

FLOPET

Denne rapport
tilhører



UND DOK.SENTER

L.NR. 91059081

KODE Well 15/9-11 nr 14

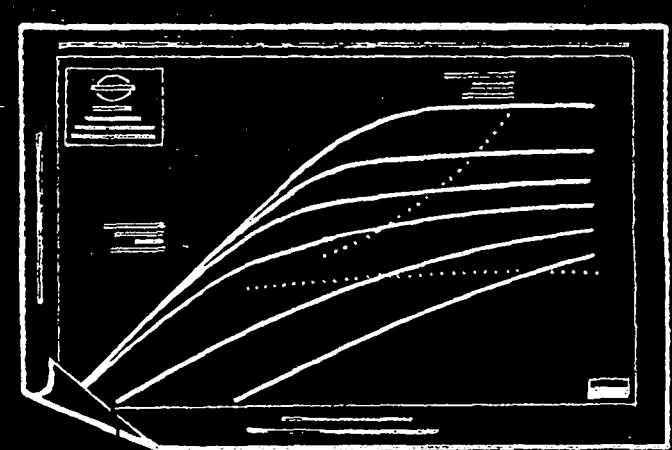
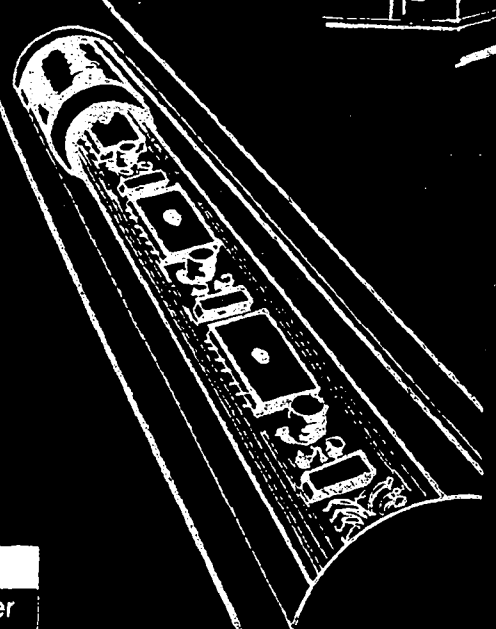
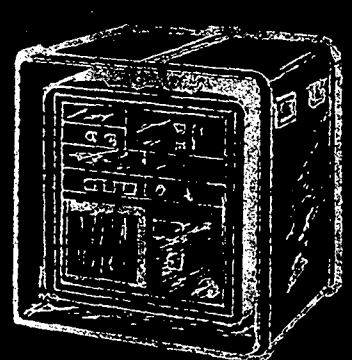
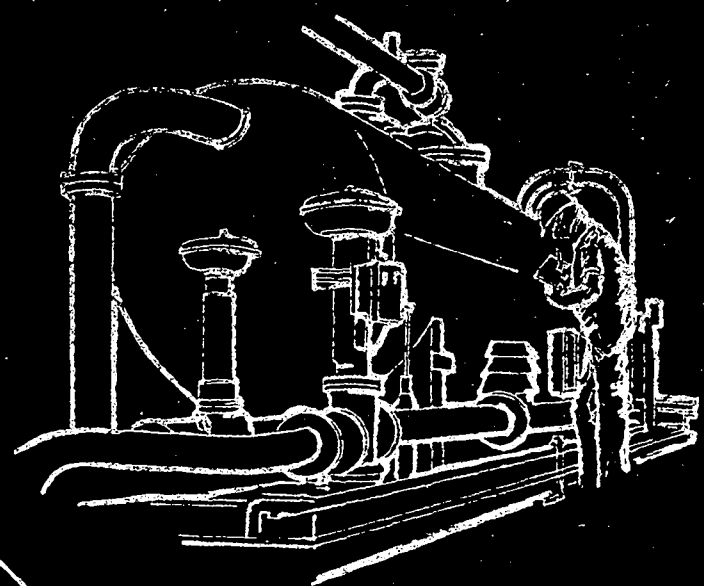
Returneres etter bruk

HIGH ACCURACY PRESSURE TEMPERATURE MEASUREMENTS

Company: STATOIL Country: NORWAY

Field: SLEIPNER Well: 15/9-11

Zone: GAMMA Date: 07.12.



FLOPETROL

DISTRICT: NUD
BASE : STAVANGER
REPORT N°: ELS-81-09S

HIGH ACCURACY PRESSURE TEMPERATURE MEASUREMENTS

Company:	STATOIL	Country:	NORWAY
Field:	SLEIPNER	Well:	15/9-11
Zone:	GAMMA	Date:	07.12. - 10.12.81

DST No. 2

INDEX

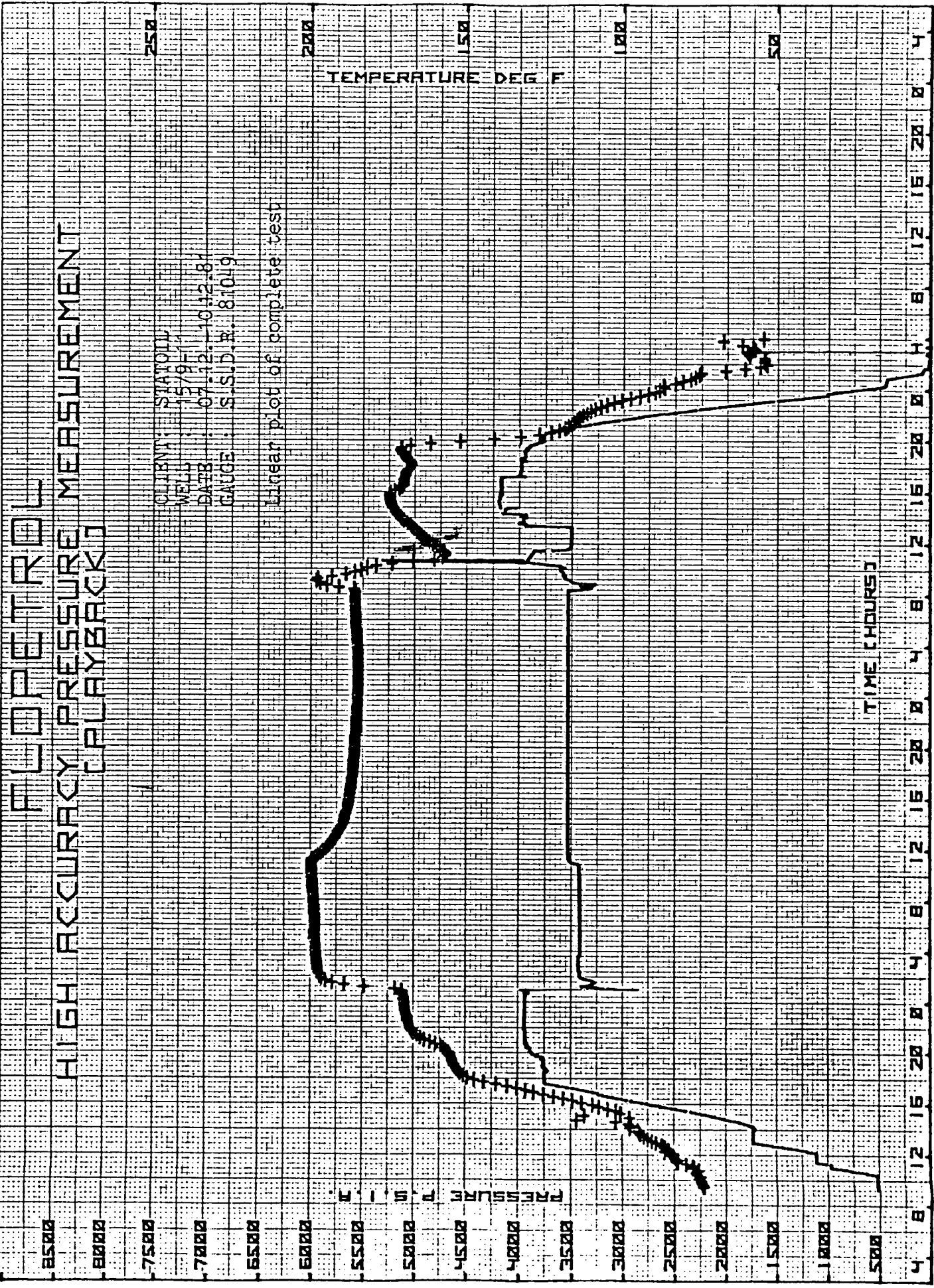
- 1 - CHARTS
- 2 - MEASUREMENT RESULTS
- 3 - SEQUENCE OF EVENTS
- 4 - WELL COMPLETION DATA
- 5 - OPERATING AND MEASURING CONDITIONS
- 6 - EQUIPMENT DATA
- 7 -

Flopetrol operator:

Geir Ole Eikemo

Company representative:

Jan Skagen



FLORETROL HIGH ACCURACY PRESSURE MEASUREMENT

CLIENT: STATOIL
WELL : 15/9-11
DATE : 07-12-10 12.31
GAUGE : S.S.D.R. 81049

Linear plot of flow period

PRESSURE IN PSI

3000
2700
2400
2100
1800
1500
1200
900
600
300
0

TIME (HOURS)

