

Sub-Surface Pressure Report

Chevron Canada Resources

Flow & Build-Up

Chevron et al Liard K-29

K-29

Sep 13, 99 to Sep 15, 99



**7449 - 49 Avenue Crescent
Red Deer, Alberta T4P 1X6**

**REPRODUCED
ON MICROFILM:**

Chevron Canada Resources

Flow & Build-Up
Chevron et al Liard K-29
K-29

Sep 13, 99 to Sep 15, 99

Service Company Contact Info

Report Writer	Vio Tandara, 1-403-347-2524	Service Company	Lee Tool, Div. of Schlumberger
Operator	Dale Sallstrom, 1-780-778-2361	Job ID	k-29ext2
		Test Date	Sep 13, 99 to Sep 15, 99

Gauge: Lee Memory Recorder Model 3000s (Quartz)
Manufacturer: Lee Tool, Division of Schlumberger Canada Limited

Recorded Data

Chevron Canada Resources
Alberta, Canada

Sep 13, 99 to Sep 15, 99

Chevron et al Liard K-29

K-29

Fort Liard, Nahanni

Data									
9401Q-16E		9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E
Real Time	apsed Time	Pressure	Pressure	Pressure	Pressure	Temperature	Temperature	Temperature	Temperature
(mmm dd,yy 24 hr)	(H.HH)	(KPa G)	(KPa G)	(KPa G)	(KPa G)	(DegC)	(DegC)	(DegC)	(DegC)
Sep 13, 99 15:39:00	0.0000	7.7195	36.3758			25.29	24.85		
15:45:00	0.1000	5928.6249	5923.2376			26.60	25.84		
15:51:00	0.2000	6963.6120	6929.6562			21.14	21.24		
15:57:00	0.3000	12104.4607	12079.7647			26.11	25.08		
16:03:00	0.4000	17577.1388	17557.4863			46.98	44.49		
16:09:00	0.5000	23214.7825	23224.8343			76.27	72.64		
16:15:00	0.6000	27005.1035	27080.8730			108.44	104.49		
16:21:00	0.7000	27423.3538	27472.2647			126.66	123.89		
16:27:00	0.8000	27476.5205	27489.3309			133.19	131.57		
16:33:00	0.9000	27317.5115	27336.2828			135.64	134.66		
16:39:00	1.0000	27339.3939	27359.0235			136.55	135.83		
16:45:00	1.1000	27361.0186	27379.9177	-7.7671	-19.7775	137.08	136.49	21.85	20.68
16:51:00	1.2000	27538.8199	27555.9740	6557.8964	6571.8547	137.96	137.38	24.32	24.04
16:57:00	1.3000	27554.9490	27561.1706	6862.2051	6878.5130	137.66	137.15	17.48	17.56
17:03:00	1.4000	27315.3858	27332.5413	10434.8148	10404.1954	137.55	137.11	21.92	21.07
17:09:00	1.5000	27309.9846	27336.3232	15748.8846	15723.2126	137.85	137.39	41.76	39.83
17:15:00	1.6000	27562.0259	27578.9504	21919.3462	21895.3469	137.96	137.43	67.51	64.85
17:21:00	1.7000	27531.8572	27535.2037	27379.2029	27430.5753	137.72	137.23	104.31	100.85
17:27:00	1.8000	27337.8198	27353.4762	27196.8754	27201.0735	137.78	137.33	125.80	123.56
17:33:00	1.9000	27278.0696	27298.5497	27193.4198	27190.2682	138.00	137.55	133.56	132.33
17:39:00	2.0000	27456.9839	27482.4536	27385.5142	27393.3167	138.23	137.73	136.35	135.64
17:45:00	2.1000	27566.9626	27582.6595	27543.8966	27558.0517	138.20	137.67	137.23	136.76
17:51:00	2.2000	27516.8784	27525.9537	27526.6501	27538.2323	138.02	137.53	137.32	137.01
17:57:00	2.3000	27303.6729	27322.4012	27281.3475	27284.1193	138.19	137.74	137.55	137.32
18:03:00	2.4000	27417.0492	27443.3484	27369.5215	27380.4101	138.51	138.03	137.90	137.65
18:09:00	2.5000	27549.3677	27566.0738	27542.0690	27558.2194	138.60	138.07	138.03	137.76
18:15:00	2.6000	27565.0316	27573.8678	27563.4700	27579.7739	138.45	137.95	137.89	137.64
18:21:00	2.7000	27340.6288	27355.9000	27334.5845	27336.3666	138.47	138.02	137.88	137.68
18:27:00	2.8000	27364.0877	27389.1954	27323.4060	27330.7339	138.77	138.30	138.17	137.95
18:33:00	2.9000	27538.8783	27555.9890	27517.4762	27531.4133	138.93	138.41	138.35	138.10
18:39:00	3.0000	27568.7122	27580.5837	27563.6085	27579.6135	138.82	138.30	138.26	138.01
18:45:00	3.1000	27413.5152	27422.8689	27430.7954	27430.8703	138.73	138.27	138.14	137.94
18:51:00	3.2000	27331.6886	27354.5013	27299.7236	27303.8887	138.95	138.50	138.36	138.16
18:57:00	3.3000	27481.3518	27506.6460	27443.4443	27455.8961	139.18	138.68	138.60	138.36
19:03:00	3.4000	27566.1878	27580.9430	27553.8542	27568.3296	139.14	138.62	138.59	138.34
19:09:00	3.5000	27536.3881	27546.1041	27540.5474	27553.5475	138.98	138.49	138.42	138.20
19:15:00	3.6000	27331.6038	27348.3468	27315.2981	27317.9483	139.07	138.62	138.49	138.30
19:21:00	3.7000	27384.8307	27409.7821	27344.7109	27352.0465	139.31	138.84	138.73	138.52
19:27:00	3.8000	27538.3966	27555.7052	27515.9076	27529.2452	139.42	138.90	138.86	138.61
19:33:00	3.9000	27567.9668	27578.3878	27563.4795	27578.7345	139.29	138.78	138.75	138.51
19:39:00	4.0000	27423.5490	27431.9827	27440.3269	27440.2256	139.21	138.74	138.64	138.44
19:45:00	4.1000	27324.1492	27345.3522	27296.4892	27299.6865	139.37	138.91	138.79	138.60
19:51:00	4.2000	27429.8683	27454.9201	27388.2464	27398.0205	139.57	139.08	139.00	138.77
19:57:00	4.3000	27554.7306	27571.9417	27540.6842	27555.0548	139.58	139.06	139.03	138.79
20:03:00	4.4000	27556.1319	27562.4815	27560.5362	27575.0077	139.41	138.91	138.87	138.64
20:09:00	4.5000	27343.7096	27358.1766	27336.7836	27337.8084	139.40	138.94	138.82	138.64
20:15:00	4.6000	27337.1559	27361.9103	27299.6225	27304.1122	139.60	139.14	139.03	138.83
20:21:00	4.7000	27516.4877	27539.9758	27481.7232	27495.3271	139.74	139.23	139.18	138.95
20:27:00	4.8000	27569.8871	27581.5591	27564.1500	27578.6014	139.61	139.10	139.08	138.84

Data

	9401Q-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	
	Real Time (mmm dd,yy 24 hr)	apsed Time (H:HH)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)
	20:33:00	4.9000	27429.7459	27433.3816	27458.2234	27455.3583	139.48	139.01	138.91	138.72
	20:39:00	5.0000	27302.2824	27324.3032	27274.4047	27276.5594	139.62	139.17	139.05	138.87
	20:45:00	5.1000	27443.4481	27469.6826	27399.4560	27409.6592	139.82	139.33	139.26	139.04
	20:51:00	5.2000	27563.6260	27579.3214	27550.1380	27564.7969	139.78	139.25	139.24	139.00
	20:57:00	5.3000	27526.7600	27534.2140	27539.0641	27550.2240	139.57	139.09	139.03	138.82
	21:03:00	5.4000	27296.9397	27315.2624	27276.6293	27277.7702	139.64	139.19	139.07	138.89
	21:09:00	5.5000	27383.9834	27413.2211	27337.5750	27345.1942	139.86	139.38	139.30	139.09
	21:15:00	5.6000	27552.4418	27568.0286	27544.4760	27558.3963	139.88	139.36	139.35	139.11
	21:21:00	5.7000	27553.5423	27556.6769	27559.8909	27573.5670	139.68	139.18	139.14	138.92
	21:27:00	5.8000	27299.1006	27316.2585	27282.2903	27283.2675	139.69	139.23	139.12	138.94
	21:33:00	5.9000	27351.6136	27381.0412	27305.2328	27311.1144	139.91	139.43	139.34	139.14
	21:39:00	6.0000	27548.8399	27562.6837	27536.4310	27549.3841	139.97	139.44	139.43	139.19
	21:45:00	6.1000	27563.6037	27571.3000	27564.4004	27578.7936	139.77	139.26	139.23	139.01
	21:51:00	6.2000	27303.8959	27319.5493	27292.2460	27292.0739	139.73	139.28	139.17	138.99
	21:57:00	6.3000	27329.0711	27359.0362	27284.0196	27289.1578	139.96	139.48	139.39	139.20
	22:03:00	6.4000	27544.6622	27559.2949	27527.8084	27540.3874	140.04	139.52	139.50	139.26
	22:09:00	6.5000	27566.9265	27575.8111	27566.1305	27580.2346	139.85	139.34	139.32	139.09
	22:15:00	6.6000	27304.6366	27318.9435	27296.5197	27295.4926	139.78	139.32	139.22	139.05
	22:21:00	6.7000	27320.5417	27350.3106	27276.2347	27281.0301	140.01	139.54	139.45	139.25
	22:27:00	6.8000	27546.7725	27561.7021	27530.7356	27543.1516	140.10	139.58	139.56	139.33
	22:33:00	6.9000	27565.4953	27573.6816	27565.5966	27579.3313	139.90	139.39	139.37	139.14
	22:39:00	7.0000	27294.1366	27309.6428	27281.5345	27281.1930	139.85	139.39	139.29	139.11
	22:45:00	7.1000	27342.9987	27374.2104	27294.9983	27301.0439	140.10	139.62	139.53	139.34
	22:51:00	7.2000	27548.5200	27563.1469	27541.4381	27554.2967	140.15	139.63	139.62	139.38
	22:57:00	7.3000	27559.1882	27563.9481	27561.4969	27575.1765	139.93	139.43	139.41	139.19
	23:03:00	7.4000	27278.9507	27296.8707	27259.7891	27260.3218	139.95	139.49	139.38	139.21
	23:09:00	7.5000	27389.2787	27419.8141	27341.4713	27349.1263	140.20	139.72	139.64	139.43
	23:15:00	7.6000	27558.3418	27575.8045	27546.5994	27560.2476	140.19	139.66	139.66	139.43
	23:21:00	7.7000	27519.7609	27521.4182	27540.0110	27550.0540	139.96	139.48	139.43	139.23
	23:27:00	7.8000	27273.1748	27294.1606	27247.5660	27248.6131	140.08	139.63	139.52	139.35
	23:33:00	7.9000	27467.1535	27493.7135	27431.0991	27441.7424	140.32	139.82	139.77	139.55
	23:39:00	8.0000	27571.2388	27583.8083	27564.6062	27578.0170	140.22	139.69	139.69	139.46
	23:45:00	8.1000	27406.8691	27401.7428	27449.0245	27440.7547	140.04	139.57	139.48	139.30
	23:51:00	8.2000	27307.1010	27335.6790	27267.3974	27270.6339	140.27	139.80	139.70	139.52
	23:57:00	8.3000	27543.3346	27559.2695	27521.2699	27533.1969	140.41	139.89	139.87	139.64
Sep 14, 99	00:03:00	8.4000	27566.9170	27575.7550	27566.4088	27579.8926	140.21	139.70	139.68	139.46
	00:09:00	8.5000	27295.1219	27311.0191	27279.6442	27279.5783	140.18	139.73	139.62	139.45
	00:15:00	8.6000	27400.4953	27430.5700	27357.4752	27364.5575	140.45	139.97	139.89	139.68
	00:21:00	8.7000	27563.8266	27579.1893	27549.9440	27562.0182	140.44	139.91	139.91	139.68
	00:27:00	8.8000	27514.8507	27525.9417	27522.3038	27531.2844	140.20	139.72	139.67	139.47
	00:33:00	8.9000	27285.4883	27310.1784	27254.1188	27255.3764	140.37	139.91	139.81	139.63
	00:39:00	9.0000	27517.1510	27544.5844	27481.3620	27493.4047	140.57	140.06	140.02	139.80
	00:45:00	9.1000	27571.4779	27581.6122	27568.5938	27581.9614	140.40	139.89	139.88	139.65
	00:51:00	9.2000	27312.7635	27324.6143	27307.3778	27305.1855	140.30	139.85	139.74	139.57
	00:57:00	9.3000	27376.7953	27407.3146	27332.8308	27338.7587	140.57	140.09	140.01	139.81
	01:03:00	9.4000	27559.9081	27576.3532	27546.4020	27559.1740	140.58	140.06	140.06	139.82
	01:09:00	9.5000	27517.7370	27522.9142	27534.5823	27543.7647	140.34	139.86	139.80	139.60
	01:15:00	9.6000	27282.5467	27307.0150	27250.5929	27252.1420	140.50	140.04	139.93	139.76
	01:21:00	9.7000	27521.2770	27546.9941	27487.4324	27499.3794	140.70	140.19	140.15	139.92
	01:27:00	9.8000	27571.1814	27580.2394	27568.7067	27582.1949	140.51	140.00	139.99	139.76
	01:33:00	9.9000	27303.1470	27317.2881	27291.2793	27290.2965	140.44	139.98	139.88	139.70
	01:39:00	10.0000	27402.9889	27433.2130	27360.5554	27367.6295	140.71	140.23	140.15	139.95
	01:45:00	10.1000	27566.8930	27581.6012	27555.6353	27567.2563	140.69	140.16	140.16	139.93
	01:51:00	10.2000	27517.1808	27514.9811	27508.8861	27519.9986	140.45	139.98	139.91	139.72
	01:57:00	10.3000	27301.8969	27330.5640	27264.6534	27267.3817	140.66	140.20	140.09	139.91
02:03:00	10.4000	27545.0173	27561.6221	27523.9857	27534.7602	140.81	140.30	140.27	140.04	
02:09:00	10.5000	27566.4083	27574.3746	27566.0822	27579.4681	140.59	140.09	140.06	139.85	
02:15:00	10.6000	27287.4749	27303.8086	27268.3333	27268.0590	140.59	140.14	140.03	139.86	

