

Rig: **ISDL 453** State: **Victoria**

Rig: ISDL 453 Field: Tuna Location: Bass Strait Well: TNA A-10A ST Company: ESSO Australia Ltd Pty	GeoVISION* Service 1:500 True Vertical Depth Recorded Mode Data												
	Location	Total depth: 2243.0 m				Elevation	K.B. 31.32 m						
		Spud date: 5-Oct-2002					G.L. -59.4 m						
		Runs: 2 To 2					D.F. 31.32 m						
		Permanent datum:		Mean Sea Level				Elev.:		59.4 m			
	Log measured from:		Drill Floor				31.32 m above Perm. datum						
	Depth reference:		Driller's Depth										
	API serial no.		Y = 5,774,222.491 m N X = 624,224.990 m E				Longitude		Latitude				
							E 148° 25' 5.413"		S 38° 10' 16.394"				
	Depth logged:		1948.9 m To 2231.4 m		Mag decl: 13.166 deg.		Other services:						
Date logged:		15-Oct-02 To 16-Oct-02		Mag dip: -68.686 deg.		D & I, Directional Drilling							
Bore hole record							Casing record						
Hole size		from		to		Size		Density		from		to	
8 1/2 in.		661.1 m		2243.0 m		20 in.		285 lbm/m		0.0 m		155.0 m	
						13 3/8 in.		226 lbm/m		0.0 m		647.0 m	
						9 5/8 in.		154 lbm/m		617.0 m		661.1 m	
Mud record							Borehole deviation record						
Type		from		to		Min		Max		from		to	
KCI/PHPA/Glycol		661.1 m		2243.0 m		37.4 deg.		42.5 deg.		646.4 m		1015.5 m	
						42.5 deg.		60.9 deg.		1015.5 m		1218.5 m	
						60.9 deg.		68.7 deg.		1218.5 m		1796.9 m	
						54.1 deg.		68.7 deg.		1796.9 m		2243.0 m	
Surface equipment				Software record									
Unit		OLU-FB-924		IDEAL Wis		ID7_OC_02r							
Depth system		PDA-AB		SPM		HSPM7_OC_10a							
				LWD		See Toolsketch							
				MWD		See Toolsketch							

Bit Run Summary

[illegible]

Type	KCl/Phpa/Glycol										
Mud weight	lb/gal	10.25									
Solids	%	9.4									
Chlorides	mg/L	40,500									
Rm	ohm-m@°C	0.125@21.5									
Rmf	ohm-m@°C	0.231@22.0									
Rmc	ohm-m@°C	0.104@20.8									
Potassium	%	4									
Environmental data											
GR											
Mud weight	lb/gal	10.25									
Bit size	in.	8.5									
Resistivity											
Neutron porosity											
Hole Size	in.	8.5									
Mud weight	lb/gal	10.25									
Temperature	°C	68.5									
Mud salinity	ppk	66.825									
Formation salinity											
Recording rate 1	SEC	10									
Recording rate 2	SEC	10									
Filtering GR		3 pt									
Filtering density		3 pt									
Filtering Neutron		3 pt									
Company representative	B. Steel	B. Woodward									
Anadrill personnel	L. Bon	J. Dolan	K. Handley								

DISCLAIMER

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OTHER SERVICES FOR RUN2 D & I Directional Drilling	OTHER SERVICES FOR RUN	OTHER SERVICES FOR RUN
REMARKS: RUN NUMBER 2 All data presented is from tool memory. GR corrected for mud weight, tool and bit size. GVR6* resistivity is corrected for the bit size, mud resistivity and borehole temperature. Bottom quadrant density is presented. Neutron porosity is calculated with a limestone matrix and is corrected for the bit size, borehole salinity, temperature and mud hydrogen index. Mud type is water-based KCl/PHPA/Glycol. Barite was present in the mud system.	REMARKS: RUN NUMBER	REMARKS: RUN NUMBER