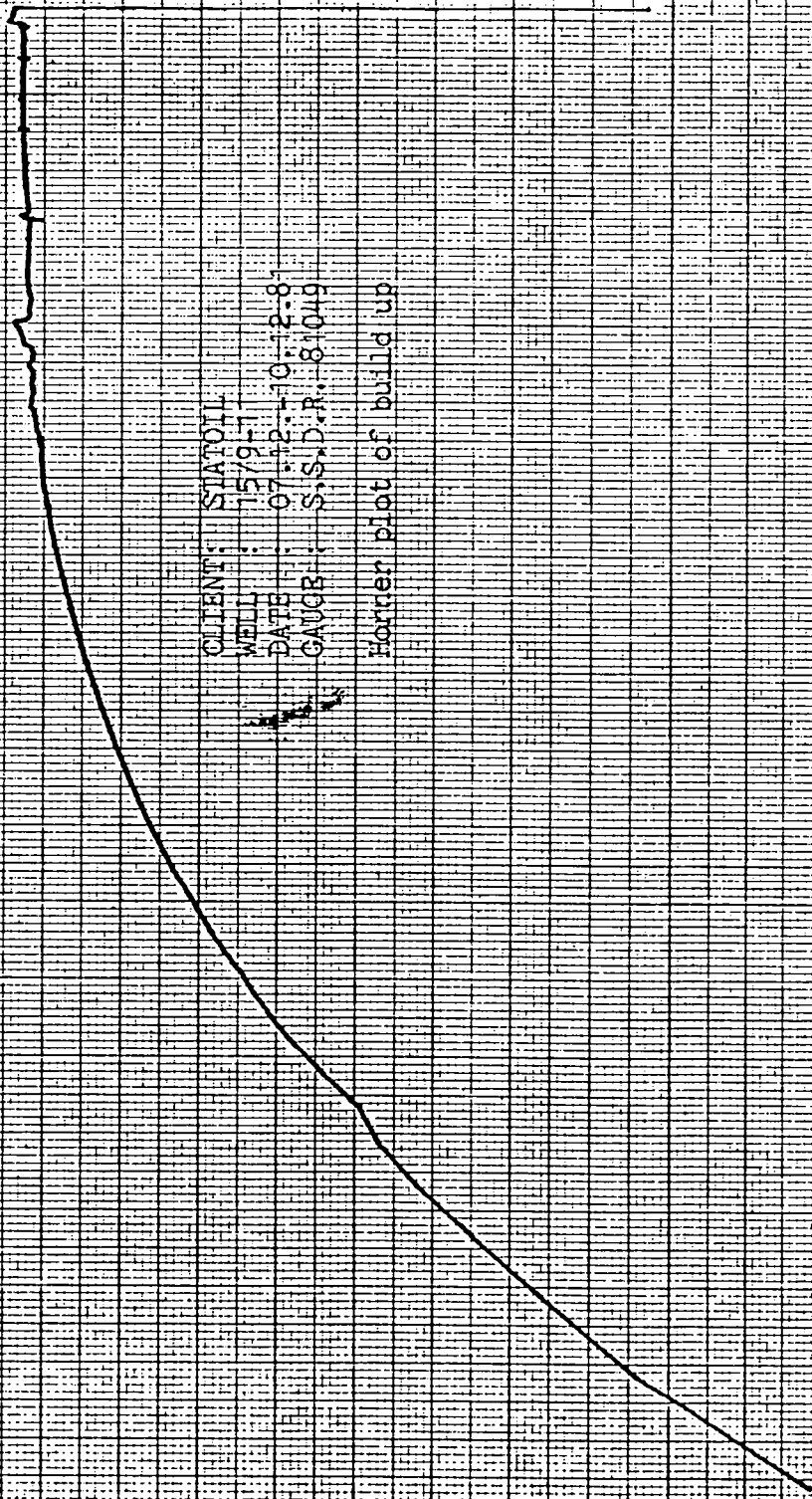
1 2 3 4 5 6 7 8 9 10 11 12



PROPETROL HIGH ACCURACY PRESSURE MEASUREMENT PLAYBACK

CLIENT: STATOIL
WELL: 1579
DATE: 07-12-10-12-8
GAUGE: S.S.D.R. 81019

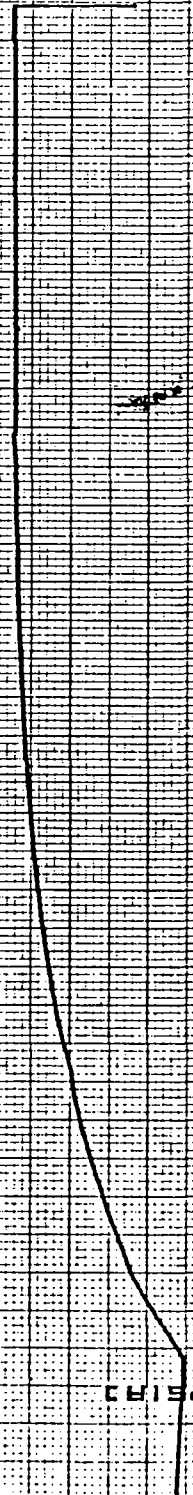
Warner plot of build up



LOG T + DELTA T
DELTA T

LOG PLOT OF HIGH ACCURACY PRESSURE MEASUREMENT CAPRETOLE

LOG DELTA P (PSIA)



CLIENT: STATOIL
 WELL: 15/9
 DATE: 07.12.10.12.81
 GAUGE: S.S.D.R. 81049

LOG-LOG plot of built up

LOG DELTA T (MINUTES)

FLUEHOLE PRESSURE & TEMPERATURE CALCULATIONS

SECTION 1
PAGE 1

DATE: 07.12.81
Gauge 81049
LOG DEL.P. LOG T DEL.T
PSIA PSIA

TIME	PRESS. PSIA	TEMP. DEG.F	DEL.T (MINUTES)	LOG DEL.T	DEL.P. PSIA	LOG DEL.P. - LOG T DEL.T	REMARKS
0. 0. 0	0.37						
0. 5. 0	11.44						
0.10. 0	13.19	71.0					
0.15. 0	16.10						
0.20. 0	0.36	86.2					
0.25. 0	0.90						
0.30. 0	4.00	152.1					
0.35. 0	16.58						
0.40. 0	6.33	80.1					
0.45. 0	12.84						
0.50. 0	10.73	177.4					
0.55. 0	56.42						
7. 0. 0	59.75	126.3					
7. 5. 0	65.32						
7.10. 0	100.17	107.6					
7.15. 0	180.61						
7.20. 0	100.33	32.0					
7.25. 0	122.20						
7.30. 0	140.60	104.3					
7.35. 0	180.91						
7.40. 0	162.95	270.1					
7.45. 0	227.42						
7.50. 0	315.40	61.0					
7.55. 0	305.23						
8. 0. 0	415.25	151.2					
8. 5. 0	426.27						
8.10. 0	424.67	98.2					
8.15. 0	436.37						
8.20. 0	435.05	163.9					
8.25. 0	442.11						
8.30. 0	453.09	97.7					
8.35. 0	610.50						
8.40. 0	546.83	347.4					
8.45. 0	495.55						
8.50. 0	521.11	109.9					
8.55. 0	651.35						
9. 0. 0	551.16	365.0					
9. 5. 0	501.93						
9.10. 0	516.25	77.5					
9.15. 0	517.50						
9.20. 0	517.60	74.1					
9.25. 0	516.15						

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FLOPETROL
PRESSURE & TEMPERATURE CALCULATIONS

TIME	PRESS.	TEMP.	DEL.T.	LOG DEL.T.	DEL.P	LOG DEL.P	LOG T+DEL.T.	REMARKS
HR. MIN.	PSIA	DEG.F	(MINUTES)		PSIA		DEL.T.	
9.30. 0	517.50	74.1						
9.35. 0	516.01							
9.40. 0	516.12	74.3						
9.45. 0	517.89							
9.50. 0	517.85	74.7						11
9.55. 0	516.00							
10. 0. 0	517.82	74.8						
10. 5. 0	517.53							
10.10. 0	517.70	75.6						
10.15. 0	517.88							
10.20. 0	517.36	75.0						
10.25. 0	517.06							
10.30. 0	568.37	76.3						
10.35. 0	620.20							
10.40. 0	669.92	76.5						12
10.45. 0	771.52							
10.50. 0	620.80	75.7						
10.55. 0	676.42							
11. 0. 0	900.00	77.2						
11. 5. 0	909.54							
11.10. 0	909.50	77.5						
11.15. 0	909.91							
11.20. 0	1021.01	79.7						13
11.25. 0	1109.65							
11.30. 0	1109.96	82.0						
11.35. 0	1110.65							
11.40. 0	1110.76	82.2						
11.45. 0	1108.42							
11.50. 0	1111.29	83.3						
11.55. 0	1111.51							
12. 0. 0	1111.10	83.6						
12. 5. 0	1112.65							
12.10. 0	1111.33	84.6						14
12.15. 0	1157.96							
12.20. 0	1206.00	86.5						
12.25. 0	1253.72							
12.30. 0	1299.07	85.3						
12.35. 0	1395.79							
12.40. 0	1444.62	86.5						
12.45. 0	1540.23							
12.50. 0	1586.87	87.4						15
12.55. 0	1680.70							

FLUORINOL
PRESSURE & TEMPERATURE CALCULATIONS

Time ----- PRESS. ----- TEMP. ----- DEL.T. ----- LOG DEL.T. ----- DEL.P ----- LOG DEL.P ----- LOG T+DEL.T. ----- REMARKS
 hr. min. sec ----- PSIA ----- DEG.F ----- (MINUTES) ----- PSIA ----- DEL.T.