Data

9401Q-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E
Real Time apsed Time (mmm dd,yy 24 hr)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)
02:21:00	10.7000	27445.7581	27473.1682	27407.9179	27416.8510	140.85	140.36	140.29
02:27:00	10.8000	27571.3604	27584.2001	27565.2080	27578.2173	140.76	140.24	140.24
02:33:00	10.9000	27402.8833	27394.8757	27440.4527	27431.5420	140.57	140.10	140.01
02:39:00	11.0000	27337.5079	27368.9898	27294.7462	27298.7577	140.81	140.35	140.25
02:45:00	11.1000	27554.0680	27570.4641	27544.2843	27556.1086	140.90	140.38	140.37
02:51:00	11.2000	27553.8941	27552.8387	27559.0100	27571.4521	140.66	140.17	140.13
02:57:00	11.3000	27282.1404	27304.1911	27255.1650	27255.9706	140.75	140.30	140.19
03:03:00	11.4000	27507.8722	27536.6303	27473.8510	27484.9204	140.99	140.48	140.43
03:09:00	11.5000	27572.3294	27582.5520	27569.0910	27582.1744	140.81	140.30	140.29
03:15:00	11.6000	27306.4481	27319.8003	27293.9131	27292.3642	140.72	140.27	140.16
03:21:00	11.7000	27419.2829	27449.0433	27379.3858	27386.4269	141.00	140.52	140.44
03:27:00	11.8000	27569.8234	27583.5871	27561.7990	27574.4239	140.95	140.43	140.43
03:33:00	11.9000	27455.9553	27436.3362	27505.4736	27500.8834	140.73	140.27	140.18
03:39:00	12.0000	27338.3933	27369.8669	27296.9983	27300.5860	140.97	140.51	140.41
03:45:00	12.1000	27552.6739	27570.2147	27541.3516	27552.5696	141.07	140.55	140.54
03:51:00	12.2000	27555.8542	27555.5261	27559.9205	27572.3296	140.83	140.33	140.30
03:57:00	12.3000	27287.6114	27311.0723	27259.2343	27259.8623	140.93	140.48	140.37
04:03:00	12.4000	27514.1746	27543.9634	27481.7037	27493.0136	141.15	140.64	140.60
04:09:00	12.5000	27572.6554	27581.7147	27569.3685	27582.3905	140.97	140.45	140.44
04:15:00	12.6000	27304.4866	27318.7774	27290.0186	27289.1544	140.90	140.45	140.34
04:21:00	12.7000	27432.3036	27461.4264	27395.0511	27402.7431	141.16	140.68	140.61
04:27:00	12.8000	27570.8743	27583.8256	27564.5291	27576.9228	141.10	140.58	140.58
04:33:00	12.9000	27422.8757	27408.9724	27461.6993	27452.8910	140.90	140.44	140.35
04:39:00	13.0000	27360.2302	27391.3561	27319.6051	27323.9036	141.15	140.68	140.59
04:45:00	13.1000	27558.5676	27575.7074	27542.9607	27553.2210	141.22	140.69	140.69
04:51:00	13.2000	27542.8608	27537.5226	27554.5509	27565.4699	140.98	140.49	140.45
04:57:00	13.3000	27304.2598	27332.2078	27270.6995	27272.3677	141.12	140.66	140.56
05:03:00	13.4000	27534.3087	27554.7066	27508.1279	27518.2673	141.30	140.79	140.76
05:09:00	13.5000	27570.0878	27578.1288	27568.9574	27581.6611	141.11	140.59	140.58
05:15:00	13.6000	27294.7310	27313.0068	27274.3492	27273.4885	141.10	140.65	140.54
05:21:00	13.7000	27475.9181	27505.0184	27446.1066	27455.9572	141.35	140.86	140.80
05:27:00	13.8000	27573.0799	27584.6022	27568.7425	27581.4498	141.22	140.70	140.70
05:33:00	13.9000	27327.6625	27337.5882	27321.4870	27318.9713	141.10	140.64	140.54
05:39:00	14.0000	27420.8900	27450.1033	27383.3626	27389.9134	141.36	140.89	140.81
05:45:00	14.1000	27570.5845	27583.7311	27564.0332	27576.0270	141.33	140.80	140.81
05:51:00	14.2000	27440.7794	27422.2221	27481.9302	27471.3883	141.12	140.65	140.56
05:57:00	14.3000	27371.4803	27401.8810	27332.5326	27336.5828	141.36	140.90	140.80
06:03:00	14.4000	27563.5223	27579.1411	27550.7285	27559.8106	141.43	140.90	140.90
06:09:00	14.5000	27530.9834	27528.9419	27547.6813	27556.8847	141.18	140.70	140.64
06:15:00	14.6000	27322.1221	27351.3005	27287.2070	27289.4337	141.34	140.89	140.78
06:21:00	14.7000	27545.7537	27567.5366	27522.5998	27532.2319	141.51	140.99	140.97
06:27:00	14.8000	27568.6136	27576.3466	27568.1075	27580.8366	141.30	140.79	140.77
06:33:00	14.9000	27299.2330	27321.3901	27272.8109	27272.8258	141.33	140.88	140.77
06:39:00	15.0000	27500.7348	27530.3259	27472.2154	27482.6956	141.56	141.06	141.01
06:45:00	15.1000	27574.2290	27585.0504	27570.3689	27583.3739	141.41	140.89	140.88
06:51:00	15.2000	27324.5358	27334.5725	27314.5342	27312.3302	141.32	140.86	140.76
06:57:00	15.3000	27444.0027	27472.2137	27409.7289	27417.9738	141.59	141.11	141.03
07:03:00	15.4000	27572.2400	27584.7296	27567.1778	27579.1626	141.51	140.99	140.99
07:09:00	15.5000	27392.7484	27384.1289	27414.3619	27407.4433	141.33	140.87	140.77
07:15:00	15.6000	27392.8392	27423.5331	27355.9104	27360.2806	141.59	141.12	141.03
07:21:00	15.7000	27570.1923	27583.3411	27564.4209	27575.8832	141.61	141.09	141.09
07:27:00	15.8000	27521.2896	27532.8885	27526.9705	27535.1148	141.37	140.89	140.83
07:33:00	15.9000	27341.7286	27375.4860	27302.7121	27305.9988	141.58	141.12	141.02
07:39:00	16.0000	27561.2134	27577.9570	27542.2688	27551.4722	141.69	141.17	141.16
07:45:00	16.1000	27561.5027	27560.0369	27564.2933	27576.4561	141.46	140.96	140.93
07:51:00	16.2000	27317.5965	27346.7280	27284.4198	27285.6864	141.58	141.13	141.02
07:57:00	16.3000	27538.6219	27565.6485	27513.8556	27523.6235	141.76	141.25	141.22
08:03:00	16.4000	27571.6020	27579.1312	27570.2770	27582.6885	141.55	141.04	141.02

