

Company **Nexus Energy**

Well Name **Longtom-4**

Field Name **Nexus Energy/VIC**

Field Location **Northing: 5781704.499 m**

Unique Well  
Identification **Easting: 616897.309 m**

Engineer's Name **M.Dawson/D.Shin**

Date **7-Jul-2008**

Report Date **23-Jul-2008**

**Schlumberger**

## Modular Formation Dynamics Tester



### Level-0 Quicklook Interpretation Report

**Innovations in  
Formation Testing**

## Table of Contents

Page

Written Comments 3

Pressure Gradients 4

Test Point Table 5

Header 7

ToolString Diagram - Run 1B (Extra-large Diameter Probe) 8

ToolString Diagram - Run 3 (Large Diameter Probe) 9

Plot 1 - All Data 10

Plot 2 - Zone 1 11

Plot 3 - Zone 2 12

Plot 4 - Zone 3 13

Inclinometry Tables 14

Well Path Plots 16

### MDT JOB OBJECTIVES:

- to measure the formation pressure
- to identify potential hydrocarbon bearing zones
- to determine formation fluid type from the pressure gradients
- to establish fluid contacts through pressure-depth plotting

### QUICKLOOK AND RESULTS:

After an XPT failure an MDT toolstring configured with an extra-large diameter probe was run in hole to achieve the objectives (Run 1B). In total 19 pretests were attempted. Of these 4 provided valid formation pressures, 12 had no seals, 2 were supercharged and 1 test was tight. A decision was then made to re-run the MDT again this time configured with a large diameter probe to improve the chances of the probe sealing (Run 3). In total 31 pretests were attempted. Of these 4 provided valid formation pressures, 8 had no seals, 5 were supercharged and 14 tests were tight. Due to the limited number of points no gradients were fitted to the data.

Mud Column Gradients


Gradient Error %	Gradient PSI/M	Density G/C3		RI	STD psia
Mud Before Lines					
0.6% (1.453 to 1.470 G/C3)	-2.079	1.462		0.9995	8.6900
Mud After Lines					
0.6% (1.453 to 1.469 G/C3)	-2.078	1.461		0.9995	8.8100

