



*e*REPORT



Prepared for:

Willy Nilly

abc Oil & Gas Co. Ltd.
1234, 567–8th Avenue SW
Calgary, Alberta, T2P 3Q4

abc Bob

100/10–20–030–40W5/0

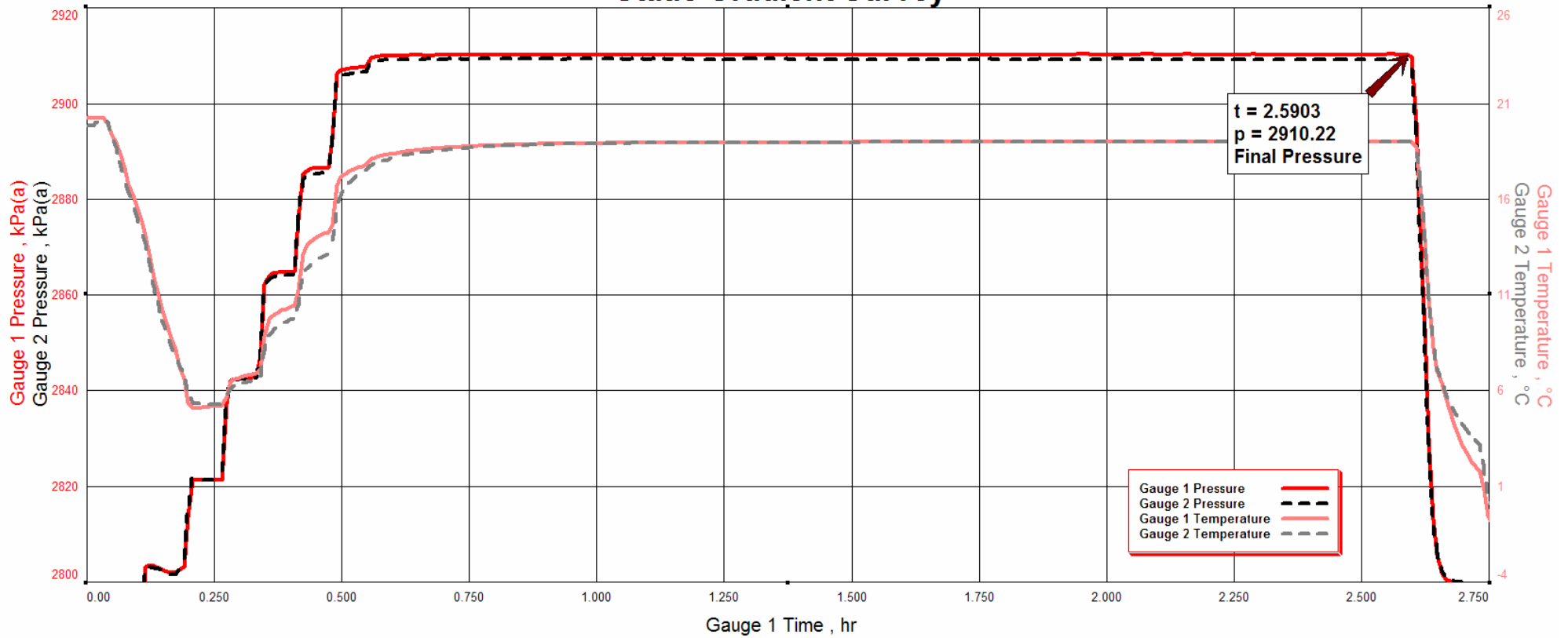
Albain

**Static Gradient Survey
November 16, 2004**

abc Oil & gas Co. Ltd.
 100/10-20-030-40W5/00
 Start Test Date: 2004/11/16
 Final Test Date: 2004/11/16