Data

9401Q-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	
Real Time (mm dd,yy 24 hr)	apsed Time (H:HH)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)
08:09:00	16.5000	27302.5154	27325.5879	27275.9864	27276.2499	141.58	141.13	141.02	140.85
08:15:00	16.6000	27509.6636	27538.1152	27485.3726	27495.4284	141.81	141.31	141.26	141.05
08:21:00	16.7000	27575.3890	27585.5905	27571.3126	27584.1542	141.64	141.12	141.11	140.89
08:27:00	16.8000	27309.0527	27324.5434	27293.4276	27292.1160	141.58	141.13	141.02	140.85
08:33:00	16.9000	27474.6263	27502.5496	27446.1484	27455.0574	141.84	141.35	141.29	141.08
08:39:00	17.0000	27574.5384	27586.4845	27570.3808	27583.0153	141.72	141.20	141.19	140.97
08:45:00	17.1000	27337.8218	27343.7424	27334.1937	27330.3810	141.58	141.13	141.02	140.86
08:51:00	17.2000	27439.1588	27470.6521	27403.3836	27410.7188	141.86	141.38	141.31	141.11
08:57:00	17.3000	27572.6922	27585.0269	27567.6734	27579.8352	141.79	141.27	141.27	141.05
09:03:00	17.4000	27390.1286	27379.0651	27412.2450	27404.3652	141.60	141.14	141.04	140.88
09:09:00	17.5000	27411.7245	27444.2685	27377.8287	27382.9660	141.88	141.41	141.32	141.13
09:15:00	17.6000	27570.9230	27583.5822	27566.0366	27577.7221	141.85	141.33	141.33	141.10
09:21:00	17.7000	27448.0209	27421.8774	27488.1296	27477.6862	141.63	141.17	141.08	140.91
09:27:00	17.8000	27392.1969	27422.0804	27356.0867	27360.0980	141.89	141.42	141.33	141.15
09:33:00	17.9000	27570.0297	27582.6901	27565.3727	27576.2749	141.91	141.38	141.38	141.16
09:39:00	18.0000	27521.5710	27476.7160	27514.5580	27523.1607	141.66	141.19	141.11	140.94
09:45:00	18.1000	27384.5503	27415.8189	27346.4649	27350.2189	141.92	141.46	141.36	141.18
09:51:00	18.2000	27568.8399	27581.8181	27564.3487	27575.2545	141.94	141.41	141.41	141.19
09:57:00	18.3000	27519.5561	27519.7485	27519.6629	27527.8796	141.69	141.21	141.14	140.97
10:03:00	18.4000	27378.9696	27412.5049	27338.2410	27342.5243	141.96	141.49	141.39	141.21
10:09:00	18.5000	27567.9694	27582.1410	27563.1277	27574.2574	141.96	141.44	141.44	141.22
10:15:00	18.6000	27521.1912	27495.7662	27515.2259	27524.5464	141.71	141.24	141.16	140.99
10:21:00	18.7000	27387.9787	27420.1371	27350.9163	27354.6634	142.00	141.53	141.44	141.25
10:27:00	18.8000	27569.6043	27583.4447	27563.3940	27574.5178	141.98	141.45	141.45	141.23
10:33:00	18.9000	27508.9815	27455.7718	27512.3590	27520.3128	141.74	141.27	141.18	141.02
10:39:00	19.0000	27553.5251	27577.0307	27477.2862	27493.6170	142.16	141.65	141.60	141.38
10:45:00	19.1000	27573.6759	27586.3212	27568.5847	27579.9280	141.92	141.40	141.37	141.17
10:51:00	19.2000	27263.3678	27299.8014	27226.6989	27227.5691	141.98	141.53	141.39	141.23
10:57:00	19.3000	27569.5574	27581.5360	27567.1517	27578.2089	142.06	141.54	141.52	141.30
11:03:00	19.4000	27472.7795	27403.5501	27499.2173	27503.8848	141.77	141.31	141.19	141.03
11:09:00	19.5000	27567.8821	27579.1162	27556.6004	27564.5807	142.16	141.64	141.60	141.38
11:15:00	19.6000	27574.2155	27586.0279	27569.2450	27581.3365	141.90	141.38	141.35	141.15
11:21:00	19.7000	27278.7178	27320.8047	27236.3118	27238.5191	142.02	141.57	141.43	141.27
11:27:00	19.8000	27569.1398	27582.1868	27564.7416	27575.6624	142.06	141.54	141.52	141.30
11:33:00	19.9000	27365.2306	27332.4944	27415.7803	27397.3635	141.80	141.35	141.21	141.06
11:39:00	20.0000	27570.1213	27580.7022	27568.4688	27577.9870	142.18	141.66	141.62	141.40
11:45:00	20.1000	27573.7177	27583.0224	27569.9157	27581.8755	141.90	141.38	141.34	141.14
11:51:00	20.2000	27338.1171	27378.4645	27298.1520	27301.1977	142.14	141.67	141.54	141.36
11:57:00	20.3000	27569.3318	27583.2357	27565.3852	27576.8448	142.05	141.53	141.51	141.30
12:03:00	20.4000	27263.7354	27273.7997	27251.5809	27247.1403	141.88	141.44	141.29	141.14
12:09:00	20.5000	27569.8302	27579.9090	27568.4697	27578.7850	142.18	141.66	141.64	141.41
12:15:00	20.6000	27569.5866	27575.4195	27567.3573	27579.7127	141.89	141.38	141.33	141.13
12:21:00	20.7000	27374.5295	27420.8755	27332.0819	27336.3833	142.20	141.72	141.61	141.42
12:27:00	20.8000	27571.4361	27584.5231	27566.6026	27577.9775	142.06	141.53	141.52	141.30
12:33:00	20.9000	27251.2186	27266.2730	27231.7647	27228.8889	141.94	141.49	141.35	141.20
12:39:00	21.0000	27570.3953	27580.6066	27568.8479	27579.4802	142.20	141.67	141.65	141.43
12:45:00	21.1000	27567.0882	27570.4417	27566.7157	27578.2769	141.90	141.40	141.34	141.15
12:51:00	21.2000	27383.4848	27436.0639	27340.4717	27344.9408	142.23	141.75	141.65	141.45
12:57:00	21.3000	27571.9374	27585.0757	27567.3839	27578.9839	142.08	141.55	141.54	141.32
13:03:00	21.4000	27250.3594	27266.4468	27230.4533	27227.5685	141.97	141.53	141.38	141.23
13:09:00	21.5000	27570.5242	27580.5099	27569.3518	27580.0205	142.22	141.69	141.68	141.46
13:15:00	21.6000	27567.7830	27571.1974	27566.7726	27578.3888	141.93	141.42	141.37	141.18
13:21:00	21.7000	27373.9968	27419.6409	27329.7073	27334.8706	142.25	141.77	141.67	141.47
13:27:00	21.8000	27571.6889	27584.9776	27567.2181	27578.6790	142.11	141.59	141.58	141.36
13:33:00	21.9000	27255.6194	27269.0076	27238.8658	27235.3341	141.98	141.54	141.39	141.25
13:39:00	22.0000	27572.4295	27582.4585	27571.5061	27581.6918	142.26	141.73	141.72	141.50
13:45:00	22.1000	27570.9199	27577.6106	27568.8240	27579.9448	141.98	141.47	141.42	141.23
13:51:00	22.2000	27355.7639	27395.3940	27320.7040	27321.4806	142.26	141.79	141.68	141.49

Data

9401Q-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	
Real Time (mm dd,yy 24 hr)	apsed Time (H:HH)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)
13:57:00	22.3000	27571.7104	27585.2196	27568.9052	27580.3808	142.19	141.66	141.66	141.43
14:03:00	22.4000	27518.5366	27450.7286	27509.8032	27520.2413	141.98	141.51	141.41	141.25
14:09:00	22.5000	27572.5241	27582.8665	27566.6818	27574.4418	142.41	141.89	141.86	141.63
14:15:00	22.6000	26854.0849	27009.3491	26700.3376	26725.7941	142.21	141.65	141.69	141.45
14:21:00	22.7000	24312.0169	24167.7628	24208.1683	24157.5161	144.99	144.25	144.69	144.18
14:27:00	22.8000	22925.3497	23060.8755	22521.4580	22440.9609	148.46	147.70	148.32	147.67
14:33:00	22.9000	23847.7410	23826.7647	23642.9604	23579.9065	150.50	149.97	150.15	149.72
14:39:00	23.0000	24101.3966	24272.5010	23756.8450	23717.9485	151.70	151.24	151.24	150.94
14:45:00	23.1000	23437.2845	23633.4595	23006.9181	-68474.1903	151.72	151.36	151.08	150.89
14:51:00	23.2000	21884.0926	22192.1717	21308.3451	-68333.5934	151.27	151.07	150.42	150.35
14:57:00	23.3000	21214.1800	21381.2714	20703.7647	-68151.4454	150.91	150.88	149.67	149.65
15:03:00	23.4000	20896.0705	21120.8488	20304.4566	-68066.9065	150.84	150.88	149.38	149.32
15:09:00	23.5000	20586.4030	20717.9697	20027.3051	-67968.9569	150.92	150.99	148.98	148.94
15:15:00	23.6000	20573.6939	20745.1733	8489.9180	-67924.0681	150.84	150.85	217.43	148.76
15:21:00	23.7000	20463.5524	20646.8764	8368.1633	-14683.3970	150.86	150.82	217.43	148.63
15:27:00	23.8000	19916.8442	20077.6081	7562.1752	-67779.2152	150.18	150.65	217.43	148.19
15:33:00	23.9000	19462.6301	19687.5573	6876.8946	18780.2365	149.70	150.47	217.43	147.82
15:39:00	24.0000	18790.7211	18985.9977	6021.7362	18092.2243	149.25	149.86	217.43	147.10
15:45:00	24.1000	18530.7620	18733.4109	5633.8001	17801.8545	148.86	149.89	217.43	146.56
15:51:00	24.2000	18090.9394	18277.5226	4993.5292	-67230.6136	148.32	150.28	217.43	145.97
15:57:00	24.3000	18110.5910	18348.3810	16809.5436	-67130.3046	147.98	150.01	150.82	145.56
16:03:00	24.4000	18043.4801	18260.1095	4904.6320	-68228.6191	147.92	149.75	217.43	149.95
16:09:00	24.5000	17853.5686	17901.0588	4651.2150	-67069.3842	147.84	151.54	217.43	145.31
16:15:00	24.6000	17834.8292	17606.8307	4625.6487	17057.4855	147.67	154.63	217.43	145.14
16:21:00	24.7000	17640.3456	7148.8938	4391.1104	16892.2522	147.53	149.94	217.43	144.90
16:27:00	24.8000	17674.0973	-335.4288	4423.1081	16842.7279	147.34	159.93	217.43	144.68
16:33:00	24.9000	17755.5805	-65704.6972	4472.7845	16957.4290	147.24	171.30	217.43	144.58
16:39:00	25.0000	17644.6817	-696.7273	4348.1593	16891.2089	147.09	223.34	217.43	143.95
16:45:00	25.1000	17801.0742	-5025.0371	4538.3013	16850.3324	147.21	193.61	217.43	147.84
16:51:00	25.2000	17804.2246	-52765.6489	4555.1843	17147.8319	147.33	107.95	217.43	144.62
16:57:00	25.3000	17674.2016	-90173.1863	4389.1526	16887.1260	147.26	223.34	217.43	144.56
17:03:00	25.4000	17642.4248	-90173.1863	4358.3773	16871.0907	147.18	223.34	217.43	144.46
17:09:00	25.5000	17765.4544	-90173.1863	4500.3132	16985.4854	147.27	223.34	217.43	144.48
17:15:00	25.6000	17688.0897	-90173.1863	4413.2581	16915.4303	147.21	223.34	217.43	144.47
17:21:00	25.7000	17805.3010	-90173.1863	4555.9184	17035.7496	147.20	223.34	217.43	144.44
17:27:00	25.8000	17897.7645	-90173.1863	4661.0010	17137.8492	147.37	223.34	217.43	144.66
17:33:00	25.9000	17849.6536	-90173.1863	4616.0459	17075.9260	147.38	223.34	217.43	144.59
17:39:00	26.0000	17836.4055	-90173.1863	4598.1243	17066.5662	147.41	223.34	217.43	144.57
17:45:00	26.1000	17878.0982	-90173.1863	4642.3464	17092.2666	147.46	223.34	217.43	144.69
17:51:00	26.2000	17833.2898	-90173.1863	4581.9762	17053.5903	147.41	223.34	217.43	144.57
17:57:00	26.3000	17807.2460	-90173.1863	4557.6923	17124.1995	147.39	223.34	217.43	144.45
18:03:00	26.4000	17856.8400	-90173.1863	4615.9236	17125.7052	147.41	223.34	217.43	144.51
18:09:00	26.5000	17999.4758	-90173.1863	4787.9014	17220.6505	147.55	223.34	217.43	144.59
18:15:00	26.6000	17989.7085	-53032.3493	4771.8794	17203.2603	147.61	-181.72	217.43	144.68
18:21:00	26.7000	18036.4942	-90173.1863	4836.3323	17253.7782	147.64	223.34	217.43	144.71
18:27:00	26.8000	18022.9814	-90173.1863	4826.6708	17468.5226	147.69	223.34	217.43	144.75
18:33:00	26.9000	18186.2956	-90173.1863	5039.5636	17414.1260	147.74	223.34	217.43	144.86
18:39:00	27.0000	18220.0577	-54144.2072	-98355.7652	-67679.8878	147.70	-199.67	217.43	147.79
18:45:00	27.1000	18236.4427	-90173.1863	-98355.7652	-108116.0129	147.87	223.34	217.43	229.78
18:51:00	27.2000	18302.7242	-90173.1863	-98355.7652	-108116.0129	148.02	223.34	217.43	229.78
18:57:00	27.3000	18281.3963	-90173.1863	-98355.7652	-108116.0129	148.09	223.34	217.43	229.78
19:03:00	27.4000	18283.2678	-90173.1863	-98355.7652	17541.3435	148.11	223.34	217.43	145.08
19:09:00	27.5000	18304.0630	-90173.1863	-98355.7652	17515.5393	148.16	223.34	217.43	145.13
19:15:00	27.6000	18277.0955	-90173.1863	-98355.7652	-67025.1335	148.17	223.34	217.43	145.12
19:21:00	27.7000	18298.1844	-90173.1863	-98355.7652	1626.4836	148.22	223.34	217.43	229.78
19:27:00	27.8000	18325.6606	-90173.1863	-98355.7652	1649.0074	148.26	223.34	217.43	229.78
19:33:00	27.9000	18376.2826	-90173.1863	-98355.7652	-108116.0129	148.33	223.34	217.43	229.78
19:39:00	28.0000	18308.1966	-90173.1863	-98355.7652	19596.5122	148.35	223.34	217.43	145.21