# Test Point Table

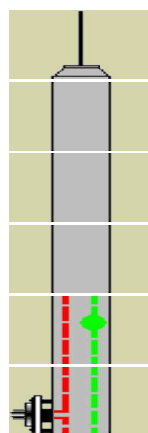
File No.	Test No.	Run	Test MD	Test TVD	Test Subsea	Formation Pressure	Drawdown Mobility	Mud Before	Test Type	Mud After	Temp.	Gauge Name	Gauge Serial#	Pretest Volume	Pretest Time	Pretest Flowrat
			M	M	M	psia	md/cp	psia		psia	DEGC			cc	s	cc/s
83	5	1B	2512.12	2294.99	-2253.99			4704.94	Lost Seal	4704.85	98.31	PQQP1	4258	10.43	12	0.87
84	6	1B	2509.16	2292.97	-2251.97			4700.91	Lost Seal	4699.79	99.75	PQQP1	4258	10.28	11.4	0.9
86	8	1B	2489.17	2278.84	-2237.84			4669.75	Dry Test	4669.06	102.17	PQQP1	4258	1.82	1.5	1.21
87	10	1B	2497.31	2284.7	-2243.70	3458.29	1.78	4685.08	Supercharged	4682.37	102.77	PQQP1	4258	10.68	5.4	1.98
88	12	1B	2506.19	2290.94	-2249.94			4695.86	Lost Seal	4695.43	103.24	PQQP1	4258	10.41	5.7	1.83
89	14	1B	2510.14	2293.64	-2252.64			4701.57	Lost Seal	4701.2	102.99	PQQP1	4258	10.41	5.4	1.93
90	16	1B	2513.17	2295.71	-2254.71			4705.97	Lost Seal	4705.69	103.11	PQQP1	4258	10.62	7.2	1.47
91	18	1B	2501.19	2287.49	-2246.49			4688.83	Lost Seal	4688.43	102.78	PQQP1	4258	10.34	11.7	0.88
92	20	1B	2494.19	2282.45	-2241.45			4679.89	Lost Seal	4678.01	102.86	PQQP1	4258	10.16	11.4	0.89
93	21	1B	2564.18	2329.26	-2288.26			4777.02	Lost Seal	4776.55	104.56	PQQP1	4258	10.5	11.4	0.92
94	23	1B	2567.13	2331.08	-2290.08			4780.73	Lost Seal	4780.36	105.4	PQQP1	4258	10.09	11.1	0.91
97	25	1B	2225.19	2065.51	-2024.51	2967.71	80.99	4229.04	Volumetric Limited draw-down	4228.99	97.47	PQQP1	4258	10.48	12	0.87
98	27	1B	2225.19	2065.51	-2024.51			4228.97	Lost Seal	4228.6	96.97	PQQP1	4258	10.05	5.4	1.86
99	29	1B	2222.13	2062.9	-2021.90	2964.65	42.49	4223.92	Volumetric Limited draw-down	4223.88	95.97	PQQP1	4258	10.77	7.2	1.5
100	31	1B	2216.16	2057.8	-2016.80	2968.06	0.54	4213.47	Supercharged	4213.28	95.38	PQQP1	4258	5.09	5.4	0.94
103	33	1B	1747.15	1648.75	-1607.75			3376.89	Lost Seal	3376.54	89.71	PQQP1	4258	10.19	36.9	0.28
104	34	1B	1747.16	1648.76	-1607.76			3376.76	Lost Seal	3376.39	89.2	PQQP1	4258	10.51	11.4	0.92
105	36	1B	1739.18	1641.88	-1600.88	2273.32	834.29	3362.79	Volumetric Limited draw-down	3362.65	88.58	PQQP1	4258	10.88	6.3	1.73
106	38	1B	1731.16	1634.97	-1593.97	2263.48	1020.02	3348.89	Volumetric Limited draw-down	3348.69	88.18	PQQP1	4258	10.7	6	1.78
144	4	3	2513.86	2296.18	-2255.18	3460.07	2.69	4728.67	Supercharged	4727.35	91.18	PQQP1	4258	10.25	25.8	0.4
145	7	3	2507.85	2292.08	-2251.08			4719.39	Dry Test	4718.35	92.45	PQQP1	4258	1.2	6.9	0.17
146	9	3	2506.77	2291.34	-2250.34			4717.43	Dry Test	4716.96	92.56	PQQP1	4258	0.59	2.7	0.22
147	11	3	2505.00	2290.12	-2249.12	3456.57	7.4	4714.83	Volumetric Limited draw-down	4713.82	93.21	PQQP1	4258	10.44	8.7	1.2
148	13	3	2567.98	2331.61	-2290.61			4802.05	Lost Seal	4801.62	95.34	PQQP1	4258	10.6	12.3	0.86
149	16	3	2566.98	2330.99	-2289.99			4800.21	Lost Seal	4799.9	96.04	PQQP1	4258	9.88	11.4	0.87
150	18	3	2567.52	2331.33	-2290.33			4800.58	Dry Test	4799.83	96.27	PQQP1	4258	4.39	5.1	0.86
151	20	3	2568.17	2331.73	-2290.73			4801.62	Lost Seal	4801.4	97.57	PQQP1	4258	5.2	13.2	0.39
152	21	3	2568.09	2331.68	-2290.68			4801.62	Lost Seal	4801.27	97.94	PQQP1	4258	5.19	12.9	0.4
153	23	3	2576.79	2337.07	-2296.07			4812.76	Lost Seal	4812.5	98.42	PQQP1	4258	5.25	13.2	0.4
154	26	3	2501.11	2287.43	-2246.43			4708.27	Dry Test	4707.8	98.26	PQQP1	4258	5.66	6.6	0.86
155	28	3	2502.01	2288.08	-2247.08	3458.16	0.53	4709.04	Supercharged	4708.75	97.57	PQQP1	4258	10.08	46.5	0.22
156	30	3	2497.19	2284.61	-2243.61			4702.01	Lost Seal	4701.98	97.61	PQQP1	4258	5.15	12.9	0.4
157	31	3	2497.62	2284.92	-2243.92			4702.61	Dry Test	4702.59	97.08	PQQP1	4258	4.7	5.4	0.87
158	32	3	2497.49	2284.83	-2243.83			4702.48	Dry Test	4702.35	96.77	PQQP1	4258	4.15	18.9	0.22
159	34	3	2503.02	2288.78	-2247.78	3455.83	9.8	4709.97	Volumetric Limited draw-down	4709.85	96.75	PQQP1	4258	10.56	11.7	0.9
160	36	3	2508.80	2292.72	-2251.72			4718.47	Dry Test	4718.18	96.94	PQQP1	4258	1.13	4.8	0.24
161	39	3	2510.20	2293.68	-2252.68	3459.67	0.96	4720.35	Supercharged	4719.97	97.46	PQQP1	4258	10.11	25.8	0.39
162	40	3	2499.49	2286.27	-2245.27			4704.57	Dry Test	4704.65	98.42	PQQP1	4258	4.45	11.1	0.4
164	42	3	2498.03	2285.21	-2244.21	3456.01	0.68	4702.29	Supercharged	4701.93	98	PQQP1	4258	10.09	47.1	0.21
165	44	3	2564.96	2329.74	-2288.74			4796.18	Dry Test	4795.68	98.38	PQQP1	4258	0.86	5.7	0.15
166	45	3	2567.84	2331.52	-2290.52			4800.01	Lost Seal	4799.62	99.55	PQQP1	4258	5.19	13.5	0.38