GVR6* downhole software: 6.1B14
ADN6* downhole software: 6.2B08

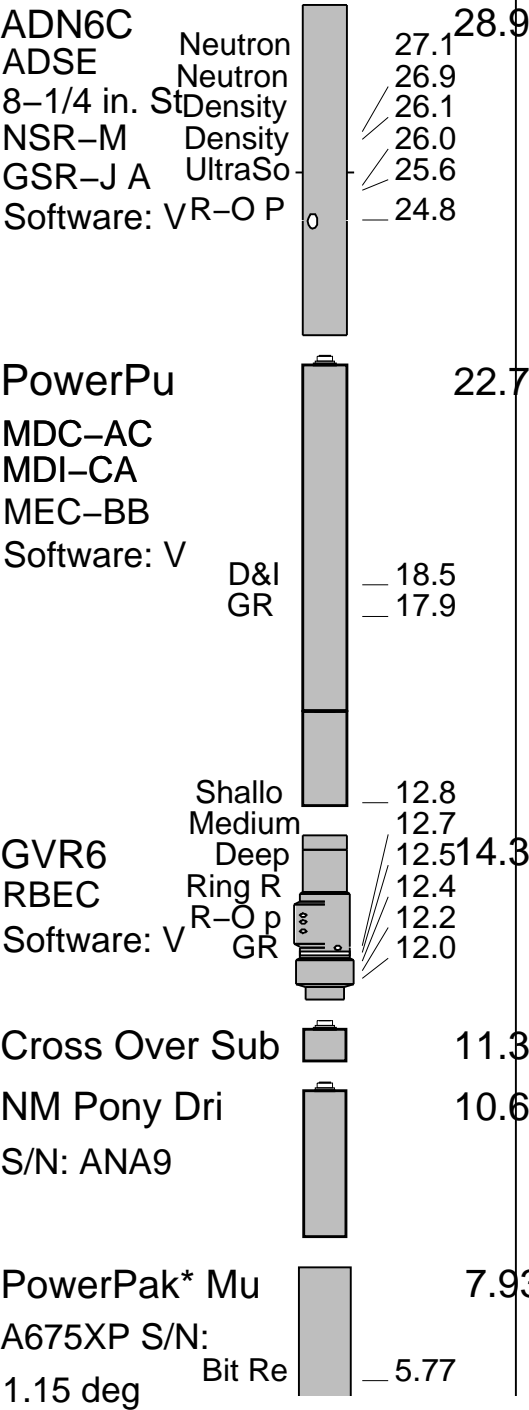
EQUIPMENT DESCRIPTION

RUN2


RUN

RUN

DOWNHOLE EQ



1.15 deg Bit Re 5.77



Security T
XS30D S/N:
MAXIMUM STRING DI
ALL LENGTHS I

True Vertical Depth Log

IDEAL Version: ID7_0C_02
IDF

RAB IDEAL Version: ID7_0C_02 MWD_10 IDEAL Version: ID7_0C_02
ADN IDEAL Version: ID7_0C_02

Format: TNA A-10A GeoVISION Service Vertical Scale: 1:500 Graphics File Created: 18-Oct-2002 06:27

Parameters

DLIS Name	Description	Value
ADN_COLLAR_STR	ADN Collar Type String	ADDC-AA: Slick
ADN_STAB_STR	ADN Stabilizer Type String	None
AVE_ADN	ADN/Array Channels: perform averaging(RM) :	YES
A_DHS	ADN Down Hole Software Version String	V6.2B
BDBHCA	RAB: Button Deep Borehole A Factor	0.004
BDBHCB	RAB: Button Deep Borehole B Factor	0.000
BHA_COEF_VER	RAB: BHA Coef Generator Version	62012.0
BHT_RM	Bottom Hole Temperature (RM)	158.0 degF
BMBHCA	RAB: Button Medium Borehole A Factor	0.023
BMBHCB	RAB: Button Medium Borehole B Factor	0.000
BSAL_RM	Mud Salinity (RM)	66.825 ppk
BSBHCA	RAB: Button Shallow Borehole A Factor	0.022
BSBHCB	RAB: Button Shallow Borehole B Factor	0.000
BS_RM	Bit Size (RM)	8.500 in
BUT_KIMP_A	RAB: Button Impedance Coeff A	0.000
BUT_KIMP_B	RAB: Button Impedance Coeff B	0.000
DBUTTON_K_FACTOR	RAB: Button Deep K factor	0.005
DEVI	Well Section Deviation	49.540 deg
DHS_VERSION	RAB: DownHole Software Version	6.101
DO	Depth Offset	0.0 m
ENVCOR	Neutron Quadrant Processing: Environmental Correction?	YES
GRDC	Grid corr angle	-0.880 deg
LITHO_TYPE_ADN	Lithology (RM)	LIME
MBUTTON_K_FACTOR	RAB: Button Medium K Factor	0.005
MST_RM	Mud Sample temperature (RM)	70.700 degF
MW_RM	Mud Weight (RM)	10.250 lbm/gal
OBM	RAB: Oil base Mud	NO
OBMF_RM	Oil Based Mud	NO
RABEC	RAB: Resistivity Env-Cor	YES
RAB_TEMP_SELECT	RAB Temperature Selection	MEAS
READOUT_PORT_MP	RAB: ROP to Bit Face Distance	12.280 m
RHOF_RM	Mud Filtrate Density (RM)	1.000 g/cm3
RHOM_RM	Matrix density (RM)	2.710 g/cm3
RINGBHCA	RAB: Ring Borehole A Factor	0.159
RINGBHCB	RAB: Ring Borehole B Factor	0.000
RING_KIMP_A	RAB: Ring Impedance Coeff A	0.000

