

9211-133-5-2RE

OTTAWA COPY

NORTHLAND
PRODUCTION TESTING LTD.

PRODUCTION SUMMARY

Customer: PARAMOUNT RESOURCES LTD.

Test: SINGLE POINT TEST

Duration: 91/03/15 2100 hrs. to 91/03/28 0900 hrs.

Well: PARAMOUNT et al CAMERON

L.S.D. # M-73 60-10-117-15

Formation: L. SULPHUR PT.

DATE	TIME	FLOW TIME	WELLHEAD			Choke or Orif.	H2S	GAS		CONDENSATE OR OIL				WATER			
			Tbg. Press	Flow Temp	Csg. Press			Q	Cumm. Prod.	Avg. hourly	Cumm. Prod.	Sp.Gr 60°F	Grind Out	Avg. hourly	Cumm. Prod.	Salin.	GOR
	Hrs	Hrs	kPa	°C	kPa	mm	%	10 ³ m ³	10 ³ m ³	m ³ /hr	m ³	°API	%H ₂ O	m ³ /hr	m ³	ppm	m ³ /m ³
91/03/16	0600	9.0	5895	6		4.76		5.59	2.23124	0.52	5.43	32.1					446.6
91/03/17	0600	33.0	4875	10		6.55		16.94	14.3388	1.36	30.16	32.0	0.1				520.2
91/03/18	0600	57.0	4935	10	1200	6.55		18.02	31.7956	1.46	59.58	32.7					514.1
91/03/19	0600	81.0	4910	11		6.55		17.00	49.0966	1.04	88.90	32.5					678.9
91/03/20	0600	105.0	4785	11		6.55		16.85	66.0409	1.25	118.43	32.7	0				560.9
91/03/21	0600	14.5	4605	11		6.55		19.40	83.5634	1.36	148.69	33.1	0				596.0
91/03/22	0600	38.5	4725	10	300	6.55		20.57	103.694	1.15	179.37	32.8	0		0.10		746.7
91/03/23	0600	62.5	4820	7	300	6.55		21.01	124.473	1.15	207.85	32.9	0		0.10		762.7
91/03/24	0600	11.8	5080	5	250	6.55		19.51	144.625	1.04	231.54	32.8	0.1				779.3
91/03/25	0600	35.8	5020	5	225	6.55		20.65	164.253	0.94	254.18	33.3	0.4		0.10		916.1
91/03/26	0600	59.8	5290	3	300	6.55		18.64	183.830	0.73	275.78	32.7	0.1		0.10		1063.1
91/03/27	0600	17.0	4880	9		6.55		22.62	202.185	1.04	298.32	33.0	0.4				903.1
91/03/27	2400	35.0	4915	9	50	6.55		22.83	219.156	0.96	316.79						996.0

28

MAY 1 1991

ENGINEERING AND CONTROL
BRANCH
TECHNIQUE ET DU CONTRÔLE

DAILY OPERATIONS SUMMARY

	DATE	TIME	DESCRIPTION
M-73 60-10-117	91/03/15	02:27	RECORDERS LANDED AT 1401 mCF
		08:00	ARRIVE ON LOCATION / CONDUCT SAFETY MEETING
		10:00	EQUIPMENT ARRIVE ON LOCATION / BEGIN TO RIG IN
		17:45	PURGE TEST EQUIPMENT
		18:40	PRESSURE TEST FLOWLINE
		18:45	PRESSURE TEST SEPARATOR
		21:00	OPEN WELL ON 4.76 mm CHOKE
		21:00	SP. GR. OF 0.636 USED FOR FLOW RATE CALCULATIONS
		21:00	pPc = 4701.0 kPa pTc = 199.1 DEG. K.
		21:17	METER IN SERVICE 15.88 mm ORIFICE PLATE
		21:28	LIQUID TO SURFACE
		22:08	METER OUT OF SERVICE
		22:17	METER IN SERVICE 12.70 mm ORIFICE PLATE
	91/03/16	01:00	H2S = 1.1 % (GASTECH) / CO2 = 4.0 % (GASTECH)
		06:00	GASTECH H2S = 1.9% / CO2 = 4.7 %
		07:10	ROCK CHOKE AS INSTRUCTED
		08:30	INCREASE CHOKE TO 5.56 mm
		10:50	CHANGE ORIFICE PLATE TO 15.88 mm
		13:35	ROCK CHOKE
		14:35	INCREASE CHOKE TO 6.35 mm
		16:00	INCREASE CHOKE TO 7.14 mm