# Test Point Table

File No.	Test No.	Run	Test MD	Test TVD	Test Subsea	Formation Pressure	Drawdown Mobility	Mud Before	Test Type	Mud After	Temp.	Gauge Name	Gauge Serial#	Pretest Volume	Pretest Time	Pretest Flowrat
			M	M	M	psia	md/cp	psia		psia	DEGC			cc	s	cc/s
167	46	3	2564.71	2329.58	-2288.58			4795.42	Dry Test	4795.23	99.87	PQQP1	4258	4.81	12.3	0.39
168	48	3	2439.81	2241.86	-2200.86			4612.81	Dry Test	4612.54	99.62	PQQP1	4258	1.52	9.3	0.16
169	49	3	2431.99	2235.88	-2194.88			4600.57	Dry Test	4600.35	98.27	PQQP1	4258	3.79	9.9	0.38
170	50	3	2345.49	2167.06	-2126.06			4457.43	Lost Seal	4457.11	96.85	PQQP1	4258	5.16	18.9	0.27
171	51	3	2345.99	2167.48	-2126.48			4457.98	Dry Test	4457.88	95.52	PQQP1	4258	3.37	12.3	0.27
172	54	3	2342.99	2165.01	-2124.01	3180.57	34.38	4452.76	Volumetric Limited draw-down	4452.61	94.58	PQQP1	4258	10.1	11.1	0.91
173	56	3	2222.00	2062.78	-2021.78	2965.92	83.78	4241.5	Volumetric Limited draw-down	4241.26	93.37	PQQP1	4258	10.46	11.7	0.89
174	57	3	2225.98	2066.19	-2025.19			4248.27	Dry Test	4248.13	92.49	PQQP1	4258	3.67	9	0.41
175	59	3	2218.69	2059.96	-2018.96	2966.34	0.93	4235.48	Supercharged	4235.48	91.99	PQQP1	4258	10.15	36.6	0.28

<b>COMPANY:</b>		<b>Nexus Energy</b>						
<b>WELL:</b>		<b>Longtom-4</b>						
<b>FIELD:</b>		<b>Nexus Energy/VIC</b>						
<b>Rig:</b>		<b>West Triton</b>			<b>State:</b>		<b>Victoria</b>	
West Triton Nexus Energy/VIC Bass Strait Longtom-4 Nexus Energy  Rig: Field: Location: Well: Company:				<b>MDT-GR</b> <b>Modular Dynamic Tester</b> <b>Suite-1 Run-1B Scale 1:200</b>				
				Bass Strait Northing: 5781704.499 m Easting: 616897.309 m			Elev: K.B. 41 M G.L. 56 M D.F. 41 M	
	Permanent Datum: AHD Log Measured From: DRILL FLOOR Drilling Measured From: DRILL FLOOR			Elev: 0 M 41M above Perm. Datum				
	State: Victoria		Max Deviation 52.52 deg		Latitude 38 6' 17.707" S		Longitude 148 19' 59.944" E	
Logging Date		7/07/2008						
Run Number		1B						
Depth Driller		2600.33 M						
Schlumberger Depth		Not tagged						
Bottom Log Interval		2576.1 M						
Top Log Interval		1731.2 M						
Casing Drilling Size @ Depth		16.000 IN 747.5 M						
Casing Schlumberger		Not detected						
Bit Size		13.500 IN						
Type Fluid in Hole		Accolade						
Mud	Density	Viscosity	1.438 G/C3	71 s				
	Fluid Loss	PH	4 cc	9.5				
	Source of Sample		Not Measured					
RM	@ Measured Temperature		@		@			
RMF	@ Measured Temperature		@		@			
RMC	@ Measured Temperature		@		@			
Source RMF		Source RMC		Not Measured		Not Measured		
RM	@ MRT	RMF	@ MRT	107 DEG	107 DEG	107 DEG		
Maximum Recorded Temperatures		107 DEGC		107 DEG	107 DEG			
Circulation Stopped		Time	6/07/2008	8:00				
Logger On Bottom		Time	7/07/2008	20:17				
Unit Number		Location	41	AUSL				
Recorded By		M.Dawson/D.Shin						
Witnessed By		C.Menhennitt/S.Ward						