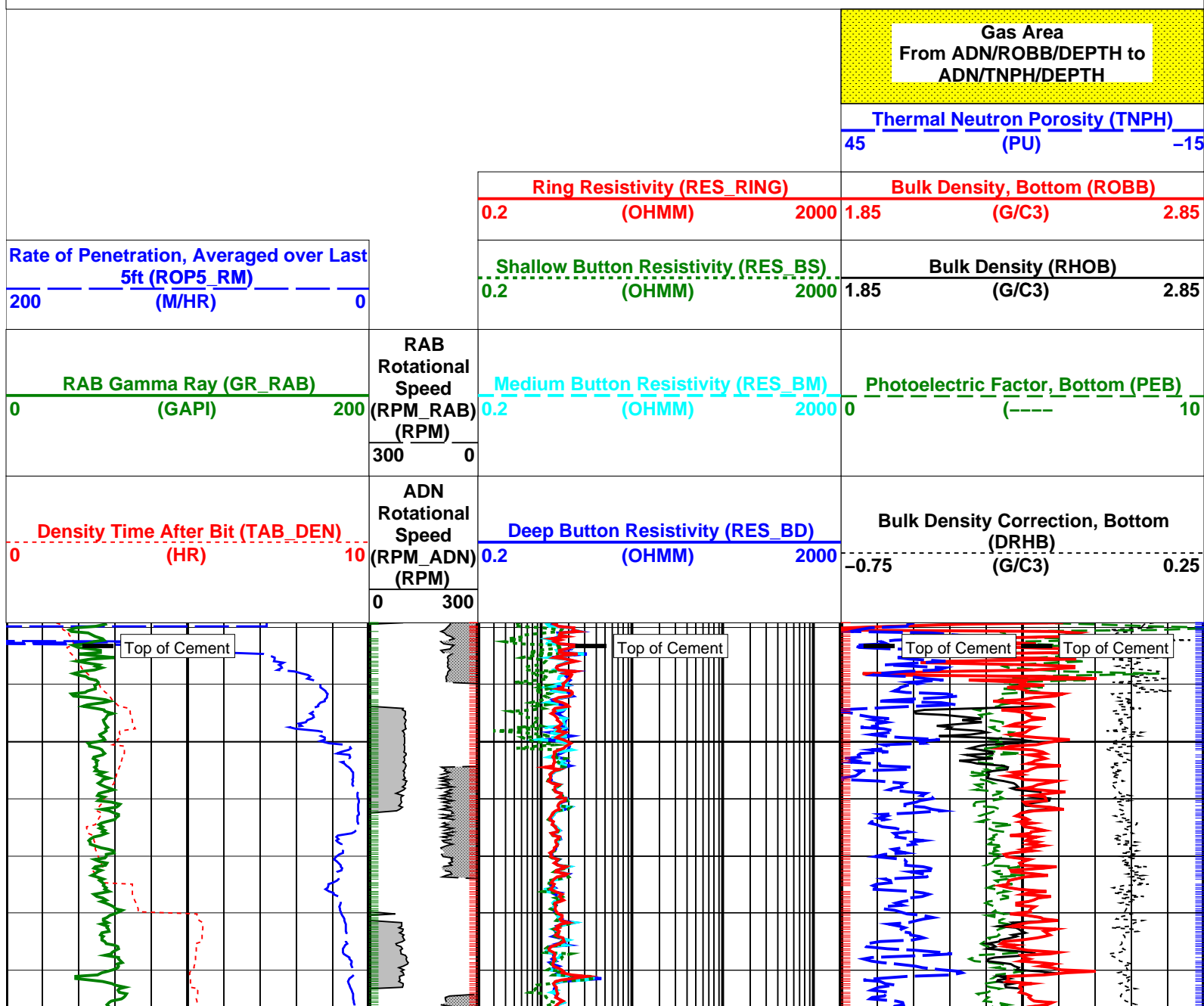
RINGBHCB	RAB: Ring Borehole B Factor	0.000	
RING_KIMP_A	RAB: Ring Impedance Coeff A	0.000	
RING_KIMP_B	RAB: Ring Impedance Coeff B	0.000	
RING_K_FACTOR	RAB: Ring K Factor	0.153	
RMS_RM	Resistivity of Mud Sample (RM)	0.125	ohm.m
RWS_RM	Resistivity of Connate Water (RM)	1.000	ohm.m
SBUTTON_K_FACTOR	RAB: Button Shallow K Factor	0.007	
SHT_RM	Surface Hole Temperature (RM)	62.600	degF
SSIZ_ADN	ADN Stabilizer Size	8.250	in
STAB	RAB: Run with Stabilizer	YES	
TD_RM	Total Measured Depth (RM)	2243.0	m
TOOLTYPE	RAB: Azimuthal Tool	YES	
TRPM_RM	Average Tool Rotational Speed	20.000	c/min
TSIZ_ADN	ADN Tool Size	6.750	in
TS_VERSION	RAB: ToolScope Software Version	6.101	
TWS_RM	Temperature of Connate Water (RM)	75.000	degF
VERS_ADN	ADN Downhole Software Version	6.200	
VRAB6	Rab Tool type (ENP/PILOT)	RAB6_C SERIES	