DAILY OPERATIONS SUMMARY

	DATE	TIME	DESCRIPTION
M-73 60-10-117	91/03/16	16:20	DECREASE CHOKE TO 6.35 mm
		19:18	INCREASE CHOKE TO 6.55 mm
		20:02	METER OUT OF SERVICE
		20:08	METER IN SERVICE 19.05 mm ORIFICE PLATE
	91/03/17	05:00	CASING VALVE FROZEN
		06:00	GASTECH H2S = 1.7 % / CO2 = 3.8 %
		22:00	CASING VALVE FROZEN
	91/03/18	06:00	GASTECH H2S = 1.0 % / CO2 = 3.0 %
		09:10	BLEED CASING TO 0 kPa
	91/03/19	06:00	GASTECH H2S = 1.7 % / CO2 = 3.5 %
	91/03/20	06:00	GASTECH H2S = 1.6 % / CO2 = 3.5 %
		15:00	SHUT IN WELL TO RUN WAX KNIVES DOWN HOLE
		15:00	WAX BUILDUP FOUND TO BE FROM 0m TO 143m
		15:00	SIGNS OF HYDRATES ALSO AT THESE DEPTHS
		15:20	RIG OUT WIRELINE
		15:30	OPEN WELL ON 6.55 mm CHOKE
		15:45	METER IN SERVICE 19.05 mm ORIFICE PLATE
		17:45	ROCK CHOKE
		21:10	ROCK CHOKE
	91/03/21	03:38	ROCK CHOKE
		06:00	GASTECH H2S = 1.5 % / CO2 = 4.0 %