Data

	9401Q-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	
	Real Time (mmm dd,yy 24 hr)	apsed Time (H.HH)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)
Sep 15, 99	19:45:00	28.1000	18350.1792	102448.0433	-98355.7652	-67033.2488	148.33	-199.67	217.43	145.16
	19:51:00	28.2000	18356.2040	-90173.1863	-98355.7652	-67045.0073	148.34	223.34	217.43	145.21
	19:57:00	28.3000	18325.2212	-90173.1863	-98355.7652		148.36	223.34	217.43	
	20:03:00	28.4000	18249.5725	-90173.1863	-98355.7652		148.26	223.34	217.43	
	20:09:00	28.5000	18257.3179	-90173.1863	-98355.7652		148.15	223.34	217.43	
	20:15:00	28.6000	18256.8402	-90173.1863	-98355.7652		148.00	223.34	217.43	
	20:21:00	28.7000	18162.4956	-90173.1863	-98355.7652		147.87	223.34	217.43	
	20:27:00	28.8000	18017.5022	-90173.1863	-98355.7652		147.79	223.34	217.43	
	20:33:00	28.9000	20869.5043	-90173.1863			148.40	223.34		
	20:39:00	29.0000	21808.2167	-90173.1863			150.09	223.34		
	20:45:00	29.1000	22347.0849	-90173.1863			150.71	223.34		
	20:51:00	29.2000	22624.9244				150.87			
	20:57:00	29.3000	22743.5957				150.94			
	21:03:00	29.4000	22769.9347				150.95			
	21:09:00	29.5000	22795.7534				150.99			
	21:15:00	29.6000	22806.6339				151.02			
	21:21:00	29.7000	27540.5342				149.00			
	21:27:00	29.8000	27541.1407				148.98			
	21:33:00	29.9000	27541.7455				148.97			
	21:39:00	30.0000	27542.3026				148.96			
	21:45:00	30.1000	27542.9070				148.94			
	21:51:00	30.2000	27543.5113				148.93			
	21:57:00	30.3000	27543.9179				148.92			
	22:03:00	30.4000	27544.5693				148.91			
	22:09:00	30.5000	27545.0246				148.90			
	22:15:00	30.6000	27545.5274				148.89			
	22:21:00	30.7000	27546.0790				148.88			
	22:27:00	30.8000	27546.4835				148.87			
	22:33:00	30.9000	27547.0363				148.86			
	22:39:00	31.0000	27547.4378				148.85			
	22:45:00	31.1000	27547.8393				148.84			
	22:51:00	31.2000	27548.2910				148.83			
	22:57:00	31.3000	27548.7427				148.82			
	23:03:00	31.4000	27549.1466				148.81			
	23:09:00	31.5000	27549.3518				148.80			
	23:15:00	31.6000	27549.8019				148.80			
	23:21:00	31.7000	27550.2518				148.79			
	23:27:00	31.8000	27550.5548				148.78			
	23:33:00	31.9000	27550.9556				148.77			
	23:39:00	32.0000	27551.2572				148.77			
	23:45:00	32.1000	27551.6579				148.76			
	23:51:00	32.2000	27551.9104				148.75			
	23:57:00	32.3000	27552.2118				148.75			
	00:03:00	32.4000	27552.6110				148.74			
	00:09:00	32.5000	27552.8131				148.73			
	00:15:00	32.6000	27551.6191				148.75			
	00:21:00	32.7000	27553.2096				148.77			
	00:27:00	32.8000	27553.8526				148.77			
	00:33:00	32.9000	27552.9583				148.78			
	00:39:00	33.0000	27554.1180				148.79			
00:45:00	33.1000	27554.8192				148.78				
00:51:00	33.2000	27555.1850				148.76				
00:57:00	33.3000	27555.4084				148.73				
01:03:00	33.4000	27555.3767				148.72				
01:09:00	33.5000	27555.6456				148.69				
01:15:00	33.6000	27555.8138				148.67				
01:21:00	33.7000	27555.9747				148.66				
01:27:00	33.8000	27556.1296				148.65				

Data

9401Q-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	
Real Time (mmm dd,yy 24 hr)	apsed Time (H.HH)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)
01:33:00	33.9000	27550.4045				148.65			
01:39:00	34.0000	27555.1660				148.73			
01:45:00	34.1000	27556.6704				148.74			
01:51:00	34.2000	27557.3708				148.73			
01:57:00	34.3000	27557.5910				148.71			
02:03:00	34.4000	27557.8609				148.68			
02:09:00	34.5000	27557.9810				148.66			
02:15:00	34.6000	27558.0949				148.65			
02:21:00	34.7000	27556.0863				148.69			
02:27:00	34.8000	27557.6107				148.73			
02:33:00	34.9000	27558.6978				148.72			
02:39:00	35.0000	27559.1174				148.70			
02:45:00	35.1000	27559.1421				148.68			
02:51:00	35.2000	27559.4567				148.65			
02:57:00	35.3000	27559.4248				148.64			
03:03:00	35.4000	27550.6710				148.63			
03:09:00	35.5000	27558.2778				148.71			
03:15:00	35.6000	27559.6367				148.72			
03:21:00	35.7000	27560.2412				148.70			
03:27:00	35.8000	27560.4642				148.68			
03:33:00	35.9000	27560.4883				148.65			
03:39:00	36.0000	27560.7033				148.63			
03:45:00	36.1000	27560.6699				148.62			
03:51:00	36.2000	27560.7776				148.61			
03:57:00	36.3000	27560.9310				148.60			
04:03:00	36.4000	27561.0832				148.59			
04:09:00	36.5000	27561.2354				148.59			
04:15:00	36.6000	27561.3365				148.58			
04:21:00	36.7000	27561.5355				148.58			
04:27:00	36.8000	27561.6355				148.58			
04:33:00	36.9000	27561.8345				148.58			
04:39:00	37.0000	27561.9835				148.57			
04:45:00	37.1000	27562.0835				148.57			
04:51:00	37.2000	27562.2824				148.57			
04:57:00	37.3000	27562.3824				148.57			
05:03:00	37.4000	27562.5324				148.56			
05:09:00	37.5000	27562.7313				148.56			
05:15:00	37.6000	27562.8313				148.56			
05:21:00	37.7000	27562.9322				148.55			
05:27:00	37.8000	27563.0322				148.55			
05:33:00	37.9000	27563.1811				148.55			
05:39:00	38.0000	27563.3300				148.55			
05:45:00	38.1000	27563.4299				148.54			
05:51:00	38.2000	27563.5298				148.54			
05:57:00	38.3000	27563.6787				148.54			
06:03:00	38.4000	27563.8276				148.54			
06:09:00	38.5000	27563.9764				148.54			
06:15:00	38.6000	27564.0763				148.53			
06:21:00	38.7000	27564.1273				148.53			
06:27:00	38.8000	27564.2761				148.53			
06:33:00	38.9000	27564.3261				148.53			
06:39:00	39.0000	27564.5238				148.53			
06:45:00	39.1000	27564.5738				148.52			
06:51:00	39.2000	27564.7226				148.52			
06:57:00	39.3000	27564.8215				148.52			
07:03:00	39.4000	27565.0193				148.52			
07:09:00	39.5000	27565.0692				148.52			
07:15:00	39.6000	27565.1191				148.52			