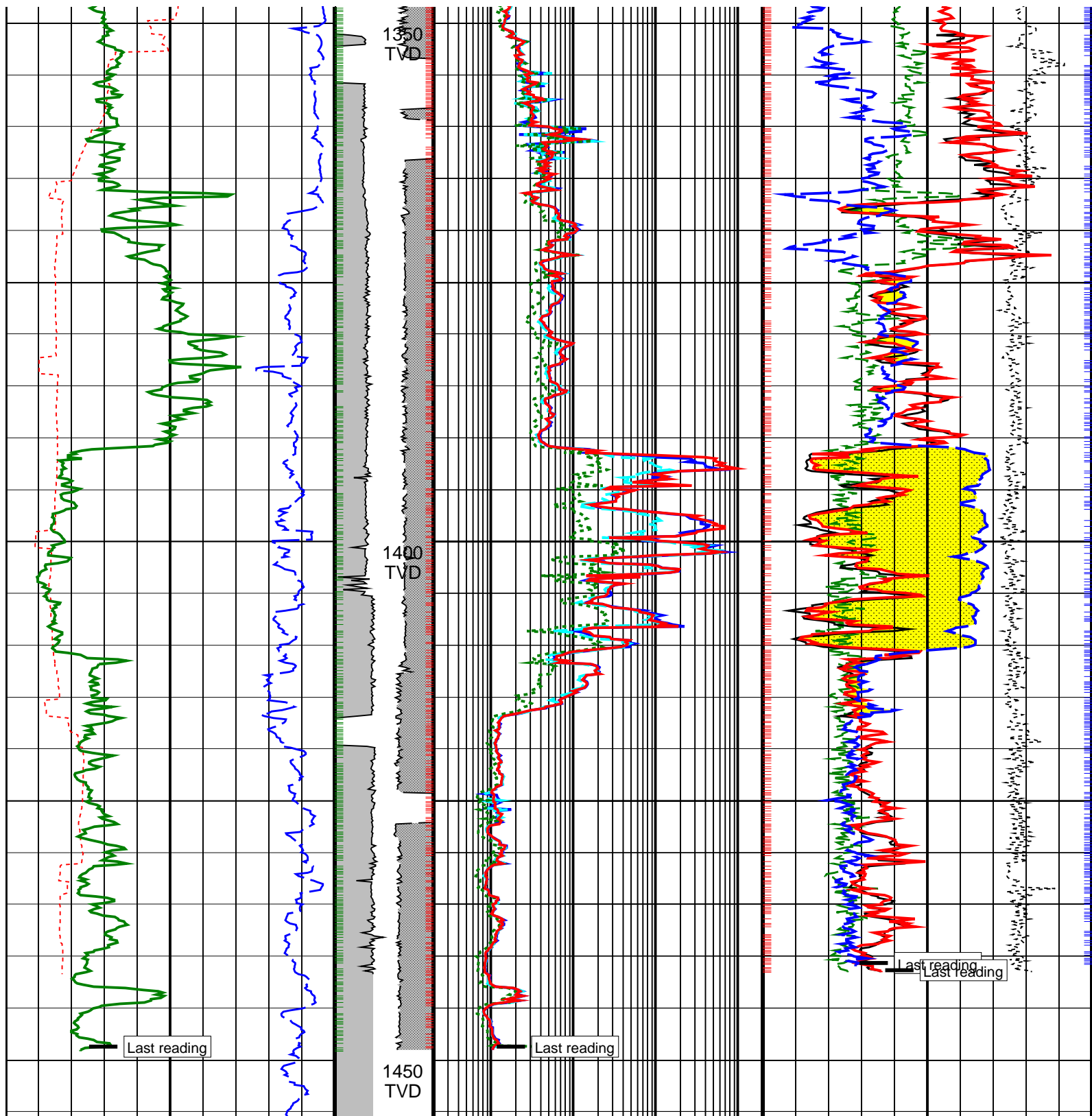
PIP SUMMARY

Density Ticks, 0.1 ft ├

Neutron Ticks, 0.1 ft ├

├ Gamma Ray Samples
├ Ring Samples





<p>Density Time After Bit (TAB_DEN) (HR)</p> <p>0 10</p>	<p>ADN Rotational Speed (RPM_ADN) (RPM)</p> <p>0 300</p>	<p>Deep Button Resistivity (RES_BD) (OHMM)</p> <p>0.2 2000</p>	<p>Bulk Density Correction, Bottom (DRHB) (G/C3)</p> <p>-0.75 0.25</p>
<p>RAB Gamma Ray (GR_RAB) (GAPI)</p> <p>0 200</p>	<p>RAB Rotational Speed (RPM_RAB)</p> <p>0 300</p>	<p>Medium Button Resistivity (RES_BM) (OHMM)</p> <p>0.2 2000</p>	<p>Photoelectric Factor, Bottom (PEB) (GAPI)</p> <p>0 10</p>




