[redacted]

ATTACHMENT 1

VIC-P17

GIPPSLAND BASIN

TARRA NO. 1

FINAL TECHNICAL REPORT

(DRILLING)

PG/195/83 BOX 1 OF 2

[redacted]

GIPPSLAND BASIN

VIC-P17

OMEO NO. 1

FINAL TECHNICAL REPORT

(DRILLING)

F3a Bis 2-78 — WELL DATA — WELL: TARRA 1

1) WELL NAME : TARRA NO. 1

2) IDENT.: TRA1

3) GEOGRAPHICAL AREA : BASS STRAIT

4) GEOLOGICAL BASIN : GIPPSLAND

5) FIELD : WILDCAT

6) BLOCK : VIC-P17

7) PERMIT HOLDERS : VIC-P17
AAP & PARTNERS

8) PARTNERS :

Name	%	Name	%
AUSTRALIAN OCCIDENTAL PET	25	CONSOLIDATED PET. AUST.	12.5
ALLIANCE RESOURCES PTY LTD	25		
AGEX PTY. LTD.	12.5	AUST. AQUITAINE PET.	25

9) OPERATOR : AUSTRALIAN AQUITAINE PETROLEUM PTY. LIMITED

11) REFERENCE WELLS :
Name
OMEO NO. 1
EDINA NO. 1

10) INITIAL STATUS
- Exploration [X]
- Development [ ]
- Othet [ ]

12) LOCATION COORDINATES

site
- Land [ ]
- Offshore [X]
- Swamp [ ]
- Other [ ]

geographical coordinates
- Latitude 38°38'37.15" S
- Longitude 147°42'08.20" E

reference meridian
- Paris [ ]
- Greenwich [X]

LAMBERT coordinates
- X(m)
- Y(m)
- Z(m)

SITE	LAND	OFFSHORE		SWAMP		OTHER	
Distance RKB/ REF.							
Reference	GROUND	MUD LINE	ZERO HYDRO				

13) DRILLING OBJECTIVES

Objective n°	Formation	Formation tops vertical depth	Departure	Direction
1	STRZELECKI	2547m (RKB)		
(ACCUMULATIONS BELOW THE BLUE HORIZON)				

14) WELL COURSE

Vertical [X] — Deviated [ ] — Normal [ ] — Scourse [ ]

15) WAS THE OBJECTIVE REACHED ?

	yes	no	Formation tops vertical depth	Departure	Direction
OBJECTIVE 1	[X]	[ ]	2586m	1 3/4°	
OBJECTIVE 2	[ ]	[ ]			
OBJECTIVE 3	[ ]	[ ]			
OBJECTIVE 4	[ ]	[ ]			

16) RESULTS
- [ ] Oil production
- [ ] Gas production
- [ ] Water production
- [ ] Shows but no reservoir
- [ ] Injection well
- [X] Dry well
- [ ] Temporarily plugged
- [X] Plugged and abandonned
- [ ] Completed

17) DATES (·)

BEGINNING		END	
Well	1.3.83	Drilling	3.4.83
Drilling :	4.3.83	Well	21.4.83

18) WELL END (··)

- Total depth : 2905m
- Drilled footage : 2812m
- Total departure : 1 3/4°
- Vertical depth : 2905m
- Lost footage : 0m
- Direction : --

TOTAL DURATION
- Drilling : 32 days
- Well : 50 days

19) COSTS — CURRENCY UNIT: AUSTRALIAN $

Before drilling	118,496
During drilling	7,941,104
After drilling	--
Total well	8,059,600

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F3a' Bis 2-78	LOGISTICS	WELL: TARRA 1

Area management : AUSTRALIAN AQUITAINE PETROLEUM PTY. LTD.
99 MOUNT STREET, NORTH SYDNEY, N.S.W. 2060
Located : P.O. BOX 725

Land Base : AQUITAINE WELSHPOOL SHORE BASE
MIDLAND HIGHWAY
Located : WELSHPOOL. VIC. 3966
P.O. BOX 27

• SERVICE COMPANIES

- Mud	: BAROID	- Under water T.V.	: ODECO
- Mud logging	: GEOSERVICES	- Testing	: HALLIBURTON
- Production tests	: FLOPETROL	- Well head	: CAMERON
- Fishing	: TRISTATE	- Depollution	: AAP
- Positioning	: DECCA SURVEY	- Air transportation	: COMMERCIAL AVIATION
- Electrical logging	: SCHLUMBERGER	- Sea transportation	: AOS
- Meteo	: MELBOURNE RADIO		: "LADY JANE"
- Diving	: OCEANEERING		: "SEA SAPPHIRE"
- H.P. Pumping	: DOWELL SCHLUMBERGER		: STAND BY-
- Bulking	: BAROID		: LOMBARDO MARINE
	:		: "CHRISTMAS CREEK"

Beginning of well = first moving in date (if this date is known)
Beginning of drilling = spudding date
End of drilling = date of last bit pulling out or end of electrical logging operations, or pressure surge at the end of production casing cementing operation
End of well = end of well plugging operations laying down included or end of completion

** - Depths ot be calculated from the rotary table
- Drilled footage: distance RKB/ground (or mud line) not included, but side tracks resulting from fishing included
- Lost footage resulting from fishing or course modification without chanaing the geological objective. Should the geological objective vary, well name or number will change, and the previous well drilled footage is not considered as a lost footage
- Except change in geological objective requiring a side track, the formula is: Drilled footage - Lost footage = Total depth - Distance RKB/ground

• AREA • LAND ☐ SEA ☒ SWAMP ☐ LAKE ☐

ALTITUDE : SEA LEVEL WATER DEPTH : 63m

DISTANCE FROM BASE : 107 KM DISTANCE FROM SHORE : 53m

• RELIEF Flat ☒ Slightly undulate ☐ Undulate ☐ Very undulate ☐

• SEA CONDITIONS Calm ☐ Medium ☐ Strong ☒ Very strong ☐

• POLLUTION RISK Low ☐ Medium ☒ High ☐ Very high ☐

• WEATHER Equatorial ☐ Hot ☐ Temperate ☐ Cold ☒ Arctic ☐

• POPULATION DENSITY Nil ☒ Low ☐ Medium ☐ High ☐ Very high ☐

MEANS USED

• NAME OF THE RIG (LAND) : —

• SUPPORT •

• TYPE Land ☐ Artificial island ☐ Jack-up ☐ Drillship ☐ Semi-submersible ☒

Swamp barge ☐ Non assisted Platform ☐ Assisted platform ☐ Tender ☐ Other ☐

• SEA SUPPORT NAME : OCEAN DIGGER

• PROPULSION: Towed ☒ Self propelled ☐ Power : — Speed : —

• POSITIONING

Mooring: Classical ☒ Dynamic ☐ Head : 260 DEG

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• DRILLING EQUIPMENT •

DRAWORK MANUFACTURER : EMSCO MODEL A1500 E CONTRACTOR : ODECO

• RANGE • Light ☐ Medium ☐ Heavy ☒ Super Heavy ☐ Extra Heavy ☐

• TRANSMISSION • Mechanical ☐ Electric ☒ Hydraulic ☐

• MAIN PUMPS • Number ☒ 2 EMSCO D-1350 HP Total hydraulic power . ☐

• RIG DESIGN • Normal design ☒ Compact ☐ Portable ☐ Helirig ☐

Flexorig ☐ Automatic racking ☐ Winterised ☐ ☐

• SURFACE OR SUBSEA EQUIPMENT

B.O.P. STACK	Diameter	API WP
Number 1	18 3/4" CAMERON "U"	10,000 PSI
Number 2	18 3/4" HYDRIL	5,000 PSI
Number 3		

WELL HEAD	Manufacturer	Type	Diameter	API WP
Number 1	CAMERON	TORQUE SET	18 3/4"	10,000 PSI
Number 2				
Number 3				

MUD LINE SUSPENSION: ☐ yes ☒ no Manufacturer : _____

RISER

	Number 1	Number 2
Diameter :	50'x22" ODx0.50" WALL	
Connector :	VETCO MR-6B	
Buoyancy system :	no ☒ yes ☐	no ☐ yes ☐

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F3c Bis 2-78

TECHNICAL SECTION

WELL : TARRA 1

• OPEN HOLE SECTIONS •		• CASINGS •				
DIAMETER	TOTAL DEPTH METRES	DIAMETER	COMPOSITE STRING DIAMETERS	SHOE DEPTH METRES	HANGER DEPTH METRES	TOP CEMENT IN ANNULUS
26"	219	20"		211m	91m	SEA BED
17½"	1010	13 3/8"		1002m	TOP SEAL ASSMY. 93.34m	500 mtrs RKB
12¼"	2580	9 5/8"		2567m	92.34m	2070RKB
8½"	2905	--		--	--	--

F3c' Bis 2-78 — FOOTAGE (METERS OR FEET) — WELL : TARRA 1

Interval	Total footage in the interval	DRILLING			CORING			TURBODRILLING			SIMULTANEOUS PILOT DRILLING AND HOLE OPENING			HOLE OPENING		RE-DRILLING AND/OR REAMING		Abandonned footage in the interval	Drilling fluid
		Ø	m or	h	Ø	m or	h	Ø	m or ft	h	Ø	m or ft	h	m or ft	h	m or	h		
26"	126	26	126	9½															SW + HI VIS PILL
17½"	791	17½	791	52												159	7.5		SEA WATER GEL NATUR/ CLAYS
12¼"	1570	12¼"	1570	142.5												1013	21		GEL POLYME 1.15S(
8½	325	8½	325	75	8½	22	7.5									73	4.5		GEL POLYME 1.09S(

F3d Bis 2-78

CORE DATA SUMMARY

WELL : TARRA 1

Core Number	DEPTH Ft or m. from	DEPTH Ft or m. to	% Recovered	Formation	Core Number	DEPTH Ft or m. from	DEPTH Ft or m. to	% Recovered	Formation
1	2797	2804	21.4	LITHIC SANDSTONE					
2	2890	2905	91	LITHIC SANDSTONE					

CLABS

Run N°	DEPTH ft or m. from	DEPTH ft or m. to	Number of samples	Formation	Run N°	DEPTH ft or m. from	DEPTH ft or m. to	Number of samples	Formation
1	2105	2568	30	100% REC SANDSTONE SHALE CLAYSTONE					
2	1134	2314	30	97% REC SANDSTONE SHALE/CLAYSTONE					
3	2880	2570	30	100% REC LITHIC SANDSTONE CLAYSTONE					

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F3d' Bis 2-78

FORMATION TEST SUMMARY

WELL : TARRA 1

Test N°	Date	Type of test *	Tested interval		Succeful		Reason of failure (**)	Observations
			from ft or m.	to ft or m.	Yes	No		

* TOHP - Test open hole full diameter
TOHR - Test open hole - rat hole
STOHP - Straddle test open hole full diameter
STOHR - Straddle test open hole rat hole
TCSG - Test casing
STCSG - Straddle test casing
FIT - Formation interval tester

