

_ BOTTOM HOLE PRESSURE CALCULATIONS _

Well producing through casing / tubing / drill pipe
 Bottom hole temperature: _____ at depth _____ with _____

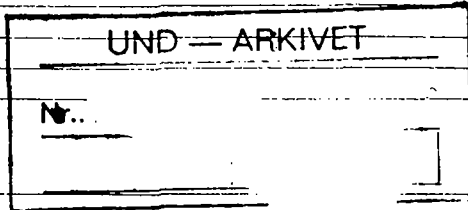
INSTRUMENT DATA

Instrument type
 Press element No and range
 Recording element No.
 Clock No and capacity

CALIBRATION DATA

Calibration No and date:
 Calibration temperature:
 Calibration range
 K:
 a. (calibrated chart)
 PRC. (non calibrated chart)

LOWER GAUGE



UPPER GAUGE

R.P.G. -3 AMERADA
 41673 0-3000 PSI
 37097
 f-696 144 hrs.

1 4/6/81

AMBIENT
 300 - 3000 PSI
 1529.8688 PSI/INCH
 6.75 PSI

DATE - TIME		Choke size	W.H. pressure	Depth	Y	C *	P	Y	C *	P
Time	Cumul									
HR:MIN	HR:MIN	INCH	PSIG	METRE				INCH		PSIG
		28/6/81	OIL ZONE	TEST						
23:35		CLOCK AND STYLUS 'ON'								
		29/6/81								
00:50		PRESSURE RECORDERS IN LUBRICATOR.								
01:10		PRESSURISE LUBRICATOR								
01:15			696	LUBRICATOR STOP						
01:20			696	UNREADABLE FOR						
01:30			698	ACCURATE PRESSURE.						
01:40			700							
01:50			700					APPROX. 0.4466		
02:00			702					= 690	PSI.	
02:10			702	START TO R.I.H. WITH PRESSURE RECORDERS.						
02:20			703							
02:30			703							
02:35		WIRELINE ON DEPTH @ 979 m - 2nd GRADIENT STOP.								
02:40			705	989				1.0505		1614
02:50			706	989				1.0510		1615
03:00			707	989				1.0513		1615

REMARKS :

* Only used if its value is significant compared to the accuracy of the gauge

- B.H. PRESSURE CALCULATIONS (Continuation) -

DATE - TIME		Choke size INCH	W H pressure PSIG	LOWER GAUGE			UPPER GAUGE		
Time GR:MIN	Cumul HR:MIN			Depth M	Y	C *	P	Y INCH	C *
29/6/81									
03:10			709	989				1.0511	1615
03:20			710	989				1.0511	1615
03:30			712	989				1.0511	1615
03:35		WIRELINER CONTINUE R.I.H.							
03:40			714					1.1366	1746
03:44		WIRELINER AT DEPTH 1279 m - 3rd GRADIENT STOP.							
03:50			715	1289				1.2794	1964
04:00			716	1289				1.2800	1965
04:10			717	1289				1.2798	1965
04:20			718	1289				1.2798	1965
04:30			719	1289				1.2795	1964
04:40			720	1289				1.2801	1965
04:44		WIRELINER CONTINUE R.I.H.							
04:50			720					1.4330	2199
04:55	0	RECORDERS LANDED IN 'F' NIPPLE @ 1566 m.							
05:00	5		723	1576				UNREADABLE	
05:10	15		723	1576				1.4940	2292
05:20	25		723	1576				1.4942	2293
05:30	35			1576				1.4945	2293
05:40	45			1576				1.4945	2293
05:50	55		668	1576				1.4946	2293
06:00			683	1576				1.4930	2291
06:01	0	OPEN AT CHOKE MANIFOLD *1 ON 28/64" FIXED CHOKE.							
06:15	0.14	28/64	500	1576				1.4323	2198
06:17	0.16	"	SWITCH FLOW THROUGH SEPARATOR						
06:30	0.29	"	555	1576				1.4493	2224
06:45	0.44	"	575	"				1.4481	2222
07:00	0.59	"	585	"				1.4484	2223