abc Bob
 Formation: Albian
 Pool: 512.5-513.0 mKB-MD
 Job Number: GRD

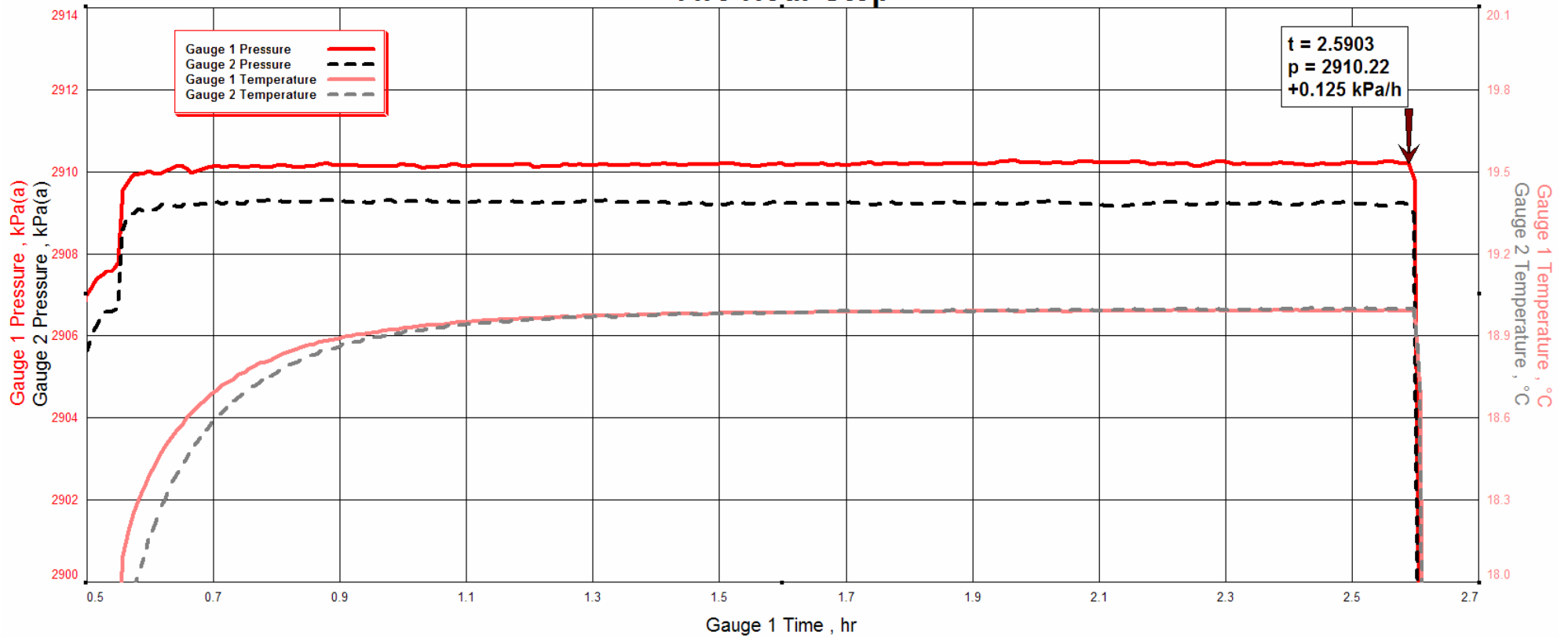
Static Gradient Survey



abc Oil & gas Co. Ltd.
 100/10-20-030-40W5/00
 Start Test Date: 2004/11/16
 Final Test Date: 2004/11/16

abc Bob
 Formation: Albian
 Pool: 512.5-513.0 mKB-MD
 Job Number: GRD

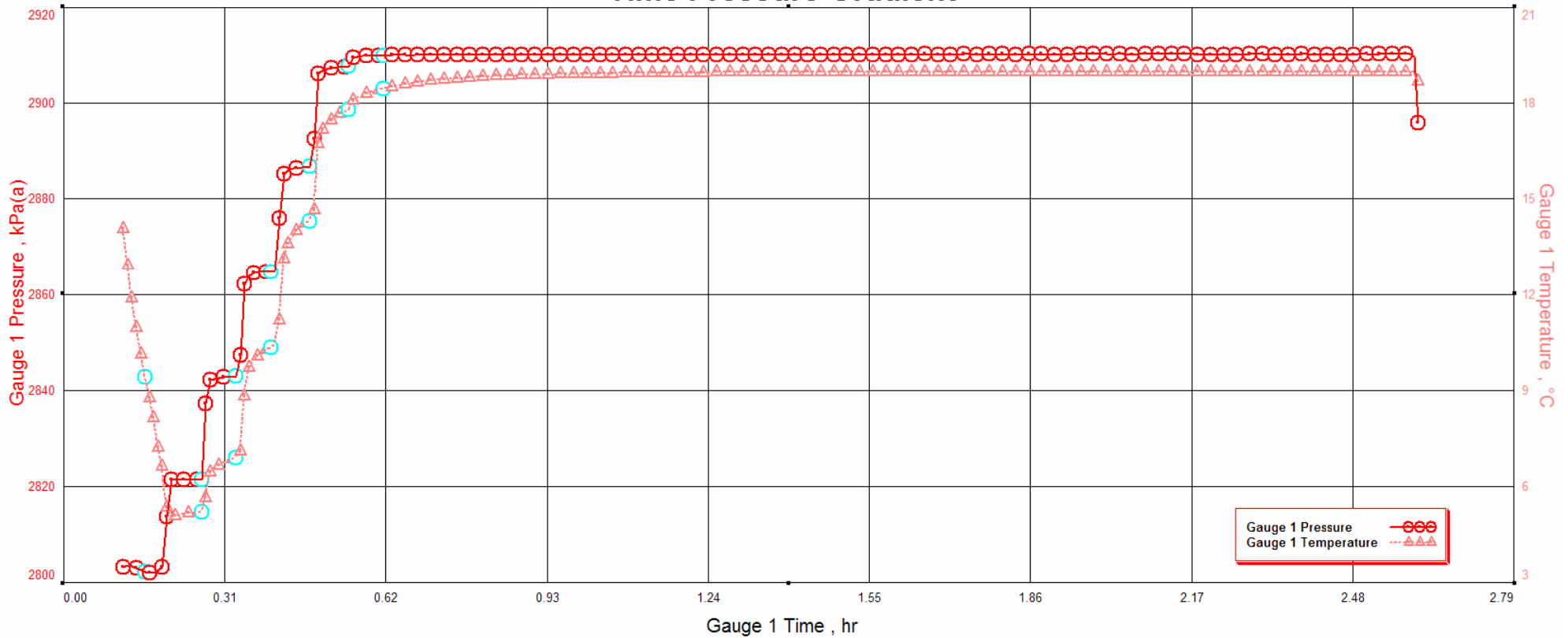
Two Hour Stop



abc Oil & gas Co. Ltd.
 100/10-20-030-40W5/00
 Start Test Date: 2004/11/16
 Final Test Date: 2004/11/16