** FP - Packer leak
BO - Tool plugged
NO - Test not opened
IN - Test interrupted
XX - Other (to be specified)

ELECTRICAL LOGGING SUMMARY

Interval	Date	Nature and Run N°	DEPTH ft or m.		Scales		
			from	to	1/20	1/200	1/500
17½"	12.3.83	NO. 1 ISF/SLS/GR-SP/CAL	1006.5	211		X	X
17½"	13.3.83	NO. 2 LDL/CAL/GR	1009	211		X	X
12¼"	25.3.83	NO. 1 ISF/SLS/GR/SP/CAL	2570	1002		X	X
12¼"	25.3.83	NO. 2 LDL/CNL/GR/CAL	2570	1002		X	X
12¼"	25.3.83	NO. 3 HDT	2561	1650	--	--	--
8½"	3.4.83	NO. 1 ISF/SLS/GR/CAL/SP	2904	2566.6		X	X
8½"	3.4.83	NO. 2 LDL/CNL/GR/CAL	2904	2566.6		X	X
8½"	3.4.83	NO. 3 HDT	2904	2566	--	--	--
8½"	3.4.83	VELOCITY SURVEY	2900	500			

F3e' Bis 2-78

INTERRUPTIONS OF OPERATIONS

WELL : TARRA 1

OPERATIONS IN PROGRESS	DURATION / REASONS	STICKING FISHING		LOSSES, FLOWING MUD TREATMENT		WAITING ON WEATHER		WAITING · OTHER	
		Number	Duration (h)	Number	Duration (h)	Number	Duration (h)	Number	Duration (h)
Moving (D2-D3)	Less than 24 h							1	8
	From 1 to 5 days							1	310
	More than 5 days								
	TOTAL →								
Drilling, casing formation surveys (A1-A2-A3-A4)	Less than 24 h	1	1						
	From 1 to 5 days			1	62	1	68.5	2	4
	More than 5 days								
	TOTAL →								
Completion (C3-C4)	Less than 24 h					1	21		
	From 1 to 5 days								
	More than 5 days								
	TOTAL →								
TOTAL →		1	1	1	62	2	89.5	4	322

TOTAL DURATION OF INTERRUPTIONS

During moving : 319 HOURS

During drilling - Casing or formation surveys : 4 HOURS

During completion and plugging : AS LAST ANCHOR MOVE TOTAL CARRIED AS ABOVE IN MOVING

NB: WAITING ON COMMONWEALTH AUTHORITY AUTHORIZATION TO MOVE THE RIG DURING 13 DAYS

F3e Bis 2-78 | **TIME DISTRIBUTION** | **WELL :** TARRA 1

		• ITEMS •	INTERVALS : Duration in hours									Durat
			D	26"	17½"	12¼"	8½"	'C'	'D'			% E tota durat
MOVING	D1	Rigging up, transportation and tearing down	46						15.50			5.1%
												61.5
	D2	Waiting on weather										— —
	D3	Waiting : other	8						210			26.2
												318.
DRILLING - CASING	F1	New hole drilling		9.5	52	142.2	75					23.
												279
	F2	Drilling trips		5.5	5	43.5	18					5.
												72
	F3	Miscellaneous drilling operations			4	22	5.5					2.
												31
	F4	Casing and cementing		38.5	37	47						10
												122
FORMATION SURVEYS	G1	Coring					7.5					0
												7
	G2	Coring trips and miscellaneous					22.5					1
												22
	G3	Testing and related operations										—
	G4	Electrical logging			17.5	24	26					5.6
												67.
INTERRUPTIONS OF OPERATIONS UNDER F & G	A1	Sticking - Fishing				1						0.0
												1
	A2	Losses and well flowing mud treatment			62							5.
												62
	A3	Waiting on weather			7	68.5						6.
												75
	A4	Waiting : other			1.5		2.5					0
												4
COMPLETION AND PLUGGING	C1	Completion - Formation treatment and Production tests										—
	C2	Abandon					65.5					5.
												65
	C3	Waiting on weather					21					1
												21
	C4	Waiting : other										—
DURATION BY INTERVAL →			54	53.5	186	348.5	157	86.5	325.5			1
												12
												—

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F3f Bis 2-78 | **MUD SUMMARY BY INTERVAL** | **WELL : TARRA 1**

INTERVAL 26" PHASE From : 91m (SEA BED) to : 219m

Mud type used in this interval : SEAWATER WITH HI VIS FLOCCULATED GEL SLUGS

• USEFUL DATA •

CASINGS

- Diameter : 20"
- Hanger : 91m
- Shoe : 211m
- Casing : 133 ##
- Lenght : 120m

BALANCE OF VOLUMES on m3

- Initial volume : 208
- Added volume : 80
- Jetted volume : 288
- Losses in formation : --
- Final volume : 0

DRILLING

Drilled (m or ft) {from: 91m to : 219m} duration (date) {from: 4 MARCH to : 4 MARCH}

Footage (m or ft) : 128m in : 1 DAY

Average dllg rate 19.1m/hr drilling hours : 6.7 HRS

Internal casing vol. : -- Losses : --

Pumping rate : 100 SPM - 20.7 BBL/MIN

• MUD CHARACTERISTICS •

	mini	maxi	average
Weight in flow			1.05
Weight out flow			
Viscosity M.V.			100
Viscosity A.V.			
Viscosity P.V.			
Viscosity Y.P.			
Gels 0'			
Gels 10'			
API WL API			
API WL HP-HT			
API WL Pressure T°			
Ph			
Pf			
Pm			
Ca^{++} (g/l)			
SO4Ca			
Clna			
CaCl2			
% water			
% oil			
oil/water ratio			
% solids			
Solids density			
% Sand			
T °C			

• CONSUMPTIONS •

CHEMICALS	QUANTITY Total m^3 or T	Kg/ft or m drilled	Kg/m^3	COST Unit Price	Total Cost	%
AQUAGEL	14.971	117.0	52.0	14.00	4,620.00	87
CAUSTIC	0.350	2.7	1.2	74.70	373.50	7.0
SODA ASH	0.320	2.5	1.1	13.88	111.04	2.0
LIME	0.750	5.8	2.6	6.75	202.50	4.0
TOTAL	16,391				5,307.04	100

Depth (M)	Lithology
FROM 91m	CORAL SANDS
	LIMESTONE
	FOSSIL FRAGMENT
219m	SILTSTONE

Total cost of {Interval : A$5,307.04 / Drilled meter foot A$ 41.50}

Currency : AUSTRALIAN DOLLARS

Conversion rate used :

F3f Bis 2-78 | **MUD SUMMARY BY INTERVAL** | **WELL : TARRA 1**

INTERVAL 17½" HOLE From : 219m to : 1010m

Mud type used in this interval : SEAWATER/GEL/NATIVE CLAYS/LIME

• USEFUL DATA •

CASINGS

- Diameter : 13 3/8"
- Hanger : 92.4m
- Shoe : 1002m
- Casing : 68lbs/ft
- Lenght : 909.6m

BALANCE OF VOLUMES on m3

- Initial volume : --
- Added volume : 1342m3
- Jetted volume : --
- Losses in formation : 1207
- Final volume : 135m3

DRILLING

Drilled (m or ft) from : 219m to : 1010m duration (date) from : 5 MARCH to : 11 MARCH

Footage (m or ft) : 791m in : 7 DAYS

Average dllg rate 21.9 drilling hours : 36 HOURS

Internal casing vol. 453/72m3 Losses :

Pumping rate : 100 SPM-20.7 BBL/HR

• MUD CHARACTERISTICS •

	mini	maxi	average
Weight in flow	1.03	1.15	1.10
Weight out flow	1.03	1.15	1.10
Viscosity M.V.	26	40	35
Viscosity A.V.			
Viscosity P.V.			
Viscosity Y.P.			
Gels 0'			
Gels 10'			
API WL API	NC	NC	NC
API WL HP-HT			
API WL Pressure T°			
Ph	7.0	10.0	8.0
Pf			
Pm			
Ca++ (g l)			
SO4Ca			
Clna	21000	21500	21250
CaCl2	100	2000	
% water	95	100	97.5
% oil	--	--	--
oil/water ratio			
% solids	0	5	2.5
Solids density			
% Sand			
T °C			

Depth (m)	Lithology
219	LIMESTONE
326	LIMST./CORAL FRAG
837	CALCARENITE
1010	LIMST./CLAYST.

• CONSUMPTIONS •

CHEMICALS	QUANTITY Total m3 or T	Kg ft or m drilled	Kg/m3	COST Unit Price	Total Cost	%
BARITE	14.972	18.93	11.2	8.00	2,641.00	12.0
AQUAGEL	23.138	29.25	17.2	14.00	7,140.10	32.5
CAUSTIC	0.560	0.71	0.42	74.70	596.60	2.7
SODA ASH	0.560	0.71	0.42	13.88	194.32	0.9
LIME	1.725	2.18	1.28	6.75	465.75	2.0
KWIK SEAL	3.636	4.59	2.71	48.22	9,644.00	44.0
MICA	0.950	1.2	0.71	12.72	636.00	3.0
CAL CHLORIDE	1.350	1.71	1.0	11.46	618.84	2.9
(THE RELATIVELY HIGH COST OF THIS PHASE WAS MAINLY DUE TO LOST CIRCULATION PROBLEMS ENCOUNTERED WHILE DRILLING THE UPPER LIMESTONE/CALCAREOUS SECTIONS)						
TOTAL	46,891.00				21,937.61	100

Total cost of { Interval : A$ 21,937.61 ; Drilled meter foot A$ 27.70

Currency : AUSTRALIAN DOLLARS

Conversion rate used :

F3f Bis 2-78 | **MUD SUMMARY BY INTERVAL** | **WELL : TARRA 1**

INTERVAL 12¼" HOLE From : 1010M to : 2581M

Mud type used in this interval : GEL/POLYMER

• USEFUL DATA •

CASINGS

- Diameter : 9 5/8"
- Hanger : 94.3m
- Shoe : 2567m
- Casing : 4716 FT
- Lenght :

BALANCE OF VOLUMES on m3

- Initial volume : 176
- Added volume : 943
- Jetted volume : 961
- Losses in formation : 10
- Final volume : 148

DRILLING

Drilled (m or ft) from : 1010 to : 2581 duration (date) from : 14 MARCH to : 25 MARCH

Footage (m or ft) : 1571 in : 12 DAYS

Average dllg rate 10.99M/N drilling hours : 143

Internal casing vol. : Losses :

Pumping rate : 60 SPM 1974 C/MIN
12.47 BBL/MIN

• MUD CHARACTERISTICS •

	mini	maxi	average
Weight in flow	1.11	1.18	1.16
Weight out flow	1.12	1.18	1.16
Viscosity M.V.	32	82	45
Viscosity A.V.			25
Viscosity P.V.			
Viscosity Y.P.			
Gels 0'	11	13	16
Gels 10'	16	19	26
API WL API	4.8	NC	6.6
API WL HP-HT			
API WL Pressure	1900	2700	2600
API WL T°	39.7	53	45
Ph	8.0	9.5	8.5
Pf	0.1	1.3	0.2
Pm	0.5	9.4	0.6
Ca⁻⁻ (g l)	40	1000	100
SO4Ca			
Clna			
CaCl2			
% water	95	90	91
% oil			
oil/water ratio			
% solids	5	10	9
Solids density			
% Sand			
T °C	40	55	--