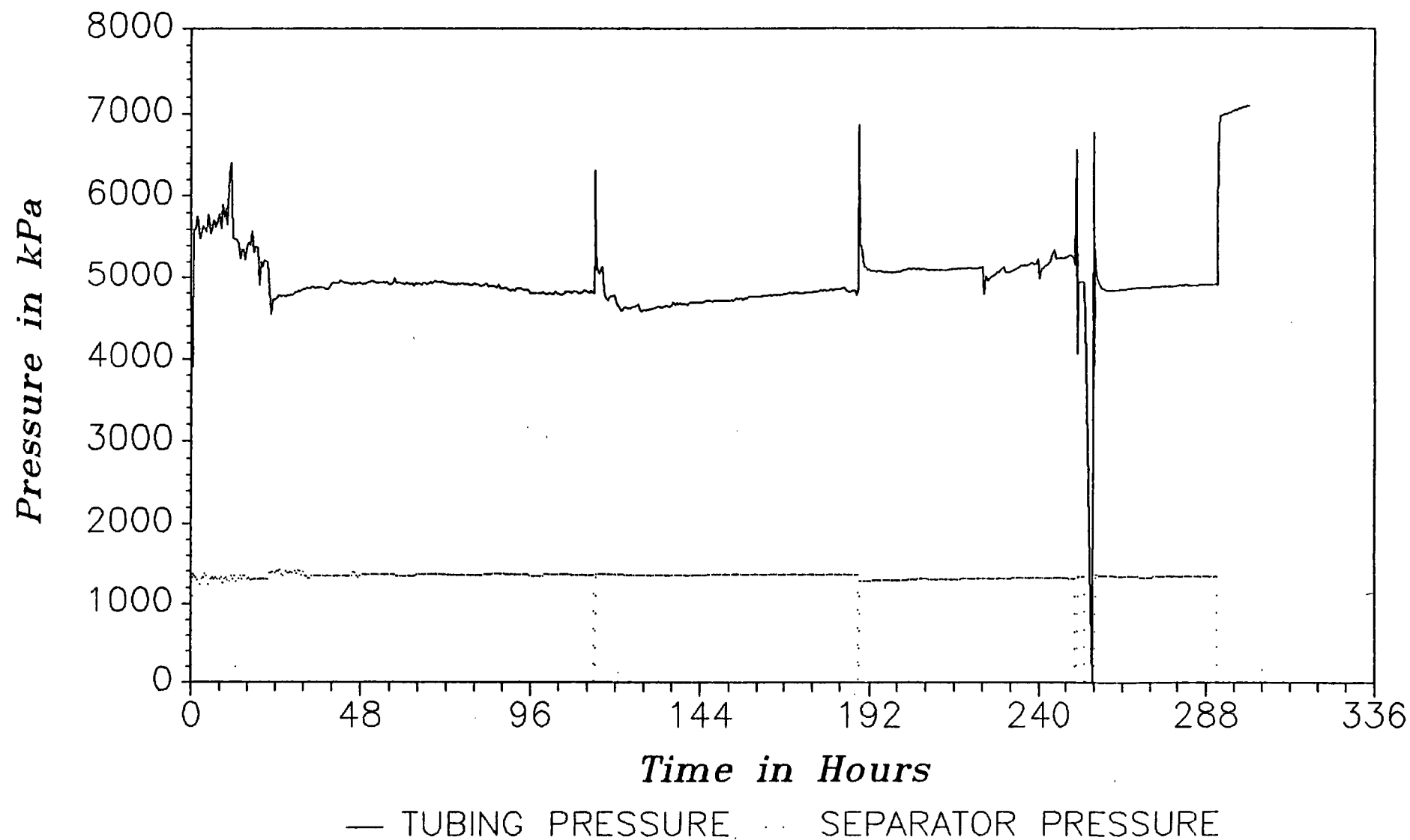
DAILY OPERATIONS SUMMARY

	DATE	TIME	DESCRIPTION
M-73 60-10-117	91/03/22	06:00	GASTECH H2S = 1.5 % / CO2 = 4.0 %
	91/03/23	06:00	GASTECH H2S = 1.5 % / CO2 = 4.6 %
		13:30	ROCK CHOKE
		14:00	ROCK CHOKE
		17:00	INCREASE CHOKE TO 7.94 mm
		17:15	DECREASE CHOKE TO 6.55 mm
		18:05	SHUT IN WELL TO INSPECT WAX BUILDUP IN FLOWLINE
		18:05	ID OF FLOWLINE DOWN FROM 49.3 mm TO 38.1 mm
		18:15	OPEN WELL ON 6.55 mm CHOKE
		19:10	ROCK CHOKE
	91/03/24	06:00	GASTECH H2S = 1.5 % / CO2 = 4.0 %
	91/03/25	05:25	INCREASE CHOKE TO 7.94 mm
		05:35	DECREASE CHOKE TO 6.55 mm
		06:00	GASTECH H2S = 1.7 % / CO2 = 4.0 %
		19:11	ROCK CHOKE
		20:43	INCREASE CHOKE TO 7.94 mm
		20:58	DECREASE CHOKE TO 6.55 mm
		21:25	INCREASE CHOKE TO 6.75 mm
		22:08	DECREASE CHOKE TO 6.55 mm
	91/03/26	06:00	GASTECH H2S = 1.5 % / CO2 = 4.2 %
		07:30	SHUT IN WELL TO RUN WAX KNIVES DOWN HOLE