13. 0. 0	1730.95	89.2							
13. 5. 0	1731.20								
13.10. 0	1732.20	90.5							
13.15. 0	1732.60								
13.20. 0	1733.04	91.9							
13.25. 0	1733.11								
13.30. 0	1733.43	93.2							
13.35. 0	1733.95								
13.40. 0	1733.09	94.3							
13.45. 0	1732.46								
13.50. 0	1731.66	94.6							
13.55. 0	1732.61								
14. 0. 0	1731.25	95.2							
14. 5. 0	1736.01								
14.10. 0	1731.32	97.7							
14.15. 0	1733.66								
14.20. 0	1777.48	97.5							
14.25. 0	1807.76								
14.30. 0	1822.50	98.2							
14.35. 0	1809.74								
14.40. 0	1910.21	102.4							
14.45. 0	1962.74								
14.50. 0	2011.61	115.2							
14.55. 0	2061.52								
15. 0. 0	2106.20	97.9							
15. 5. 0	2153.54								
15.10. 0	2200.82	112.6							
15.15. 0	2248.81								
15.20. 0	2295.37	100.9							
15.25. 0	2342.60								
15.30. 0	2407.55	102.4							
15.35. 0	2470.15								
15.40. 0	2536.46	105.1							
15.45. 0	2579.68								
15.50. 0	2626.89	107.8							
15.55. 0	2676.04								
16. 0. 0	2767.36	109.9							
16. 5. 0	2810.24								
16.10. 0	2865.62	113.5							
16.15. 0	2914.67								
16.20. 0	2963.11	116.4							
16.25. 0	3014.16								

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FLOPPYKUL
PRESSURE & TEMPERATURE CALCULATIONS

TIME	PRESS.	TEMP.	DEL. T	LOG DEL. T	DEL. P	LOG DEL. P	LOG T+DEL. T	REMARKS
HR. MIN. SS	PSIA	DEG. F	(MINUTES)	PSIA	PSIA		DEL. T	
16.30.0	3112.59	119.3						
16.35.0	3148.48							
16.40.0	3197.51	122.4						
16.45.0	3244.82							
16.50.0	3245.76	125.6						
16.55.0	3292.87							
17.00.0	3339.64	128.7						
17.05.0	3387.82							
17.10.0	3435.87	131.2						
17.15.0	3483.45							
17.20.0	3559.56	133.9						
17.25.0	3641.54							
17.30.0	3671.50	136.9						
17.35.0	3720.97							
17.40.0	3752.08	140.5						
17.45.0	3754.54							
17.50.0	3756.65	144.5						
17.55.0	3756.74							
18.00.0	3755.44	147.6						
18.05.0	3758.58							
18.10.0	3757.67	149.7						
18.15.0	3757.96							
18.20.0	3760.03	151.0						
18.25.0	3759.52							
18.30.0	3759.71	152.1						
18.35.0	3751.93							
18.40.0	3743.03	152.6						
18.45.0	3743.39							
18.50.0	3767.02	153.1						
18.55.0	3763.86							
19.00.0	3767.67	153.7						
19.05.0	3772.08							
19.10.0	3767.75	154.0						
19.15.0	3766.07							
19.20.0	3767.93	154.4						
19.25.0	3767.30							
19.30.0	3769.24	154.6						
19.35.0	3779.55							
19.40.0	3779.65	154.8						
19.45.0	3804.19							
19.50.0	3823.29	155.1						
19.55.0	3874.59							

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ELECTRICAL
PRESSURE & TEMPERATURE CALCULATIONS

TIME	WELL PRESS. PSIA	TEMP. LOG DEL.F	DEL.T (MINUTS)	LOG DEL.T	DEL.P PSIA	LOG DEL.F	LOG T+DEL.T	DEL.T	REMARKS
23.30.0	3942.41								
23.35.0	3942.16								
23.40.0	3941.51	165.9							
23.45.0	3941.58								
23.50.0	3941.31	170.1							
23.55.0	3940.54								
24.0.0	3940.60	170.1							
24.0.0	3940.60								
0.5.0	3940.29								
0.10.0	3940.62	170.2							
0.15.0	3939.67								
0.20.0	3939.40	170.4							
0.25.0	3939.33								
0.30.0	3939.00	170.4							
0.35.0	3938.85								
0.40.0	3938.60	170.6							
0.45.0	3947.73								
0.50.0	3929.76	171.0							
0.51.0	3942.03								
0.52.0	3942.31								
0.53.0	3942.59								
0.54.0	3942.67								
0.55.0	3943.15								
0.56.0	3943.48	171.0							
0.57.0	3943.54								
0.58.0	3944.37								
0.59.0	3944.61								
1.0.0	3962.15								
1.1.0	2045.05	0.00		0.0000	920.99				WELL OPENED
1.2.0	3023.62	1.00		0.3010	869.48				1. 1. 0
1.3.0	3055.33	2.00		0.4771	853.94				SHUT IN PRES.
1.4.0	3090.67	3.00		0.6021	819.50				3944.61
1.5.0	3125.31	4.00		0.6990	790.30				
1.6.0	3154.51	5.00	173.1	0.7782	753.91				
1.7.0	3190.90	6.00		0.8451	715.29				Open to choke 1" adj.
1.8.0	3225.52	7.00		0.9031	701.52				
1.9.0	3243.29	8.00		0.9542	694.36				
1.10.0	3250.45	9.00		1.0000	696.30				
1.11.0	3240.51	10.00		1.0414	699.55				
1.12.0	3245.26	11.00		1.0752	679.75				
1.13.0	3265.00	12.00		1.1159	637.60				
1.14.0	3307.24	13.00							Change to choke 3/4" adj.

FLUORINOL

PRESSURE & TEMPERATURE CALCULATIONS

TIME	PRESS.	TEMP.	DEL.T	LOG DEL.T	DEL.P	LOG DEL.P	LOG T+DEL.T	REMARKS
HR:MM:SS	PSIA	DEG.F	(MINUTES)		PSIA		$\frac{DEL.P}{DEL.T}$	
1.15.0	3349.00		14.00	1.1461	595.21	2.7747		
1.16.0	3364.07	163.0	15.00	1.1761	560.74	2.7488		
1.17.0	3408.16		16.00	1.2041	536.65	2.7297		
1.18.0	3413.56		17.00	1.2304	530.65	2.7250		
1.19.0	3365.71		18.00	1.2553	575.10	2.7557		
1.20.0	3351.55		19.00	1.2788	593.26	2.7732		
1.21.0	3359.44		20.00	1.3016	585.37	2.7674		
1.22.0	3343.20		21.00	1.3222	601.61	2.7793		
1.23.0	3331.08		22.00	1.3424	613.73	2.7880		
1.24.0	3322.20		23.00	1.3617	622.53	2.7942		
1.25.0	3315.17		24.00	1.3802	629.64	2.7991		
1.26.0	3309.02	169.5	25.00	1.3979	635.79	2.8033		
1.27.0	3305.74		26.00	1.4150	639.07	2.8055		
1.28.0	3305.05		27.00	1.4314	639.78	2.8060		
1.29.0	3302.97		28.00	1.4472	641.84	2.8074		
1.30.0	3299.15		29.00	1.4624	645.66	2.8100		
1.31.0	3292.49		30.00	1.4771	652.82	2.8145		
1.32.0	3289.64		31.00	1.4914	655.17	2.8164		
1.33.0	3265.26		32.00	1.5051	659.58	2.8192		
1.34.0	3276.27		33.00	1.5185	668.54	2.8251		
1.35.0	3277.67		34.00	1.5315	666.94	2.8241		
1.36.0	3262.58	193.5	35.00	1.5441	662.23	2.8210		
1.37.0	3264.25		36.00	1.5563	660.56	2.8199		
1.38.0	3264.57		37.00	1.5682	660.24	2.8197		
1.39.0	3254.16		38.00	1.5798	650.65	2.8133		
1.40.0	3297.69		39.00	1.5911	646.92	2.8109		
1.41.0	3309.93		40.00	1.6021	634.86	2.8027		
1.42.0	3316.52		41.00	1.6128	626.29	2.7962		
1.43.0	3321.00		42.00	1.6232	623.61	2.7951		
1.44.0	3324.77		43.00	1.6335	620.04	2.7924		
1.45.0	3326.66		44.00	1.6435	617.95	2.7910		
1.46.0	3327.53	195.6	45.00	1.6532	617.28	2.7905		
1.47.0	3347.19		46.00	1.6626	597.62	2.7764		
1.48.0	3364.64		47.00	1.6721	579.97	2.7634		
1.49.0	3376.57		48.00	1.6812	568.24	2.7545		
1.50.0	3364.01		49.00	1.6902	560.80	2.7486		
1.51.0	3393.50		50.00	1.6990	551.31	2.7414		
1.52.0	3400.23		51.00	1.7076	544.58	2.7361		
1.53.0	3404.63		52.00	1.7160	540.16	2.7325		
1.54.0	3406.53		53.00	1.7243	536.28	2.7294		
1.55.0	3411.93		54.00	1.7324	532.68	2.7266		
1.56.0	3414.36	196.9	55.00	1.7404	530.43	2.7246		

Change to choke 3/4" fixed

Decrease to choke 28/64" adj.

Change to choke 28/64" adj.