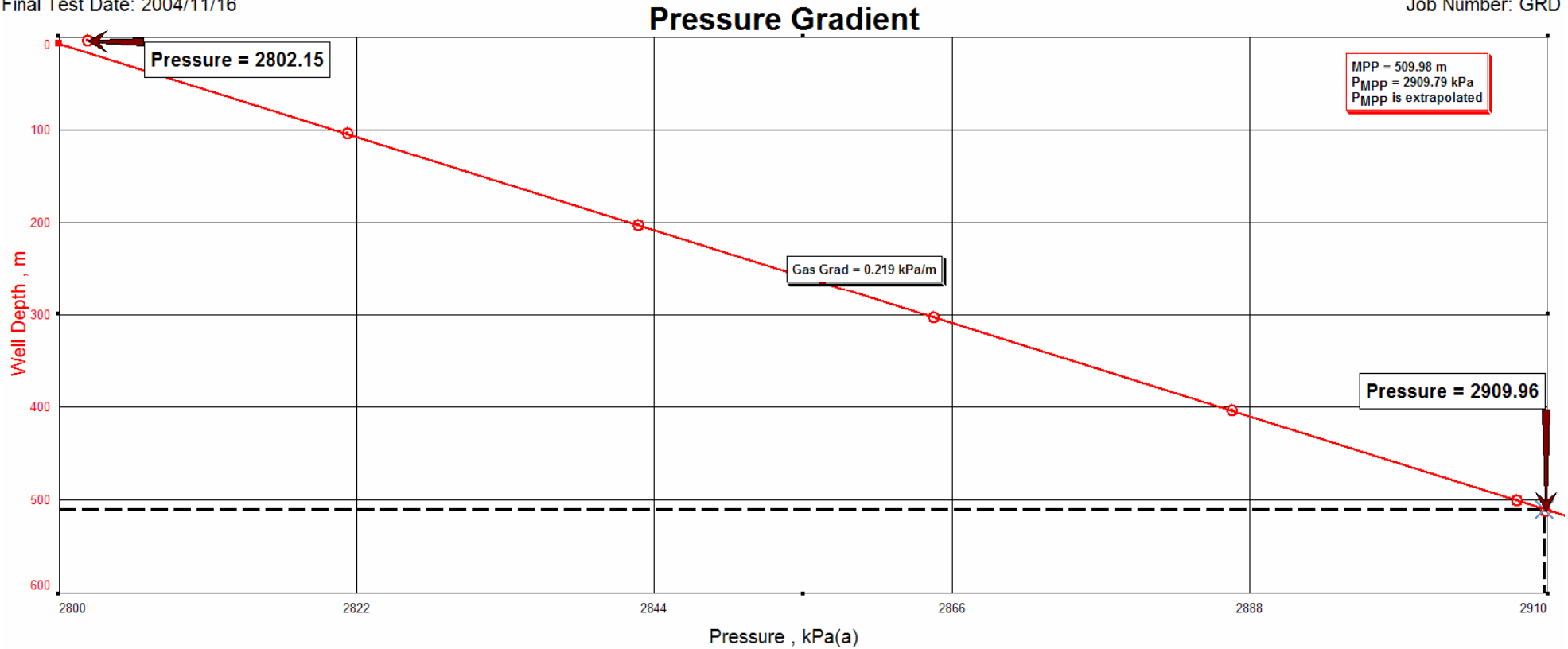
abc Bob
 Formation: Albian
 Pool: 512.5-513.0 mKB-MD
 Job Number: GRD

Time Pressure Gradient



abc Oil & gas Co. Ltd.
 100/10-20-030-40W5/00
 Start Test Date: 2004/11/16
 Final Test Date: 2004/11/16

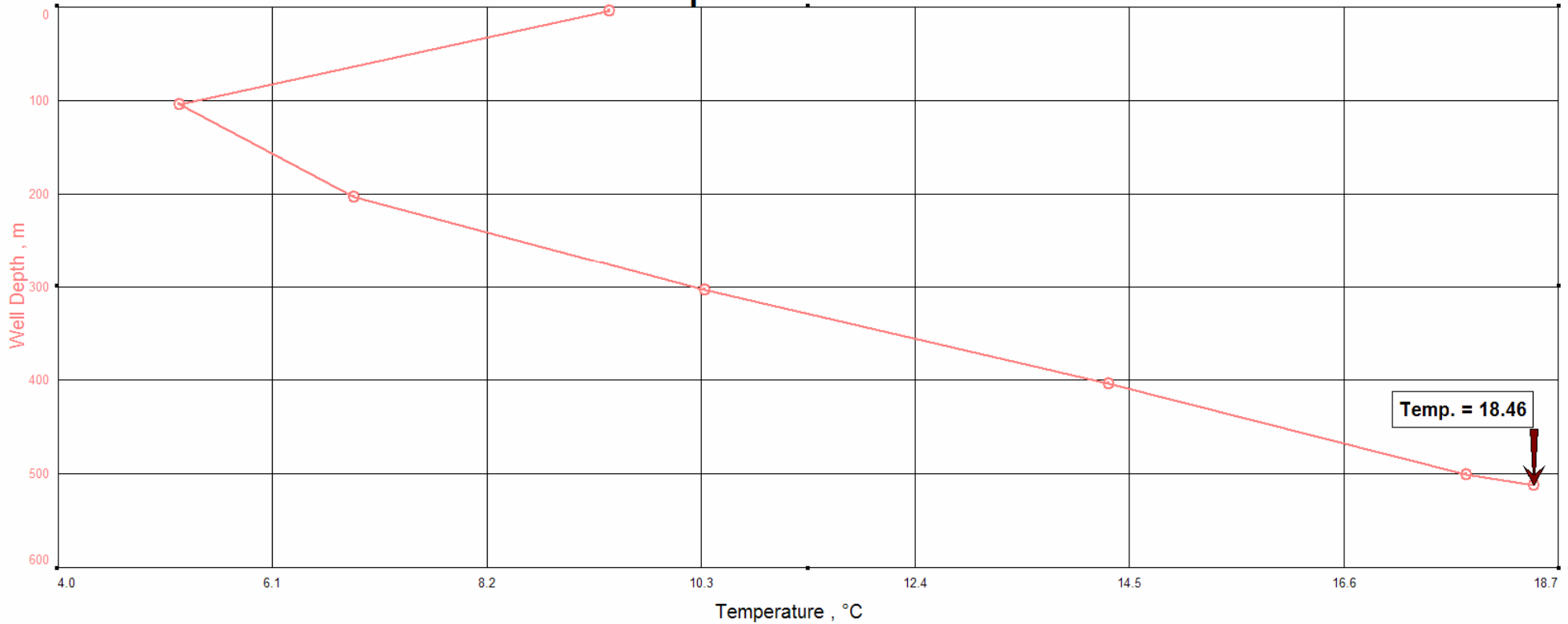
abc Bob
 Formation: Albian
 Pool: 512.5–513.0 mKB-MD
 Job Number: GRD