# **Tool String Diagram - Run 1B (Extra-large Diameter Probe)**



**DTS Telemetry Tool (DTC-H)**

**High resolution Integrated Logging Tool-DTS (HILTB-FTB)**

**Downhole Toolbus Adapter - A (DTA-A)**

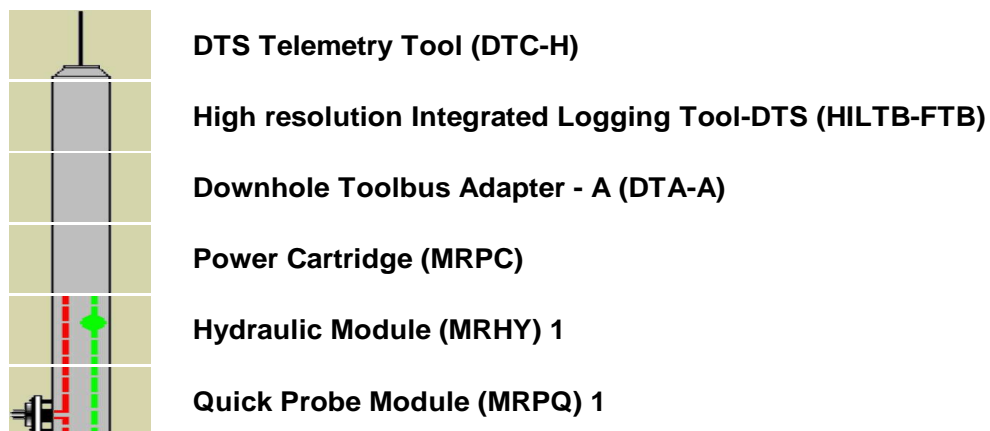
**Power Cartridge (MRPC)**

**Hydraulic Module (MRHY) 1**

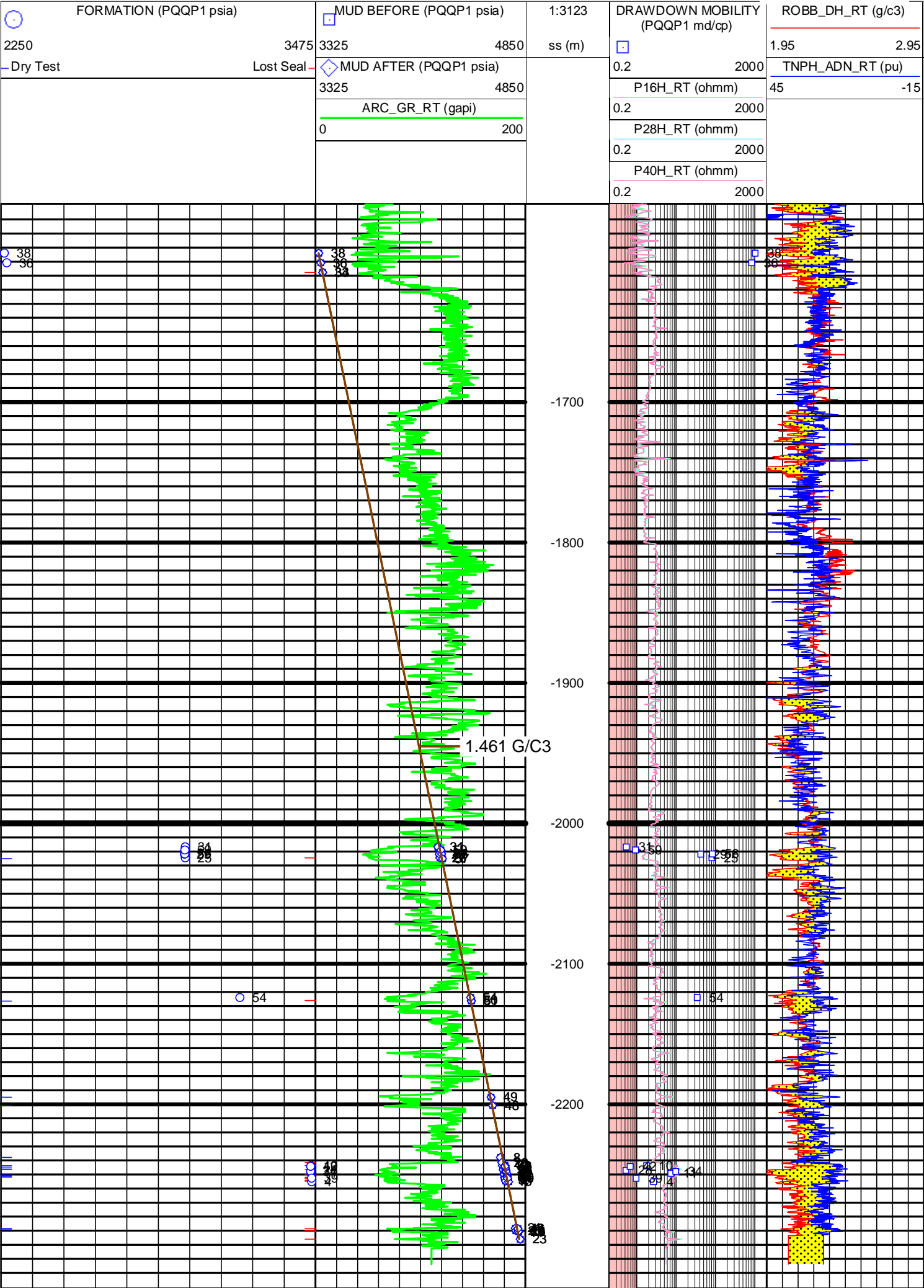
**Quick Probe Module (MRPQ) 1**

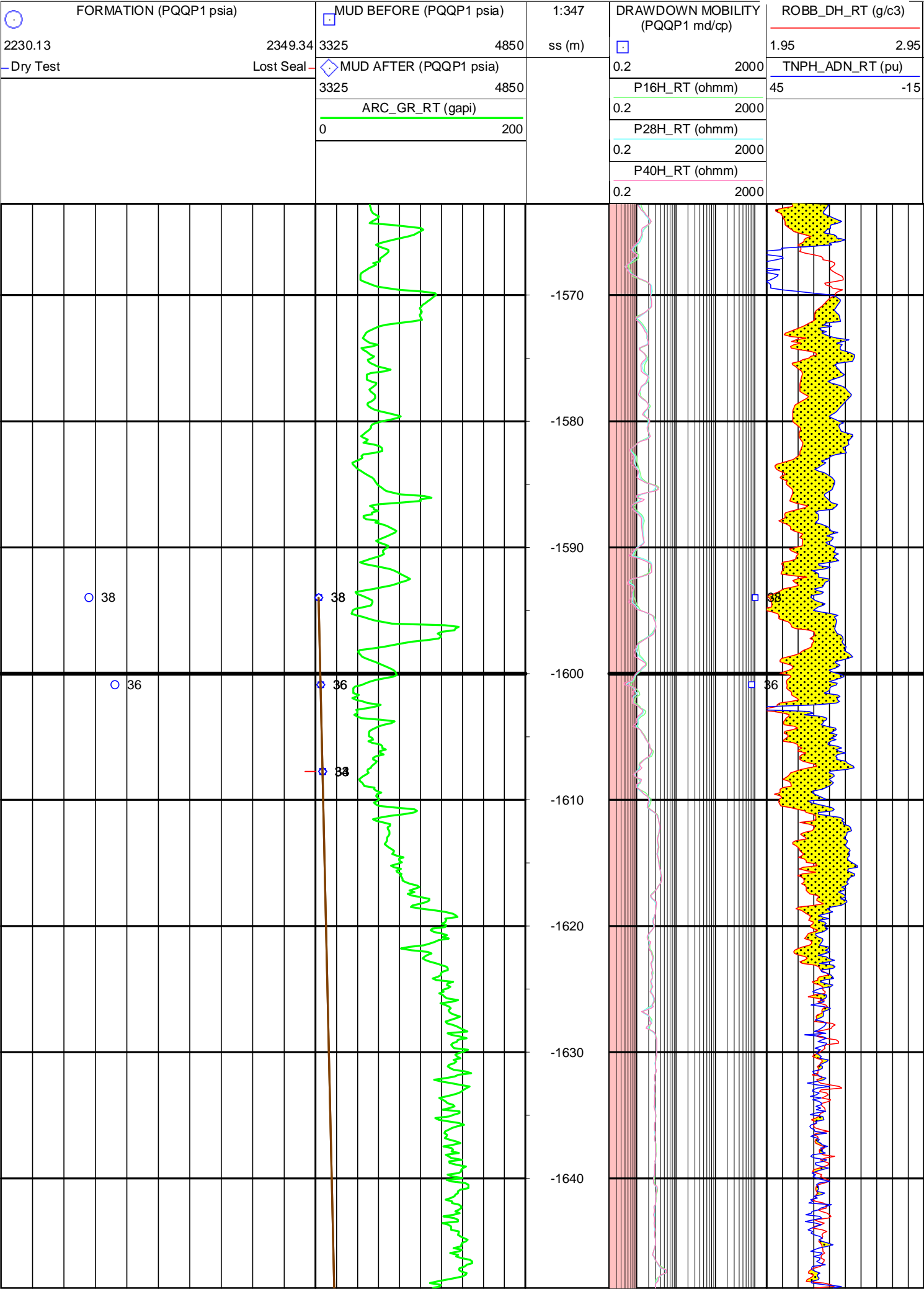


# **Tool String Diagram - Run 3 (Large Diameter Probe)**



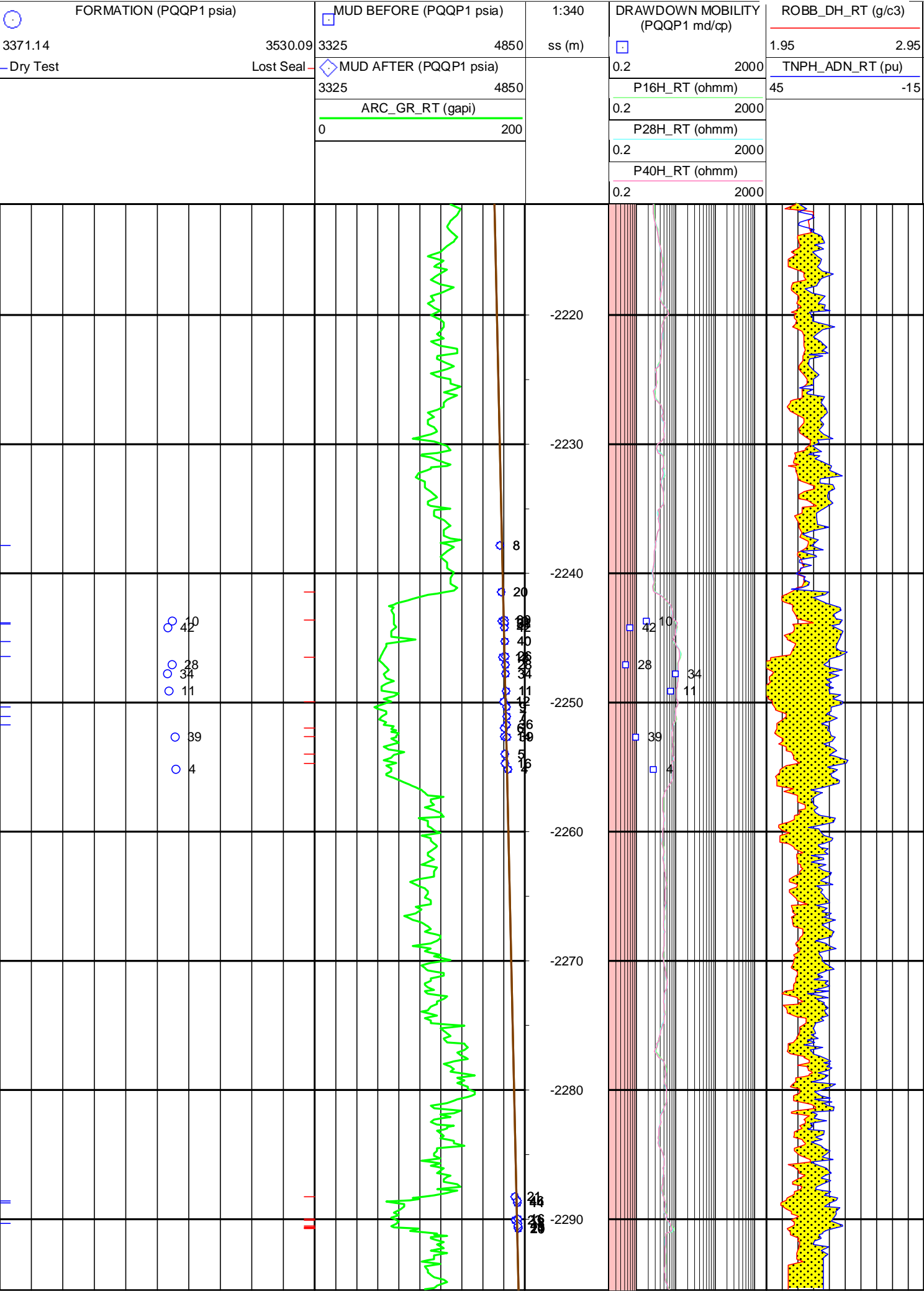
Plot 1 - All Data





# Schlumberger





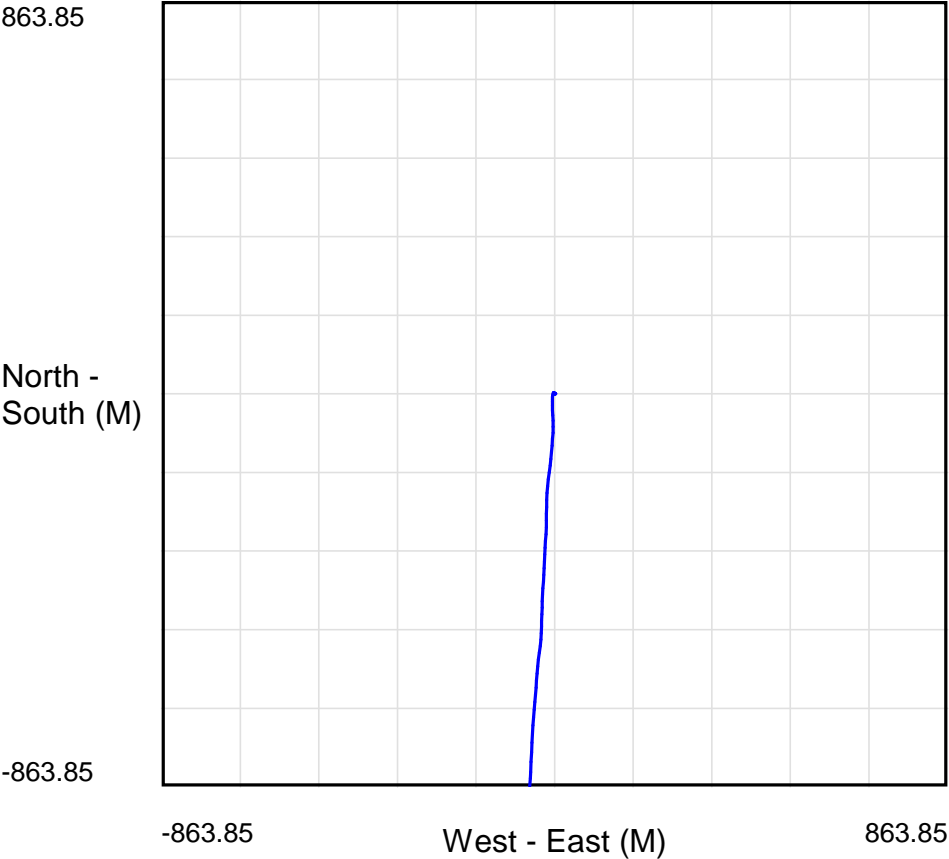
## Longtom-4

Source :Supplied Survey table

MD	TVD	Devi	Azimuth	North	East	Departur e	Departur e Azimuth	Dogleg Severity
M	M	Deg	Deg	M	M	M	Deg	Deg/100f
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
97.03	97.03	0.00	0.00	0.00	0.00	0.00	0.00	
116.15	116.15	0.69	328.34	0.10	-0.06	0.12	329.03	
124.06	124.06	0.56	358.29	0.18	-0.09	0.20	333.43	0.50
147.44	147.44	0.36	43.93	0.34	-0.04	0.34	353.29	0.26
204.75	204.75	0.52	335.69	0.71	-0.02	0.71	358.39	0.09