LOGGING
PRESSURE & TEMPERATURE CALCULATIONS

TIME HR. MIN. PRESS. PSIA TEMP. DEG. F DEL. T (MINUTES) LOG DEL. T LOG DEL. P DEL. P PSIA LOG DEL. T DEL. T REMARKS

TIME	HR.	MIN.	PRESS. PSIA	TEMP. DEG. F	DEL. T (MINUTES)	LOG DEL. T	LOG DEL. P	DEL. P PSIA	LOG DEL. T	DEL. T	REMARKS
1.57	0		3416.37		56.00	1.7482		528.44		2.7230	
1.58	0		3417.97		57.00	1.7559		526.84		2.7217	
1.59	0		3419.40		58.00	1.7634		525.41		2.7205	
2.00	0		3421.50		59.00	1.7709		523.31		2.7188	
2.01	0		3423.16		60.00	1.7782		521.65		2.7174	
2.02	0		3425.44		61.00	1.7853		521.37		2.7171	
2.03	0		3424.07		62.00	1.7924		520.74		2.7166	
2.04	0		3425.65		63.00	1.7993		519.12		2.7153	
2.05	0		3426.13		64.00	1.8062		518.68		2.7149	
2.06	0		3426.16	197.4	65.00	1.8129		518.63		2.7149	
2.07	0		3426.59		66.00	1.8195		518.22		2.7145	
2.08	0		3426.88		67.00	1.8261		517.93		2.7143	
2.09	0		3427.34		68.00	1.8325		517.47		2.7139	
2.10	0		3427.63		69.00	1.8388		517.18		2.7136	
2.11	0		3427.65		70.00	1.8451		517.12		2.7136	
2.12	0		3427.61		71.00	1.8513		517.20		2.7137	
2.13	0		3427.05		72.00	1.8573		517.76		2.7141	
2.14	0		3426.43		73.00	1.8633		518.38		2.7146	
2.15	0		3426.24		74.00	1.8692		518.54		2.7146	
2.16	0		3426.02	197.6	75.00	1.8751		518.79		2.7150	
2.17	0		3425.77		76.00	1.8808		519.04		2.7152	
2.18	0		3425.56		77.00	1.8865		519.25		2.7154	
2.19	0		3425.32		78.00	1.8921		519.49		2.7156	
2.20	0		3425.11		79.00	1.8976		519.70		2.7158	
2.21	0		3425.17		80.00	1.9031		519.64		2.7157	
2.22	0		3425.40		81.00	1.9085		519.41		2.7155	
2.23	0		3425.88		82.00	1.9138		518.93		2.7151	
2.24	0		3426.91		83.00	1.9191		517.90		2.7142	
2.25	0		3427.76		84.00	1.9243		517.05		2.7135	
2.26	0		3428.25	198.0	85.00	1.9294		516.56		2.7131	
2.27	0		3428.55		86.00	1.9345		515.86		2.7125	
2.28	0		3429.52		87.00	1.9395		515.29		2.7121	
2.29	0		3429.99		88.00	1.9445		514.82		2.7117	
2.30	0		3430.52		89.00	1.9494		514.29		2.7112	
2.31	0		3430.81		90.00	1.9542		514.00		2.7110	
2.32	0		3431.17		91.00	1.9590		513.64		2.7107	
2.33	0		3431.66		92.00	1.9636		513.15		2.7102	
2.34	0		3431.50		93.00	1.9685		512.91		2.7100	
2.35	0		3432.10		94.00	1.9731		512.71		2.7099	
2.36	0		3432.41	198.1	95.00	1.9777		512.40		2.7096	
2.37	0		3432.73		96.00	1.9823		512.08		2.7093	
2.38	0		3432.85		97.00	1.9866		511.92		2.7092	

TIME HR. MIN. SS PRESS. PSIA TEMP. DEG. F DEL. T (MINUTES) LOG DEL. T LOG DEL. P PSIA LOG DEL. P LOG T+DEL. T DEL. T PSIA REMARKS

2.39.	0	3433.05		98.00	1.9912	511.76	2.7091			
2.40.	0	3433.21		99.00	1.9956	511.60	2.7089			
2.41.	0	3433.49		100.00	2.0000	511.32	2.7087			
2.42.	0	3433.60		101.00	2.0043	511.21	2.7086			
2.43.	0	3433.74		102.00	2.0086	511.07	2.7085			
2.44.	0	3433.88		103.00	2.0126	510.93	2.7084			
2.45.	0	3433.94		104.00	2.0170	510.87	2.7083			
2.46.	0	3434.20	196.1	105.00	2.0212	510.61	2.7081			
2.47.	0	3434.15		106.00	2.0253	510.62	2.7081			
2.48.	0	3434.31		107.00	2.0294	510.50	2.7080			
2.49.	0	3434.32		108.00	2.0334	510.49	2.7080			
2.50.	0	3434.27		109.00	2.0374	510.54	2.7080			
2.51.	0	3434.41		110.00	2.0414	510.40	2.7079			
2.52.	0	3434.20		111.00	2.0453	510.61	2.7081			
2.53.	0	3434.07		112.00	2.0492	510.74	2.7082			
2.54.	0	3434.14		113.00	2.0531	510.67	2.7081			
2.55.	0	3434.20		114.00	2.0569	510.85	2.7080			
2.56.	0	3434.25	196.3	115.00	2.0607	510.40	2.7080			
2.57.	0	3434.29		116.00	2.0645	510.52	2.7080			
2.58.	0	3434.43		117.00	2.0682	510.38	2.7079			
2.59.	0	3434.61		118.00	2.0719	510.20	2.7077			
3. 0.	0	3434.68		119.00	2.0755	510.13	2.7077			
3. 0.	0	3435.16		124.00	2.0934	509.65	2.7073			
3.10.	0	3435.55	196.3	125.00	2.1166	509.26	2.7065			
3.15.	0	3435.70		134.00	2.1271	509.11	2.7066			
3.20.	0	3436.00	196.5	139.00	2.1430	508.61	2.7066			
3.25.	0	3436.51		144.00	2.1584	508.50	2.7063			
3.30.	0	3436.61	196.5	149.00	2.1732	508.20	2.7060			
3.35.	0	3436.77		154.00	2.1875	508.04	2.7059			
3.40.	0	3424.44	196.7	159.00	2.2014	520.37	2.7163			
3.45.	0	3420.92		164.00	2.2148	523.69	2.7152			
3.50.	0	3419.68	196.7	169.00	2.2279	524.93	2.7201			
3.55.	0	3419.40		174.00	2.2405	525.41	2.7205			
4. 0.	0	3419.40	196.7	179.00	2.2529	525.41	2.7205			
4. 5.	0	3420.26		184.00	2.2648	524.53	2.7196			
4.10.	0	3419.94	196.5	189.00	2.2765	524.67	2.7201			
4.15.	0	3419.55		194.00	2.2878	525.20	2.7204			
4.20.	0	3419.46	196.5	199.00	2.2989	525.35	2.7204			
4.25.	0	3419.55		204.00	2.3096	525.26	2.7204			
4.30.	0	3419.50	196.5	209.00	2.3201	525.31	2.7204			
4.35.	0	3419.52		214.00	2.3304	525.29	2.7204			
4.40.	0	3419.62	196.5	219.00	2.3404	525.19	2.7203			

Change to choke 1/2" fixed

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FLOPPING & TEMPERATURE CALCULATIONS

TIME	TEMP. DEG.F	DEL.T (MINUTES)	LOG DEL.P	DEL.P PSIA	LOG DEL.T	LOG DEL.P	DEL.T	REMARKS
4.45.0	3420.08	224.00	2.3502	524.73	2.7199	2.7199	36	
4.50.0	3415.67	229.00	2.3598	525.14	2.7203	2.7203		
4.55.0	3420.09	234.00	2.3692	524.72	2.7199	2.7199		
5.0.0	3420.11	239.00	2.3784	524.70	2.7199	2.7199		
5.5.0	3420.09	244.00	2.3874	524.72	2.7199	2.7199		
5.10.0	3420.40	249.00	2.3502	524.33	2.7196	2.7196		
5.15.0	3420.69	254.00	2.4048	524.12	2.7194	2.7194		
5.20.0	3421.00	259.00	2.4133	523.81	2.7192	2.7192		
5.25.0	3420.89	264.00	2.4216	523.92	2.7193	2.7193		
5.30.0	3421.04	269.00	2.4298	523.77	2.7191	2.7191	37	
5.35.0	3421.16	274.00	2.4378	523.63	2.7190	2.7190		
5.40.0	3421.07	279.00	2.4456	523.74	2.7191	2.7191		
5.45.0	3421.53	284.00	2.4533	523.28	2.7187	2.7187		
5.50.0	3421.44	289.00	2.4609	523.37	2.7188	2.7188		
5.55.0	3421.31	294.00	2.4683	523.50	2.7189	2.7189		
6.0.0	3421.31	299.00	2.4757	523.50	2.7189	2.7189		
6.5.0	3421.25	304.00	2.4829	523.66	2.7190	2.7190		
6.10.0	3421.13	309.00	2.4900	523.68	2.7191	2.7191		
6.15.0	3421.31	314.00	2.4969	523.50	2.7189	2.7189	38	
6.20.0	3421.50	319.00	2.5036	523.31	2.7188	2.7188		
6.25.0	3421.71	324.00	2.5105	523.10	2.7186	2.7186		
6.30.0	3421.85	329.00	2.5172	522.96	2.7185	2.7185		
6.35.0	3422.04	334.00	2.5237	522.77	2.7183	2.7183		
6.40.0	3422.24	339.00	2.5302	522.57	2.7181	2.7181		
6.45.0	3422.39	344.00	2.5366	522.42	2.7180	2.7180		
6.50.0	3422.42	349.00	2.5428	522.39	2.7180	2.7180		
6.55.0	3422.89	354.00	2.5490	521.92	2.7176	2.7176		
7.0.0	3423.21	359.00	2.5551	521.60	2.7173	2.7173	39	
7.5.0	3423.27	364.00	2.5611	521.54	2.7173	2.7173		
7.10.0	3423.60	369.00	2.5670	521.21	2.7170	2.7170		
7.15.0	3423.71	374.00	2.5729	521.10	2.7169	2.7169		
7.20.0	3423.78	379.00	2.5786	521.03	2.7169	2.7169		
7.25.0	3423.91	384.00	2.5843	520.90	2.7168	2.7168		
7.30.0	3424.30	389.00	2.5899	520.51	2.7164	2.7164		
7.35.0	3424.36	394.00	2.5955	520.45	2.7164	2.7164		
7.40.0	3424.58	399.00	2.6010	520.23	2.7162	2.7162		
7.45.0	3424.79	404.00	2.6064	520.02	2.7160	2.7160	40	
7.50.0	3424.87	409.00	2.6117	519.94	2.7160	2.7160		
7.55.0	3425.00	414.00	2.6170	519.75	2.7158	2.7158		
8.0.0	3425.10	419.00	2.6222	519.71	2.7158	2.7158		
8.5.0	3425.00	424.00	2.6274	519.81	2.7158	2.7158		
8.10.0	3425.51	429.00	2.6325	519.30	2.7154	2.7154		

