.
SILTSTONE:dk gy,arg,com carb
fiks & lams,sft-frm,sbbiky-fiss

SURVEY @ 1514.3m: 28.4° 321T

SANDSTONE:clr-trnsl,tr off wh,
med-v crs,dom crs,pr srt,a-sa,wk
sil cmt,rr arg mtx,com nod pyr,
tr calc fiks,dom lse,rr fri aggs
v gd inf & fr vis por.

SANDSTONE:clr-trnsl,f-med,rr crs
mod pr srt,sr wk sil cmt,tr arg
mtx,occ qtz ovghts,lse,fr inf
por.

SURVEY @ 1524.0m: 28.3° 321T

SILTSTONE:lt-med gy bn,v arg,g/t
CLYST i/p,mnr glauc pels & stng,
sft-frm,sbbiky.

WAARRE FM (B' SAND):
1529.6mRT

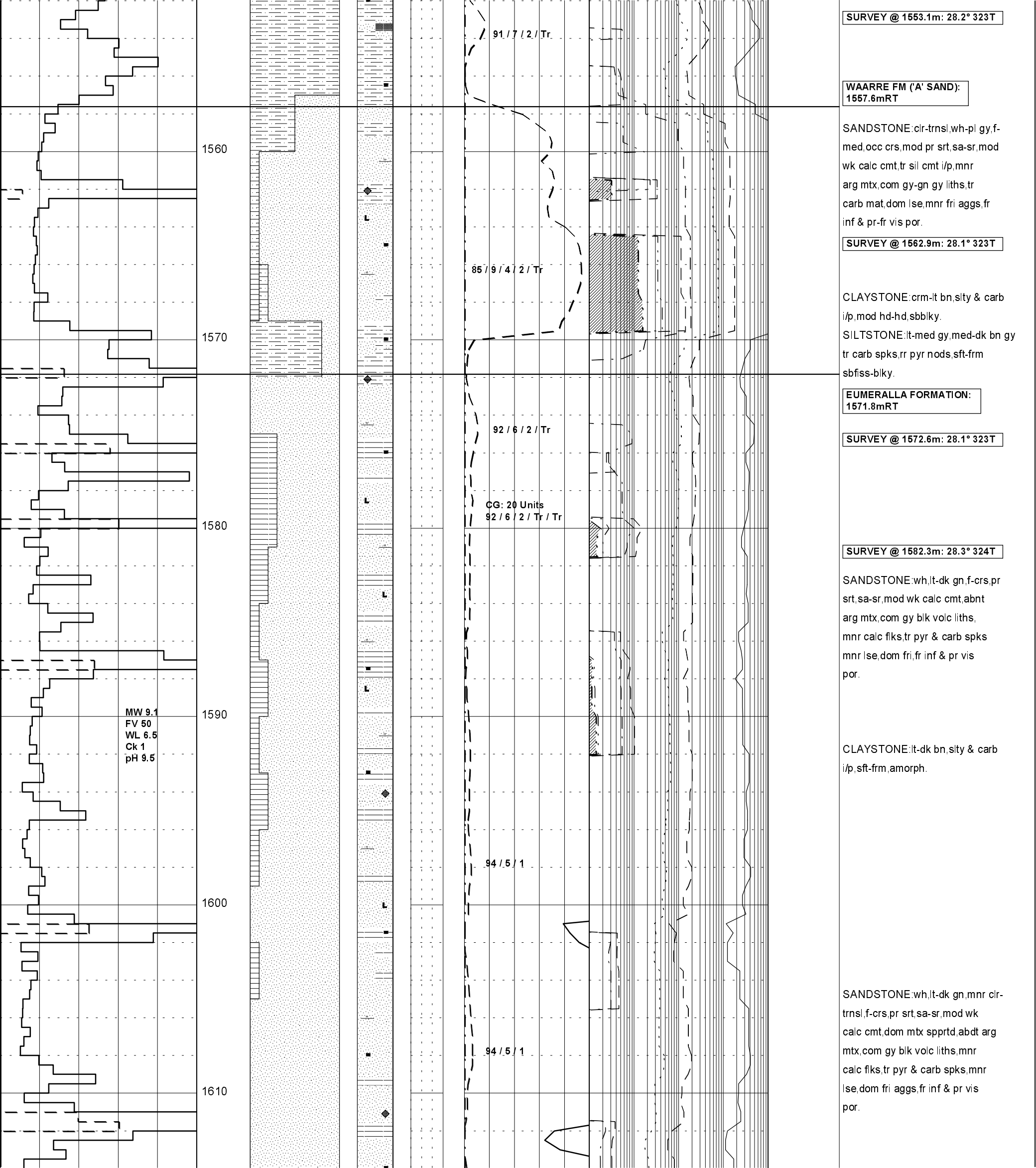
SURVEY @ 1533.7m: 28.3° 323T

SANDSTONE:clr-trnsl,f-crs,pred
med-crs,mod pr srt,sa-sr,wk sil
cmt,occ qtz ovghts,lse,fr-gd inf
por.