Depth (ft)	Lithology
1010-2293	CLYST./SHALE
2293-2581	SND./CLYST/SILT

• CONSUMPTIONS •

CHEMICALS	QUANTITY Total m³ or T	Kg/ft or m drilled	Kg/m³	COST Unit Price	Total Cost	%
BARITE	38.564	24.5	34.4	8.00	6,800.00	18.6
GEL	11.025	7.0	9.8	14.00	3,402.00	9.3
CAUSTIC	4.550	2.9	4.1	74.70	4,855.00	13.3
SODA ASH	1.320	0.8	1.2	13.88	458.14	1.2
LIME	0.250	0.2	0.2	6.75	67.50	0.1
CMC - LV	1.750	1.1	1.6	45.85	3,209.50	8.8
CMC - HV	0.600	0.2	0.5	48.68	1,168.32	3.2
DEXTRID	3.405	2.2	3.0	51.60	7,740.00	21.2
MONPAC	0.050	0.0	0.1	106.06	212.12	0.5
SOLTEX	1.362	0.9	1.2	78.50	4,710.00	12.9
Q.BROXIN	2.900	1.8	2.6	29.50	3,422.00	9.3
CONDET	.205m³	0.3	0.2	258.00	258.00	0.7
AL STEARATE	0.875	0.5	0.8	42.61	298.27	0.8
SODA BICORBANATE	0.200	0.1	0.2	16.98	84.90	0.2
TOTAL					36,686.25	100.1

Total cost of { Interval : A$36,686.25
Drilled meter / foot A$ 23.35

Currency :

Conversion rate used :

F3f Bis 2-78

MUD SUMMARY BY INTERVAL

WELL : TARRA 1

INTERVAL : 8½" PHASE From : 2581M to : 2905M

Mud type used in this interval : SEAWATER/GEL/POLYMER

• USEFUL DATA •

CASINGS

- Diameter :
- Hanger :
- Shoe :
- Casing
- Lenght

BALANCE OF VOLUMES bbl on m3

- Initial volume : 148
- Added volume : 285
- Jetted volume : 433
- Losses in formation : 0
- Final volume : 0

DRILLING

Drilled (m or ft) { from : 2581 / to : 2905 } duration (date) { from : 26 MARCH / to : 2 APRIL }

Footage (m or ft) : 324M in : 8 DAYS

Average dllg rate 3.8 M/HR drilling hours : 83.5 HRS

Internal casing vol. : -- losses : --

Pumping rate : 32 SPM - 6.6 BBL/MIN

• MUD CHARACTERISTICS •

	mini	maxi	average
Weight in flow	9.1/1.09	1.10	1.09
Weight out flow	1.11	1.12	1.11
Viscosity M.V.	43	55	48
Viscosity A.V.	23	27.5	25
Viscosity P.V.	17	20	19
Viscosity Y.P.	7	21	14
Gels 0'	4	8	6
Gels 10'	11	20	15
API WL API	5.9	19.6	6.5
API WL HP-HT	--	--	--
API WL Pressure	--	--	--
Pm	9.5	12	10.5
Pf	0.1	0.8	0.4
Pm	0.6	5.2	2.1
Ca++ mg/l	160	400	320
SO4Ca	--	--	--
Clnc	16500	25000	17500
CaCl2	--	--	--
% water	92	95	95
% oil	--	--	--
oil/water ratio			
% solids	5	8	5
Solids density	--	--	--
% Sand	0.25	0.75	0.5
T °C	--	--	--

• CONSUMPTIONS •

CHEMICALS	QUANTITY Total m³ or T	Kg ft or m drilled	Kg m³	COST Unit Price	Total Cost	
BARITE	52.629	162.4	184.8	8.00	9,280.00	40.7
AQUAGEL	12.113	37.4	42.5	14.00	3,738.00	16.4
CAUSTIC	1.120	3.5	3.9	74.70	1,195.2	5.2
SODA ASH	0.440	1.3	1.54	13.88	152.68	0.7
BICARB	1.000	3.1	3.5	16.98	424.5	1.9
DEXTRID	1.135	3.5	3.9	51.60	2,580.0	11.1
CMC LV	0.825	2.5	2.9	45.85	1,513.05	6.
CMC HV	0.275	0.8	0.9	48.68	535.48	2.
MONPAC	0.225	0.7	0.8	106.06	954.54	4.
PAC-R	0.200	0.6	0.7	106.06	848.48	3.
Q.BROXIN	0.050	0.1	0.2	29.50	59.0	0.
STARLOSE	0.227	0.7	0.8	48.0	480.0	2
SAPP	0.650	2.0	2.3	15.0	390.0	1
AC STEARATE	0.187	0.5	0.7	42.61	639.15	2
CACL CHLORIDE	0.725				332.34	
TOTAL	71.801				23,122.42	1

Depth (ft) (m)	Lithology
2600M	SANDSTONE
2800M	SANDSTONE
2875M	CLAYST/SNDST
2905	" "

Total cost of { Interval : A$23,122.42 / Drilled meter foot A$ 71.36 }

Currency :

Conversion rate used :

Imp. 4996 SNEA(P) - RGM 959.004.011

F3g Bis 2-78

DRILL STRING COMPOSITION AND DEVIATION SURVEYS

WELL : TARRA 1

RUN NUMBER	INTERVAL	DRILL STRING	. DRILLING .			. SURVEYS .				
			Weight on bit	R.P.M.	Flow rate	Number	Date	Drilled depth (m or ft)	Inclination (°)	Direction (°)
1	26"	26" BIT+1x9½DC+1x26"STAB+2x9½DC+XOVER+3x7 3/4DC+BS+3x 7 3/4DC+XOVER+HWDP.	1/5	60/80	3200	1	4.3.83	219	0°	
2	17½"	17½BIT+BS+2x9½DC+17½STAB+1x9½DC+3x7 3/4DC+BS+6x7 3/4DC+ XO+FLEX JT+EQ JAR+1 HWDP+HYDRIL SUB+HWDP.	5/10	100	3300					
3	17½"	17½BIT+BS+2x9½DC+17½STAB+1x9½DC+XO+3x7 3/4DC+2 BS+6x 7 3/4DC+XO+FLEX JT+EQ JARS+1HWDP+HYDRIL SUB+8 HWDP.	5/10	60/100	3300	2	9.3.83	326	2°	
4	17½"	17½BIT+BS+2x9½DC+17½STAB+1x9½DC+XO+3x7 3/4DC+B/SUB+3x 7 3/4DC+B/SUB+3x7 3/4DC+B/SUB+XO+FLEX JT+EQ JARS+1xHWDP +HYDRIL SUB+8HWDP.	20	130	3200	3 4	10.3.83 12.3.83	712 1010	1½° 3/4°	
5	17½"	IDEM ABOVE WITH 17½ STAB MOVED TO 10 MTRS ABOVE BIT FOR CONTROL HOLE FOR LOGS AND 13 3/8" CSG.	CONTROL TRIP ONLY		3200					
6	12¼"	BIT+BIT SUB+2x7 3/4DC+12¼STAB+9x7 3/4DC+BUMPER SUB+6x 7 3/4DC+XO+FLEX JT+EQ JARS+1HWDP+HYDRIL SUB+8 HWDP	3/28	50/100	1930					
7	12¼"	BIT+BIT SUB 3 PTS+XOVER+SHOCK SUB+1x7 3/4DC+STAB+2x7 3/4 DC+STAB+8x7 3/4DC+BUMPER SUB+6x7 3/4DC+XO+FLEX JT+1 HWDP + HYDRIL SUB + 8 HWDP.	20	110	2100	5 6	15.3.83 16.3.83	1334 2066	¼° 3¼°	
8	12¼"	BIT+BIT SUB+NB REAMER 3 PTS+XOVER+SHOCK SUB+1x7 3/4DC+ STAB+2x7 3/4DC+STAB+8x7 3/4DC+2BUMPER SUBS+6x7 3/4DC+ XO+FLEX JT+1HWDP+HYDRIL SUB+8 HWDP.	22	115	1900	7 8 9	19.3.83 20.3.83 25.3.83	2265 2465 2580	2 3/4° 1 3/4° 1 3/4°	
9	8½"	BIT+BIT SUB+1x6½DC+STAB+1x6½DC+STAB+13x6½DC+BUMPER SUB+ 6x6½DC+FLEX JT+1 HWDP+HYDRIL SUB+8 HWDP.	5/12	30/50	1000					
10	8½"	BIT+JUNK SUB+BIT SUB+1x6½DC+STAB+1x6½DC+13x6½DC+BUMPER SUB+6x6½DC+FLEX JT+EQ JARS+1xHWDP+HYDRIL SUB+8HWDP.	16	50	1000	10	30.3.83	2797	1 3/4°	
11	8½"	CORING BHA+CH+CORE BBL+5x6½DC+2BUMPER SUBS+16x6½DC+FLEX JT+EQ JARS+1 HWDP+HYDRIL SUB+8 HWDP.	8	90	850					

F3g' Bis 2-78

WELL BORE COURSE CALCULATION

WELL : _____

• MEASUREMENTS •					• RESULTS •							
N°	Type	Measured depth	Inclination (°)	Geographic azimuth	DEPTHS		RELATIVE COORDINATES			GEOGRAPHIC COORDINATES		Dog • Leg Severity
					Measured and corrected	Vertical	N.S.	E.W.	Departure	X	Y	

VERTICAL BORE

Correction due to drill pipes elongation • This correction is optional • Correct also the vertical depth ?

F3 h Bis 2-78 | COMPLETION STATUS | WELL : TARRA 1

1) COMPLETION (If carried out by the drilling rig)

yes ☐

no ☒

2) - CASINGS, TUBINGS AND ANNULUS STATUS

CASING AND TUBING DIAMETER	SHOE DEPTH	HANGER DEPTH	CASING CUT DEPTH (event)	CEMENT TOPS		ANNULUS FLUIDS	
				OD	ID	NATURE	SG
20"	211m	91m	110m	SEABED		CMT	
13 3/8"	1002m	93.34m	170m	500 m		SEA WATER GEL	1.08
9 5/8"	2567m	92.34m	230m	2070 m		SEA WATER GEL - POLYMER	1.15

Depths of perforations :

Tubing anchoring device and packer depth(s) :

3) - CEMENT PLUGSAND BRIDGE PLUGS (CP and BP)

CEMENT PLUG (CP) or BRIDGE PLUG (BP)	CP	CP	CP						
FROM (m or)	2600	260	200						
TO (m or ft)	2520	200	120						
TESTED	☒ yes ☐ no	☐ yes ☒ no	☒ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
BY PRESSURE OR WEIGHT	1000 PSI		1000 PSI						

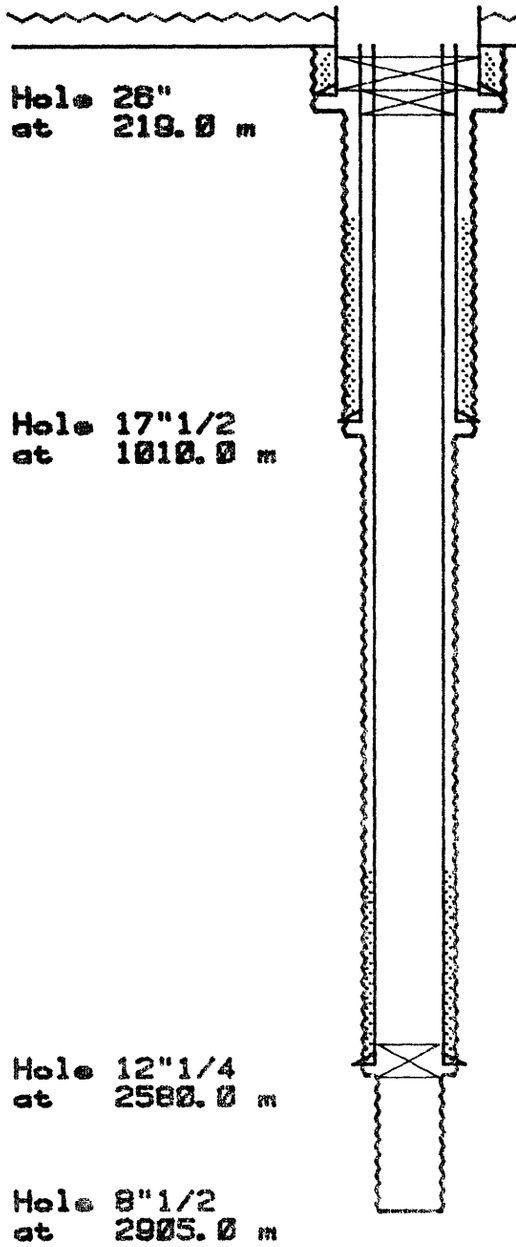
4) - WELL HEAD

Description of abandonned equipment : ALL EQUIPMENT REMOVED FROM SEABED

RELOCALIZATION DEVICE { yes ☐ / no ☒ } TYPE :