Data

9401Q-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E
Real Time (mmm dd,yy 24 hr)	apsed Time (H.HH)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)
07:21:00	39.7000	27565.2180				148.51		
07:27:00	39.8000	27565.4157				148.51		
07:33:00	39.9000	27565.5146				148.51		
07:39:00	40.0000	27565.6135				148.51		
07:45:00	40.1000	27565.6634				148.51		
07:51:00	40.2000	27565.7623				148.51		
07:57:00	40.3000	27565.8611				148.51		
08:03:00	40.4000	27565.9111				148.51		
08:09:00	40.5000	27566.0099				148.50		
08:15:00	40.6000	27566.1088				148.50		
08:21:00	40.7000	27563.6525				148.51		
08:27:00	40.8000	27565.1456				148.60		
08:33:00	40.9000	27566.3023				148.61		
08:39:00	41.0000	27566.8505				148.60		
08:45:00	41.1000	26833.0163				145.19		
08:51:00	41.2000	25034.8616				119.85		
08:57:00	41.3000	22811.6744				79.57		
09:03:00	41.4000	156.1044				41.39		
09:09:02	41.5006		-59517.3576				148.25	
09:15:02	41.6006		-59515.5189				148.24	
09:21:02	41.7006		-59518.4083				148.25	
09:27:02	41.8006		-59537.0678				148.34	
09:33:02	41.9006		27563.0283				148.35	
09:39:02	42.0006		-90173.1863				223.34	
09:45:02	42.1006		-59528.3930				148.30	
09:51:02	42.2006		-59522.8745				148.27	
09:57:02	42.3006		-59517.8829				148.25	
10:03:02	42.4006		-59514.7309				148.24	
10:09:02	42.5006		-59530.4956				148.31	
10:15:02	42.6006		-59537.0678				148.34	
10:21:02	42.7006		-59533.3871				148.32	
10:27:02	42.8006		-90173.1863				223.34	
10:33:02	42.9006		-90173.1863				223.34	
10:39:02	43.0006		-59516.5695				148.25	
10:45:02	43.1006		-59513.1551				148.23	
10:51:02	43.2006		-59515.2562				148.24	
10:57:02	43.3006		-59532.5985				148.32	
11:03:02	43.4006		-59532.0728				148.31	
11:09:02	43.5006		-90173.1863				223.34	
11:15:02	43.6006		-90173.1863				223.34	
11:21:02	43.7006		-59515.7815				148.24	
11:27:02	43.8006		-59511.3169				148.22	
11:33:02	43.9006		-59507.6408				148.21	
11:39:02	44.0006		-59506.0655				148.20	
11:45:02	44.1006		-59505.0154				148.19	
11:51:02	44.2006		-59503.9653				148.19	
11:57:02	44.3006		-59503.1778				148.19	
12:03:02	44.4006		-59502.6529				148.18	
12:09:02	44.5006		-59502.1279				148.18	
12:15:02	44.6006		-59501.3405				148.18	
12:21:02	44.7006		-59500.8155				148.18	
12:27:02	44.8006		-59500.2906				148.17	
12:33:02	44.9006		-59499.7657				148.17	
12:39:02	45.0006		-59499.2408				148.17	
12:45:02	45.1006		-59498.4534				148.16	
12:51:02	45.2006		-59497.9286				148.16	
12:57:02	45.3006		-90173.1863				223.34	
13:03:02	45.4006		-90173.1863				223.34	

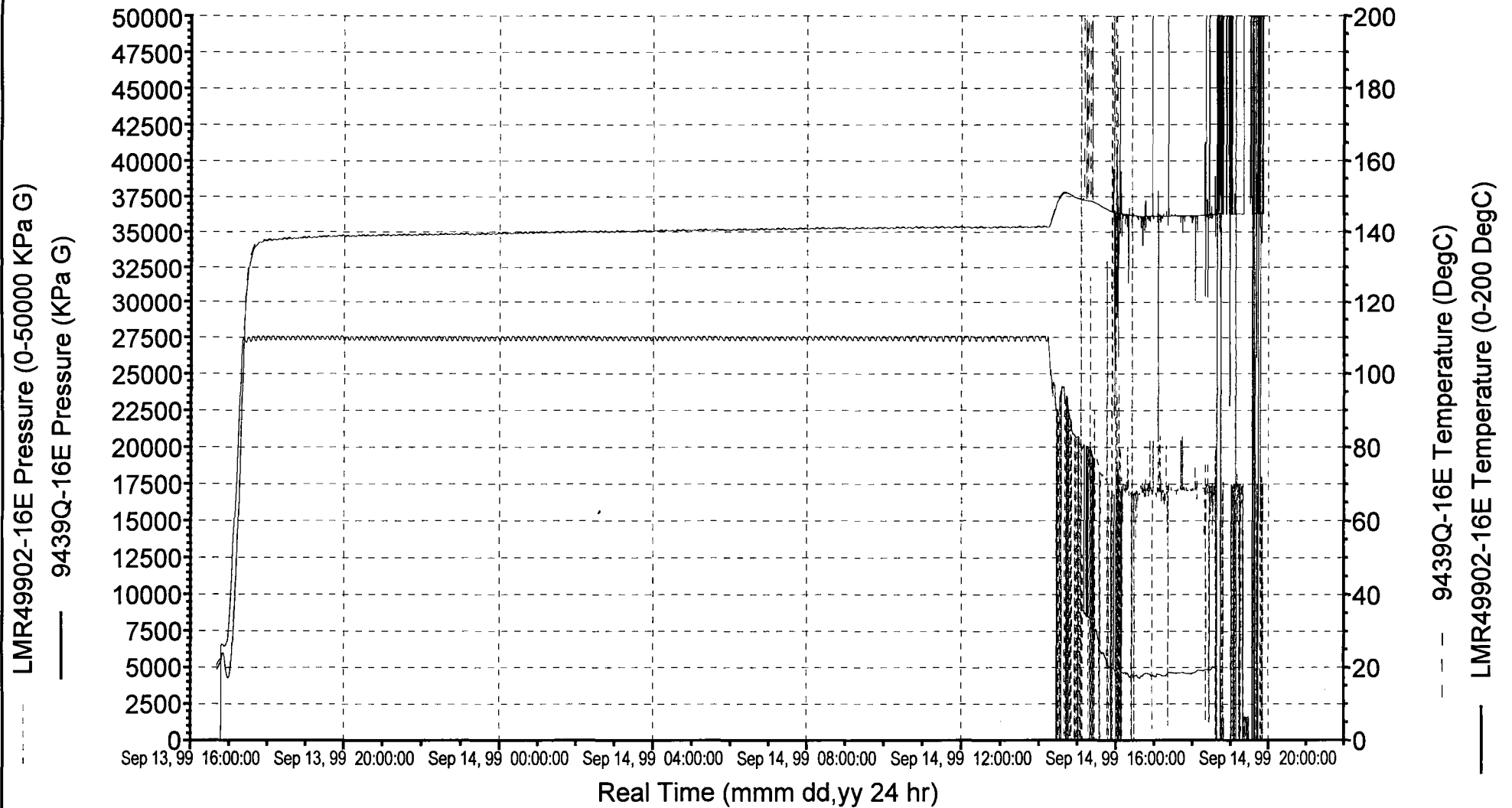
Data

9401Q-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E	9401Q-16E	9432Q-16E	9439Q-16E	R49902-16E
Real Time (mmm dd,yy 24 hr)	apsed Time (H.HH)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Pressure (KPa G)	Temperature (DegC)	Temperature (DegC)	Temperature (DegC)
13:09:02	45.5006		-90173.1863				223.34	
13:15:02	45.6006		-90173.1863				223.34	
13:21:02	45.7006		-90173.1863				223.34	
13:27:02	45.8006		-59495.0421				148.15	
13:33:02	45.9006		-59494.2549				148.15	
13:39:02	46.0006		-59493.4678				148.14	
13:45:02	46.1006		-59492.9430				148.14	
13:51:02	46.2006		-59492.4183				148.14	
13:57:02	46.3006		-59491.6312				148.13	
14:03:02	46.4006		-59491.1065				148.13	
14:09:02	46.5006		-90173.1863				223.34	
14:15:02	46.6006		-59490.0572				148.13	
14:21:02	46.7006		-59490.0572				148.13	
14:27:02	46.8006		-59489.7949				148.13	
14:33:02	46.9006		-59489.2702				148.12	
14:39:02	47.0006		27572.0171				148.13	
14:45:02	47.1006		27572.0873				148.13	
14:51:02	47.2006		27571.6779				148.12	
14:57:02	47.3006		27572.0616				148.12	
15:03:02	47.4006		27572.1319				148.12	
15:09:02	47.5006		27572.2021				148.12	
15:15:02	47.6006		27572.3203				148.12	
15:21:02	47.7006		27572.2467				148.12	
15:27:02	47.8006		27572.3872				148.12	
15:33:02	47.9006		27572.5756				148.11	
15:39:02	48.0006		27572.6458				148.11	
15:45:02	48.1006		27573.4885				148.10	
15:51:02	48.2006		27572.8342				148.11	
15:57:02	48.3006		17574.9633				223.34	
16:03:02	48.4006		27572.9747				148.11	
16:09:02	48.5006		27570.5058				148.14	
16:15:02	48.6006		27572.2280				148.23	
16:21:02	48.7006		27573.1712				148.23	
16:27:02	48.8006		-90173.1863				223.34	
16:33:02	48.9006		-90173.1863				223.34	
16:39:02	49.0006		24663.6478				116.53	
16:45:02	49.1006		22742.8892				76.52	
16:51:02	49.2006		97.1221				40.00	

Pressure & Temperature vs. Real Time(extended)

Company: **Lee Tool, Div. of Schlumberger**
Client: **Chevron Canada Resources**
Remarks: 9401 bot. set, bot. rec. & 9432 bot. set, top rec. 9439 top set, bot. rec. & 49902 top set, top rec.

Field: **Fort Liard**
Well Name: **Chevron et al Liard K-29**
Well Number: **K-29**



Flow & Build-Up

Chevron Canada Resources
Alberta, Canada

Sep 13, 99 to Sep 15, 99

Chevron et al Liard K-29

K-29

Fort Liard, Nahanni

Well					
Client Chevron Canada Resources			Province Alberta		Country Canada
Well Name Chevron et al Liard K-29			Deviated Well Yes		Well Status Gas
Well No. K-29			KB Elevation 417.40 m		CF Elevation 409.60 m
Field Fort Liard	Pool Nahanni		Pool Datum 2500.00 mSS		

Test						
Test Type				Atmospheric		
Flow & Build-Up				101.30 KPa A		
Test Start (mm/dd/yy)		Test Finish		Casing ID		Tubing ID
09/13/99 03:39 PM		09/15/99 11:41 AM				177.80 mm
On Bottom		Off Bottom		C. Pres. Before		T. Pres. Before
09/13/99 04:17 PM		09/15/99 11:12 AM		0.00 KPa G		
Shut In		ETO		C. Pres. After		T. Pres. After
09/15/99		09/13/99 03:39 PM				
	Meas. Depth [mCF]	TVD [mCF]	Est. Pressure [KPa G]	Est. Gradient [KPa/m]	Est. Temperature [DegC]	Grad. Threshold
Well Datum		2909.60				Grad. Recorder
Landed Depth	2466.00	2457.45				
Avg. MPP Depth						
Operator				Service Company		
Dale Sallstrom, 1-780-778-2361				Lee Tool, Div. of Schlumberger		
Remarks						
9401 bot. set, bot. rec. & 9432 bot. set, top rec.9439 top set, bot. rec. & 49902 top set, top rec.						