324.05	324.04	0.78	189.14	0.40	-0.37	0.54	317.23	0.07
382.91	382.90	0.23	326.57	0.11	-0.50	0.51	282.41	0.28
412.77	412.76	0.34	250.06	0.13	-0.62	0.63	281.84	0.11
442.90	442.89	0.19	118.87	0.07	-0.66	0.66	276.06	0.15
531.83	531.82	0.85	328.15	0.56	-0.88	1.04	302.47	0.23
563.30	563.29	0.97	289.41	0.85	-1.25	1.51	304.22	0.12
651.66	651.64	0.44	355.43	1.43	-1.98	2.44	305.84	0.18
741.14	741.12	0.59	334.49	2.19	-2.21	3.11	314.74	0.05
750.39	750.37	0.71	327.45	2.28	-2.26	3.21	315.25	0.40
783.28	783.25	0.52	304.12	2.54	-2.49	3.56	315.57	0.18
812.94	812.91	2.32	203.29	2.06	-2.84	3.51	305.96	1.85
842.62	842.52	5.16	197.97	0.24	-3.49	3.50	273.93	2.92
872.25	871.98	7.16	192.11	-2.83	-4.29	5.14	236.59	2.06
901.94	901.40	8.22	183.91	-6.76	-4.82	8.30	215.49	1.09
931.42	930.50	10.19	179.91	-11.47	-4.96	12.50	203.39	2.04
960.94	959.36	13.95	179.75	-17.64	-4.94	18.32	195.64	3.88
990.68	987.98	17.52	178.95	-25.70	-4.85	26.15	190.69	3.66
1020.40	1016.05	20.88	177.48	-35.47	-4.53	35.76	187.28	3.45
1050.08	1043.45	24.28	176.64	-46.85	-3.94	47.02	184.81	3.49
1078.64	1069.33	25.70	178.42	-58.90	-3.43	59.00	183.33	1.52