FLOPETROL
PRESSURE & TEMPERATURE CALCULATIONS

TIME	PRESS.	TEMP.	DEL.T	LOG DEL.T	DEL.P	LOG DEL.P	LOG T+DEL.T	REMARKS
HR:MIN:SS	PSIA	DEG.F	(MINUTES)		PSIA		DEL.T	
8.15.0	3425.74		434.00	2.6375	519.07	2.7152		40
8.20.0	3425.62	199.4	439.00	2.6425	518.99	2.7152		
8.25.0	3426.02		444.00	2.6474	518.79	2.7150		
8.30.0	3426.04	199.4	445.00	2.6522	518.77	2.7150		41
8.35.0	3426.04		454.00	2.6571	518.77	2.7150		
8.40.0	3426.26	199.6	455.00	2.6618	518.53	2.7146		
8.45.0	3426.16		464.00	2.6665	518.65	2.7149		
8.50.0	3426.63	199.6	465.00	2.6712	518.18	2.7145		
8.55.0	3426.64		474.00	2.6758	518.17	2.7145		
9.0.0	3426.64	199.6	475.00	2.6803	517.97	2.7143		
9.5.0	3426.68		484.00	2.6848	517.93	2.7143		
9.10.0	3427.06	199.6	485.00	2.6893	517.73	2.7141		
9.15.0	3427.13		494.00	2.6937	517.66	2.7141		42
9.20.0	3427.24	199.6	499.00	2.6981	517.57	2.7140		
9.25.0	3427.30		504.00	2.7024	517.51	2.7139		
9.30.0	3427.43	199.6	509.00	2.7067	517.38	2.7136		
9.35.0	3427.45		514.00	2.7110	517.36	2.7136		
9.40.0	3427.77	199.6	519.00	2.7152	517.44	2.7135		
9.45.0	3427.99		524.00	2.7193	516.84	2.7133		
9.50.0	3428.21	199.9	525.00	2.7235	516.60	2.7132		
9.55.0	3428.06		534.00	2.7275	516.73	2.7133		
10.0.0	3428.32	199.9	539.00	2.7316	516.49	2.7131		43
10.5.0	3428.43		544.00	2.7356	516.38	2.7130		
10.10.0	3428.56	199.9	549.00	2.7396	516.45	2.7130		
10.15.0	3428.60		554.00	2.7435	516.01	2.7127		
10.20.0	3428.76	199.9	559.00	2.7474	516.05	2.7127		
10.25.0	3428.72		564.00	2.7513	516.09	2.7127		
10.30.0	3428.72	199.9	569.00	2.7551	516.09	2.7127		
10.35.0	3428.80		574.00	2.7589	516.01	2.7127		
10.40.0	3429.04	199.9	579.00	2.7627	515.77	2.7125		
10.45.0	3429.05		584.00	2.7664	515.76	2.7124		
10.50.0	3429.65		585.00	2.7672	515.96	2.7126		44
10.55.0	3429.98	200.1	586.00	2.7679	515.83	2.7125		
10.50.0	3430.92		587.00	2.7686	513.89	2.7109		
10.45.0	3437.14		588.00	2.7694	507.67	2.7056		
10.50.0	3441.15		589.00	2.7701	503.60	2.7021		SHUT IN TIME 10.53.0
10.51.0	3444.09		590.00	2.7709	500.72	2.6996		
10.52.0	3446.63		591.00	2.7716	498.18	2.6974		FLOWING PRES. 3446.63
10.53.0	3471.21		0.00	0.0000	40.45	1.6009		2.7738
10.54.0	3467.06		1.00	0.3010	39.05	1.5516		2.4735
10.55.0	3485.66		2.00	0.4711	50.44	1.7626		2.2561
10.56.0	3527.07	200.1	3.00					FLOW TIME T (HOURS)

FLUETROL
PRESSURE & TEMPERATURE CALCULATIONS

TIME PRESS. TEMP. DEL.T. LCG DEL.T. DEL.P. LCG DEL.P. LCG T+DEL.T. REMARKS
PSIA DEG.F (MINUTES) PSIA

10.57.0	3503.00		4.00	0.6021	56.43	1.7515	2.1739
10.58.0	3507.51		5.00	0.6990	60.66	1.7645	2.0777
10.59.0	3511.08		6.00	0.7782	64.45	1.8092	1.9993
11.00.0	3513.54		7.00	0.8451	66.91	1.8255	1.9331
11.01.0	3514.80		8.00	0.9031	68.17	1.8336	1.8758
11.02.0	3517.03		9.00	0.9542	70.40	1.8476	1.8254
11.03.0	3518.67		10.00	1.0000	72.24	1.8588	1.7803
11.04.0	3520.30		11.00	1.0414	73.67	1.8673	1.7396
11.05.0	3521.48		12.00	1.0792	74.85	1.8742	1.7026
11.06.0	3522.37	200.1	13.00	1.1139	75.74	1.8793	1.6685
11.07.0	3523.41		14.00	1.1461	76.78	1.8852	1.6371
11.08.0	3524.22		15.00	1.1761	77.55	1.8898	1.6078
11.09.0	3524.93		16.00	1.2041	78.30	1.8938	1.5805
11.10.0	3525.54		17.00	1.2304	78.91	1.8971	1.5549
11.11.0	3526.12		18.00	1.2553	79.49	1.9003	1.5308
11.12.0	3526.67		19.00	1.2789	80.04	1.9033	1.5080
11.13.0	3527.17		20.00	1.3010	80.54	1.9060	1.4864
11.14.0	3527.61		21.00	1.3222	80.98	1.9084	1.4659
11.15.0	3528.03		22.00	1.3424	81.40	1.9106	1.4465
11.16.0	3528.41	199.6	23.00	1.3617	81.76	1.9126	1.4279
11.17.0	3528.75		24.00	1.3802	82.12	1.9144	1.4101
11.18.0	3529.08		25.00	1.3979	82.45	1.9162	1.3930
11.19.0	3529.30		26.00	1.4150	82.73	1.9177	1.3767
11.20.0	3529.63		27.00	1.4314	83.00	1.9191	1.3610
11.21.0	3529.87		28.00	1.4472	83.24	1.9203	1.3459
11.22.0	3530.12		29.00	1.4624	83.49	1.9216	1.3314
11.23.0	3530.36		30.00	1.4771	83.73	1.9229	1.3174
11.24.0	3530.57		31.00	1.4914	83.94	1.9240	1.3038
11.25.0	3530.78		32.00	1.5051	84.15	1.9251	1.2907
11.26.0	3530.98	198.9	33.00	1.5185	84.35	1.9261	1.2781
11.27.0	3531.18		34.00	1.5315	84.55	1.9271	1.2658
11.28.0	3531.35		35.00	1.5441	84.72	1.9280	1.2539
11.29.0	3531.51		36.00	1.5563	84.88	1.9288	1.2423
11.30.0	3531.66		37.00	1.5682	85.03	1.9296	1.2311
11.31.0	3531.82		38.00	1.5798	85.19	1.9304	1.2202
11.32.0	3531.95		39.00	1.5911	85.32	1.9311	1.2097
11.33.0	3532.13		40.00	1.6021	85.50	1.9320	1.1993
11.34.0	3532.25		41.00	1.6128	85.62	1.9326	1.1893
11.35.0	3532.36		42.00	1.6232	85.75	1.9332	1.1795
11.36.0	3532.50	196.0	43.00	1.6335	85.87	1.9338	1.1700
11.37.0	3532.64		44.00	1.6435	86.01	1.9345	1.1607
11.38.0	3532.74		45.00	1.6532	86.11	1.9351	1.1516

FLUORTEL

PRESSURE & TEMPERATURE CALCULATIONS

SECTION 1
PAGE 13

REMARKS

DEL.T

LOG DEL.P LOG T DEL.T

DEL.P
PSIA

LOG DEL.T

DEL.T
(MINUTLS)