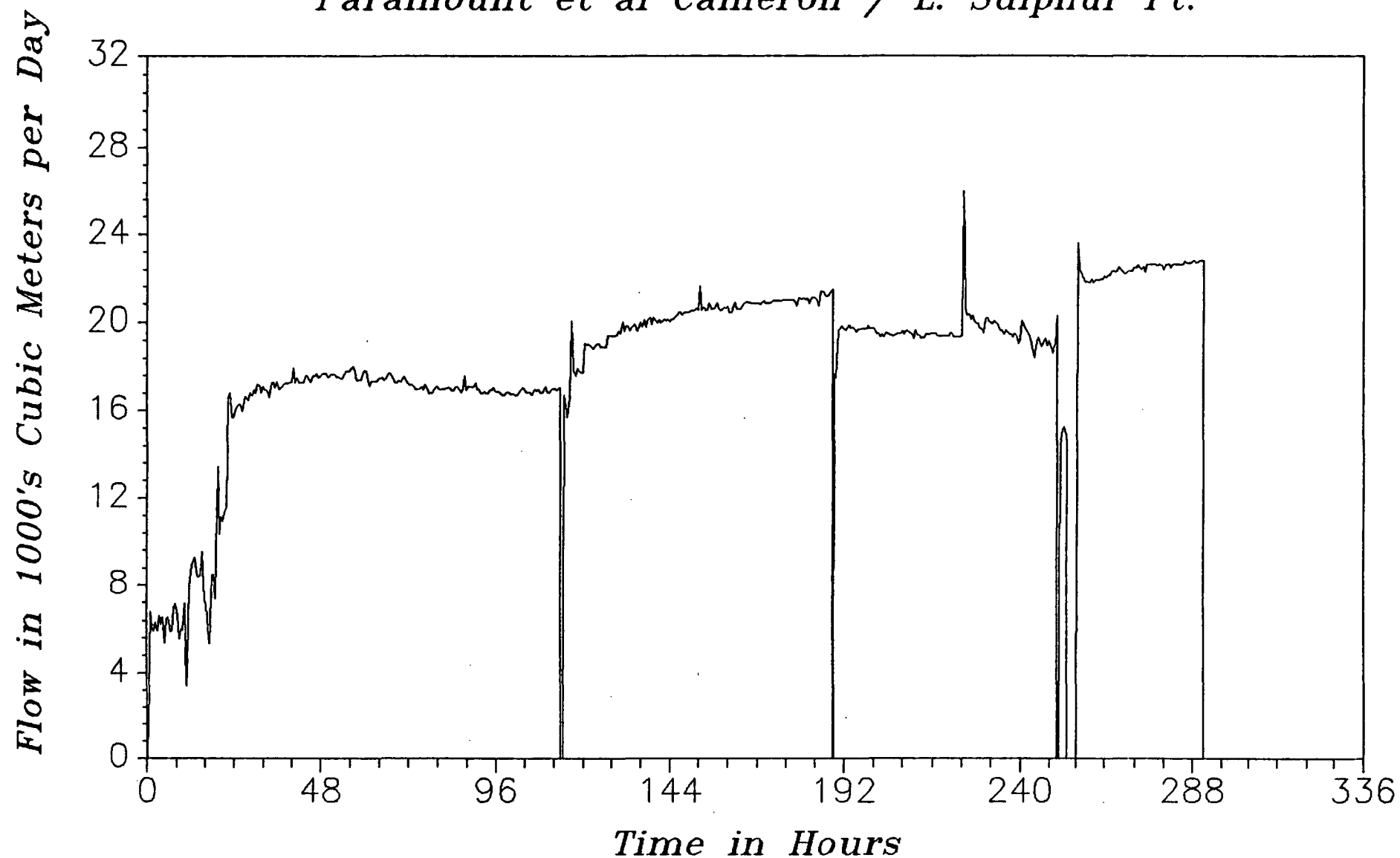
DAILY OPERATIONS SUMMARY

	DATE	TIME	DESCRIPTION
M-73 60-10-117	91/03/26	07:30	WAX AT 140 m
		07:55	PRESSURE UP TO CHOKE
		08:00	OPEN WELL ON 11.91 mm CHOKE
		08:05	DECREASE CHOKE TO 6.55 mm
		08:10	INCREASE CHOKE TO 11.91 mm
		08:15	DECREASE CHOKE TO 6.55 mm
		08:15	METER IN SERVICE 19.05 mm ORIFICE PLATE
		10:15	SHUT IN WELL TO RUN RECORDERS
		11:58	BOTTOM SET OF RECORDERS LANDED AT 1401 mCF(80 DAY)
		12:30	TOP SET OF RECORDERS LANDED AT 1401 mCF
		13:00	OPEN WELL ON 9.92 mm CHOKE
		13:05	DECREASE CHOKE TO 6.55 mm
		13:20	METER IN SERVICE 19.05 mm ORIFICE PLATE
		19:00	CASING VALVE FROZEN
91/03/27	06:00	GASTECH H2S = 1.2 % / CO2 = 4.0 %	
	22:00	AGAT LABS HP GAS SAMPLES # 18325 # 12689	
	22:00	HP OIL SAMPLES # 17072 # 3983	
	22:00	2 LP OIL SAMPLES TAKEN / H2S = 1.27 % (TUT)	
	22:00	CO2 = 4.0 % (GASTECH)	
	23:59	SHUT IN WELL FOR BUILDUPS	
91/03/28	09:00	END OF TEST / RIG OUT EQUIPMENT	