0	(GAPI)	200	(RPM_RAB)	0.2	(OHMM)	2000	0	(----	10
			(RPM)				300	0	
Rate of Penetration, Averaged over Last 5ft (ROP5_RM)			Shallow Button Resistivity (RES_BS)			Bulk Density (RHOB)			
200 (M/HR)			0.2 (OHMM)			1.85 (G/C3) 2.85			
			Ring Resistivity (RES_RING)			Bulk Density, Bottom (ROBB)			
			0.2 (OHMM)			1.85 (G/C3) 2.85			
						Thermal Neutron Porosity (TNPH)			
						45 (PU) -15			
						Gas Area From ADN/ROBB/DEPTH to ADN/TNPH/DEPTH			

PIP SUMMARY									
					Density Ticks, 0.1 ft				
Gamma Ray Samples					Neutron Ticks, 0.1 ft				
Ring Samples									

IDEAL Version: ID7_0C_02			
IDF			
RAB	IDEAL Version: ID7_0C_02	MWD_10	IDEAL Version: ID7_0C_02
ADN	IDEAL Version: ID7_0C_02		
True Vertical Depth Log			

6.75-in. Azimuthal Density Neutron / Equipment Identification									
Primary Equipment:					ADN6C* S/N: 289				
Tool Name and Serial Number					ADDC - AA				
Collar Type and Serial Number					ADSE - EA				
Chassis Type and Serial Number					Clamp-On Stabilizer				
Stabilizer Type and Serial Number					NSR-M S/N: A161				
Neutron Logging Source					GSR-J S/N: A2125				
Density Logging Source					8.25 - in.				
Stabilizer Size					Valid				
Calibration Status									

Master: 20-Aug-2002 12:00														
6.75-in. Azimuthal Density Neutron Calibration														
Density: Magnesium Block														
Phase	LS window 3 – Mg CPS			Value	Phase	SS window 1 – Mg CPS			Value	Phase	SS window 3 – Mg CPS			Value
Master	<div><div></div></div>			1286	Master	<div><div></div></div>			2974	Master	<div><div></div></div>			7375
	250.0	4125	8000		700.0	9350	18000		2500	23750	45000			
	(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)			

Master: 20-Aug-2002 12:00														
6.75-in. Azimuthal Density Neutron Calibration														
Density: Aluminum Block														
Phase	LS window 3 – Al CPS			Value	Phase	SS window 1 – Al CPS			Value	Phase	SS window 3 – Al CPS			Value
Master				199.3	Master				1579	Master				4746
	50.00	725.0	1400		500.0	4250	8000		1500	15750	30000			
	(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)		(Minimum)	(Nominal)	(Maximum)			

Master: 20-Aug-2002 12:00											
6.75-in. Azimuthal Density Neutron Calibration											
Density: Background											
Phase	LS window 3 – Background	CPS	Value	Phase	SS window 1 – Background	CPS	Value	Phase	SS window 3 – Background	CPS	Value
Master			51.89	Master			125.3	Master			546.5

Master		51.89	Master		125.3	Master		546.5
15.00 (Minimum)	82.50 (Nominal)	150.0 (Maximum)	40.00 (Minimum)	220.0 (Nominal)	400.0 (Maximum)	150.0 (Minimum)	825.0 (Nominal)	1500 (Maximum)

Master: 20-Aug-2002 12:00								
6.75-in. Azimuthal Density Neutron Calibration								
Density: Water Block Check								
Phase	Long spacing water density G/C3		Value	Phase	Short spacing water density G/C3		Value	
Master			1.034	Master			1.130	
	1.015 (Minimum)	1.030 (Nominal)	1.045 (Maximum)		1.095 (Minimum)	1.120 (Nominal)	1.145 (Maximum)	

Master: 20-Aug-2002 12:00								
6.75-in. Azimuthal Density Neutron Calibration								
Neutron: Water Tank								
Phase	Far 1 tube 1 gain		Value	Phase	Far 1 tube 1 offset CPS		Value	
Master			1.102	Master			-0.8340	
	0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)		-1.200 (Minimum)	-0.9000 (Nominal)	-0.6000 (Maximum)	
Phase	Far 1 tube 2 gain		Value	Phase	Far 1 tube 2 offset CPS		Value	
Master			1.048	Master			-0.9090	
	0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)		-1.200 (Minimum)	-0.9000 (Nominal)	-0.6000 (Maximum)	
Phase	Far 1 tube 3 gain		Value	Phase	Far 1 tube 3 offset CPS		Value	
Master			1.071	Master			-0.7690	
	0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)		-1.200 (Minimum)	-0.9000 (Nominal)	-0.6000 (Maximum)	
Phase	Far 2 tube 1 gain		Value	Phase	Far 2 tube 1 offset CPS		Value	
Master			1.107	Master			-0.7220	
	0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)		-1.200 (Minimum)	-0.9000 (Nominal)	-0.6000 (Maximum)	
Phase	Far 2 tube 2 gain		Value	Phase	Far 2 tube 2 offset CPS		Value	
Master			1.000	Master			-0.8370	
	0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)		-1.200 (Minimum)	-0.9000 (Nominal)	-0.6000 (Maximum)	
Phase	Far 2 tube 3 gain		Value	Phase	Far 2 tube 3 offset CPS		Value	
Master			1.108	Master			-0.7300	
	0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)		-1.200 (Minimum)	-0.9000 (Nominal)	-0.6000 (Maximum)	
Phase	Near 1 tube 1 gain		Value	Phase	Near 1 tube 1 offset CPS		Value	
Master			1.088	Master			0	
	0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)		-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)	
Phase	Near 2 tube 1 gain		Value	Phase	Near 2 tube 1 offset CPS		Value	
Master			1.062	Master			0	
	0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)		-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)	