Depth References		
Depth Reference	Offset [m]	Elevation [mMSL]
Casing Flange (CF)		409.60
Kelly Bushing (KB)	CF + 7.80	417.40

Top Recorder			
Model LMR-4000S	Serial LMR49902-16E	Latest Calibration 04/21/99	
Max. Rated Press. 110213.79 KPa G	Max. Rated Temp. 174.96 DegC		

Bottom Hole Pressure				
	Tool String MD, [mCF]	Sample R/T [mmm dd, yy 24 hr.]	Pressure [KPa G]	
Sample 1	2471.00			
Sample 2				
Difference:				Build Up Rate

Recorder 2

Model	LMR-3000S	Serial	9439Q-16E	Latest Calibration	08/10/99
Max. Rated Press.	110213.15 KPa G	Max. Rated Temp.	174.99 DegC		

Bottom Hole Pressure

	Tool String MD, [mCF]	Sample R/T [mmm dd, yy 24 hr.]	Pressure [KPa G]	
Sample 1	2471.00			
Sample 2				
Difference:				Build Up Rate

Recorder 3

Model	LMR-3000S	Serial	9432Q-16E	Latest Calibration	08/20/99
Max. Rated Press.	110213.11 KPa G	Max. Rated Temp.	174.98 DegC		

Bottom Hole Pressure

	Tool String MD, [mCF]	Sample R/T [mmm dd, yy 24 hr.]	Pressure [KPa G]	
Sample 1	2471.00			
Sample 2				
Difference:				Build Up Rate

Bottom Recorder

Model	LMR-3000S	Serial	9401Q-16E	Latest Calibration	11/19/98
Max. Rated Press.	110209.53 KPa G	Max. Rated Temp.	174.82 DegC		

Bottom Hole Pressure

	Tool String MD, [mCF]	Sample R/T [mmm dd, yy 24 hr.]	Pressure [KPa G]	
Sample 1	2471.00	Sep 15, 99 02:30:10	27558.30	
Sample 2		08:30:00	27565.82	
Difference:		05:59:50	7.52	Build Up Rate 1.25 KPa/Hr.

Deviated Well Survey

Meas. Depth [mKB]	Inclination [Degrees]	TVD [mKB]	Meas. Depth [mCF]	TVD [mCF]
2471.00	4.50	2462.46	2463.20	2454.66
2484.00	4.40	2475.42	2476.20	2467.62

Tool Summary

Chevron Canada Resources
Alberta, Canada

Sep 13, 99 to Sep 15, 99

Chevron et al Liard K-29

K-29

Fort Liard, Nahanni

Top Recorder

Tool	LMR-4000S	Serial	LMR49902-16E	Latest Calibration	04/21/99	Battery Serial	150
Landed Depth	2465.00 mCF	Depth Offset	-1.00 m	Min. Battery	0.10 V		

Program: liard-60 day test

Intervals					Expected Samples			Actual Samples				
Mode	Interval [d hh:mm:ss]	Rate [hh:mm:ss]	Delta [KPa]	Periodic [hh:mm:ss]	Regular Samples	Percent Storage	Energy [Ahr]	Regular Samples	Delta Samples	Percent Storage	Energy [Ahr]	Duration [d hh:mm:ss]
HB	10:00	1			600	0.2%	0.0022	600		0.2%	0.0022	10:00
HB	30	10			259200	74.2%	5.4747	9725		2.8%	0.2054	1 3:00:50
HB	60	1:00			86400	24.7%	10.2249					
Totals:	90 10:00				346200	99.0%	15.7018	10325		3.0%	0.2076	1 3:10:50

Recorder 2

Tool	LMR-3000S	Serial	9439Q-16E	Latest Calibration	08/10/99	Battery Serial	150 C
Landed Depth	2466.00 mCF	Depth Offset	0.00 m	Min. Battery	0.10 V		

Program: liard-60 day test

Intervals					Expected Samples			Actual Samples				
Mode	Interval [d hh:mm:ss]	Rate [hh:mm:ss]	Delta [KPa]	Periodic [hh:mm:ss]	Regular Samples	Percent Storage	Energy [Ahr]	Regular Samples	Delta Samples	Percent Storage	Energy [Ahr]	Duration [d hh:mm:ss]
HB	10:00	1			600	0.2%	0.0022	600		0.2%	0.0022	10:00
HB	30	10			259200	74.2%	5.4747	9967		2.9%	0.2105	1 3:41:10
HB	60	1:00			86400	24.7%	10.2249					
Totals:	90 10:00				346200	99.0%	15.7018	10567		3.0%	0.2127	1 3:51:10

Recorder 3

Tool	LMR-3000S	Serial	9432Q-16E	Latest Calibration	08/20/99	Battery Serial	150
Landed Depth	2464.50 mCF	Depth Offset	-1.50 m	Min. Battery	0.10 V		

Program: Liard-30 days

Intervals					Expected Samples			Actual Samples				
Mode	Interval [d hh:mm:ss]	Rate [hh:mm:ss]	Delta [KPa]	Periodic [hh:mm:ss]	Regular Samples	Percent Storage	Energy [Ahr]	Regular Samples	Delta Samples	Percent Storage	Energy [Ahr]	Duration [d hh:mm:ss]
HB	10:00	1			600	0.2%	0.0022	600		0.2%	0.0022	10:00
HB	30	10			259200	74.2%	5.4747	17685		5.1%	0.3735	2 1:07:30
HB	15	30			43200	12.4%	2.5925					
Totals:	45 10:00				303000	86.7%	8.0693	18285		5.2%	0.3757	2 1:17:30

Bottom Recorder

ool	LMR-3000S	Serial	9401Q-16E	Latest Calibration	11/19/98	Battery Serial	150
anded Depth	2466.00 mCF	Depth Offset	0.00 m	Min. Battery	18.83 V		

Program: Liard-30 days

Intervals					Expected Samples			Actual Samples				
Mode	Interval [d hh:mm:ss]	Rate [hh:mm:ss]	Delta [KPa]	Periodic [hh:mm:ss]	Regular Samples	Percent Storage	Energy [Ahr]	Regular Samples	Delta Samples	Percent Storage	Energy [Ahr]	Duration [d hh:mm:ss]
HB	10:00	1			600	0.2%	0.0022	600		0.2%	0.0022	10:00
HB	30	10			259200	74.2%	5.4747	14880		4.3%	0.3143	1 17:20:00
HB	15	30			43200	12.4%	2.5925					
Totals:	45 10:00				303000	86.7%	8.0693	15480		4.4%	0.3165	1 17:30:00

Calibration Summary

Chevron Canada Resources
Alberta, Canada

Sep 13, 99 to Sep 15, 99

Chevron et al Liard K-29

K-29

Fort Liard, Nahanni

Top Recorder

Tool	LMR-4000S	Serial	LMR49902-16E	Latest Calibration	04/21/99	Battery Serial	150
Landed Depth	2465.00 mCF	Depth Offset	-1.00 m	Min. Battery	0.10 V		

Equations

FP = Pres Freq (Hz)

FT = Temp Freq (Hz)

$XP = 2.587700e+004 + (1.000000e-002) FP$

$XT = 4.960700e+004 + (1.000000e-002) FT$

$P_0 = 1.938549e+001 + (-1.102970e+000) XT + (-2.105686e-002) XT^2 + (2.726975e-006) XT^3 + (-1.240216e-008) XT^4$

$P_1 = 4.300392e+001 + (-2.173011e-002) XT + (3.279552e-005) XT^2 + (1.782524e-008) XT^3 + (1.722304e-010) XT^4$

$P_2 = -1.696746e-003 + (1.256029e-005) XT + (-1.687992e-008) XT^2 + (-1.065681e-010) XT^3 + (-5.951906e-013) XT^4$

$P_3 = 3.717924e-007 + (-9.475833e-009) XT + (-5.518843e-011) XT^2 + (-5.411052e-014) XT^3 + (4.411910e-016) XT^4$

Pressure (psiA) = $P_0 + P_1 XP + P_2 XP^2 + P_3 XP^3$

$T_0 = 2.580166e+001$

$T_1 = -7.245111e-001$

$T_2 = -8.167484e-004$

$T_3 = -6.004826e-007$

Temperature (degC) = $T_0 + T_1 XT + T_2 XT^2 + T_3 XT^3$

Recorder 2

Tool	LMR-3000S	Serial	9439Q-16E	Latest Calibration	08/10/99	Battery Serial	150 C
Landed Depth	2466.00 mCF	Depth Offset	0.00 m	Min. Battery	0.10 V		

Equations

FP = Pres Freq (Hz)

FT = Temp Freq (Hz)

$XP = 2.602300e+004 + (1.000000e-002) FP$

$XT = 4.617700e+004 + (1.000000e-002) FT$

$P_0 = 2.002256e+001 + (-1.604990e+000) XT + (-2.252490e-002) XT^2 + (3.973241e-007) XT^3 + (-1.276300e-008) XT^4$

$P_1 = 4.310545e+001 + (-2.115897e-002) XT + (3.758977e-005) XT^2 + (2.915778e-008) XT^3 + (1.639741e-010) XT^4$

$P_2 = -1.762542e-003 + (8.161465e-006) XT + (-1.005207e-007) XT^2 + (-4.225944e-010) XT^3 + (-9.245675e-013) XT^4$

$P_3 = 6.310796e-007 + (2.138745e-009) XT + (1.618523e-010) XT^2 + (8.813787e-013) XT^3 + (1.696126e-015) XT^4$

Pressure (psiA) = $P_0 + P_1 XP + P_2 XP^2 + P_3 XP^3$

$T_0 = 2.520539e+001$

$T_1 = -7.379367e-001$

$T_2 = -8.338691e-004$

$T_3 = -5.640936e-007$

Temperature (degC) = $T_0 + T_1 XT + T_2 XT^2 + T_3 XT^3$

Recorder 3

Tool	LMR-3000S	Serial	9432Q-16E	Latest Calibration	08/20/99	Battery Serial	150
Landed Depth	2464.50 mCF	Depth Offset	-1.50 m	Min. Battery	0.10 V		

Equations

FP = Pres Freq (Hz)

FT = Temp Freq (Hz)

XP = 2.504100e+004 + (1.000000e-002) FP

XT = 4.710200e+004 + (1.000000e-002) FT

$$P_0 = 2.000495e+001 + (-1.584861e+000) XT + (-2.061648e-002) XT^2 + (2.881244e-006) XT^3 + (-9.969509e-009) XT^4$$

$$P_1 = 3.971455e+001 + (-2.086061e-002) XT + (2.941225e-005) XT^2 + (-1.198650e-008) XT^3 + (1.030260e-010) XT^4$$

$$P_2 = -1.854139e-003 + (1.076376e-005) XT + (-3.257277e-008) XT^2 + (-6.836747e-011) XT^3 + (-3.871155e-013) XT^4$$

$$P_3 = 5.465527e-007 + (-3.011634e-009) XT + (2.911474e-011) XT^2 + (1.582671e-013) XT^3 + (5.245827e-016) XT^4$$
Pressure (psiA) = $P_0 + P_1 XP + P_2 XP^2 + P_3 XP^3$ $T_0 = 2.521427e+001$ $T_1 = -7.462305e-001$ $T_2 = -8.775839e-004$ $T_3 = -6.661817e-007$ Temperature (degC) = $T_0 + T_1 XT + T_2 XT^2 + T_3 XT^3$ **Bottom Recorder**

Tool	LMR-3000S	Serial	9401Q-16E	Latest Calibration	11/19/98	Battery Serial	150
Landed Depth	2466.00 mCF	Depth Offset	0.00 m	Min. Battery	18.83 V		

Equations

FP = Pres Freq (Hz)