Imp. 4996 SNEA(P) RGM 959 004.011

Bis 2-78 | WELL TECHNICAL SECTION (COMPLETION STATUS) | WELL : TARRA 1



Elevation KB 30.0 m above MSL
Sea bed at 63.0 m below MSL

Hole 26"
at 219.0 m

Cement plug from 200.0 to 120.0 m
Cement plug from 260.0 to 200.0 m

20" Casing shoe at 211.0 m

Cement top at 500.0m

20" CUT AT 110m RKB

13-3/8" CUT AT 170m RKB

9-5/8" CUT AT 230m RKB

Hole 17"1/2
at 1010.0 m

13"3/8 Casing shoe at 1002.0 m

Cement top at 2070.0m

Hole 12"1/4
at 2580.0 m

Cement plug from 2600.0 to 2520.0 m

9"5/8 Casing shoe at 2567.0 m

Hole 8"1/2
at 2905.0 m

F3 i Bis 2-78 | MAIN CONSUMPTIONS OF THE WELL | WELL: TARRA 1

ROCK BITS AND CORE BITS

BIT DIAMETER	CONE BITS				DIAMOND BITS			BITS		Total by interval
	Tooth tricone bits	Insert tricone bits	Removable center	Bicone bits	Drilling bits	Core bits	Removable center	Drag bits	Special bits	
26"	1U									1
17½"	2									2
12¼"	5	2								7
8½"	1	2				2				5
								TOTAL →		15

CASINGS

Diameter	Weight (lbs/Ft)	Thread	Grade	Length (Ft or m)	Observations
20"	133	"CC" CONNECTOR CAMERON	X56	120m	
13 3/8"	68	BUTTRESS	K55	909m	SHOE AT 1002M
9 5/8"	47	BUTTRESS	N80	2484m	SHOE AT 2567M

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F3i' Bis 2-78	MAIN CONSUMPTIONS OF THE WELL	WELL: TARRA 1

• CEMENTS •

Class	QUANTITY (T)			Class	QUANTITY (T)		
	Casing	Well abandon	Plugging losses		Casing	Well abandon	Plugging lo
G	135T	13T	46T				

CHEMICALS

CHEMICAL NAME	QUANTITIES ADDED m^3 or T	CHEMICAL NAME	QUANTITIES ADI m^3 or T
GEL	61.25T	CALCIUM CHLORIDE	2.08T
CAUSTIC	6.58T	CMC LV CMC HV	2.58T 0.88T
SODA ASH	2.64T	STARLOSE PAC-R	0.227T 0.200T
LIME	2.73T	DEXTRID	4.54T
BARITE	154.94T	MON PAC	0.275T
KWIK SEAL	3.64T	SOLTEX	1.36T
MICA	0.95T	Q.BROXIN	2.95T
CONDET	0.205M^3	AL STEARATE	1.06T
*15.2T USED TO PLUG LOSSES 33.57T DUMPED PRIOR RIG MOVE		BICARBONATE SAPP	1.20T 0.650T

ABOVE FIGURES EXCLUDE TRANSFER LOSSES

WATER - DIESEL/OIL (not added in mud)

FRESH WATER (m^3)	--		
DIESEL-OIL (m^3)	300T	-FOR THE RIG ONLY CONSUMPTION OF THE 3 BOATS	EXCLUDED

WELL HEADS, HANGERS (Ø - API working pressure - Type)

- 1 x HOUSING 18 3/4" x 10,000 PSI CIW WITH PILE JOINT 18" x 24" x 30 FT LONG.
- 18 3/4" NOMINAL SEAT PROTECTOR CIW.
- 13 3/8" x 18 3/4" CASING HANGER + 13 3/8" x 18 3/4" SEAL ASSY. + 13 3/8" WEAR BUSHI
- 9 5/8"x18 3/4"CASING HANGER+1x9 5/8"x18 3/4"SEAL ASSY.+9 5/8"x8½" WEAR BUSHING CIW.
- 2 AX RING CIW
- 1 x TEMPORARY GUIDE BASE CIW (MODIFIED)
- 1 x PERMANENT GUIDE BASE CIW (MODIFIED)

F3j' Bis 2-78	BREAKDOWN OF CONSUMABLES, RENTAL AND SERVICE COST	WELL: TRA1

CONSUMABLES (Item 5)

– Fuel and lubricants	A$ 184,641	– Casing and miscellaneous	A$ 490,786
– Drilling bits	A$ 62,787	– Wellhead and miscellaneous	A$ 86,168
– Core - Bits	A$ 11,839	– Bottom hole equipment	A$ 2,742
– Mud chemicals	A$ 100,883	– Surface equipment	A$ 3,751
– Cements	A$ 60,609	– Offshore or anchoring equipment	A$ 1,777
– Water	A$ 4,639	– Anti-pollution products	A$ --
–		–	

TOTAL : A$ 1,010,622

RENTAL AND SERVICES (Item 6)

– Electrical logging	A$ 497,282	– Mud logging	A$ 59,043
– Cementing and pumping	A$ 55,717	– Mud services	A$ 13,958
– Fishing	A$ 18,736	– Directional survey	A$ --
– Turbodrill	A$ --	– Tong service	A$ 13,560
– Testing	A$ 64,785	– Air drilling	A$ --
– Subsea operations (diving)	A$ 143,941	– Other services	A$ --
– Welding	A$ --	– Bottom hole equipment rental	A$ 28,724
– Oceano-meteorological assistance	A$ --	– Surface equipment rental	A$ --
– Velocity survey	A$ 12,600	– Wellhead equipment rental	A$ 193
– Subsea television	A$ --	– Anti-pollution equipment rental	A$ --
– Positioning	A$ 48,073	–	
–		–	

TOTAL: A$ 956,612

F3j Bis 2-78 | **COSTS BREAKDOWN** | **WELL:** TARRA 1

	OPERATIONS	BEFORE DRILLING	DRILLING	AFTER DRILLI
I	Operation preparation	25,000		--
II	Access and drilling site works & sea bottom surveys	29,046	9,601	--
III	Rig mobilization and moving in - COSTS EX SINGAPORE/MOVING DOWN AUSTRALIA COAST - APPROTIONED.	64,450	1,047,754	--
	SUB TOTAL	118,496	1,057,355	--
IV	Drilling Contractor	--	3,434,629	--
V	Consumables	--	1,010,622	--
VI	Rental and services	--	928,156	--
VII	Operator supervision	--	192,352	--
VIII	Transportation (air - land - sea)	--	1,194,434	--
IX	Insurances	--	--	--
X	Operating bases	--	123,556	--
	SUB TOTAL	--	6,883,749	--
XI	Rig demobilization and moving out	--		--
XII	Finalization of operations	--		--
	TOTAL	A 118,496	B 7,941,104	C --

TOTAL COST OF WELL: A + B + C ---------- 8,059,600

- Drilled footage (meter ~~or feet~~): 2,812 m
- Drilling duration (d): 38 (INCLUDES MOVING IN/OUT) days
- Cost { per drilled meter $\frac{B}{m}$ 2,824 ; ~~or drilled foot $\frac{B}{ft}$~~ }
- Daily cost $\frac{B}{d}$: 212,094

Currency: AUSTRALIAN $ Conversion rate: --

Imp 4996 SNEAP RGM 959 004 011

FSK Bis 2-78 | MONTHLY METEOROLOGICAL SHEET | WELL: TARRA 1

MONTH: MARCH | WELL: TARRA 1

YEAR 1983	DAILY MORNING OBSERVATIONS							UNIT MOTIONS			Temperature °C	Visibility (miles)
	Wind		Waves			Current						
DATE	Speed	Direction	Height (Ft or m)	Period (sec.)	Direction	Speed (Knt)	Direction	Roll (°)	Pitch (°)	Heave (Ft or m)		
1	20	ESE	1	3	SE			0.5	0.5		17	
2	30	ENE	2	3	E			0.5	0.6		20	
3	25	ESE	1.5	2	SE			0.6	0.6		21	
4	20	E	3	6	E			0.4	0.4	0.5	24	
5	2	SW	--	--	--			0.1	0.1	0.2	20	
6	17	NNE	1.5	6	NE			0.3	0.3	0.3	23	
7	2	ESE	--	--	--			0.1	0.1	0.1	24	
8	25	NNE	1.5	5	NNE			0.3	0.3	0.3	23	
9	60	WSW	7	7	WSW			1.0	2.0	0.8	20.5	
10	40	ENE	5	7	E			0.6	1.0	1.0	19	
11	25	NE	5	6	E			0.6	1.0	1.0	21.5	
12	20	SW	2	5	SW			0.3	0.3	0.8	22.5	
13	30	WSW	3	8	SW			0.4	0.4	1.0	21	
14	15	W	2.5	7	SW			0.4	0.4	0.8	18	
15	15	E	1.5	6	SW			0.2	0.2	0.3	16	
16	30	E	3.5	6	E			0.3	0.5	0.3	19	
17	25	E	3	6	E			0.3	0.5	0.4	19.5	
18	20	SW	--	--	--			0.1	0.1	0.2	20	
19	5	ESE	--	--	--			0.2	0.2	0.2	19	
20	25	E	4	5	E			0.4	1.2	0.6	19	
21	35	E	9	5	E			1.0	1.5	1.0	19	
22	40	E	14	6	E			1.5	2.0	2.0	21	
23	45	W	6	7	SW			0.8	1.0	1.2	21	
24	35	SW	6	5	SW			0.9	1.2	1.0	16.5	
25	25	WSW	2	5	SW			0.6	0.4	0.5	16.5	
26	35	WSW	5	6	SW			0.8	0.6	0.7	17	
27	30	WSW	4	6	SW			0.6	0.7	0.6	17	
28	30	WSW	4	6	SW			0.5	0.4	0.5	17.5	
29	15	WSW	3	6	SW			0.3	0.3	0.4	18	
30	25	SW	3	6	SW			0.3	0.3	0.4	19	
31	18	SW	3	4	SW			0.3	0.4	0.5	18	