1108.28	1095.91	26.85	180.79	-72.02	-3.34	72.10	182.66	1.18
1137.39	1121.79	27.64	182.43	-85.34	-3.72	85.42	182.50	0.83
1166.97	1147.89	28.48	183.83	-99.23	-4.48	99.33	182.59	0.87
1196.40	1173.64	29.46	184.58	-113.45	-5.53	113.58	182.79	1.01
1225.95	1199.28	30.16	185.46	-128.08	-6.81	128.26	183.04	0.72
1255.99	1225.30	29.83	185.82	-143.03	-8.29	143.27	183.32	0.33
1285.37	1250.76	30.03	186.70	-157.60	-9.89	157.91	183.59	0.21
1315.16	1276.41	31.09	187.90	-172.62	-11.81	173.02	183.91	1.08
1344.99	1301.94	31.21	187.53	-187.91	-13.89	188.42	184.23	0.12
1374.68	1327.44	30.42	184.92	-203.03	-15.54	203.62	184.38	0.81
1404.59	1353.28	30.04	183.00	-218.05	-16.58	218.68	184.35	0.39
1433.94	1378.48	31.67	182.29	-233.08	-17.27	233.72	184.24	1.69
1463.79	1404.02	30.65	181.20	-248.52	-17.75	249.15	184.09	1.04
1493.62	1429.77	30.04	180.72	-263.59	-18.00	264.20	183.91	0.62
1523.35	1455.50	30.08	180.58	-278.48	-18.17	279.07	183.73	0.04
1553.11	1481.21	30.38	181.81	-293.46	-18.48	294.04	183.60	0.31
1583.05	1507.05	30.31	183.44	-308.57	-19.17	309.16	183.55	0.07