TEMP.
DEG.F

PNSS.
PSIA

TIME
HR:MIN:SS

TIME HR:MIN:SS	PNSS. PSIA	TEMP. DEG.F	DEL.T (MINUTLS)	LOG DEL.T	DEL.P PSIA	LOG DEL.P	LOG T DEL.T	REMARKS
11.39.0	3532.65		46.00	1.6626	86.22	1.9356	1.1427	
11.40.0	3532.93		47.00	1.6721	86.30	1.9360	1.1341	
11.41.0	3533.03		48.00	1.6812	86.40	1.9365	1.1256	
11.42.0	3533.13		49.00	1.6902	86.50	1.9370	1.1173	
11.43.0	3533.25		50.00	1.6990	86.62	1.9376	1.1092	
11.44.0	3533.31		51.00	1.7076	86.66	1.9379	1.1013	
11.45.0	3533.37		52.00	1.7160	86.74	1.9382	1.0936	
11.46.0	3533.46	197.1	53.00	1.7243	86.83	1.9387	1.0860	
11.47.0	3533.57		54.00	1.7324	86.94	1.9392	1.0785	
11.48.0	3533.65		55.00	1.7404	87.02	1.9396	1.0712	
11.49.0	3533.72		56.00	1.7482	87.09	1.9400	1.0641	
11.50.0	3533.79		57.00	1.7559	87.16	1.9403	1.0570	
11.51.0	3533.86		58.00	1.7634	87.25	1.9408	1.0502	
11.52.0	3533.94		59.00	1.7709	87.31	1.9411	1.0434	
11.53.0	3534.03		60.00	1.7782	87.40	1.9415	1.0368	
11.54.0	3534.08		61.00	1.7853	87.45	1.9418	1.0302	
11.55.0	3534.15		62.00	1.7924	87.52	1.9421	1.0238	
11.56.0	3534.23	196.3	63.00	1.7993	87.60	1.9425	1.0176	
11.57.0	3534.29		64.00	1.8062	87.66	1.9428	1.0114	
11.58.0	3534.36		65.00	1.8129	87.73	1.9431	1.0053	
11.59.0	3534.39		66.00	1.8195	87.76	1.9433	0.9993	
12.0.0	3534.44		67.00	1.8261	87.81	1.9435	0.9935	
12.10.0	3534.64	195.4	77.00	1.8665	88.21	1.9455	0.9396	
12.20.0	3535.14	194.7	77.00	1.8395	88.51	1.9470	0.8930	46
12.30.0	3535.24	194.2	97.00	1.8668	88.61	1.9475	0.8521	
12.40.0	3535.56	193.6	107.00	2.0294	88.93	1.9490	0.8157	
12.50.0	3535.87	193.1	117.00	2.0682	89.24	1.9506	0.7831	
13.0.0	3535.86	192.6	127.00	2.1038	89.23	1.9505	0.7535	
13.10.0	3536.00	192.2	137.00	2.1367	89.37	1.9512	0.7266	47
13.20.0	3535.66	191.6	147.00	2.1673	89.23	1.9505	0.7019	
13.30.0	3536.50	191.5	157.00	2.1959	89.87	1.9536	0.6792	
13.40.0	3536.98	190.9	167.00	2.2227	90.35	1.9559	0.6581	
13.50.0	3536.05	190.6	177.00	2.2480	89.42	1.9514	0.6385	48
14.0.0	3535.92	190.2	187.00	2.2718	89.29	1.9508	0.6203	
14.10.0	3536.09	189.9	197.00	2.2945	89.46	1.9516	0.6032	
14.20.0	3536.14	189.7	207.00	2.3160	89.51	1.9519	0.5871	
14.30.0	3536.15	189.5	217.00	2.3365	89.52	1.9519	0.5720	49
14.40.0	3536.11	189.5	227.00	2.3560	89.48	1.9517	0.5578	
14.50.0	3536.07	189.1	237.00	2.3747	89.44	1.9515	0.5443	
15.0.0	3536.07	189.0	247.00	2.3927	89.44	1.9515	0.5316	
15.10.0	3536.04	188.8	257.00	2.4099	89.41	1.9514	0.5195	
15.20.0	3536.00	188.6	267.00	2.4265	89.43	1.9515	0.5080	50

FLOPETROL
PRESSURE & TEMPERATURE CALCULATIONS

TIME	LOG DEL.P	LOG T+DEL.T	DEL.P	LOG DEL.T	DEL.T	TEMP.	DEL.T	LOG DEL.T	DEL.P	LOG DEL.P	LOG T+DEL.T	REMARKS
hr.m.ss	PSIA	PSIA	PSIA	(MINUTES)	(MINUTES)	DEG.F	(MINUTES)	PSIA	PSIA	PSIA	PSIA	DEL.T
15.30.0	3535.74	186.4	277.00	2.4425	89.11	1.9499	0.4970					
15.40.0	3536.10	186.4	267.00	2.4579	89.47	1.9517	0.4866					
15.50.0	3536.13	186.1	297.00	2.4728	89.50	1.9518	0.4766					
16.00.0	3536.17	186.1	307.00	2.4871	89.54	1.9520	0.4671					
16.10.0	3536.21	187.9	317.00	2.5011	89.58	1.9522	0.4580					
16.20.0	3536.25	187.5	327.00	2.5145	89.62	1.9524	0.4452					
16.30.0	3536.29	187.7	337.00	2.5276	89.66	1.9526	0.4409					
16.40.0	3536.32	187.7	347.00	2.5403	89.69	1.9527	0.4328					
16.50.0	3536.32	187.5	357.00	2.5527	89.69	1.9527	0.4251					
17.00.0	3536.32	187.3	367.00	2.5647	89.69	1.9527	0.4176					
17.10.0	3536.31	187.3	377.00	2.5763	89.66	1.9527	0.4104					
17.20.0	3536.35	187.2	387.00	2.5877	89.72	1.9529	0.4035					
17.30.0	3536.35	187.2	397.00	2.5988	89.72	1.9529	0.3968					
17.40.0	3536.39	187.2	407.00	2.6096	89.76	1.9531	0.3904					
17.50.0	3536.37	187.0	417.00	2.6201	89.74	1.9530	0.3842					
18.00.0	3536.38	186.8	427.00	2.6304	89.75	1.9530	0.3782					
18.10.0	3536.41	186.8	437.00	2.6405	89.78	1.9532	0.3724					
18.20.0	3536.42	186.8	447.00	2.6503	89.79	1.9532	0.3667					
18.30.0	3536.40	186.8	457.00	2.6599	89.74	1.9531	0.3613					
18.40.0	3536.46	186.6	467.00	2.6693	89.85	1.9535	0.3560					
18.50.0	3536.45	186.6	477.00	2.6785	89.82	1.9534	0.3509					
19.00.0	3536.44	186.6	487.00	2.6875	89.81	1.9533	0.3459					
19.10.0	3536.41	186.4	497.00	2.6964	89.78	1.9532	0.3411					
19.20.0	3536.47	186.4	507.00	2.7050	89.84	1.9535	0.3364					
19.30.0	3536.43	186.3	517.00	2.7135	89.82	1.9534	0.3316					
19.40.0	3536.42	186.3	527.00	2.7216	89.79	1.9532	0.3274					
19.50.0	3536.40	186.3	537.00	2.7300	89.83	1.9534	0.3231					
20.00.0	3536.47	186.3	547.00	2.7380	89.84	1.9535	0.3189					
20.10.0	3536.40	186.1	557.00	2.7459	89.83	1.9534	0.3146					
20.20.0	3536.40	186.1	567.00	2.7530	89.83	1.9534	0.3109					
20.30.0	3536.43	186.1	577.00	2.7612	89.80	1.9533	0.3070					
20.40.0	3536.43	186.1	587.00	2.7686	89.85	1.9535	0.3032					
20.50.0	3536.46	186.1	597.00	2.7760	89.83	1.9534	0.2996					
21.00.0	3536.47	185.9	607.00	2.7832	89.84	1.9535	0.2960					
21.10.0	3536.47	185.9	617.00	2.7903	89.84	1.9535	0.2925					
21.20.0	3536.43	185.7	627.00	2.7973	89.80	1.9533	0.2891					
21.30.0	3536.47	185.7	637.00	2.8041	89.84	1.9535	0.2858					
21.40.0	3536.47	185.7	647.00	2.8109	89.84	1.9535	0.2825					
21.50.0	3536.47	185.7	657.00	2.8176	89.84	1.9535	0.2793					
22.00.0	3536.44	185.7	667.00	2.8241	89.81	1.9533	0.2762					
22.10.0	3536.44	185.7	677.00	2.8306	89.81	1.9533	0.2732					
22.20.0	3536.44	185.7	687.00	2.8370	89.81	1.9533	0.2703					