Imp. 4986 SNEAP) RGM 969 004 011

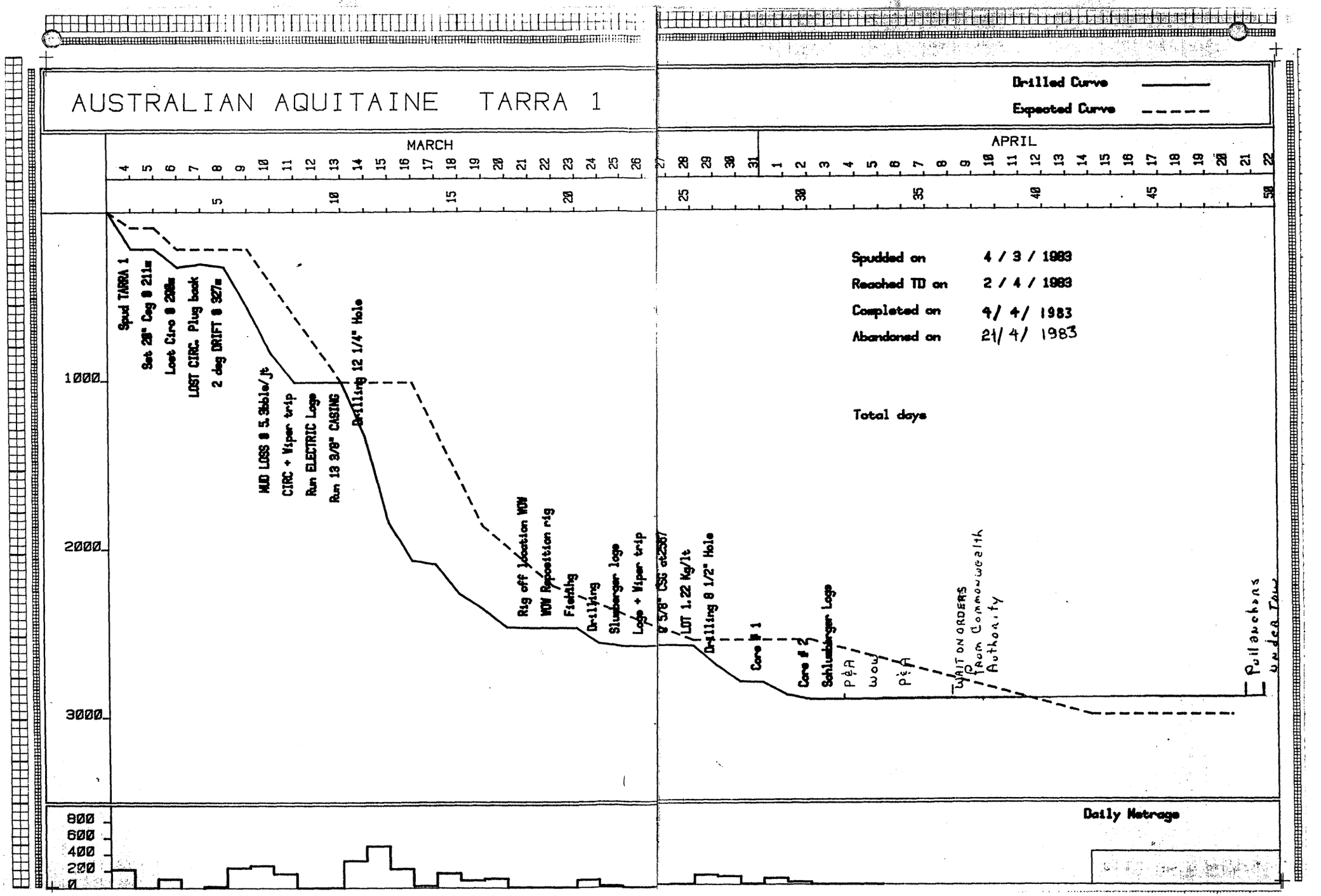
F3k Bis 2-78 | **MONTHLY METEOROLOGICAL SHEET** | **WELL:** TARRA 1

MONTH: APRIL | **WELL:** TARRA 1

YEAR 19__	DAILY MORNING OBSERVATIONS							UNIT MOTIONS				
	Wind		Waves			Current					Temperature °C	Visibility (miles)
DATE	Speed	Direction	Height (Ft or m)	Period (sec.)	Direction	Speed (Knt)	Direction	Roll (°)	Pitch (°)	Heave (Ft or m)		
1	20	SW	2.5	7	SW			0.2	0.3	0.4	16	
2	20	SW	3	6	SW			0.3	0.3	0.5	16	
3	10	ENE	2	VAR	VAR			0.2	0.3	0.4	18	
4	35	WNW	6	7	SW			0.3	0.6	0.5	18	
5	60	WNW	8	7	W			1.0	1.8	1.0	15	
6	50	W	8	5	W			1.0	1.8	1.0	14	
7	6	W	2	5	SW			0.2	0.2	NIL	15.5	
8	20	NE	3.5	7	E			0.2	0.4	--	17	
9	25	ENE	3.5	8	E			0.2	0.5	--	19.5	
10	35	NE	3.5	VARIABLE				0.2	0.3	0.3	20.5	
11	30	WSW	4.5	8	WSW			0.4	0.8	--	20.5	
12	22	WSW	4.5	6	WSW			0.8	0.8	--	16	
13	22	W	3	6	SW			0.4	0.5	--	16.5	
14	35	W	3.5	8	SW			1.0	0.8	--	16.5	
15	25	SSE	3.5	7	SE			1.0	0.8	--	16	
16	25	SSE	4	7	SE			1.0	0.6	--	15	
17	20	SSE	4.5	6	SE			1.0	0.8	--	15	
18	18	SSE	4.5	6	SE			0.9	0.9	--	16	
19	19	SSE	4.5	6	SE			0.9	0.9	--	16	
20	15	SW	1	VARIABLE				0.4	0.5	--	15	
21	14	SW	1	VARIABLE				0.3	0.3	--	18	
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												

Imp. 4986 SNEA(P) RGM 969 004 011

AUSTRALIAN AQUITAINE TARRA 1



CASING AND CEMENTING REPORT

F5a Bis

WELL (Country)	RIG (Contractor)	R Ground ☐ K Height B M.L. ☒	ϕ Casing ☒ Liner ☐	CASING SHOE	Hanger depth (for liners) or changing ϕ casing depth :	OPERATION DATE
TARRA 1 (AUSTRALIA)	OCEAN DIGGER (ODECO)	93m	20"	Measured depth : 211m Vertical depth : 211m	91m	5.3.83

1 - WELL CONDITION

Open hole diameter : 26" Depth { Vertical : 219 / Measured : 219 } Deviation { Mini : ° to ° / Maxi : 0 ° to 219 r

Important caving (location - average diameter..) : NONE

Losses during drilling (levels, extent) DRILLING WITH RETURNS TO SEABED SPOTTING HI VIS PILLS

Reamer runs (number) 1 Reamer at 9 m from the bi

Previous casing : Diameter NONE Shoe at

Bo. Ps on well when running in (Type - equipment, test pressure) NONE - SURFACE CSG

MUD CHARACTERISTICS BEFORE INJECTING SLURRY	S.G.	W.L.	P.V.	Y.V.	VISCOSIMETER READINGS Vs R.P.M. 600	300				
	1.03									

Observations HI VIS SPUD MUD IN HOLE

2 - GENERAL COMPOSITION OF CASING STRING

ELEMENT	MFG, type	ϕ	Weight (lb/ft) or thickness	Thread or joint type	Grade	Special corrosion ?	Inside volume l/m	Length (m)	Numbe of joints
SHOE	FLOAT	20"	SHOE JT						X
COLLAR	TRISTATE FLOAT	20"	133 LB	"CC"	X56	NO	177.8	12.80	1 X
CASING	N.K.K.		133 LB	"CC"	X56	NO	177.8	95.24	8
PILE JT	CIW	24"x20"		"CC"		NO		12.24	1
Tripping joint : 5" HWDP + BUMPER SUB								91.00	X
							TOTAL ➤	211.27 m	10

Drift diameter in the thickest joint 118.2MM

Maximum permissible tension 143T

Theoretical weight of the casing string : In air 35T in mud : 32T

3 - EQUIPMENT OF CASING STRING

CENTRALIZERS
MGF : NONE
TYPE :
NUMBER :
DEPTH/RKB :

SCRATCHERS
MGF :
TYPE :
NUMBER :
DEPTH/RKB :

OTHER EQUIPMENT
(Description - Location)

Imp. 4995 B SNEA(P) - RGM 959.004.013 - F5abis/2-78/11-80

4 - RUNNING CASING

Making-up of joint : CAMERON CC CONN. (MFG BY TRISTATE)
Grease type used for threads : OIL
Average torque to make-up the joints N/A
Filling frequency
Intermediate circulation (duration - depth) WASH DOWN CSG 5 HR 125m TO 180m

Total running time (with circulations) 9 h 00 average rate N/A joints/h
Troubles during running NECESSARY TO WASH DOWN CSG FROM 125M TO 180M

Bottom hole circulation : Duration 30M Rate 1480 LTS/MIN Pressure 500 PSI
Reciprocating : Duration Rate Amplitude
M.D. indications after stop of bottom hole circulation :
Observations : CSG FREE AFTER 180M, REGAN SLOPE INDICATOR 3/4 DEG WHEN LANDED AND AFTER CEMENT JOB.

5 - SINGLE STAGE OR FIRST STAGE CEMENTING

Service cy DOWELL SCHLUMBERGER
Mixing pump DOW SCHLUM 2"x3"x11" CENT.
Slurry injection pump DOW SCHLUM 4½"x3 3/4" TRI.
Displacement pump(s) DOW SCHLUM 4½"x3 3/4" TRI.

Beginning of slurry making at 0730 h
End of slurry making at 0805 h.
End of displacement at 0845 h.
Pressure released in casing at 0847 h.

	Nature or class of cements	Sacks or bulk	Cement weight increase %	Water and additives used (nature : quantities)	TONNAGES USED
1	"G"	565		3.79% PREHYDRATED GEL + 2% CACL2	24 T
2				THIXOTROPIC A + B COMPONENTS	8.54 T
3				64 LBS "B" 128 LBS "A"	T

CARACTERISTICS OF		S.G.	P.V.	Y.V.	VISCOSIMETER READINGS VS R.P.M. 600	300
SLURRIES	1	1.52				
	2	1.68				
	3					
SPACER PLUGS	1					
	2					

Slurry injection rate 954 LTS/MIN Displacement rate 795 LTS/MIN

Displacement fluid nature SEA WATER Pumped volume 19396 LTS

Pressure at the beginning of displacement 250 at the end 265 at the surge 265
Estimated losses ? RETURNS OBSERVED WITH SUB SEA TV
Casing string pressuring up at Result
Residual pressure (eventual) after bleeding off

6 - SETTING ON SPOOL

M.D. indication at the end of displacement
M.D. indication after cement betting setting tension on spool → T.
Casing string set on spool h. after the end of displacement
Spool : MFG Nominal dimensions API WP.
Suspension and seal type
Additional seal (type - dimensions)
Distance between the upper part of the spool and R.K.B. TOP 18 3/4" WELL HEAD AT 91M
Cut casing cm above the spool

7 - CONTROL

Temperature well logging after h. setting
Cementing log after h. setting Top cement annulus → SEABED m
Result of these logs (or enclose a copy) DIVERS OBSERVED CEMENT AT SEA BED

Test casing string + B.O.P.(blind and pipe rams) Test pressure →
Packer depth :
Test result :

DETAILED COMPOSITION OF THE CASING STRING

F 5 c Bis 2 - 78

Well site	TRA NO. 1	Casing diameter	20"	RKB distance above the ground or above the mud-line in off-shore	93M

Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length	Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length
RKB TO TOP 18 3/4 WELLHEAD			91.0	91.00					
1	SHOE FC JOINT		12.80	103.80					
2	133LB/FT X56 CC		11.91	115.71					
3	" "	"	11.91	127.62					
4	" "	"	11.90	139.52					
5	" "	"	11.89	151.41					
6	" "	"	11.91	163.32					
7	" "	"	11.89	175.21					
8	" "	"	11.91	187.12					
9	" "	"	11.64	198.76					
10	PILE JOINT		12.24	211.00					

IMPORTANT: *the detailed composition of the casing string should be given from top to bottom. For the upper joint the length under RKB will only be considered. So each cumulated length will be the RKB true measured depth of each corresponding joint.*

Imp. 4993 SNEA(P) - RGM 959.004.023

CASING AND CEMENTING REPORT

F5a Bis

WELL (Country)	RIG (Contractor)	R Ground ☐ K Height ☐ B M.L. ☒	ø Casing ☒ Liner ☐	CASING SHOE	Hanger depth (for liners) or changing ø casing depth :	OPERATION DATE
TARRA 1 (AUSTRALIA)	OCEAN DIGGER (ODECO)	93	13 3/8	Measured depth : 1002 Vertical depth :		12.3.83

1 - WELL CONDITION

Open hole diameter : 17½" Depth { Vertical : / Measured : } Deviation { Mini : 314 ° to 1010 m / Maxi : 2 ° to 326 m }

Important caving (location - average diameter..) :

Losses during drilling (levels, extent) TOTAL LOSSES BELOW 20" CSG - DRILL AHEAD WITH PARTIAL LOSSES (10 TO 2 M^3/HR).