abc Oil & gas Co. Ltd.
100/10-20-030-40W5/00
Start Test Date: 2004/11/16
Final Test Date: 2004/11/16

abc Bob
Formation: Albian
Pool: 512.5-513.0 mKB-MD
Job Number: GRD

Temperature Gradient



Static Gradient 1

abc Oil & gas Co. Ltd.
 100/10-20-030-40W5/00
 Start Test Date: 2004/11/16
 Final Test Date: 2004/11/16

abc Bob
 Formation: Albian
 Pool: 512.5–513.0 mKB-MD
 Job Number: GRD

Gauge 1

Gauge Serial Number	19266	Gauge Type	9001
Gauge Manufacturer	CalScan	Maximum Recorder Range	10342.50 kPa
Run Depth	514.80 m	Date of Last Calibration	2004/08/18
Gauge Start Date	2004/11/16 16:44:05	Gauge Stop Date	2004/11/16 19:55:00
Date Gauge On Bottom	2004/11/16 17:17:30	Date Gauge Off Bottom	2004/11/16 19:19:30

Test Data

Test/Prod Interval Top KB (TVD)	509.73 m	Base KB (TVD)	510.22 m
Pool Datum Depth (SS)	m	Well Datum Depth	m
Tubing Pressure Initial	2813.00 kPa(a) Final		2813.00 kPa(a)
Casing Pressure Initial	2766.00 kPa(a) Final		2766.00 kPa(a)
Start Test Date		Date Well Shut-In	2004/11/08 09:00:00

Depth m	Time hh:mm:ss	Duration min	Pressure kPa(a)	Gradient kPa/m	Temp. °C	Gradient °C/m
3.90	16:53:30		2802.15		9.40	
103.90	17:00:00	6.50	2821.35	0.192	5.19	-0.042
203.89	17:04:00	4.00	2842.81	0.215	6.90	0.017
303.83	17:08:00	4.00	2864.71	0.219	10.34	0.034
403.47	17:12:30	4.50	2886.76	0.221	14.30	0.040
501.33	17:17:00	4.50	2907.78	0.215	17.80	0.036
511.98	17:21:00	4.00	2909.96	0.205	18.46	0.062

Results

Gas	0.219 kPa/m	MPP	509.98 m	2909.79 kPa(a)
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AEUB.pas



From: EUB-WellTestCaptureProductionSystem@eub.gov.ab.ca
Sent: November 22, 2004 10:10
To: darla@welltestspecialists.com
Subject: EUB WTC PRODUCTION Level 2 Failure - Tracking Id: 2345678
(2345678_100.10-20-030-40W5.0 GRD 2004-11-16.ZIP)

THIS E-MAIL MESSAGE IS FROM THE WTC PRODUCTION SYSTEM Errors occurred while validating your well test package(s). Please see below for tracking id(s) and errors specific to the package(s) you uploaded...

Package: **2345678_100.10-20-030-40W5 GRD 2004-11-16.ZIP [Tracking Id: 2345678]
- UWI: 100/10-20-030-40W5/0

*PAS File: 2345678_100.10-20-030-40W5 GRD 2004-11-16.PAS

* Tested Date: 16 Nov 2004

* Test Purpose: Initial

* TVD Interval: 509.73000 - 510.22000

- ~TEST DATA, TBASL.M, {Test/Prod. Interval Base M Kb (Log)} can not be verified because finished drilling information is not in the EUB Database at this time.

GENERAL INFORMATION

Client Information:

Company: abc Oil & gas Co. Ltd.

Contact: Willy Nilly

Phone: 403-234-5678 Fax: e-mail: willy@abc.ca

Site Information:

Contact: Jo Blow

Phone: 780-345-6789 Fax: e-mail:

Well Information:

Name: abc Bob

Operator: abc

Location-Downhole: 100/10-20-030-40W5/00

Location-Surface:

Test Information:

Company: Kodiak Wireline Services

Representative: Jeff Roth

Supervisor:

Test Type: Static Gradient Job Number: GRD

Test Unit:

Start Date: 2004/11/16 Start Time: 16:44:00

End Date: 2004/11/16 End Time: 19:55:00

Report Date: 2004/11/18 Prepared By: Darla McQuay

Remarks: Qualified By: David Leech

CLIENT INFORMATION

Company: abc Oil & gas Co. Ltd.