Master: Calibration date not found								
6.75-in. Azimuthal Density Neutron Calibration								
Neutron: Water Block Check								
Phase	Far Neutron water porosity V/V		Value	Phase	Near Neutron water porosity V/V		Value	
Master			1.000	Master			1.000	
	0.9000 (Minimum)	1.000 (Nominal)	1.150 (Maximum)		0.9000 (Minimum)	1.000 (Nominal)	1.150 (Maximum)	

6.75-in. Resistivity At-the-Bit / Equipment Identification

Primary Equipment:

Tool Name and Serial Number

GVR6* S/N: 160













Calibration Status

Valid

Master: 11-Sep-2002 12:00

6.75-in. Resistivity At-the-Bit Calibration

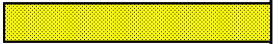
Resistivity: Fixture

Phase	Ring/T1 factor	Value	Phase	Ring/T2 factor	Value	Phase	M0/T1 factor	Value
Master		0.9975	Master		0.9991	Master		1.001
	0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)
		1.025 (Maximum)			1.025 (Maximum)			1.025 (Maximum)
Phase	M0/T2 factor	Value	Phase	M2/T1 factor	Value	Phase	M2/T2 factor	Value
Master		1.002	Master		0.9983	Master		0.9994
	0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)
		1.025 (Maximum)			1.025 (Maximum)			1.025 (Maximum)
Phase	BTN shallow/T1 factor	Value	Phase	BTN shallow/T2 factor	Value	Phase	BTN medium/T1 factor	Value
Master		1.006	Master		1.007	Master		1.002
	0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)
		1.025 (Maximum)			1.025 (Maximum)			1.025 (Maximum)
Phase	BTN medium/T2 factor	Value	Phase	BTN deep/T1 factor	Value	Phase	BTN deep/T2 factor	Value
Master		1.003	Master		1.012	Master		1.012
	0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)		0.9750 (Minimum)	1.000 (Nominal)
		1.025 (Maximum)			1.025 (Maximum)			1.025 (Maximum)

Master: 11-Sep-2002 12:00

6.75-in. Resistivity At-the-Bit Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor	Value
Master		0.8590
	0.7500 (Minimum)	1.000 (Nominal)
		1.250 (Maximum)

ANADRILL

SCHLUMBERGER

Survey report 16-Oct-2002 12:09:07 Page 1 of 3

Client.....: Esso Australia Ltd.

Field.....: Tuna

Well.....: TNA A-10A

API number.....:

Engineer.....: L. Bon

RIG.....: ISDL 453

STATE.....: Victoria

Spud date.....: 4-Oct-2002

Last survey date.....: 16-Oct-02

Total accepted surveys...: 57

MD of first survey.....: 646.50 m

MD of last survey.....: 2243.00 m

----- Survey calculation methods-----

Method for positions.....: Minimum curvature

Method for DLS.....: Mason & Taylor

----- Depth reference -----

Permanent datum.....: Mean Sea Level

Depth reference.....: Driller's Depth

GL above permanent.....: -59.40 m

KB above permanent.....: 31.32 m

DF above permanent.....: 31.32 m

----- Geomagnetic data -----

Magnetic model.....: BGGM version 2001

Magnetic date.....: 20-Sep-2002

Magnetic field strength...: 1200.29 HCNT

Magnetic dec (+E/W-).....: 13.17 degrees

Magnetic dip.....: -68.69 degrees

----- MWD survey Reference Criteria -----

Reference G.....: 1000.02 mGal

Reference H.....: 1200.29 HCNT

Reference Dip.....: -68.69 degrees

Tolerance of G.....: (+/-) 2.50 mGal

Reference Dip.....: -68.69 degrees
Tolerance of G.....: (+/-) 2.50 mGal
Tolerance of H.....: (+/-) 6.00 HCNT
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Platform reference point----- Corrections -----
Latitude (+N/S-).....: -3.05 m Magnetic dec (+E/W-).....: 13.17 degrees
Departure (+E/W-).....: 0.11 m Grid convergence (+E/W-).....: -0.88 degrees
Total az corr (+E/W-).....: 14.05 degrees
Azimuth from rotary table to target: 332.28 degrees (Total az corr = magnetic dec - grid conv)
Sag applied (Y/N).....: No degree: 0.00