1612.84	1532.76	30.34	184.08	-323.58	-20.16	324.21	183.57	0.03
1642.12	1558.01	30.48	183.53	-338.37	-21.14	339.03	183.57	0.15
1671.81	1583.64	30.16	182.75	-353.33	-21.96	354.01	183.56	0.33
1701.38	1609.24	29.96	181.97	-368.13	-22.57	368.82	183.51	0.21
1730.84	1634.69	30.49	182.20	-382.95	-23.11	383.65	183.45	0.55
1760.64	1660.38	30.44	183.16	-398.04	-23.82	398.75	183.42	0.05
1790.34	1686.07	29.76	183.49	-412.91	-24.68	413.65	183.42	0.70
1820.04	1711.94	29.12	183.26	-427.48	-25.54	428.24	183.42	0.66
1849.86	1738.12	28.05	182.80	-441.73	-26.30	442.51	183.41	1.09
1879.39	1764.13	28.45	182.54	-455.69	-26.95	456.49	183.38	0.41
1909.08	1790.15	29.18	181.91	-469.99	-27.50	470.79	183.35	0.75
1938.97	1816.24	29.25	182.37	-484.57	-28.05	485.38	183.31	0.07
1968.51	1842.19	27.81	181.63	-498.67	-28.54	499.49	183.28	1.49
1998.05	1868.38	27.26	181.66	-512.32	-28.94	513.14	183.23	0.57
2028.03	1895.07	26.98	181.70	-525.98	-29.34	526.80	183.19	0.28
2057.68	1921.25	29.01	184.81	-539.87	-30.14	540.71	183.20	2.09
2087.27	1947.05	29.58	188.03	-554.25	-31.76	555.16	183.28	0.59