Contact: Willy Nilly

Street 1: 1234, 567-8th Avenue SW

Street 2:

City: Calgary

Prov./State: Alberta

Country: Canada

Postal Code: T2P 3Q4

Phone: 403-234-5678 Fax:

e-mail: willy@abc.ca

SITE INFORMATION

Contact: Jo Blow

Phone: 780-345-6789 Fax:

e-mail:

Remarks

WELL INFORMATION

Well Name : abc Bob

Well Operator : abc

Well Location : 100/10-20-030-40W5/00

Location-Surface :

Field : Bob

Well Type : Deviated

Pool : 512.5–513.0 mKB-MD

Formation : Albian

Perforation Type :	Producing Through : Tubing	38.10mm
Pool Datum	m CF Elevation Referenc	682.65m KB
Datum Depth	m CF Elevation Referenc	678.75m CF
	Offset	3.90m

Production Intervals

Production Interval & MPP Reference To : KB

MPP Pressure Reference : None

Fro	m	To -	m	Dept	m	Pressure	kPa
1.	512.50	513.00		1.	512.75		
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
7.				7.			
8.				8.			
9.				9.			
10.				10.			
11.				11.			
12.				12.			

Remarks :

abc Oil & gas Co. Ltd.
100/10-20-030-40W5/00
Start Test Date: 2004/11/16
Final Test Date: 2004/11/16

Recorder

abc Bob
Formation: Albian
Pool: 512.5–513.0 mKB-MD
Job Number: GRD

Gauge 1

Gauge Serial Number	19266	Gauge Type	9001
Gauge Manufacturer	CalScan	Maximum Recorder Range	10342.50 kPa
Run Depth	514.80 m	Date of Last Calibration	2004/08/18
Gauge Start Date	2004/11/16 16:44:05	Gauge Stop Date	2004/11/16 19:55:00
Date Gauge On Bottom	2004/11/16 17:17:30	Date Gauge Off Bottom	2004/11/16 19:19:30

Gauge 2

Gauge Serial Number	19265	Gauge Type	9001
Gauge Manufacturer	CalScan	Maximum Recorder Range	10342.50 kPa
Run Depth	514.14 m	Date of Last Calibration	2004/08/18
Gauge Start Date	2004/11/16 16:44:05	Gauge Stop Date	2004/11/16 19:55:00
Date Gauge On Bottom	2004/11/16 17:17:30	Date Gauge Off Bottom	2004/11/16 19:19:30

abc Oil & gas Co. Ltd.
 100/10-20-030-40W5/00
 Start Test Date: 2004/11/16
 Final Test Date: 2004/11/16

KODIAK WIRELINE SERVICES
Static Gradient

abc Bob
 Formation: Albian
 Pool: 512.5–513.0 mKB-MD
 Job Number: GRD

	Gauge 1 Date yyyy/mm/dd	Gauge 1 Clk Time hh:mm:ss	Gauge 1 Time hr	Gauge 1 Pres. kPa(a)	Gauge 1 Temp. °C	Gauge 2 Pres. kPa(a)	Gauge 2 Temp. °C
1	2004/11/16	16:44:05	0.0000	94.77	20.27	92.65	19.86
2	2004/11/16	16:45:00	0.0153	94.63	20.21	92.59	19.99
3	2004/11/16	16:50:30	0.1069	92.42	14.85	90.61	14.36
4	2004/11/16	16:56:00	0.1986	2813.68	5.35	2814.12	5.94
5	2004/11/16	17:01:30	0.2903	2842.34	6.57	2842.15	6.23
6	2004/11/16	17:07:00	0.3819	2864.71	10.16	2863.91	9.43
7	2004/11/16	17:12:30	0.4736	2886.76	14.30	2885.61	13.16
8	2004/11/16	17:18:00	0.5653	2909.78	18.19	2908.93	17.87
9	2004/11/16	17:23:30	0.6569	2910.10	18.60	2909.23	18.45
10	2004/11/16	17:29:00	0.7486	2910.12	18.77	2909.23	18.69
11	2004/11/16	17:34:30	0.8403	2910.12	18.86	2909.27	18.81
12	2004/11/16	17:40:00	0.9319	2910.15	18.90	2909.26	18.88
13	2004/11/16	17:45:30	1.0236	2910.14	18.93	2909.28	18.92
14	2004/11/16	17:51:00	1.1153	2910.18	18.95	2909.28	18.94
15	2004/11/16	17:56:30	1.2069	2910.11	18.96	2909.23	18.96
16	2004/11/16	18:02:00	1.2986	2910.15	18.97	2909.31	18.97
17	2004/11/16	18:07:30	1.3903	2910.19	18.98	2909.26	18.97
18	2004/11/16	18:13:00	1.4819	2910.19	18.98	2909.20	18.98
19	2004/11/16	18:18:30	1.5736	2910.19	18.98	2909.22	18.98
20	2004/11/16	18:24:00	1.6653	2910.20	18.99	2909.23	18.99
21	2004/11/16	18:29:30	1.7569	2910.20	18.99	2909.23	18.99
22	2004/11/16	18:35:00	1.8486	2910.19	18.99	2909.23	18.99
23	2004/11/16	18:40:30	1.9403	2910.26	18.99	2909.25	18.99
24	2004/11/16	18:46:00	2.0319	2910.22	18.99	2909.27	18.99
25	2004/11/16	18:51:30	2.1236	2910.23	18.99	2909.18	18.99
26	2004/11/16	18:57:00	2.2153	2910.19	18.99	2909.28	18.99
27	2004/11/16	19:02:30	2.3069	2910.22	18.99	2909.23	18.99
28	2004/11/16	19:08:00	2.3986	2910.21	18.99	2909.19	19.00
29	2004/11/16	19:13:30	2.4903	2910.23	18.99	2909.25	19.00
30	2004/11/16	19:19:00	2.5819	2910.22	18.99	2909.24	19.00
31	2004/11/16	19:24:30	2.6736	2800.11	4.88	2800.57	5.34
32	2004/11/16	19:30:00	2.7653	81.34	-1.10	82.78	-0.27
33	2004/11/16	19:35:30	2.8569	81.43	-1.69	82.48	-1.13
34	2004/11/16	19:41:00	2.9486	81.00	-2.15	82.21	-1.72
35	2004/11/16	19:46:30	3.0403	80.72	-2.60	81.95	-2.16
36	2004/11/16	19:52:00	3.1319	80.50	-2.96	81.76	-2.47
37	2004/11/16	19:55:00	3.1819	80.47	-3.12	81.73	-2.61