[(c)2002 Anadrill IDEAL ID7_OC_02]

ANADRILL SCHLUMBERGER Survey Report

16-Oct-2002 12:09:07

Page 2 of 3

Seq	Measured depth	Incl angle	Azimuth angle	Course length	TVD depth	Vertical section	Displ +N/S-	Displ +E/W-	Total displ	At Azim	DLS (deg/100f)	Srvy tool type	Tool qual
#	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(m)	(deg)				
1	646.5	37.39	204.16	0	614.23	-101.72	-136.8	-35.75	138.47	194.65	0	TIP	-
2	661.2	37.68	204.31	14.7	625.89	-107.24	-144.96	-39.43	147.32	195.21	0.63	GYR	-
3	700.49	38.02	219.27	39.29	656.98	-119.38	-165.32	-52.05	170.44	197.48	7.11	MWD	6-axis
4	729	38.66	224.98	28.51	679.35	-125.46	-178.42	-63.91	186.69	199.71	3.85	MWD	6-axis
5	757.82	37.29	233.89	28.82	702.08	-129.42	-189.94	-77.34	202.3	202.15	5.97	MWD	6-axis
6	785.91	37.06	243.45	28.09	724.48	-130.48	-198.74	-91.8	216.2	204.79	6.27	MWD	6-axis
7	814.55	37.96	252.29	28.64	747.22	-128.78	-205.29	-107.92	229.28	207.73	5.8	MWD	6-axis
8	843.56	39.69	259.68	29.01	769.83	-124.45	-209.66	-125.54	241.82	210.91	5.19	MWD	6-axis
9	871.13	40.19	267.56	27.57	790.98	-118.02	-211.62	-143.1	253	214.07	5.62	MWD	6-axis
10	901.08	40.82	274.91	29.95	813.77	-108.61	-211.19	-162.52	264.15	217.58	4.9	MWD	6-axis
11	927.94	40.93	282.75	26.86	834.09	-98.15	-208.5	-179.86	273.13	220.78	5.82	MWD	6-axis
12	956.4	41.73	290.78	28.46	855.48	-85	-203.08	-197.82	281.4	224.25	5.74	MWD	6-axis
13	986.18	42.47	297.76	29.78	877.59	-69.28	-194.87	-216	288.96	227.94	4.85	MWD	6-axis
14	1015.52	42.54	305.13	29.34	899.23	-52.29	-184.55	-232.88	295.34	231.61	5.17	MWD	6-axis
15	1044.86	42.2	312.78	29.34	920.92	-34.16	-172.14	-248.24	300.45	235.26	5.37	MWD	6-axis
16	1073.87	45.34	320.38	29.01	941.88	-14.86	-157.56	-261.98	304.25	238.98	6.43	MWD	6-axis
17	1102.84	49.02	325.14	28.97	961.58	6.08	-140.64	-274.81	307.43	242.9	5.34	MWD	6-axis
18	1131.52	51.38	330.94	28.68	979.94	28.04	-121.95	-286.45	310.25	246.94	5.36	MWD	6-axis
19	1160.5	54.35	336.25	28.98	997.44	51.12	-101.26	-296.7	312.63	251.15	5.44	MWD	6-axis
20	1189.57	58.35	338.23	29.07	1013.55	75.22	-78.95	-306.05	315.43	255.53	4.54	MWD	6-axis
21	1218.51	60.94	341.52	28.94	1028.18	99.97	-55.51	-314.63	319.08	259.99	4.05	MWD	6-axis
22	1247.44	64.09	344.91	28.93	1041.53	125.15	-30.94	-322.03	323.34	264.51	4.59	MWD	6-axis
23	1276.26	68.16	347.68	28.82	1053.19	150.71	-5.34	-328.26	328.38	269.07	5.07	MWD	6-axis
24	1304.91	68.17	350.31	28.65	1063.85	176.18	20.76	-333.34	334.29	273.56	2.6	MWD	6-axis
25	1334.11	67.47	350.2	29.2	1074.88	201.9	47.41	-337.91	341.77	277.99	0.74	MWD	6-axis
26	1363.21	66.92	349.8	29.1	1086.15	227.45	73.83	-342.57	351.2	282.16	0.69	MWD	6-axis
27	1391.75	67.53	350.62	28.54	1097.2	252.49	99.76	-347.04	362.06	286.04	1.04	MWD	6-axis
28	1420.36	67.08	350.51	28.61	1108.24	277.55	125.8	-351.37	374.35	289.7	0.49	MWD	6-axis
29	1448.66	68.99	350.9	28.3	1118.83	302.45	151.7	-355.61	387.92	293.1	2.09	MWD	6-axis
30	1477.72	68.34	350.63	29.06	1129.4	328.12	178.41	-359.95	403.21	296.37	0.73	MWD	6-axis