SILTSTONE:lt-med bn,mnr med-dk
gy,v arg,g/t CLYST i/p,tr carb
spks,sft,amorph-sbbiky.

SURVEY @ 1543.4m: 28.4° 323T

COAL(Tr):blk,dll,arg,g/t Carb
SHALE i/p,unevn,fri,sbfiss.



SURVEY @ 1553.1m: 28.2° 323T

WAARRE FM ('A' SAND):
1557.6mRT

SANDSTONE: cl-trnsl, wh-pl gy, f-med, occ crs, mod pr srt, sa-sr, mod wk calc cmt, tr sil cmt i/p, mnr arg mtx, com gy-gn gy liths, tr carb mat, dom lse, mnr fri aggs, fr inf & pr-fr vis por.

SURVEY @ 1562.9m: 28.1° 323T

CLAYSTONE: crm-lt bn, sity & carb i/p, mod hd-hd, sbblky.

SILTSTONE: lt-med gy, med-dk bn gy tr carb spks, rr pyr nods, sft-frm sbfiss-blky.

EUMERALLA FORMATION:
1571.8mRT

SURVEY @ 1572.6m: 28.1° 323T

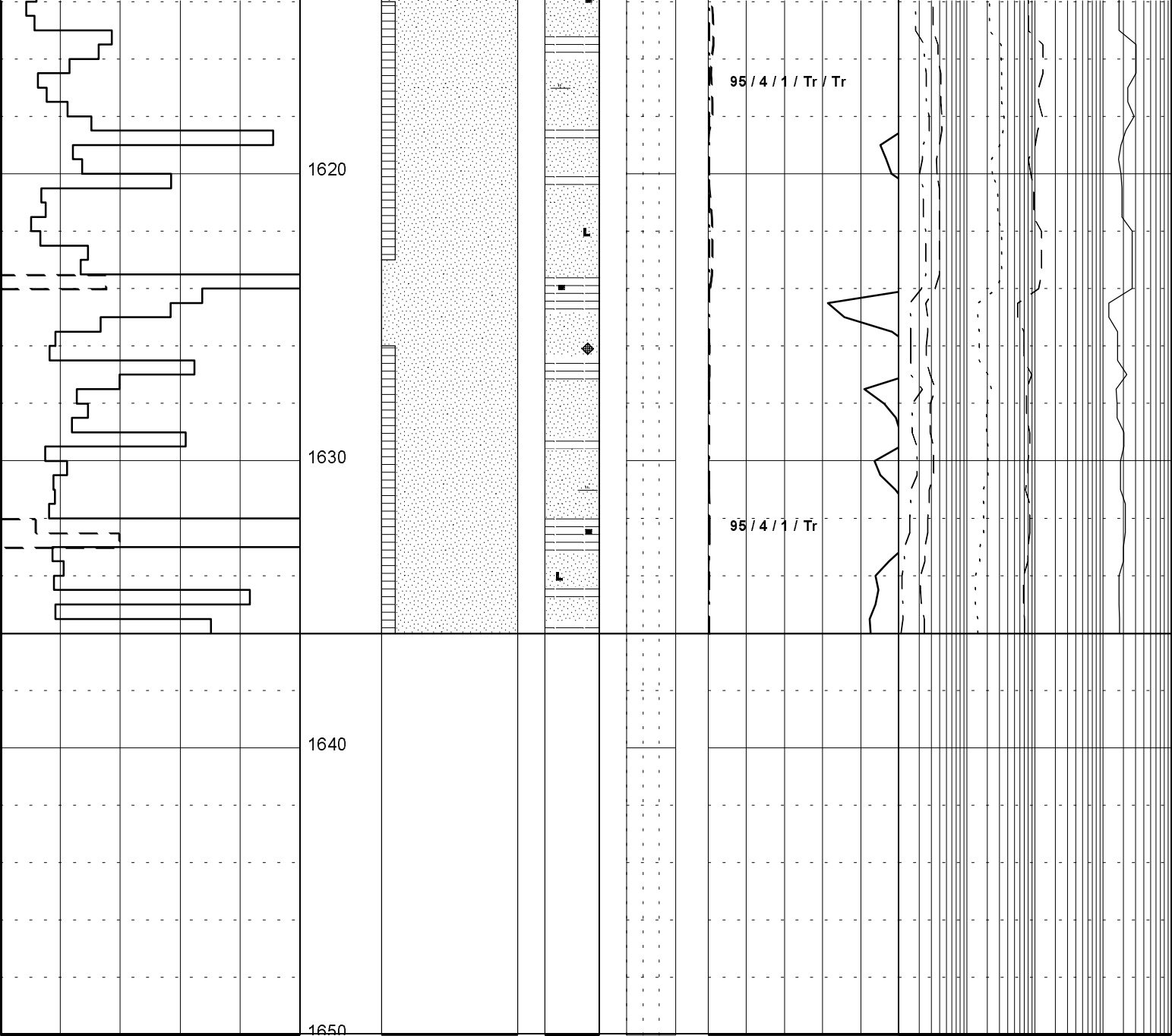
SURVEY @ 1582.3m: 28.3° 324T

SANDSTONE: wh, lt-dk gn, f-crs, pr srt, sa-sr, mod wk calc cmt, abnt arg mtx, com gy blk volc liths, mnr calc flks, tr pyr & carb spks mnr lse, dom fri, fr inf & pr vis por.

CLAYSTONE: lt-dk bn, sity & carb i/p, sft-frm, amorph.

SANDSTONE: wh, lt-dk gn, mnr cl-trnsl, f-crs, pr srt, sa-sr, mod wk calc cmt, dom mtx spprtd, abdt arg mtx, com gy blk volc liths, mnr calc flks, tr pyr & carb spks, mnr lse, dom fri aggs, fr inf & pr vis por.

MW 9.1
FV 50
WL 6.5
Ck 1
pH 9.5



SURVEY @ 1619.4m: 29.5° 324T

CLAYSTONE:lt-dk bn,silty & carb
i/p,sft-frn,amorph-sbbkky.

73mm CASING SHOE
SET @ 1634.5m

DUNBAR1-DW1 REACHED TD
@ 23:00 HRS ON 23-03-2001

DRILLERS DEPTH:
1636.0mRT
LOGGERS DEPTH:
1633.7mRT (+2m fill)

WIRELINE LOGS RUN @ TD:
RUN #1:
DLS-MLL-GR-CAL
RUN #2:
PDS-CNL-GR-CAL

CEMENT BOND LOG

1 : 200

Reeves

COMPANY
ORIGIN ENERGY
WELL
DUNBAR 1 DW 1
FIELD
OTWAY BASIN
PROVINC/COUNTY
VICTORIA
COUNTRY/STATE
AUSTRALIA
PERMIT NUMBER
PPL1

LOCN.
PPL1
PRVNC
VICTORIA
FIELD
OTWAY BASIN

WELL :
DUNBAR 1 DW 1
COMPANY :
ORIGIN ENERGY

PERMANENT DATUM
MSL
LOG MEASURED FROM
RT
DATE
21-MAR-01
RUN NUMBER
ONE
DEPTH-LOGGER
1620.7 M
LAST READING
1618.7 M
CASING-DELLER
1025 M
CASING-LOGGER
HOLE SIZE
WATER
DEPS./VISC.
CHPT/UID LOSS
SAMPLE SIZES
IN @ MEAS TEMP
IN @ MEAS TEMP
IN @ MEAS TEMP
SOURCE: ENR /MNC
IN @ BHT
TIME SINCE CTIC
MAX REC TEMP
EQUIPMENT/CASE
W/1030 ROMA
RECORDED BY
M.BARNES
WITNESSED BY
B.BEETSON

OTHER SERVICES

ELEVATIONS:
KB
N/A
GL
77.2 M

REMARKS									
CEMENT BOND LOG					1:200				
38°32'53.79"S: 142°54'23.11"E					MEASURING WHEEL CALIBRATION 1.01170				
CEMENT TOP IS AT 1060 M.									
ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT AND DO NOT, GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS. AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO OUR GENERAL TERMS AND CONDITIONS IN OUR PRICE SCHEDULE.									

↓	MAIN LOG										↓	
DEPTH BASED DATA - MAXIMUM SAMPLING INCREMENT 10.0CM												RECORDED ON 21-MAR-2001 AT 13:57
FILENAME: CBL5ML01.CIB RUN ID:MAIN LOG												PLOTTED ON 06-APR-2001 AT 08:37