Gauge 1 Serial Number: 19266 Start Date: 2004/11/16 16:44:05 Run Depth: 514.80
 Gauge 2 Serial Number: 19265 Start Date: 2004/11/16 16:44:05 Run Depth: 514.14
 Print Filter: Print every 11th point



MD-TVD Correction Report					
Name: abc Bob					
UWI: 100/10-20-030-40W5/0					
Zone: Albain					
	Deviation Survey			Depths	
	MD (mKB)	Inc. (θ) (angle, °)	TVD (mKB)	MD (mKB)	TVD (mKB)
Perf's					
Top	510.00	12.38	507.29	512.50	509.73
Bot	510.00	12.38	507.29	513.00	510.22
MPP	510.00	12.38	507.29	512.75	509.98
Wellbore					
Anchor					
GN-Nipple					
EOT					
Gradient					
KB-CF				3.90	
Stop 1	100.00	0.00	100.00	103.90	103.90
Stop 2	207.00	1.63	206.99	203.90	203.89
Stop 3	302.00	2.13	301.93	303.90	303.83
Stop 4	407.00	8.44	406.54	403.90	403.47
Stop 5	501.00	12.31	498.50	503.90	501.33
Stop 6					
Stop 7					
Stop 8					
Stop 9					
Stop 10					
Stop 11					
KB-CF					
RRD					
Top	510.00	12.38	507.29	514.80	511.98
Bot	510.00	12.38	507.29	514.14	511.33