Reamer runs (number) 1 Reamer at 9 m from the bit

Previous casing : Diameter 20" Shoe at 211 m

Bo. Ps on well when running in (Type - equipment, test pressure) CIW 18 3/4" SERIAL 10,000 PSI

MUD CHARACTERISTICS BEFORE INJECTING SLURRY	S.G.	W.L.	P.V.	Y.V.	VISCOSIMETER READINGS Vs R.P.M. 600	300				
	1.14	NC	6	27						

Observations

2 - GENERAL COMPOSITION OF CASING STRING

ELEMENT	MFG, type	ø	Weight (lb/ft) or thickness	Thread or joint type	Grade	Special corrosion ?	Inside volume l/m	Length (m)	Number of joints
SHOE	FLOAT	13 3/8	68 LBS/FT	BUTT	K55		78.08	0.	X
COLLAR	FLOAT	13 3/8	68 LBS/FT	BUTT	K55		78.08	0.60	X
CASING	RII	13 3/8	68 LBS/FT	BUTT	K55		78.08	906.32	76
HANGER	CIW	13 3/8	TORQUE SET					0.70	
Tripping joint :	HWDP	5"	50LBS/FT	4½ I.F.			4.61		X
							TOTAL ➤	908.32 m	76

Drift diameter in the thickest joint

Maximum permissible tension

Theoretical weight of the casing string : In air in mud :

3 - EQUIPMENT OF CASING STRING

CENTRALIZERS	SCRATCHERS	OTHER EQUIPMENT (Description - Location)
MGF :	MGF :	
TYPE : WEATHERFORD ST III	TYPE :	
NUMBER : 5	NUMBER :	CIW 13 3/8 SEAL ASSY LOW
DEPTH/RKB : 995	DEPTH/RKB :	TORQUE SET SYSTEM SCREW ON
981		TOP 13 3/8 HANGER
970		
935		(TOP SEAL ASSY 93.34M)
208		

4 - RUNNING CASING

Making-up of joint : WEATHERFORD LAMB
Grease type used for threads : JET LUBE SEAL THREAD COMPOUND
Average torque to make-up the joints : 12,000 LBS/FT (TO TRIANGLE)
Filling frequency : EVERY 5 JOINTS
Intermediate circulation (duration - depth) : NONE

Total running time (with circulations) 8 h average rate 9.5 joints/h
Troubles during running :

Bottom hole circulation : Duration 1 HR Rate 1644 Pressure 400 PSI
Reciprocating : Duration NONE Rate Amplitude
M.D. indications after stop of bottom hole circulation :
Observations :

5 - SINGLE STAGE OR FIRST STAGE CEMENTING

Service cy DOWELL SCHLUMBERGER
Mixing pump DOWELL SCHLUMBERGER
Slurry injection pump DOWELL SCHLUMBERGER
Displacement pump(s) RIG PUMP

Beginning of slurry making at 7H21 (13.3.83) h
End of slurry making at 8H20 h.
End of displacement at 9H10 h.
Pressure released in casing at 9H20 h.

	Nature or class of cements	Sacks or bulk	Cement weight increase %	Water and additives used (nature : quantities)	TONNAGES USED
1	"G"	B	CALIPER	4% PREHYDRATED BENTONITE + FRESH WATER	21 TONS T
2	"G"	B	FRESH WATER WITHOUT ADDITIVES		27 TONS T
3					T

CARACTERISTICS OF		S.G.	P.V.	Y.V.	VISCOSIMETER READINGS VS R.P.M. 600	300				
SLURRIES	1	1.42								
	2	1.90								
	3									
SPACER PLUGS	1									
	2									

Slurry injection rate 1) 1777 LIT/MIN 2) 1320 LIT/MIN Displacement rate 990 LIT/MIN

Displacement fluid nature MUD Pumped volume 69.5M3

Pressure at the beginning of displacement 300 at the end 1000 PSI at the surge 2000 PSI
Estimated losses 9.5M3
Casing string pressuring up at 2000 PSI Result OK (HELD 15 MIN)
Residual pressure (eventual) after bleeding off

6 - SETTING ON SPOOL

M.D. indication at the end of displacement
M.D. indication after cement betting setting tension on spool → T.
Casing string set on spool h. after the end of displacement
Spool : MFG Nominal dimensions API WP.
Suspension and seal type
Additional seal (type - dimensions)
Distance between the upper part of the spool and R.K.B.
Cut casing cm above the spool

7 - CONTROL

Temperature well logging after h. setting
Cementing log after h. setting Top cement annulus → 500 m
Result of these logs (or enclose a copy)

Test casing string + B.O.P.(blind and pipe rams) Test pressure → 2000
Packer depth :
Test result :

DETAILED COMPOSITION OF THE CASING STRING

F 5 c Bis 2 - 78

Well site	TARRA 1	Casing diameter	13 3/8	RKB distance above the ground or above the mud-line in off-shore	93M

Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length	Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length
DISTANCE ROTARY TABLE TO					39			11.83	559.62
TOP 18 3/4 HOUSING			92.36	93.36	40			11.82	571.44
DISTANCE TOP HOUSING TO					41			11.88	583.32
TOP HANGER			1.32	93.68	42			11.74	595.06
HANGER CIW			0.70	94.38	43			11.92	606.98
1	68LBS-K55-BUTT		12.00	106.38	44			11.75	618.73
2			12.01	118.39	45			11.55	630.28
3			12.07	130.46	46			11.96	642.24
4			11.84	142.30	47			11.88	654.12
5			11.90	154.20	48			11.99	666.11
6			12.03	166.23	49			12.00	678.11
7			11.88	178.11	50			12.06	690.17
8			11.93	190.04	51			11.91	702.08
9			12.03	202.07	52			12.07	714.15
*10			12.05	214.12	53			12.07	726.22
11			12.05	226.17	54			12.00	738.22
12			11.80	237.97	55			12.07	750.29
13			12.07	250.04	56			11.79	762.08
14			11.93	261.97	57			12.04	774.12
15			11.98	273.95	58			11.99	786.11
16			12.07	286.02	59			12.07	798.18
17			11.66	297.68	60			12.07	810.25
18			12.05	309.73	61			11.96	822.21
19			11.94	321.67	62			11.90	834.11
20			11.93	333.60	63			11.76	845.87
21			11.85	345.45	64			11.94	857.81
22			12.05	357.50	65			12.07	869.88
23			11.83	369.33	66			12.01	881.89
24			12.06	381.39	67			12.08	893.97
25			11.97	393.36	68			12.08	906.05
26			12.02	405.38	69			11.91	917.96
27			12.06	417.44	70			11.66	929.62
28			11.82	429.26	*71			11.65	941.27
29			11.47	440.73	72			11.78	953.05
30			12.07	452.80	73			12.07	965.12
31			11.65	464.45	*74			12.03	977.15
32			11.97	476.42	FLOAT			0.60	977.75
33			11.99	488.41	*75			11.90	989.65
34			11.74	500.15	*76			11.65	1001.30
35			11.70	511.85	SHOE			0.70	1002.00
36			11.92	523.77					
37			12.05	535.82					
38			11.97	547.79					

IMPORTANT: *the detailed composition of the casing string should be given from top to bottom. For the upper joint the length under RKB will only be considered. So each cumulated length will be the RKB true measured depth of each corresponding joint.*

Imp. 4993 SNEA(P) - RGM 959.004.023

CASING AND CEMENTING REPORT

F5a Bis

WELL (Country)	RIG (Contractor)	R Ground ☐ K Height B M.L. ☒	ø Casing ☒ Liner ☐	CASING SHOE	Hanger depth (for liners) or changing ø casing depth :	OPERATION DATE
TARRA 1 (AUSTRALIA)	OCEAN DIGGER (ODECO)	94.30	9 5/8	Measured depth : 2567M Vertical depth :		27.3.83

1 - WELL CONDITION

Open hole diameter : 12¼M Depth { Vertical : / Measured : 2580M } Deviation { Mini : ¼ ° to 1334 m / Maxi : 3¼ ° to 2066 m }

Important caving (location - average diameter..) :

Losses during drilling (levels, extent) NONE

Reamer runs (number) ONE Reamer at 1M/9/18/27M m from the bi

Previous casing : Diameter 13 3/8 Shoe at 1002M m

Bo. Ps on well when running in (Type - equipment, test pressure) CIW 18 3/4 SERIAL 10,000 WELLHEAD HOUSING CAMERON - TORQUE SET SYSTEM

MUD CHARACTERISTICS BEFORE INJECTING SLURRY	S.G.	W.L.	P.V.	Y.V.	VISCOSIMETER READINGS Vs R.P.M. 600	300				
	1.16	25	5	16						

Observations

2 - GENERAL COMPOSITION OF CASING STRING

ELEMENT	MFG, type	ø	Weight (lb/ft) or thickness	Thread or joint type	Grade	Special corrosion ?	Inside volume l/m	Length (m)	Number of joints
SHOE	FLOAT	9 5/8	47 LBS/FT	BUTT	N80		38.19	0.60	X
COLLAR	FLOAT	9 5/8	47 LBS/FT	BUTT	N80		38.19	0.50	X
CASING	RII	9 5/8	47 LBS/FT	BUTT	N80		38.19	2472.30	210
HANGER	CIW	9 5/8	TORQUE SET	BUTT				0.70	
Tripping joint :	HWDP	5"	50LBS/FT	4½"IF			4.61		X
							TOTAL ➤	2,474.10 m	210

Drift diameter in the thickest joint 216.5mm

Maximum permissible tension 523 10^3 DAN

Theoretical weight of the casing string : In air 177 T in mud : 150.8T

3 - EQUIPMENT OF CASING STRING

CENTRALIZERS

MGF :

TYPE : WEATHERFORD ST III

NUMBER : 11

DEPTH/RKB :

951
975
998
2435
2459
2494
2506
2530
2542
2554
2560

SCRATCHERS

MGF :

TYPE :

NUMBER :

DEPTH/RKB :

OTHER EQUIPMENT (Description - Location)

CIW 9 5/8 SEAL ASSEMBLY
LOW TORQUE SYSTEM SCREW
ON TOP 9 5/8 HANGER.