2116.78	1972.72	29.55	188.02	-568.67	-33.79	569.67	183.40	0.03
2146.82	1998.67	30.97	187.12	-583.68	-35.79	584.78	183.51	1.44
2176.36	2023.89	31.76	185.57	-598.96	-37.48	600.13	183.58	0.82
2206.21	2049.31	31.48	183.82	-614.55	-38.76	615.77	183.61	0.29
2235.88	2074.63	31.35	183.41	-629.99	-39.74	631.24	183.61	0.13
2265.38	2099.72	32.11	184.62	-645.46	-40.83	646.75	183.62	0.79
2295.93	2125.66	31.69	185.04	-661.55	-42.19	662.89	183.65	0.42
2325.11	2150.28	33.21	184.84	-677.15	-43.53	678.55	183.68	1.59
2355.31	2175.15	35.92	185.28	-694.21	-45.05	695.67	183.71	2.74
2385.09	2199.13	36.82	184.07	-711.81	-46.48	713.33	183.74	0.92
2413.59	2221.81	37.70	183.21	-729.03	-47.58	730.58	183.73	0.94
2472.44	2266.80	42.55	182.99	-766.89	-49.62	768.49	183.70	2.51
2502.19	2288.21	45.34	182.77	-787.51	-50.66	789.14	183.68	2.86
2531.76	2308.39	48.61	183.24	-809.09	-51.80	810.75	183.66	3.37
2561.19	2327.40	50.89	182.57	-831.53	-52.93	833.21	183.64	2.36
2578.22	2337.96	52.52	183.03	-844.87	-53.59	846.57	183.63	2.92
2600.00	2351.21	52.52	183.03	-862.13	-54.50	863.85	183.62	0.00

Map View



Cross Section View