FT = Temp Freq (Hz)

XP = 2.529900e+004 + (1.000000e-002) FP

XT = 5.382900e+004 + (1.000000e-002) FT

$$P_0 = 1.994289e+001 + (3.277153e-001) XT + (-1.931485e-002) XT^2 + (2.872806e-006) XT^3 + (-1.316248e-008) XT^4$$

$$P_1 = 4.068000e+001 + (-1.978860e-002) XT + (3.295403e-005) XT^2 + (1.376352e-008) XT^3 + (1.414274e-010) XT^4$$

$$P_2 = -1.792567e-003 + (9.062682e-006) XT + (-5.182607e-008) XT^2 + (-1.451315e-010) XT^3 + (-4.433513e-013) XT^4$$

$$P_3 = 6.674909e-007 + (-1.185712e-009) XT + (5.544023e-011) XT^2 + (2.313389e-013) XT^3 + (5.180155e-016) XT^4$$
Pressure (psiA) = $P_0 + P_1 XP + P_2 XP^2 + P_3 XP^3$ $T_0 = 2.537663e+001$ $T_1 = -7.182610e-001$ $T_2 = -7.484118e-004$ $T_3 = -3.879256e-007$ Temperature (degC) = $T_0 + T_1 XT + T_2 XT^2 + T_3 XT^3$

Pressure & Temperature vs. Real Time(extended)

Company:

Lee Tool, Div. of Schlumberger

Field:

Fort Liard

Client:

Chevron Canada Resources

Well Name:

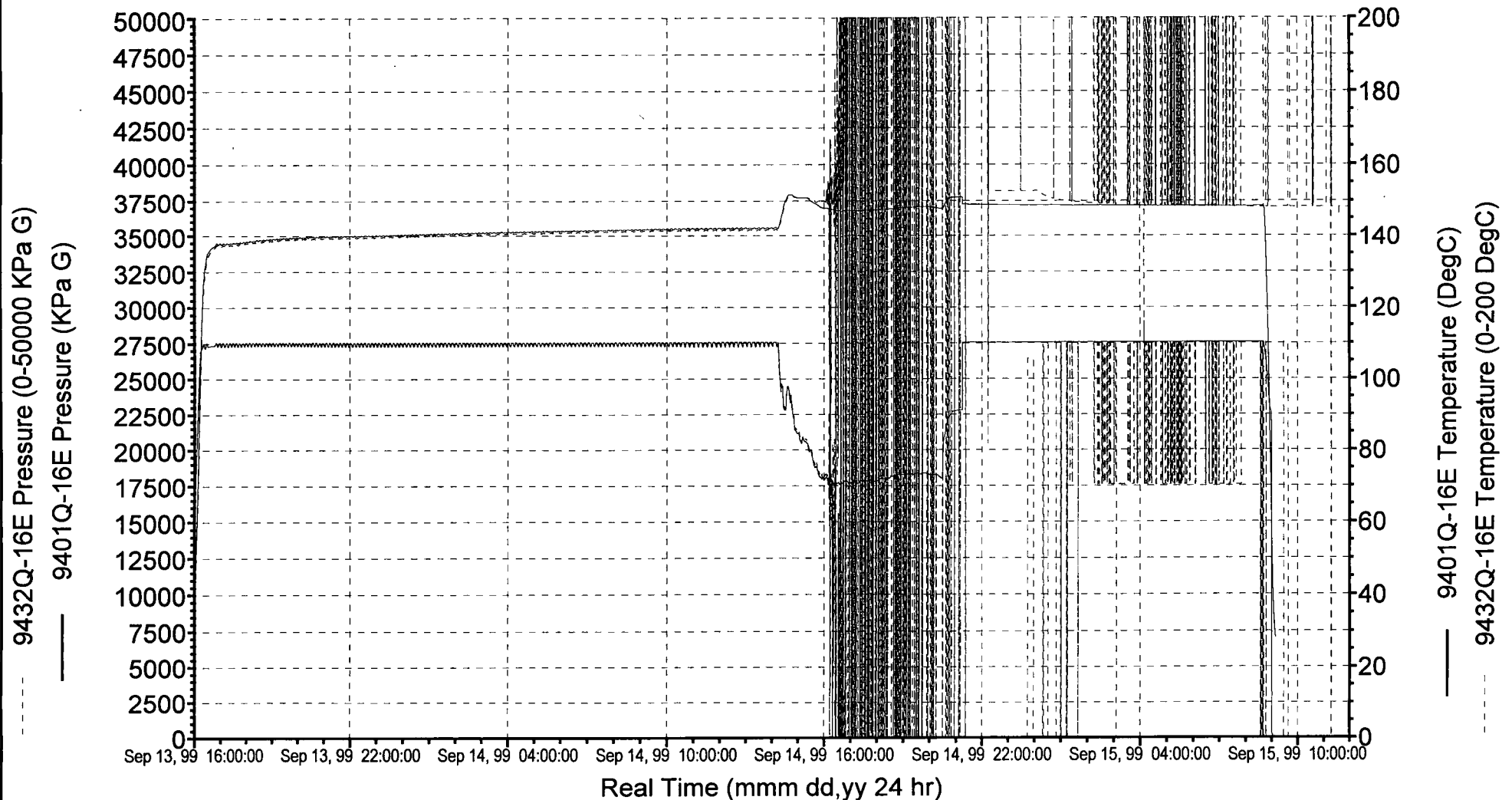
Chevron et al Liard K-29

Remarks:

9401 bot. set, bot. rec. & 9432 bot. set, top rec. 9439 top set, bot. rec. & 49902 top set, top rec.

Well Number:

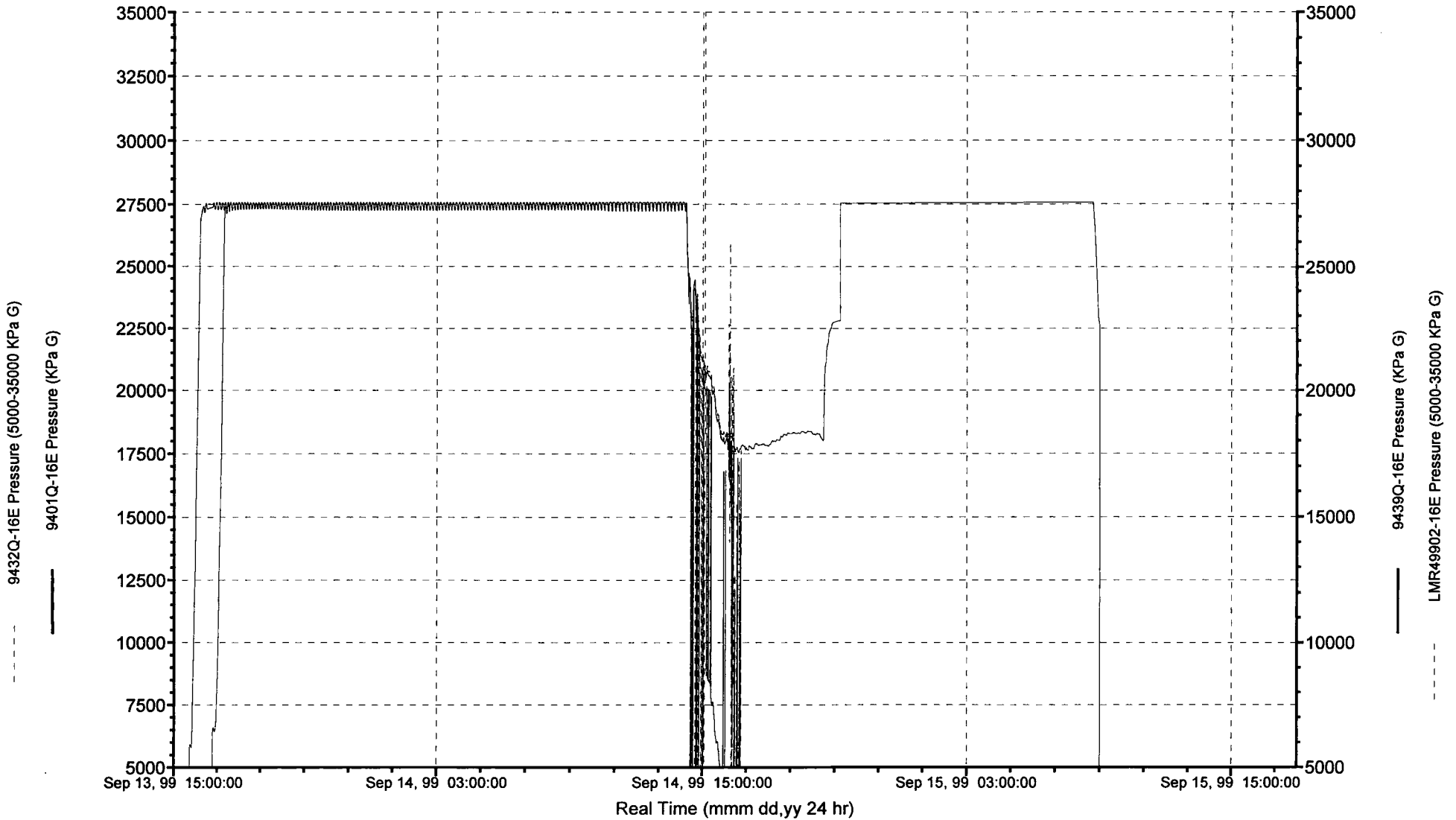
K-29



Pressure vs. Real Time

Company: Lee Tool, Div. of Schlumberger
Client: Chevron Canada Resources
Remarks: 9401 bot. set, bot. rec. & 9432 bot. set, top rec. 9439 top set, bot. rec. & 49902 top set, top rec.