TOP SEAL ASSY AT 93.95M

Imp. 4995 B SNEA(P) - RGM 959.004.013 - F5abis/2-78/11-80

4 - RUNNING CASING

Making-up of joint : TO TRIANGLE WITH WEATHERFORD LAMB
Grease type used for threads : JET LUBE SEAL THREAD COMPOUND
Average torque to make-up the joints 10,000 LBS/FT (TO TRIANGLE)
Filling frequency EVERY 10 JOINTS
Intermediate circulation (duration - depth) NONE

Total running time (with circulations) _____ h ___ average rate _____ joints/h
Troubles during running

Bottom hole circulation : Duration 1½ Rate 1480 LIT/MIN Pressure
Reciprocating : Duration NONE Rate Amplitude
M.D. indications after stop of bottom hole circulation :
Observations :

5 - SINGLE STAGE OR FIRST STAGE CEMENTING

Service cy DOWELL SCHLUMBERGER
Mixing pump DOWELL SCHLUMBERGER
Slurry injection pump DOWELL SCHLUMBERGER
Displacement pump(s) RIG PUMP

Beginning of slurry making at 17:10 h
End of slurry making at 17:46 h.
End of displacement at 19:30 h.
Pressure released in casing at 19:40 h.

	Nature or class of cements	Sacks or bulk	Cement weight increase %	Water and additives used (nature : quantities)				TONNAGES USED
1	"G"	BULK	CALIPER					14T T
2				0.02 G/SK	D109			27 GALLON T
3				0.15 G/SK	D80			138 GALLON T

CARACTERISTICS OF		S.G.	P.V.	Y.V.	VISCOSIMETER READINGS VS R.P.M. 600	300				
SLURRIES	1									
	2									
	3									
SPACER PLUGS	1									
	2									

Slurry injection rate Displacement rate

Displacement fluid nature Pumped volume

Pressure at the beginning of displacement 200 PSI at the end 1100 PSI at the surge
Estimated losses 9.3M³
Casing string pressuring up at 2500 PSI Result PRESSURE DROP TO 950 PSI
Residual pressure (eventual) after bleeding off NONE

6 - SETTING ON SPOOL

M.D. indication at the end of displacement
M.D. indication after cement betting setting tension on spool → T.
Casing string set on spool h. after the end of displacement
Spool : MFG Nominal dimensions API WP
Suspension and seal type
Additional seal (type - dimensions)
Distance between the upper part of the spool and R.K.B.
Cut casing cm above the spool

7 - CONTROL

Temperature well logging after h. setting
Cementing log after h. setting
Top cement annulus → 2070M m
Result of these logs (or enclose a copy)

Test casing string + B.O.P.(blind and pipe rams) Test pressure BOP TEST (HYDRIL 2000 ONLY) → 4000 PSI
Packer depth :
Test result :

DETAILED COMPOSITION OF THE CASING STRING

F 5 c Bis 2 - 78

Well site	TARRA 1	Casing diameter	9-5/8	RKB distance above the ground or above the mud-line in off-shore	94.30

Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length	Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length
ROTARY TABLE TO TOP		9-5/8	HANGER	94.30	42			11.80	587.68
HANGER			0.70	95.00	43			11.85	599.53
1	47 lb/ft N80		11.56	106.56	44			11.95	611.48
2	BUTRESS		11.61	118.17	45			11.66	623.14
3			11.74	129.91	46			11.98	635.17
4			11.79	141.70	47			11.83	646.95
5			11.85	153.55	48			T1.84	658.79
6			11.91	165.46	49			11.82	670.61
7			11.78	177.24	50			11.74	682.35
8			11.85	189.09	51			11.71	694.06
9			11.81	200.90	52			11.91	705.97
10			11.32	212.22	53			11.84	717.81
11			11.51	223.73	54			11.76	729.57
12			11.71	235.44	55			11.84	741.41
13			12.05	247.49	56			11.69	753.10
14			11.67	259.16	57			11.89	764.99
15			11.70	270.86	58			11.60	776.59
16			11.75	282.61	59			11.81	788.40
17			11.75	294.36	60			11.42	799.82
18			10.80	305.16	61			11.87	811.69
19			11.77	316.93	62			11.50	823.19
20			11.63	328.56	63			11.70	834.89
21			11.51	340.07	64			11.58	846.47
22			11.91	351.98	65			11.73	858.20
23			11.95	363.93	66			11.85	870.05
24			11.73	375.66	67			11.71	881.76
25			11.75	387.41	68			11.52	893.28
26			11.90	399.31	69			11.58	904.86
27			11.86	411.17	70			11.51	916.37
28			11.82	422.99	71			11.59	977.96
29			11.72	434.71	72			11.86	939.82
30			11.83	446.54	73 *			11.87	951.69
31			11.95	458.49	74			11.82	963.51
32			11.73	470.22	75 *			11.63	975.14
33			11.80	482.02	76			11.87	987.01
34			11.82	493.84	77 *			11.76	998.77
35			11.75	505.59	78			11.76	1010.53
36			11.79	517.38	79			11.88	1022.41
37			11.82	529.20	80			11.67	1034.08
38			11.47	540.67	81			11.75	1045.83
39			11.73	552.40	82			11.64	1057.47
40			11.77	564.17	83			11.62	1069.09
41			11.71	575.88	84			11.84	1080.93

IMPORTANT: the detailed composition of the casing string should be given from top to bottom. For the upper joint the length unc RKB will only be considered. So each cumulated length w the RKB true measured depth of each corresponding joint.

DETAILED COMPOSITION OF THE CASING STRING

F 5 c Bis 2 - 7

Well site	TARRA 1	Casing diameter	9-5/8	RKB distance above the ground or above the mud-line in off-shore	94.30

Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length	Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length
85	47lb/ft N80		11.83	1092.76	128			11.84	1598.85
86	BUTTRESS		11.84	1104.60	129			11.71	1610.56
87			11.68	1116.28	130			11.80	1622.36
88			11.77	1128.05	131			11.94	1634.30
89			11.75	1139.80	132			11.98	1646.28
90			11.66	1151.46	133			11.82	1658.10
91			11.92	1163.38	134			11.69	1669.79
92			11.93	1175.31	135			11.86	1681.65
93			11.61	1186.92	136			12.06	1693.71
94			12.06	1198.98	137			11.72	1705.43
95			11.85	1210.83	138			11.72	1717.15
96			11.63	1222.46	139			11.69	1728.84
97			11.90	1234.36	140			11.77	1740.61
98			11.76	1246.12	141			11.76	1752.37
99			11.80	1257.92	142			11.76	1764.13
100			11.81	1269.73	143			11.73	1775.86
101			11.47	1281.20	144			11.66	1787.52
102			11.35	1292.55	145			11.95	1799.47
103			11.78	1304.33	146			11.79	1811.26
104			11.68	1316.01	147			11.77	1823.03
105			11.93	1327.94	148			11.88	1834.91
106			11.68	1339.62	149			11.92	1846.83
107			11.91	1351.53	150			11.55	1858.38
108			11.76	1363.29	151			11.72	1870.10
109			11.79	1375.08	152			11.82	1881.92
110			11.68	1386.76	153			11.72	1893.64
111			11.83	1398.59	154			11.83	1909.47
112			11.83	1410.42	155			11.78	1917.25
113			11.48	1421.90	156			11.79	1929.04
114			11.69	1433.59	157			11.80	1940.84
115			11.73	1445.32	158			11.56	1952.40
116			11.80	1457.12	159			11.80	1964.20
117			11.92	1469.04	160			11.69	1975.84
118			11.79	1480.83	161			11.70	1987.59
119			11.80	1492.63	162			11.82	1999.41
120			11.62	1504.25	163			11.89	2011.30
121			11.97	1516.22	164			11.70	2023.00
122			11.80	1528.02	165			11.92	2034.92
123			11.67	1539.67	166			11.68	2046.60
124			11.78	1551.47	167			11.43	2058.03
125			11.80	1563.27	168			11.74	2069.77
126			11.99	1575.26	169			11.91	2081.68
127			11.75	1587.01	170			11.85	2093.53

***IMPORTANT:** the detailed composition of the casing string should be given from top to bottom. For the upper joint the length und RKB will only be considered. So each cumula ngth will be the RKB true measured depth of each corresponding joint.*

DETAILED COMPOSITION OF THE CASING STRING

F 5 c Bis 2 - 78

Well site	TARRA 1	Casing diameter	9-5/8	RKB distance above the ground or above the mud-line in off-shore	94.30

Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length	Equipment joint number	Thickness and grade	Threads	Unit length	Cumulated length
171	47 lb/ft N80		11.84	2105.37					
172	BUTTRESS		11.88	2117.25					
173			11.89	2129.14					
174			11.89	2141.03					
175			11.54	2152.57					
176			11.79	2164.36					
177			11.77	2176.13					
178			11.88	2188.01					
179			11.76	2199.77					
180			11.90	2211.67					
181			11.90	2223.57					
182			11.91	2235.48					
183			11.80	2247.28					
184			11.99	2259.27					
185			11.96	2271.23					
186			11.87	2283.10					
187			11.95	2295.05					
188			11.90	2306.95					
189			11.65	2318.60					
190			11.83	2330.43					
191			11.83	2342.26					
192			11.73	2353.99					
193			11.57	2365.56					
194			11.75	2377.31					
195			11.75	2389.06					
196			11.79	2400.85					
197			11.51	2412.36					
198			11.80	2424.16					
199 *			11.68	2435.84					
200			11.87	2447.71					
201 *			11.77	2459.48					
202			11.74	2471.22					
203 *			11.71	2482.93					
204			11.57	2494.50					
205 *			11.95	2506.45					
206			11.88	2518.33					
207 *			11.91	2530.24					
FLOAT			0.50	2530.74					
208 *			11.91	2542.65					
209 *			11.85	2554.59					
210 *			11.90	2566.40					
SHOE			0.60	2567.00					
*	INDICATED CENTRALISER.								

IMPORTANT: the detailed composition of the casing string should be given from top to bottom. For the upper joint the length und RKB will only be considered. So each cumulated length will be the RKB true measured depth of each corresponding joint.

elf aquitaine

TIME DISTRIBUTION

F6 bis / 12-80

OPERATOR	COUNTRY	WELL	RIG	CONTRACTOR	MONTH/YEAR
A.A.P	AUSTRALIA	TARRA 1	OCEAN DIGGER	ODECO	MARCH 83

DAY	Number of day from start of drilling	D			F				G				A				C			
		D_1	D_2	D_3	F_1	F_2	F_3	F_4	G_1	G_2	G_3	G_4	A_1	A_2	A_3	A_4	C_1	C_2	C_3	C_4
1		5.5																		
2		21.5		2.5			MOVING / ANCHORING													
3		18.5		5.5																
4	1	0.5			9.5	5.5		8.5			26" PHASE									
5	2							24												
6	3				4.5			6						13.5						
7	4													24						
8	5										17½" PHASE			22.5		1.5				
9	6				13.5		1.5							2	7					
	7				19.5	2	2.5													
	8				14.5	3						6.5								
	9							13				11								
	10							24												
	11				21	1.5	1.5													
	12				20.5	3.5					12¼" PHASE									
	13				15	0.5	8.5													
	14				5.5	16	2.5													
	15				22		2													
	16				15.5	8	0.5													
	17				23								1							
	18				2	10.5									11.5					
	19														24					
	20														24					
	21				13.5		1.5								9					
	22				4.5	3.5	5.5					10.5								
	23							10.5				13.5								
	24							24												
	25				3.5	6.5	1.5	12.5			8½" PHASE									
	26				23.5		0.5													
	27				23		1													
	28					6.5	0.5		2.5	12						2.5				
TOTAL																				

TIME OF SIDE TRACK DRILLING		TIME OF LOGGING OR FISHING JOB	

Causes of side track:
- Fishing job unsolved ☐
- Accidental on Plug ☐
- Correction of drill-path ☐

N.B. 1) Add an asterisk to each following day number:
- Time spent on F1, F2, F3 for technical side tracks, until the initial depth of the old hole is reached.
- Time spent on G4 for logging necessitated by a fishing job.