PRESSURE & TEMPERATURE CALCULATIONS

TIME	PRESS.	TEMP.	DEL.T.	LOG DEL.T.	DEL.P.	LOG DEL.P.	LOG T+DEL.T.	REMARKS
HOURS:SS	PSIA	DEG.F	(MINUTES)		PSIA		DEL.T.	
22.30.0	3536.42	185.5	697.00	2.8432	89.79	1.9532	0.2674	
22.40.0	3536.42	185.5	707.00	2.8494	89.79	1.9532	0.2645	
22.50.0	3536.44	185.5	717.00	2.8555	89.81	1.9533	0.2618	
23.00.0	3536.41	185.5	727.00	2.8615	89.78	1.9532	0.2590	60
23.10.0	3536.43	185.5	737.00	2.8675	89.80	1.9533	0.2564	
23.20.0	3536.39	185.4	747.00	2.8733	89.76	1.9531	0.2538	
23.30.0	3536.43	185.4	757.00	2.8791	89.80	1.9533	0.2512	
23.40.0	3536.43	185.4	767.00	2.8848	89.80	1.9533	0.2487	61
23.50.0	3536.43	185.4	777.00	2.8904	89.80	1.9533	0.2463	
24.00.0	3536.43	185.4	787.00	2.8960	89.80	1.9533	0.2439	
0.10.0	3536.41	185.4	797.00	2.9015	89.78	1.9532	0.2416	
0.20.0	3536.38	185.2	807.00	2.9069	89.75	1.9530	0.2393	
0.30.0	3536.40	185.2	817.00	2.9122	89.77	1.9531	0.2370	
0.40.0	3536.36	185.2	827.00	2.9175	89.75	1.9530	0.2348	62
0.50.0	3536.40	185.2	837.00	2.9227	89.77	1.9531	0.2326	
1.00.0	3536.42	185.2	847.00	2.9279	89.79	1.9532	0.2305	
1.10.0	3536.44	185.2	857.00	2.9330	89.81	1.9533	0.2284	63
1.20.0	3536.40	185.2	867.00	2.9380	89.77	1.9531	0.2263	
1.30.0	3536.40	185.2	877.00	2.9430	89.77	1.9531	0.2243	
1.40.0	3536.40	185.2	887.00	2.9479	89.77	1.9531	0.2223	
1.50.0	3536.38	185.2	897.00	2.9528	89.75	1.9530	0.2204	
2.00.0	3536.34	185.2	907.00	2.9576	89.71	1.9528	0.2185	64
2.10.0	3536.36	185.2	917.00	2.9624	89.73	1.9529	0.2166	
2.20.0	3536.42	185.2	927.00	2.9671	89.79	1.9532	0.2148	
2.30.0	3536.34	185.2	937.00	2.9717	89.71	1.9528	0.2130	
2.40.0	3536.34	185.2	947.00	2.9763	89.71	1.9528	0.2112	65
2.50.0	3536.36	185.2	957.00	2.9809	89.73	1.9529	0.2094	
3.00.0	3536.38	185.2	967.00	2.9854	89.75	1.9530	0.2077	
3.10.0	3536.38	185.2	977.00	2.9899	89.75	1.9530	0.2060	
3.20.0	3536.40	185.2	987.00	2.9943	89.77	1.9531	0.2043	
3.30.0	3536.40	185.2	997.00	2.9987	89.77	1.9531	0.2027	66
3.40.0	3536.44	185.2	1007.00	3.0030	89.81	1.9533	0.2011	
3.50.0	3536.43	185.4	1017.00	3.0073	89.80	1.9533	0.1995	
4.00.0	3536.45	185.4	1027.00	3.0116	89.82	1.9534	0.1979	
4.10.0	3536.45	185.4	1037.00	3.0158	89.82	1.9534	0.1964	
4.20.0	3536.51	185.4	1047.00	3.0199	89.86	1.9537	0.1949	67
4.30.0	3536.51	185.5	1057.00	3.0241	89.88	1.9537	0.1934	
4.40.0	3536.37	185.5	1067.00	3.0282	89.74	1.9530	0.1919	
4.50.0	3536.44	185.5	1077.00	3.0322	89.81	1.9533	0.1905	
5.00.0	3536.64	185.5	1087.00	3.0362	90.01	1.9543	0.1891	
5.10.0	3537.24	185.5	1097.00	3.0402	90.61	1.9572	0.1877	68
5.20.0	3537.25	185.7	1107.00	3.0441	90.62	1.9572	0.1863	

09.12.81

FLOPPING
PRESSURE & TEMPERATURE CALCULATIONS

SECTION 1
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TIME	PRESS.	TEMP.	DEL.T.	LOG DEL.T.	DEL.P.	LOG DEL.P.	LOG T-DEL.T.	REMARKS
HR:MIN:SS	FSIA	DEG.F	(MINUTES)		FSIA		DEL.T.	
5.30.0	3537.17		1117.00	3.0481	90.54	1.9568	0.1849	68
5.40.0	3537.15	185.9	1127.00	3.0515	90.52	1.9567	0.1836	
5.50.0	3537.13	185.5	1137.00	3.0558	90.50	1.9566	0.1823	69
6.0.0	3537.13	185.9	1147.00	3.0596	90.50	1.9566	0.1810	
6.10.0	3537.11	185.9	1157.00	3.0633	90.48	1.9566	0.1797	
6.20.0	3537.09	185.9	1167.00	3.0671	90.46	1.9565	0.1784	
6.30.0	3537.05	185.9	1177.00	3.0708	90.42	1.9563	0.1772	70
6.40.0	3537.05	185.9	1187.00	3.0745	90.42	1.9563	0.1760	
6.50.0	3537.04	186.1	1197.00	3.0781	90.41	1.9562	0.1748	
7.0.0	3537.01	185.9	1207.00	3.0817	90.38	1.9561	0.1736	
7.10.0	3537.01	186.1	1217.00	3.0853	90.38	1.9561	0.1724	
7.20.0	3537.01	186.1	1227.00	3.0888	90.38	1.9561	0.1712	71
7.30.0	3536.99	186.1	1237.00	3.0924	90.36	1.9560	0.1701	
7.40.0	3536.97	186.1	1247.00	3.0959	90.34	1.9559	0.1690	
7.50.0	3536.95	186.1	1257.00	3.0993	90.32	1.9558	0.1678	
8.0.0	3536.93	186.1	1267.00	3.1028	90.30	1.9557	0.1667	72
8.10.0	3536.91	186.1	1277.00	3.1062	90.28	1.9556	0.1657	
8.20.0	3536.98	186.1	1287.00	3.1096	90.26	1.9559	0.1646	End of build up Start bullheading

FLOTTROL
PRESSURE & TEMPERATURE CALCULATIONS

TIME	PRESS.	TEMP.	DEL.T.	LOG DEL.T.	DEL.P.	LOG DEL.P.	LOG T+DEL.T.	REMARKS
HR:MIN:SS	PSIA	DEG.F	(MINUTES)		PSIA		DEL.T.	
8.21.00	3537.00							
8.24.00	3530.03							
8.25.00	3496.45							
8.24.00	3425.39							
8.25.00	3405.02							
8.26.00	3375.21	186.4						
8.27.00	3354.40							
8.28.00	3339.97							
8.29.00	3328.22							
8.30.00	3322.62							
8.31.00	3316.40							
8.32.00	3311.39							
8.33.00	3310.17							
8.34.00	3313.27							
8.35.00	3314.71							
8.36.00	3310.61	191.3						
8.37.00	3313.94							
8.38.00	3333.19							
8.39.00	3361.45							
8.40.00	3422.78							
8.41.00	3406.26							
8.42.00	3369.38							
8.43.00	3372.02							
8.44.00	3359.17							
8.45.00	3334.36							
8.46.00	3310.53	195.3						
8.47.00	3293.06							
8.48.00	3280.35							
8.49.00	3274.69							
8.50.00	3322.37							
8.51.00	3309.79							
8.52.00	3411.16							
8.53.00	3442.86							
8.54.00	3403.35							
8.55.00	3476.88							
8.56.00	3486.58	197.4						
8.57.00	3454.08							
8.58.00	3300.24							
8.59.00	3504.36							
9.00.00	3507.77							
9.01.00	3510.62							
9.02.00	3513.00							

FLOPETROL
PRESSURE & TEMPERATURE CALCULATIONS

TIME IN.PA.SS PRESS. PSIA TEMP. DEG.F DEL.T (MINUTES) LOG DEL.T DEL.P PSIA LOG T+DEL.T DEL.T REMARKS

5. 3. 0	3515.11									
5. 4. 0	3516.93									
5. 5. 0	3518.51									
5. 6. 0	3519.93		198.7							
5. 7. 0	3521.07									
5. 8. 0	3522.08									
5. 9. 0	3523.42									
5.10. 0	3532.15									
5.11. 0	3540.57									
5.12. 0	3554.55									
5.13. 0	3561.08									
5.14. 0	3566.54									
5.15. 0	3572.86									
5.16. 0	3562.77		198.1							
5.17. 0	3562.45									
5.18. 0	3564.98									
5.19. 0	3568.95									
5.20. 0	3571.56									
5.21. 0	3564.97									
5.22. 0	3563.75									
5.23. 0	3565.12									
5.24. 0	3567.68									
5.25. 0	3571.81									
5.26. 0	3576.71		193.6							
5.27. 0	3576.98									
5.28. 0	3578.55									
5.29. 0	3571.97									
5.30. 0	3577.61									
5.31. 0	3569.31									
5.32. 0	3569.89									
5.33. 0	3570.50									
5.34. 0	3571.94									
5.35. 0	3573.68									
5.36. 0	3575.90		189.1							
5.37. 0	3578.26									
5.38. 0	3580.63									
5.39. 0	3583.15									
5.40. 0	3583.77									
5.41. 0	3583.78									
5.42. 0	3583.51									
5.43. 0	3583.27									
5.44. 0	3584.45									

FLUORINOL
PRESSURE & TEMPERATURE CALCULATIONS

SECTION 1
PAGE 19

TIME PRESS. PSIA TEMP. DEG.F DEL.T (MINUTES) LOG DEL.T DEL.P PSIA LOG DEL.P LOG T+DEL.T DEL.T

9.45.	0	3566.73								
9.46.	0	3590.16	186.3							
9.47.	0	3594.45								
9.48.	0	3595.65								
9.49.	0	3594.13								
9.50.	0	3556.37								
9.51.	0	3529.67								
9.52.	0	3600.67								
9.53.	0	3600.70								
9.54.	0	3610.00								
9.55.	0	3614.66								
9.56.	0	3612.55	184.3							
9.57.	0	3611.20								
9.58.	0	3610.11								
9.59.	0	3609.06								
10. 0.	0	3609.37								
10. 1.	0	3612.58								
10. 2.	0	3612.09								
10. 3.	0	3611.52								
10. 4.	0	3598.54								
10. 5.	0	3586.17								
10. 6.	0	3571.09	162.1							
10. 7.	0	3571.24								
10. 8.	0	3577.12								
10. 9.	0	3569.74								
10.10.	0	3620.14								
10.11.	0	3623.25								
10.12.	0	3621.40								
10.13.	0	3611.27								
10.14.	0	3605.36								
10.15.	0	3608.46								
10.16.	0	3616.05	179.2							
10.17.	0	3632.57								
10.18.	0	3652.20								
10.19.	0	3671.56								
10.20.	0	3695.12								
10.21.	0	3721.66								
10.22.	0	3753.55								
10.23.	0	3761.55								
10.24.	0	3765.96								
10.25.	0	3755.56								
10.26.	0	3626.55	174.2							