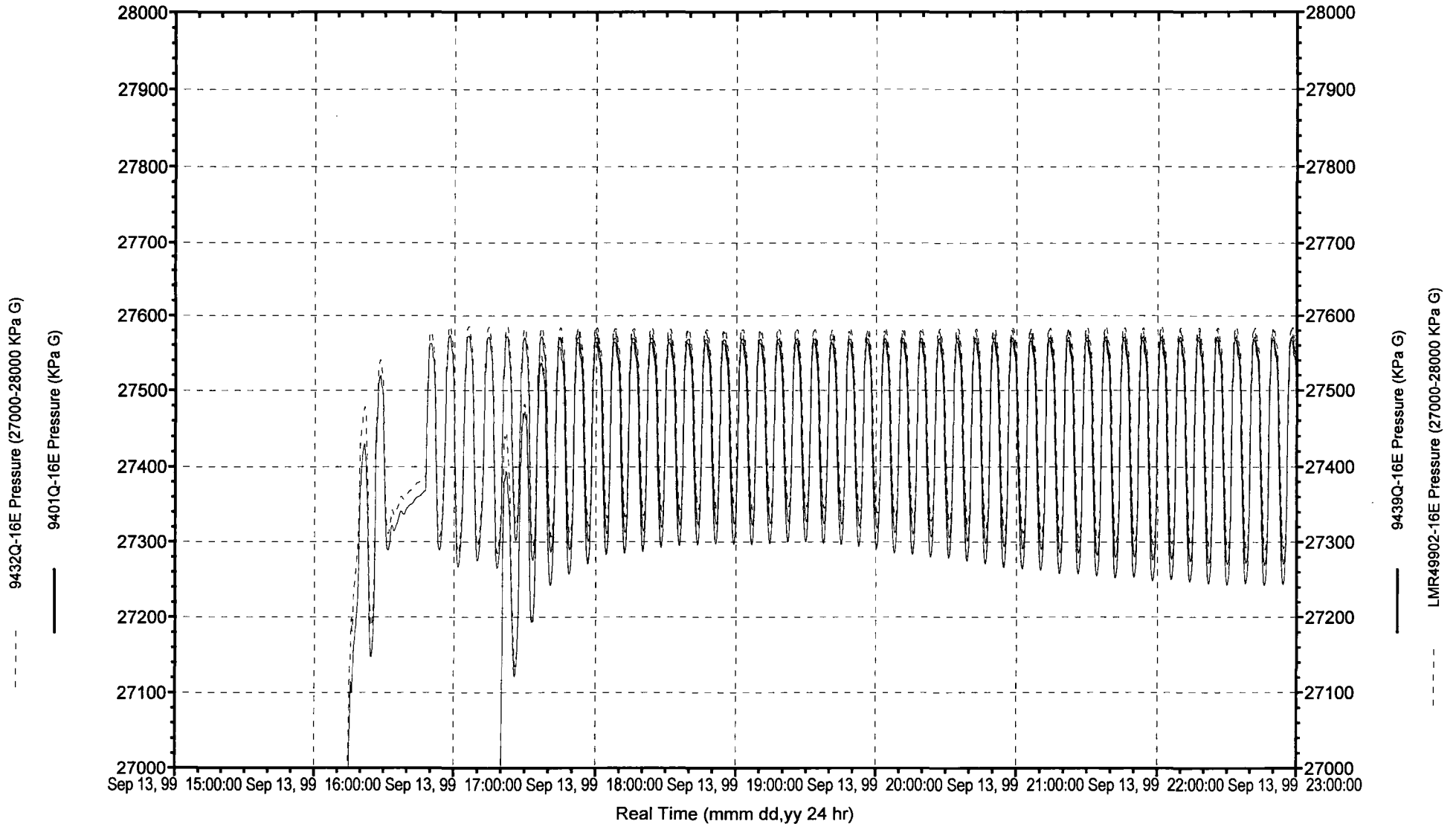
Field: Fort Liard
Well Name: Chevron et al Liard K-29
Well Number: K-29



Pressure vs. Real Time

Company: Lee Tool, Div. of Schlumberger
Client: Chevron Canada Resources
Remarks: 9401 bot. set, bot. rec. & 9432 bot. set, top rec. 9439 top set, bot. rec. & 49902 top set, top rec.

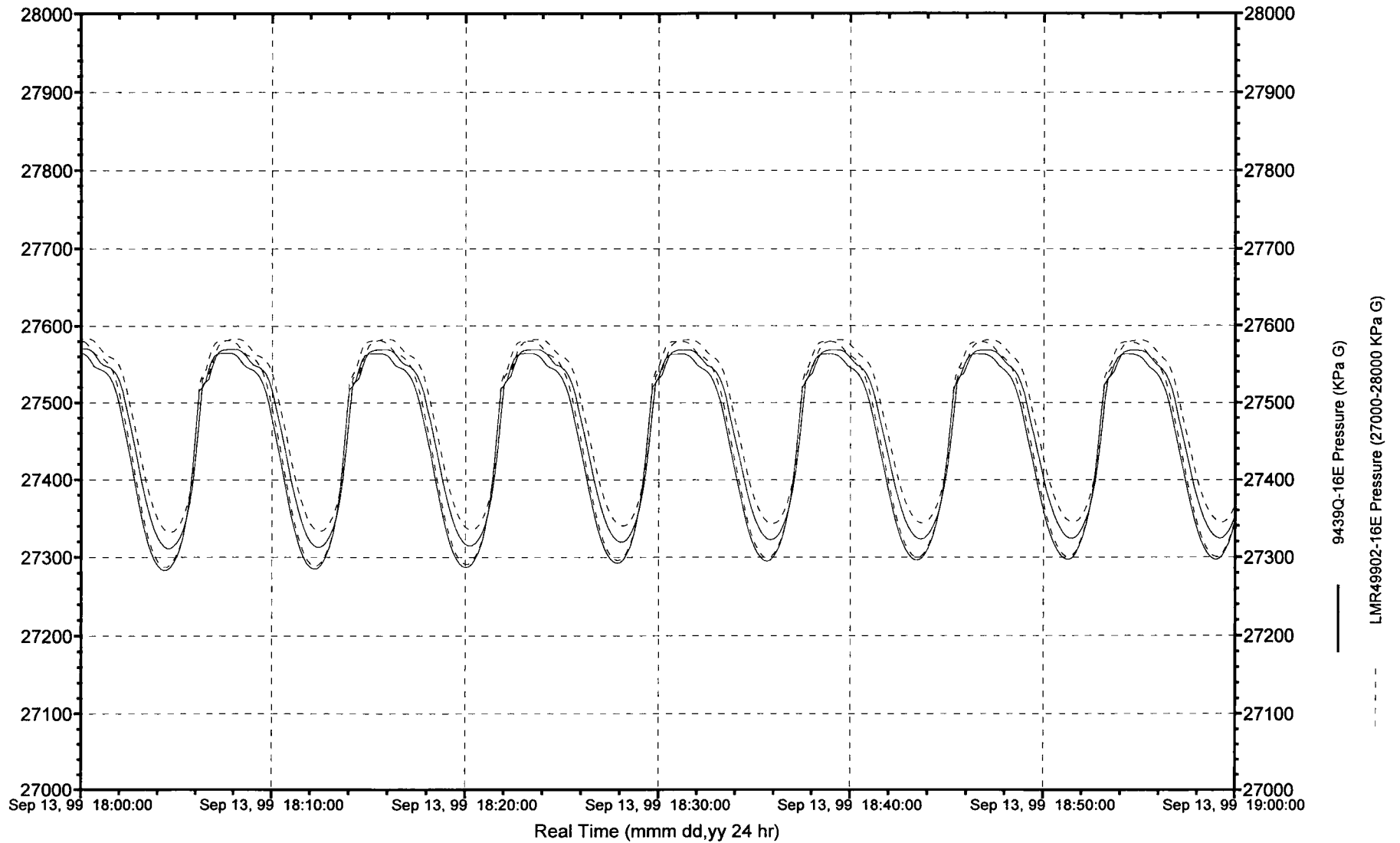
Field: Fort Liard
Well Name: Chevron et al Liard K-29
Well Number: K-29



Pressure vs. Real Time

Company: Lee Tool, Div. of Schlumberger
Client: Chevron Canada Resources
Remarks: 9401 bot. set, bot. rec. & 9432 bot. set, top rec. 9439 top set, bot. rec. & 49902 top set, top rec.

Field: Fort Liard
Well Name: Chevron et al Liard K-29
Well Number: K-29



Failure report for : Chevron Canada Resources(Eric Furlan)

Tool S.N. : 9439q-16e(lmr 4000s recorder)

Client: Chevron

Well I.D or U.W.I. k-29 Fort Liard

Type of the Test: Flow & Build-Up

Duration of the Test: Approximately 2 days

Downhole Temperature:	150 °C
Downhole Pressure:	28 Mpa
Pressure Range Tool:	110 mpa
Temperature Range Tool:	175 °C
Reason For Failure :	During the first rate of the flow period due to high flowing rate the top set of recorders was unlatched and moved up the hole and then it dropped on the bottom set, which was set 5 meters bellow the top set. The incident has totally or partially damaged all four pressure tools. The top set had a NO-GO attached to the bottom recorder. When pulled the NO-GO had impressions from the impact with the J-head from the bottom set.
The extent of the damage:	As a result of the impact the Quartzdyne sensor had the reference crystal damaged. This was confirmed when replaced with a new one. The data from that point on was not valid.

Downhole Conditions:	High flowing rates and fairly high flowing pressures. The temperature was rated as high.
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[illegible]

Failure report for : Chevron Canada Resources(Eric Furlan)

Tool S.N. : LMR49902(lmr 4000s recorder)

Client: Chevron

Well I.D or U.W.I. k-29 Fort Liard

Type of the Test: Flow & Build-Up

Duration of the Test: Approximately 2 days

Downhole Temperature:	150 °C
Downhole Pressure:	28 Mpa
Pressure Range Tool:	110 mpa
Temperature Range Tool:	175 °C
Reason For Failure :	During the first rate of the flow period due to high flowing rate the top set of recorders was unlatched and moved up the hole and then it dropped on the bottom set, which was set 5 meters bellow the top set. The incident has totally or partially damaged all four pressure tools. The top set had a NO-GO attached to the bottom recorder. When pulled the NO-GO had impressions from the impact with the J-head from the bottom set.
The extent of the damage:	As a result of the impact the main electronic board had several solder joints damaged. This was confirmed when replaced some components or touched up some of them. The data from that point on is not valid.

Downhole Conditions:	High flowing rates and fairly high flowing
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[illegible]

Failure report for : Chevron Canada Resources(Eric Furlan)

Tool S.N. : LMR9432Q-16E

Client: Chevron

Well I.D or U.W.I. k-29 Fort Liard

Type of the Test: Flow & Build-Up

Duration of the Test: Approximately 2 days

Downhole Temperature:	150 °C
Downhole Pressure:	28 Mpa
Pressure Range Tool:	110 mpa
Temperature Range Tool:	175 °C
Reason For Failure :	During the first rate of the flow period due to high flowing rate the top set of recorders was unlatched and moved up the hole and then it dropped on the bottom set, which was set 5 meters bellow the top set. The incident has totally or partially damaged all four pressure tools. The top set had a NO-GO attached to the bottom recorder. When pulled the NO-GO had impressions from the impact with the J-head from the bottom set.
The extent of the damage:	As a result of the impact the temperature and the reference crystals on the pressure transducer were damaged. The data from that point on is not valid.

Downhole Conditions:	High flow rates and fairly high flow pressures. The temperature was rated as high.
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[illegible]

Failure report for : Chevron Canada Resources(Eric Furlan)

Tool S.N. : LMR9401Q-16E

Client: Chevron

Well I.D or U.W.I. k-29 Fort Liard

Type of the Test: Flow & Build-Up

Duration of the Test: Approximately 2 days

Downhole Temperature:	150 °C
Downhole Pressure:	28 Mpa
Pressure Range Tool:	110 mpa
Temperature Range Tool:	175 °C

Reason For Failure : During the first rate of the flow period due to high flowing rate the top set of recorders was unlatched and moved up the hole and then it dropped on the bottom set, which was set 5 meters bellow the top set. The incident has totally or partially damaged all four pressure tools. The top set had a NO-GO attached to the bottom recorder. When pulled the NO-GO had impressions from the impact with the J-head from the bottom set.

The extent of the damage: As a result after the impact this tool did not record pressure and temperature data for approximately 8 hours, however it recovered and recorded data up to the end of the test.

Downhole Conditions:	High flowing rates and fairly high flow pressures.
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[illegible]