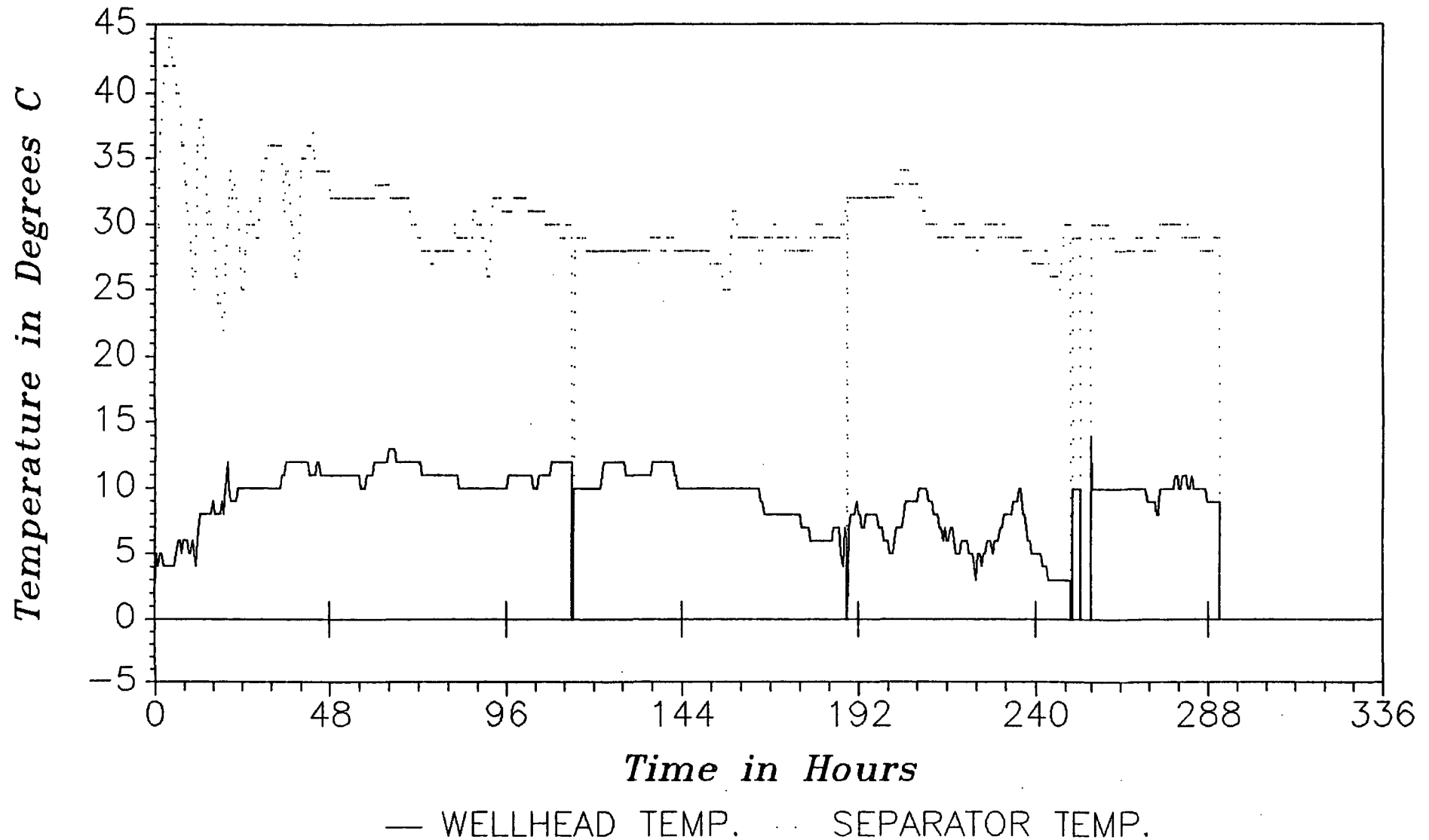
*Tubing and Separator Pressure
Single Point Test M-73 60-10-117-15
Paramount et al Cameron / L. Sulphur Pt.*