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ANADRILL SCHLUMBERGER Survey Report

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Seq	Measured depth	Incl angle	Azimuth angle	Course length	TVD depth	Vertical section	Displ +N/S-	Displ +E/W-	Total displ	At Azim	DLS (deg/100f)	Srvy tool type	Tool qual
#	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(m)	(deg)				
31	1506.45	67.61	350.84	28.73	1140.17	353.38	204.7	-364.24	419.42	299.33	0.8	MWD	6-axis
32	1535.61	68.97	350.83	29.16	1150.96	379.07	231.44	-368.56	436.92	302.13	1.42	MWD	6-axis
33	1565.41	68.26	350.58	29.8	1161.82	405.39	258.83	-373.04	455.87	304.75	0.76	MWD	6-axis
34	1594.42	67.8	350.83	29.01	1172.68	430.92	285.38	-377.38	475.07	307.1	0.54	MWD	6-axis
35	1623.51	67.52	350.94	29.09	1183.74	456.42	311.95	-381.65	494.93	309.26	0.31	MWD	6-axis
36	1652.59	68.41	350.68	29.08	1194.64	481.98	338.55	-385.95	515.5	311.26	0.97	MWD	6-axis
37	1681.35	68.05	350.92	28.76	1205.31	507.3	364.92	-390.22	536.43	313.08	0.45	MWD	6-axis
38	1710.58	67.88	350.84	29.23	1216.28	532.98	391.67	-394.52	558.15	314.79	0.19	MWD	6-axis
39	1739.39	67.67	350.96	28.81	1227.18	558.25	418.01	-398.73	579.97	316.35	0.25	MWD	6-axis
40	1767.87	67.3	351.21	28.48	1238.08	583.16	444	-402.81	601.83	317.78	0.47	MWD	6-axis
41	1796.96	68.71	351.25	29.09	1248.98	608.67	470.65	-406.92	624.56	319.15	1.48	MWD	6-axis
42	1825.58	67.9	351.27	28.62	1259.56	633.82	496.94	-410.96	647.28	320.41	0.86	MWD	6-axis
43	1854.31	67.69	350.38	28.73	1270.41	659.03	523.2	-415.21	670.39	321.56	0.9	MWD	6-axis
44	1883.82	67.24	350.44	29.51	1281.72	684.94	550.07	-419.75	694.42	322.65	0.47	MWD	6-axis
45	1912.74	68.05	348.78	28.92	1292.72	710.47	576.38	-424.57	718.39	323.62	1.83	MWD	6-axis
46	1941.53	67.75	348.8	28.79	1303.55	736.04	602.54	-429.76	742.65	324.5	0.32	MWD	6-axis
47	1970.81	67.57	348.94	29.28	1314.68	762	629.12	-434.98	767.43	325.34	0.23	MWD	6-axis
48	1999.66	67.07	349.15	28.85	1325.81	787.49	655.25	-440.04	791.89	326.12	0.57	MWD	6-axis

47	1970.81	67.57	348.94	29.28	1314.68	762	629.12	-434.98	767.43	325.34	0.23	MWD	6-axis
48	1999.66	67.07	349.15	28.85	1325.81	787.49	655.25	-440.04	791.89	326.12	0.57	MWD	6-axis
49	2034.43	62.98	349.79	34.77	1340.49	817.59	686.23	-445.8	820.94	326.99	3.62	MWD	6-axis
50	2063.19	57.85	350.62	28.76	1354.68	841.38	710.87	-450.06	844	327.66	5.49	MWD	6-axis
51	2092.26	54.07	349.1	29.07	1370.95	864.34	734.58	-454.3	866.36	328.27	4.18	MWD	6-axis
52	2121.17	54.36	349.19	28.91	1387.86	886.78	757.61	-458.71	888.32	328.81	0.32	MWD	6-axis
53	2150	55.5	349.25	28.83	1404.42	909.35	780.79	-463.13	910.49	329.33	1.21	MWD	6-axis
54	2179.27	56.64	349.55	29.27	1420.76	932.56	804.66	-467.59	933.35	329.84	1.22	MWD	6-axis
55	2208.3	56.7	349.39	29.03	1436.71	955.73	828.51	-472.02	956.24	330.33	0.15	MWD	6-axis
56	2224.38	57.39	349.38	16.08	1445.46	968.63	841.77	-474.51	969.01	330.59	1.31	MWD	6-axis
57	2243	57.75	349.37	18.62	1455.44	983.65	857.21	-477.41	983.91	330.89	0.59	MWD	-

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Company: **ESSO Australia Ltd Pty**

Schlumberger

Well: **TNA A-10A ST**

Field: **Tuna**

Rig: **ISDL 453**

State: **Victoria**

GeoVISION* Service
1:500 True Vertical Depth
Recorded Mode Data