Gr Elev (m)	K0 Elevator (m)	K0-Grd (m)	Current Well Status	User/Text	Spud Date	Rig Release Date				
678.75	682.65	3.90			10/31/2004	11/03/2004				
Name					Vertical Section Direction	Edit				
Original Hole										
Description					Survey Company	Edit				
Wire line/EM					Akita/Computalog					
Survey Data Edit										
MD (mKB)	Incl O	Azm O	TVD (mKB)	Meq	VS (m)	NS (m)	EW (m)	DIS (30m)	Tie-In PP	Tie-In TVD (mKB)
31.00	0.25		31.00	Totco	-0.07	0.07	0.00	0.24		
69.00	0.77		69.00	Totco	-0.40	0.41	0.00	0.41		
100.00	0.50		100.00	Totco	-0.73	0.75	0.00	0.27		
110.00	0.50		110.00	Totco	-0.82	0.84	0.00	0.00		
131.00	0.25	156.00	131.00	Totco	-0.87	0.89	0.02	1.05		
140.00	0.31	130.00	140.00	Totco	-0.84	0.86	0.05	0.46		
150.00	0.25	65.00	150.00	Totco	-0.84	0.85	0.09	0.92		
159.00	0.75	119.00	159.00	Totco	-0.84	0.83	0.16	2.12		
169.00	0.94	130.00	168.99	Totco	-0.79	0.74	0.28	0.75		
178.00	0.88	138.00	177.99	Totco	-0.71	0.64	0.38	0.47		
188.00	1.13	127.00	187.99	Totco	-0.63	0.53	0.51	0.94		
197.00	1.38	121.00	196.99	Totco	-0.56	0.42	0.67	0.94		
207.00	1.63	121.00	206.99	Totco	-0.49	0.28	0.90	0.75		
216.00	1.69	125.00	215.98	Totco	-0.40	0.14	1.12	0.43		
226.00	1.50	125.00	225.98	Totco	-0.30	-0.02	1.34	0.57		
235.00	1.56	125.00	234.97	Totco	-0.21	-0.16	1.54	0.20		
245.00	1.56	112.00	244.97	Totco	-0.14	-0.29	1.78	1.06		
254.00	1.81	130.00	253.97	Totco	-0.06	-0.42	2.00	1.94		
264.00	1.69	127.00	263.96	Totco	0.07	-0.61	2.24	0.45		
273.00	2.25	133.00	272.96	Totco	0.21	-0.81	2.47	1.99		
283.00	2.38	134.00	282.95	Totco	0.41	-1.09	2.77	0.41		
292.00	2.38	144.00	291.94	Totco	0.63	-1.37	3.01	1.38		
302.00	2.13	145.00	301.93	Totco	0.89	-1.69	3.24	0.76		
311.00	2.13	162.00	310.93	Totco	1.14	-1.99	3.39	2.10		
320.00	2.19	193.00	319.92	Totco	1.46	-2.32	3.40	3.85		
330.00	2.63	191.00	329.91	Totco	1.88	-2.73	3.31	1.34		
340.00	3.50	191.00	339.90	Totco	2.41	-3.25	3.21	2.61		
349.00	4.63	195.00	348.88	Totco	3.05	-3.87	3.07	3.88		
359.00	5.50	192.00	358.84	Totco	3.93	-4.73	2.86	2.73		
369.00	5.44	190.00	368.79	Totco	4.88	-5.67	2.68	0.60		
378.00	5.75	185.00	377.75	Totco	5.75	-6.54	2.57	1.92		
387.00	6.44	188.00	386.70	Totco	6.70	-7.48	2.46	2.53		
397.00	7.06	200.00	396.63	Totco	7.87	-8.62	2.17	4.61		
407.00	8.44	207.00	406.54	Totco	9.20	-9.85	1.63	5.01		
416.00	9.63	205.00	415.43	Totco	10.58	-11.12	1.01	4.10		
426.00	10.63	205.00	425.27	Totco	12.30	-12.71	0.26	3.00		
435.00	11.25	209.00	434.11	Totco	13.96	-14.23	-0.51	3.27		
445.00	11.63	211.00	443.91	Totco	15.86	-15.95	-1.50	1.65		
464.00	12.75	201.00	462.48	Totco	19.77	-19.55	-3.24	3.77		
473.00	13.88	192.00	471.24	Totco	21.83	-21.53	-3.82	7.86		
482.00	13.69	188.00	479.98	Totco	23.97	-23.64	-4.20	3.24		
491.00	12.94	185.00	488.74	Totco	26.03	-25.70	-4.43	3.40		
501.00	12.31	190.00	498.50	Totco	28.20	-27.87	-4.71	3.78		
510.00	12.38	195.00	507.29	Totco	30.12	-29.74	-5.13	3.57		
520.00	13.38	197.00	517.04	Totco	32.35	-31.89	-5.75	3.28		
530.00	13.63	197.00	526.76	Totco	34.68	-34.12	-6.43	0.75		
538.00	13.31	197.00	534.54	Totco	36.54	-35.90	-6.97	1.20		
548.00	13.31	197.00	544.27	Totco	38.84	-38.10	-7.65	0.00		
557.00	13.13	197.00	553.03	Totco	40.89	-40.07	-8.25	0.60		
567.00	12.75	197.00	562.78	Totco	43.13	-42.21	-8.90	1.14		
576.00	12.94	198.00	571.55	Totco	45.12	-44.12	-9.51	0.98		
585.00	13.06	198.00	580.32	Totco	47.14	-46.05	-10.13	0.40		
595.00	13.38	199.00	590.06	Totco	49.42	-48.22	-10.86	1.18		
605.00	13.25	199.00	599.79	Totco	51.71	-50.39	-11.61	0.39		
614.00	13.19	199.00	608.55	Totco	53.76	-52.34	-12.28	0.20		
624.00	13.50	196.00	618.28	Totco	56.06	-54.54	-12.97	2.28		
633.00	13.56	195.75	627.03	Totco	58.16	-56.57	-13.55	0.28		
643.00	13.19	193.63	636.76	Totco	60.48	-58.80	-14.13	1.84		