2) Side-track drilling further to a change in the geological target is considered as a new hole, whose the name changes (add .G to the old one). A new form is open up from the first day of the side track.

Imp. 4807 A SNEA(P) 959.004.007

elf aquitaine

TIME DISTRIBUTION

F6 bis / 12-80

OPERATOR	COUNTRY	WELL	RIG	CONTRACTOR	MONTH/YEAR
A.A.P	AUSTRALIA	TARRA 1	OCEAN DIGGER	ODECO	APRIL 83

DAY (Number of day from start drilling)	D MOVING			F DRILLING CASING				G FORMATION SURVEYS				A INTERRUPTION OF OPERATIONS UNDER F or G				C COMPLETION AND PLUGGING			
	D_1	D_2	D_3	F_1	F_2	F_3	F_4	G_1	G_2	G_3	G_4	A_1	A_2	A_3	A_4	C_1	C_2	C_3	C
1 29				22	1	1							$8\frac{1}{2}$" PHASE						
2 30				3	4	1		5	10.5		0.5								
3 31											24								
1C				ABANDON PHASE							1.5						22.5		
2C																	15	9	
3C																	2	22	
4C																	24		
1D			22														2		
2D			24																
3D			24																
4D			24																
5D			24																
6D			24								ABANDON								
7D			24																
8D			24																
9D			24																
10D			24																
11D			24																
12D			24																
13D			24																
14D	15.5																		
25																			
27																			
28																			
29																			
30																			
31																			
TOTAL																			

TIME OF SIDE-TRACK DRILLING		TIME OF LOGGING BY A FISHING JOB	

Causes of side track: Fishing job unsolved ☐ — Accidental on Plug ☐ — Correction of drill-path ☐

N.B. 1) Add an asterisk to each following day figures
* Time spent on F1, F2, F3 for technical side tracks, until the initial depth of the old hole is reached.
* Time spent on G4 for logging necessitated by a fishing job
2) Side-track drilling further to a change in the geological target is considered as a new hole, whose the name changes (add .G to the old one). A new form is open up from the first day of the side track.

Imp. 4807 A SNEA(P) - 959 004 007

F7 Bis 2-78

BIT RECORD

WELL: TARRA 1

GENERAL DATA			DRILLING BIT								PERFORMANCES					PARAMETERS				MUD				DULL BIT CONDITION				GEOLOGICAL FORMATION	Reason for tripping	TURBODRILLED			
Run number	Operation	Drive	Bit type	Bit Diameter	Manufacturer	Code IADC	Serial number	Nozzles 1 /32	Nozzles 2 /32	Nozzles 3 /32	Operation starting depth	Footage in this operation	Drilling time (hours)	Drilling rate	Déviation	Weight on bit	R.P.M.	Flow rate	Pressure	Density (mud weight)	Plastic Viscosity (cp)	Solid content (%)	Water loss (cc)	T	B	G	Observations on grading			Type of turbodrill	Turbodrill diameter	Turbodrilled footage	Total time (hours)
1U	F	R	T	26"	SMI	DSJ	SA5248	18	18	18	93	126	9½	13.2	0	1/5	60/80	3200	1750	SEA PILL	WATER	+ HI	VIS	1	1	I		NO RETURN	E				
2	RA	R	T	17½	HUG	OSC3A	2505R	18	18	18	199	20	1½	13.3		5/10	100	3300	2000														
2	F	R	T	17½	HUG	OSC3A	2505R	18	18	18	219	107	4½	23.8		8	100	3300	2000	1.08	6	5	NC	1	1	I		CMT	E				
2R	RA	R	T	17½	HUG	OSC3A	2505R	18	18	18	307	159	7½	21.2		5/10	60/100	3300	1800	1.08	6	5	NC		INC			CMT					
2R	F	R	T	17½	HUG	OSC3A	2505R	18	18	18	326	618	37½	16.5	2°	0/18	120	3200	2100	1.11	6	5	NC	3	6	I		CMT	B-A				
3	F	R	T	17½	HUG	OSC3A	302SP	18	18	18	837	173	14½	11.9	1½°	20	130	3200	2300	1.12	6	5	NC	1	1	I		CM	E				
4	RA	R	T	12¼	SMI	FDGH	XA6663	13	13	13	976	34	2½	13.6		3/9	50	1980	1700	1.13	7	5	NC		INC			CMT					
4	F	R	T	12¼	SMI	FDGH	XA6663	13	13	13	1010	324	21	15.4	3/4°	28	105	1930	2260	1.12	5	5	26	6	7	I		A	AB				
5	RA	R	T	12¼	HUG	X3A	SV736	13	13	13	1505	385	2½	154		0/8	80/110	2100	2600	1.14	15	7	14.2		INC			A					
5	F	R	T	12¼	HUG	X3A	SV736	13	13	13	1334	732	36½	20.1		20	110	2100	2600	1.14	15	7	14.2	4	7	1/8		A	AB				
6	RA	R	T	12¼	REED	HS51	NBH188	13	13	13	1709	357	1½	238		2/5	100	2100	2600	1.17	10	10	16.4		INC			A					
6	F	R	T	12¼	REED	HS51	NBH188	13	13	13	2066	10	3½	2.9	3¼°	20/30	50/110	2100	2600	1.17	10	10	16.4	1	1	I		A		BIT WOULD NOT DRILL IN CLAYSTONE			
7	RA	R	T	12¼	HUG	X3A	KK316	13	13	13	2039	37	1	37		5/10	100	1900	2400	1.17	10	10	16.4		INC			A					
7	F	R	T	12¼	HUG	X3A	KK316	13	13	13	2076	189	24	7.9	2 3/4°	22	115	1900	2450	1.14	14	10	7.6	7	5	I		AG	A				
6R	F	R	T	12¼	REED	HS51	NBH188	13	13	13	2265	200	38	5.3	1 3/4°	25	70	1900	2600	1.15	15	9	6.6	2	4	¼		G	AB				
8	F	R	T	12¼	REED	HS51	NBH184	13	13	13	2465	6	2	3		25	60	1900	2600	1.15	15	9	6.6	1	1	I		GA		*PULLED DUE TO BAD WEATHER			
9	F	R	T	12¼	SMI	FVH	XB0999	13	13	13	2471	109	18	6	1 3/4°	25	110	2100	2700	1.15	15	9	5.8	8	7	¼		AS	B				
10	COND RA	R	T	12¼	SMI	FVH	XB0994	13	13	13								2100	2700	1.15	16	9	6.6		NEW				E	*COND. HOLE ONLY FOR 9 5/8 CSG			
11	RA	R	T	8½	SMI	SVH	CE4110	14	14	14	2530	50	3½	14.3		5/12	30/50	1000	850	1.15	22	8	19.6		INC			CMT					
11	R	R	T	8½	SMI	SVH	CE4110	14	14	14	2580	3	3½	0.86		16	50	1000	900	1.15	22	8	19.6	4	1	I	BT	A	A	DAMAGED DRILLING FLOAT COLLAR			

OPERATION
F – Drilling
K – Coring
RA } – Redrilling (formation or cement)
– Reaming and control trip
P – Pilot hole drilling
E – Hole opening
PE – Simultaneous piloting and hole opening

Note: Use one line for each operation

DRIVE
R – Rotary
T – Turbine
M – Bottom hole motor other than turbine

BIT DESIGN
T – Triscones (rock bits)
B – Bicones
M – Other cone rock bits
F – Mill
D – Diamond bit
C – Diamond core head
A – Rock bit w/removable center
F – Diamond bit w/removable center

MANUFACTURER
The code constists the first three letters of the manufacturer name
HUG – Hughes
SMI – Smith
REE – Reed
SEC – Security
SMF – SMF
DIA – Diamond beart
DRI – Drilling service
CHR – Christensen

CODE

– BULL BIT CONDITION
T1 - Tooth hight 1/8 gone
T2 - Tooth hight 1/4 gone
T3 - Tooth hight 3/8 gone
T4 - Tooth hight 1/2 gone
T5 - Tooth hight 5/8 gone
T6 - Tooth hight 3/4 gone
T7 - Tooth hight 7/8 gone
T8 - Tooth hight all gone

Bearing wear B1 to B8

OBSERVATION ON GRADING :
Teeth and cones
CT – Chipped teeth
ET – Eroded teeth or inserts
BT – Broken teeth or inserts
BU – Bit balled up
RG – Rounded gauge teeth or inserts
WG – Worn or lost gauge teeth or inserts
FC – Flat crested
EC – Eroded cone shell
BS – Broken, worn or lost spear

Bearings
CL – Cone(s) locked
BF – Bearing failure
SF – Seal failure
LC – Lost cone(s)
BP – Broken bearing pins or journels

Bit body
BL – Bent legs - Pinched
PN – Plugged nozzle(s)
EN – Eroded nuzzle(s)

– FORMATION
A – Clay
C – Limestone of dolomite
M – Marl or shale
D – Chalk
S – Sand
G – Sandstone
Q – Quartz
V – Chert
X – Granite
K – Conglomerate
I – Gypsum - Anhydrite
L – Salitz

The lithology drilled in the previous 24 Hrs will be defined by the codes of the last formations drilled, with a maximum of three placed in order of relative importance.

Ex. (1) Ap : Plastic clay
(2) AS : Clay and sand
(3) Mct : Marl and soft limestone
(4) MChv: Marl and tight dolomite w/Chert

– REASON FOR TRIPPING
A – Penetration slowing down
B – Increasing torque
C – Hydraulic problems
D – Bit drill maximum hours allowed
E – Reason other than bit problems

Ex. (1) Drillstring modification
(2) Casing
(3) Test
etc...

91 SNEAP) RGM 559.004.015

F7 Bis 2-78

BIT RECORD

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12	F	R	T	8½	SMI	F2	XA1552	14	14	14	2583	214	46½		1 3/4°	18	65	1134	900	1.09	18	8	6.5	2	4	I		GK	B				
1KU	K	R	T	8½	CHRIS	RC3	82B0932	WATER COURSE			2797	7	2½			7	75	800	600	1.09	19	5	6.4	90%	USED			G	A	21.4%	RECOVERY		
13	RA	R	T	8½	SMI	F2	XA1558	14	14	14	2781	23	1	23		5/10	75	1118	900	1.09	17	5	5.9		INC								
13	F	R	T	8½	SMI	F2	XA1558	14	14	14	2804	86	25		1 3/4°	20	65	1118	900	1.09	17	7	6	2	3	1/8		G	E				
2K	K	R	T	15/832	CHRIS	C22	81E0937				2890	15	5			8	90	985	700	1.09	17	7	6	75%	OK			G	E	91% RECOVERY			

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