FLUORINE
PRESSURE & TEMPERATURE CALCULATIONS

WELL PRESS. TEMP. DEL.T LOG DEL.T DEL.P LOG DEL.P LOG T+DEL.T DEL.T REMARKS
IN. PRESS. PSIA DEG.F (MINUTES) PSIA

10.27. 0	3656.11								
10.28. 0	3692.61								
10.29. 0	3966.57								
10.30. 0	4244.16								
10.31. 0	4504.12								
10.32. 0	4645.86								
10.33. 0	5040.57								
10.34. 0	5232.37								
10.35. 0	5107.96								
10.36. 0	4734.14	167.2							
10.37. 0	4597.75								
10.38. 0	5176.50								
10.39. 0	5317.12								
10.40. 0	5126.82								
10.41. 0	4745.00								
10.42. 0	4552.76								
10.43. 0	5929.56								
10.44. 0	5924.26								
10.45. 0	3921.65								
10.46. 0	3919.46	160.5							
10.47. 0	3916.74								
10.48. 0	3914.89								
10.49. 0	3912.52								
10.50. 0	3911.17								
10.51. 0	3909.14								
10.52. 0	3907.16								
10.53. 0	3905.31								
10.54. 0	3903.89								
10.55. 0	3902.66								
10.56. 0	3900.55	157.6							
10.57. 0	3898.47								
10.58. 0	3897.19								
10.59. 0	3895.65								
11. 0. 0	3894.18								
11. 1. 0	3892.61								
11. 2. 0	3891.06								
11. 3. 0	3889.45								
11. 4. 0	3887.55								
11. 5. 0	3886.44								
11. 6. 0	3884.05	157.1							
11. 7. 0	3883.42								
11. 8. 0	3881.55								

FLUORIMETER
PRESSURE & TEMPERATURE CALCULATIONS

TIME PRESS. TEMP. DEL.T. LOG DEL.T. DEL.P LOG DEL.P LOG T+DEL.T DEL.T. REMARKS
 HR. MIN. SS PSIA DEG.F (MINUTES) PSIA DEL.T

11. 9. 0	3880.48									
11.10. 0	3879.15									
11.11. 0	3877.60									
11.12. 0	3876.47									
11.13. 0	3875.13									
11.14. 0	3873.50									
11.15. 0	3872.60									
11.16. 0	3871.27	157.5								
11.17. 0	3870.01									
11.18. 0	3868.63									
11.19. 0	3866.56									
11.20. 0	3864.48									
11.21. 0	3863.20									
11.22. 0	3862.06									
11.23. 0	3864.67									
11.24. 0	3866.71									
11.25. 0	3861.59									
11.26. 0	3867.79	157.6								
11.27. 0	3865.50									
11.28. 0	3855.46									
11.29. 0	3802.58									
11.30. 0	3578.95									
11.31. 0	3563.09									
11.32. 0	3551.42									
11.33. 0	3542.62									
11.34. 0	3536.05									
11.35. 0	3531.01									
11.36. 0	3527.17	156.7								
11.37. 0	3524.15									
11.38. 0	3521.84									
11.39. 0	3519.56									
11.40. 0	3516.25									
11.41. 0	3516.95									
11.42. 0	3515.79									
11.43. 0	3514.88									
11.44. 0	3514.00									
11.45. 0	3513.36									
11.46. 0	3512.82	159.6								
11.47. 0	3512.25									
11.48. 0	3511.79									
11.49. 0	3511.36									
11.50. 0	3510.90									

WLOGFETROL
PRESSURE & TEMPERATURE CALCULATIONS

TIME	PRESS. PSIA	TEMP. DEG.F	DEL.T (MINUTES)	LOG DEL.T	DEL.P PSIA	LOG DEL.P - LOG T+DEL.T DEL.T	REMARKS
12.33.0	3505.89						
12.34.0	3505.84						
12.35.0	3505.77						
12.36.0	3505.60	164.6					
12.37.0	3505.73						
12.38.0	3505.69						
12.39.0	3505.67						
12.40.0	3505.66						
12.41.0	3505.62						
12.42.0	3505.56						
12.43.0	3505.57						
12.44.0	3505.53						
12.45.0	3505.48						
12.46.0	3505.44	165.4					
12.47.0	3505.43						
12.48.0	3505.44						
12.49.0	3505.44						
12.50.0	3505.41						
12.51.0	3505.44						
12.52.0	3505.41						
12.53.0	3505.40						
12.54.0	3505.37						
12.55.0	3505.37						
12.56.0	3505.34	166.3					
12.57.0	3505.34						
12.58.0	3505.33						
12.59.0	3505.30						
13.00.0	3505.27						
13.10.0	3505.00	167.0					
13.20.0	3936.89	167.7					79
13.30.0	3935.58	168.4					
13.40.0	3939.57	169.3					
13.50.0	3903.20	170.4					
14.00.0	3971.74	171.1					
14.10.0	3909.38	171.7					80
14.20.0	4139.04	172.4					
14.30.0	4136.51	172.9					
14.40.0	4130.07	173.5					
14.50.0	4162.95	174.0					
15.00.0	4168.02	174.2					
15.10.0	4154.31	174.6					
15.20.0	4153.12	174.7					81

PRESSURE & TEMPERATURE CALCULATIONS

TIME PRESS. TEMP. DEL.T. LOG DEL.T. DEL.P. LOG DEL.P. LOG T+DEL.T. DEL.T. REMARKS
 HR. MIN. PSIA DEG.F (MINUTES) PSIA

15.30.0	4183.34	174.9							82
15.40.0	4182.95	174.9							
15.50.0	4176.97	175.1							
16.0.0	4169.96	174.7							
16.10.0	4172.59	175.5							
16.20.0	4174.55	171.9							83
16.30.0	4172.76	171.0							
16.40.0	4161.01	170.4							
16.50.0	4172.34	170.4							
17.0.0	4177.69	170.4							
17.10.0	4096.93	170.2							84
17.20.0	3996.43	165.9							
17.30.0	3987.55	169.5							
17.40.0	3986.76	169.5							
17.50.0	3979.82	169.0							85
18.0.0	3960.41	168.3							
18.10.0	3982.52	167.9							
18.20.0	3963.93	168.1							
18.30.0	3945.56	168.4							
18.40.0	3952.52	169.3							86
18.50.0	3939.42	170.1							
19.0.0	3943.33	170.8							
19.10.0	3949.49	171.1							
19.20.0	3935.71	171.5							87
19.30.0	3908.10	171.1							
19.40.0	3673.99	168.3							
19.50.0	3785.25	161.8							
20.0.0	3776.61	152.2							
20.10.0	3787.23	141.4							88
20.20.0	3770.02	135.0							
20.30.0	3766.56	127.0							
20.40.0	3721.06	123.3							
20.50.0	3613.71	120.7							89
21.0.0	3532.56	118.9							
21.10.0	3588.18	117.9							
21.20.0	3260.52	116.6							
21.30.0	3132.60	116.1							
21.40.0	2967.14	115.2							
21.50.0	2804.55	114.3							
22.0.0	2705.25	113.2							
22.10.0	2494.29	111.9							
22.20.0	2362.85	110.7							90

FLOPETROL
PRESSURE & TEMPERATURE CALCULATIONS

SECTION 1
PAGE 25

TIME HR. MIN. SS	PRESS. PSIA	TEMP. DEG.F	DEL.T (MINUTES)	LOG DEL.T	DEL.P PSIA	LOG DEL.P	LOG T-DEL.T -DEL.T	REMARKS
22.30.0	2210.62	109.2						91
22.40.0	2014.95	107.4						
22.50.0	1825.19	105.4						
23.00.0	1650.13	103.1						
23.10.0	1441.12	100.6						92
23.20.0	1243.24	97.7						
23.30.0	1050.42	94.6						
23.40.0	1007.85	91.9						
23.50.0	805.66	89.8						93
24.00.0	720.53	86.3						
0.10.0	520.32	80.7						
0.20.0	436.07	87.1						
0.30.0	438.37	83.3						
0.40.0	429.27	81.0						94
0.50.0	422.96	78.4						
1.00.0	329.66	77.0						
1.10.0	188.17	75.7						
1.20.0	85.38	75.0						95
1.30.0	75.79	67.1						
1.40.0	66.01	60.6						
1.50.0	19.39	55.8						
2.00.0	19.09	53.4						
2.10.0	17.17	54.3						96
2.20.0	12.63	54.1						
2.30.0	7.10	54.3						
2.40.0	5.75	59.2						

Base : STAVANGER

- SEQUENCE OF EVENTS -

DATE	TIME	OPERATION
		<u>DST No. 2</u>
		Perforation at 2432 - 2440 m
07.12.81	02.30	Start to prepare tools for test
	04.26	Battery connected S.S.D.R. 81049
	04.32	First transfer S.S:D.R. 81049
	04.36	Second transfer S.S.D.R. 81049
	04.41	Battery connected S.S.D.R. 81048
	04.47	First transfer S.S.D.R. 81048
	04.51	Second transfer S.S.D.R. 81048
	05.07	S.S.D.R. 81049 set in tail pipe with DST hanging kit
	05.25	S.S.D.R. 81048 set in X-N nipple in tail pipe
	05.35	Start to R.I.H. with tools
08.12.81	00.37	On depth 81048 at 2408.74 m
		81049 at 2421.30 m Set packer
	01.00	Open APR-N tester valve
	01.07	Open on 1" adj. choke
	01.11	Change to 3/4" adj. choke
	01.17	Change to 3/4" fixed choke
	01.37	Decrease to 28/64" adj. choke
	01.45	Change to 28/64" fixed choke
	03.38	Change to 1/2" fixed choke
	04.12	Through heater
	04.27	Through separator