Report Printed: 11/18/2004

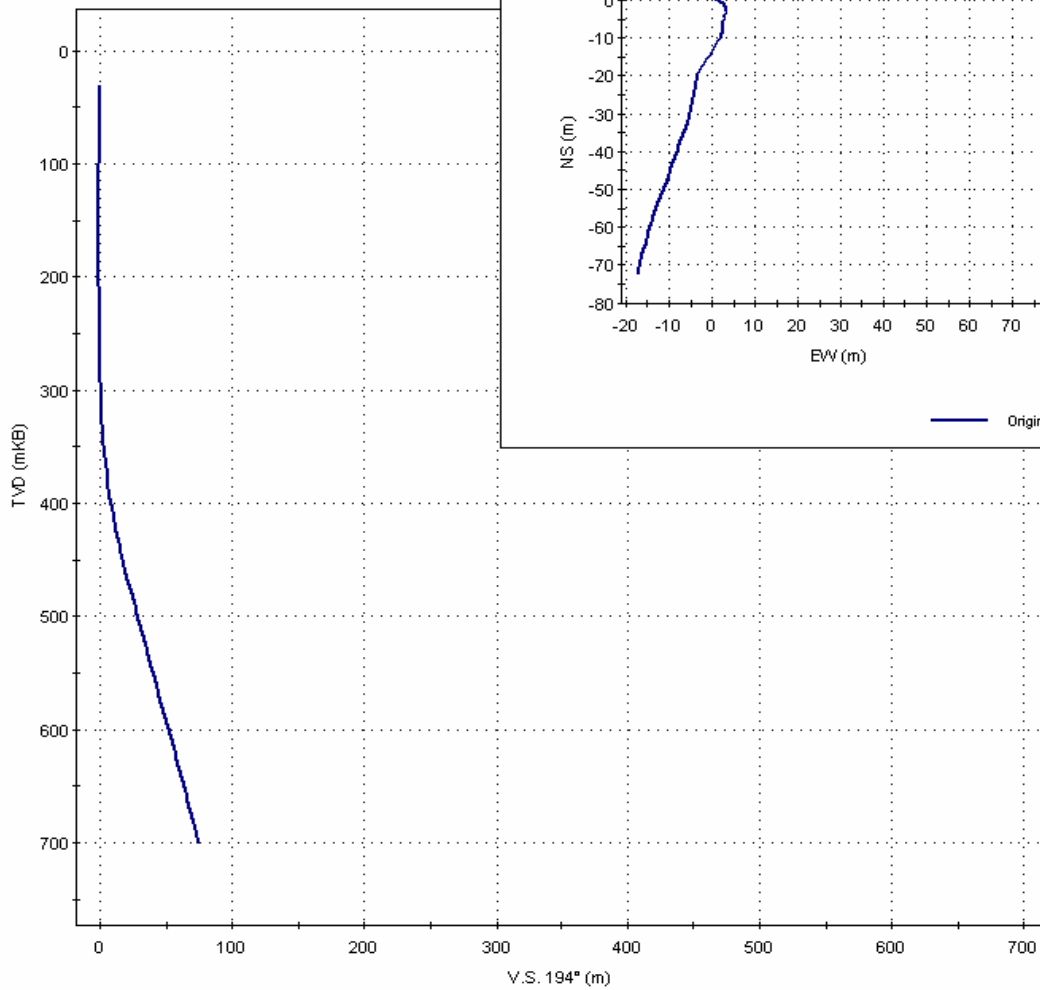
Survey Data

[Edit](#)

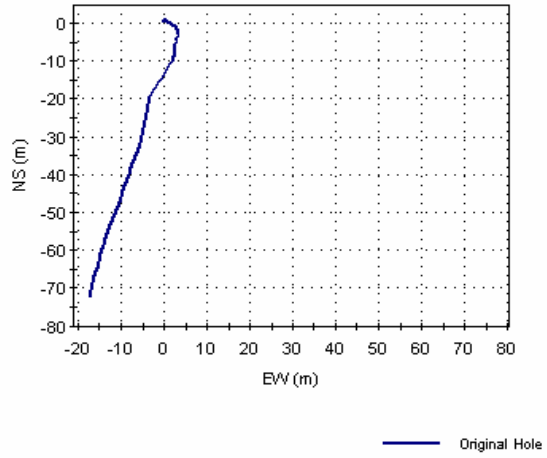
HD (mK@)	Incl. C	Arm. C	TVD (mK@)	MeB	VS (m)	NS (m)	Bl (m)	DLS C(30m)	Tk-h PE	Tk-h TVD (mK@)
652.00	12.88	194.63	645.53	Totco	62.51	-60.77	-14.63	1.28		
662.00	12.81	194.63	655.28	Totco	64.73	-62.92	-15.19	0.21		
671.00	12.81	193.75	664.05	Totco	66.72	-64.86	-15.68	0.65		
680.00	12.56	193.25	672.83	Totco	68.70	-66.78	-16.14	0.91		
690.00	11.88	192.63	682.61	Totco	70.82	-68.84	-16.61	2.08		
709.00	11.94	193.25	701.20	Totco	74.74	-72.66	-17.49	0.22		

KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Spud Date	Rig Release Date
682.65	678.75	3.90	10/31/2004 2:45:00 PM	11/03/2004 8:00:00 AM
Name Original Hole			Vertical Section Direction	Edit
Description Wire line/EM			Survey Company Akita/Computalog	Edit

Vertical Section



Plan





RECORDER RUNSHEET

COMPANY: _____ LSD: _____

GAUGE DATA BATTERY CHECK: (Y) / N Battery

	Serial Number	Pressure Range	On Time	Off Time
TOP	19265	1.5	1644	
BOTTOM	19266	1.5	1644	

TEST DATA TYPE Static Gradient Flowing Gradient Flow & Build Up Bottom Hole Pressure

①

INITIAL GRADIENT - Zone: _____ Event: 00

Start Date: Nov 16 104 Finish Date: _____

Run Depth: _____ Time on Bottom: _____ Time off Bottom: _____

Tubing Pressure - Run: 2720 KPAG Pull: _____

Casing Pressure - Run: 2673 KPAG Pull: _____

	Depth	Time		Depth	Time		Depth	Time
1	0	1649 - 1652	6	500	1712 - 1715	11		
2	100	1655 - 1658	7	510.9 $\frac{mg}{mpp}$	1716 - 1716	12		
3	200	1659 - 1702	8	0	1723 - 1726	13		
4	300	1704 - 1707	9			14		
5	400	1708 - 1711	10			15		

②

FINAL GRADIENT - Zone: _____ Event: 02

Start Date: Nov 16 104 Finish Date: _____

Run Depth: _____ Time on Bottom: _____ Time off Bottom: _____

Tubing Pressure - Run: 2676 KPAG Pull: _____

Casing Pressure - Run: 2673 KPAG Pull: _____

	Depth	Time		Depth	Time		Depth	Time
1	0	2014 - 2017	6	450	2036 - 2039	11		
2	100	2019 - 2022	7	500	2041 - 2041	12		
3	200	2024 - 2027	8	0	2246 - 2249	13		
4	300	2028 - 2031	9			14		
5	400	2033 - 2036	10			15		

Comments: _____