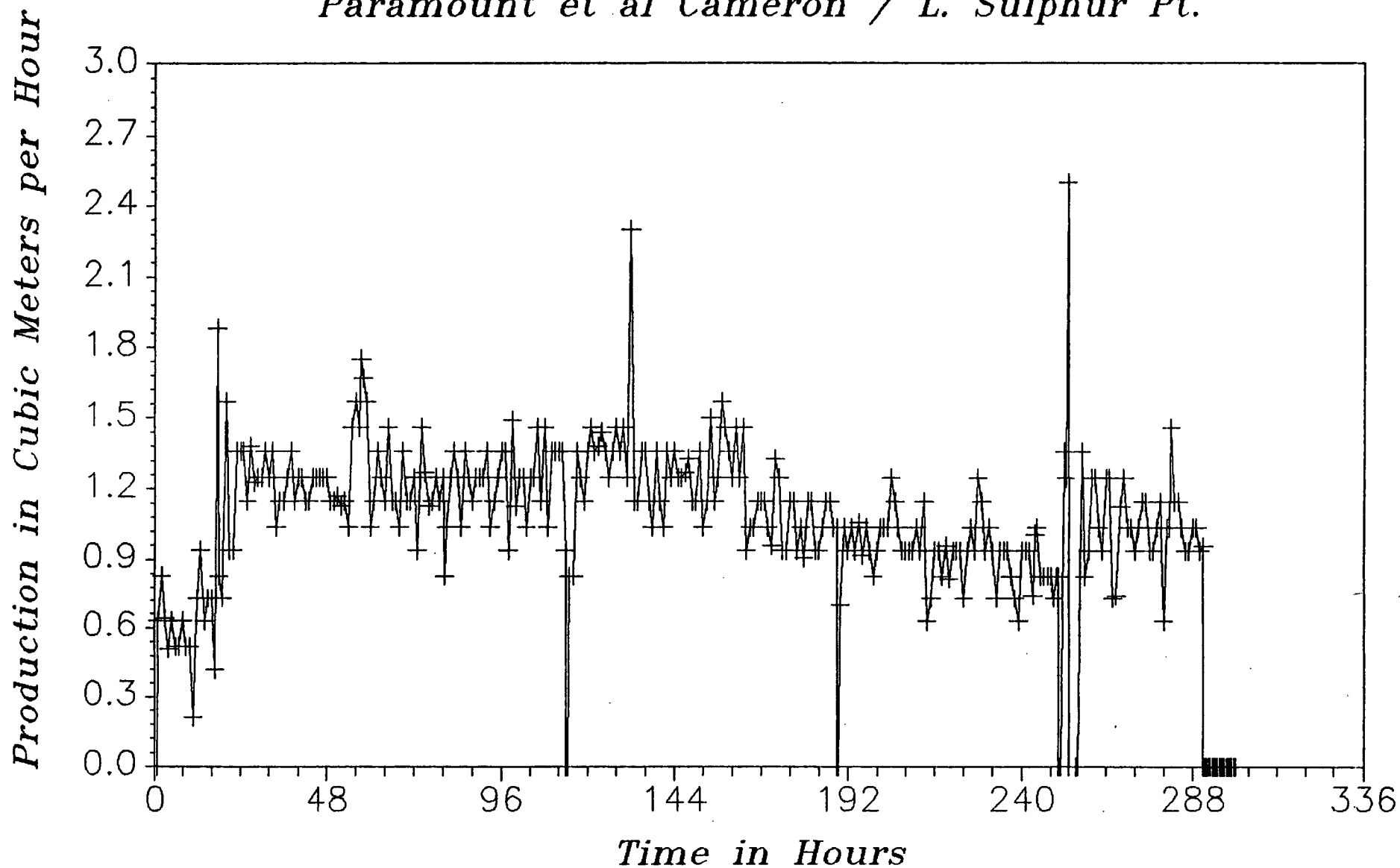
Flow Rate
Single Point Test M-73 60-10-117-15
Paramount et al Cameron / L. Sulphur Pt.



*Wellhead and Separator Temperature
Single Point Test M-73 60-10-117-15
Paramount et al Cameron / L. Sulphur Pt.*



Hourly Condensate Rate
Single Point Test M-73 60-10-117-15
Paramount et al Cameron / L. Sulphur Pt.



Gas / Oil Ratio
Single Point Test M-73 60-10-117-15
Paramount et al Cameron / L. Sulphur Pt.