- B. H. PRESSURE CALCULATIONS (Continuation) -

DATE - TIME		Choke size	W H pressure	LOWER GAUGE			UPPER GAUGE		
Time	Cumul			Depth	Y	C *	P	Y	C *
HR:MIN	HR:MIN	INCH	PSIG	M			INCH		PSIG
29/6/81									
07:15	1.14	28/64	580	1576			1.4520		2228
07:30	1.29	"	635	"			1.4510		2227
07:45	1.44	"	630	"			1.4524		2229
08:00	1.59	"	615	"			1.4562		2235
08:05	2.04		SWITCH SAND FILTERS						
08:15	2.14	28/64	585	1576			1.4194		2178
08:30	2.29	"	590	"			1.4207		2180
08:45	2.44	"	610	"			1.4321		2198
08:56	2.55		BYPASS SAND FILTERS						
09:00	2.59	"	590	1576			1.4138		2170
09:15	3.14	"	600	"			1.4132		2169
09:30	3.29	"	602	"			1.4113		2166
09:45	3.44	"	632	"			1.4429		2214
09:48	3.47	INCREASE TO 48/64"		CHOKE					
10:00	3.59	48/64	501	1576			1.3028		2000
10:15	4.14	"	502	"			1.2927		1984
10:25	4.24	SWITCH TO 48/64" ADJ AND BEAN DOWN TO 44/64"							
10:30	4.29	44/64	552	1576			1.3410		2058
10:33	4.32	SWITCH TO 40/64" FIXED CHOKE							
10:45	4.44	40/64	550	1576			1.3360		2051
11:00	4.59	"	548	"			1.3325		2045
11:15	5.14	"	546	"			1.3314		2044
11:30	5.29	"	"	"			1.3301		2042
11:45	5.44	"	"	"			1.3298		2041
12:00	5.59	"	547	"			1.3297		"
12:15	6.14	"	"	"			"		"
12:30	6.29	"	550	"			1.3280		2083
12:30	6.29	SWITCH TO 40/64" ADJ CHOKE.							

FLOPPETROL

Section: ANNEX 12

B. H. PRESSURE CALCULATIONS (Continuation)

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				LOWER GAUGE				UPPER GAUGE		
DATE - TIME		Choke size	W H pressure	Depth	Y	C *	P	Y	C *	P
Time	Cumul									
HR:MIN	HR:MIN									
29/6/81										
12:34	6.33	SWITCH TO 64/64" FIXED CHOKE.								
12:45	6.44	64/64	415	1576				1.2100		1858
13:00	6.59	"	414	"				1.2042		1849
13:15	7.14	"	415	"				1.2040		"
13:27	7.26	THORNTON MANIFOLD ON								
13:30	7.29	64/64						1.2055		1851
13:45	7.44	"	433	1576				1.2158		1867
14:00	7.59	"	"	"				1.2138		1864
14:15	8.14	"	"	"				1.2132		1863
14:30	8.29	"	"	"				"		"
14:45	8.44	"	"	"				1.2120		1861
15:00	8.59	"	435	"				1.2128		1862
15:15	9.14	"	"	"				"		"
15:30	9.29	"	437	"				1.2135		1863
15:45	9.44	"	"	"				1.2132		"
16:00	9.59	"	"	"				1.2130		1862
16:15	10.14	"	"	"				1.2127		"
16:30	10.24	"	"	"				1.2120		1861
16:45	10.44	"	"	"				1.2131		1863
17:00	10.59	"	"	"				1.2120		1861
17:15	11:14	"	"	"				1.2114		1860
17:30	11:29	"	"	"				"		"
17:45	11:44	"	"	"				"		"
18:00	11.59	"	"	"				1.2110		1859
18:15	12.14	"	437	"				1.2103		1858
18:30	12.29	"	438					"		"
18:45	12.44	"	"					1.2098		"
19:00	12.51	"	"					"		"

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- B. H. PRESSURE CALCULATIONS (Continuation) -

DATE - TIME		Choke size	W H pressure	LOWER GAUGE			UPPER GAUGE		
				Depth	Y	C *	P	Y	C *
Time	Cumul								
HR:MIN	HR:MIN	INCH	PSIG	M				INCH	PSIG
29/6/81									
19:15	13.14	64/64	438					1.2096	1857
19:30	13.29	"	"					"	"
19:45	13.44	"	"					1.2100	1858
20:00	13.59	"	439					1.2097	"
20:15	14.14	"	440					1.2104	1859
20:30	14.29	"	"					1.2096	1857
20:45	14.44	"	"					1.2102	1858
21:00	14.59	"	"					1.2100	"
21:15	15.14	"	"					"	"
21:30	15.29	"	442					"	"
21:45	15.44	"	"					1.2101	"
22:00	15.59	"	"					1.2103	"
22:15	16.14	"	440					1.2103	"
22:30	16.29	"	"					1.2100	"
22:45	16.44	"	437					1.2093	1857
23:00	16.59	"	440					1."	"
23:10	17.09	SWITCH FLOW TO STARBOARD BURNER							
23:15	17.14	64/64	440					1.2080	1855
23:30	17.29	"	"					1.2085	1856
23:45	17.44	"	"					1.2090	"
24:00	17.59	"	442					1.2102	1858
30/6/81									
00:30	18.29	64/64	441					1.2107	1859
01:00	18.59	"	442					"	"
01:30	19.29	"	443					"	"
02:00	19.59	"	"	1576				1.2104	"
02:30	20.29	"	"	"				1.2100	1858
03:00	20.59	"	"	"				"	"

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_ B. H. PRESSURE CALCULATIONS (Continuation) _

				LOWER GAUGE			UPPER GAUGE			
DATE - TIME		Choke	W H	Depth	Y	C *	P	Y	C *	P
Time	Cumul	Size	pressure							
HR:MIN	HR:MIN	INCH	PSIG	M				INCH		PSIG
30/6/81										
03:30	21.29	64/64	443	1576				1.2100		1858
04:00	21.59	"	"	"				1.2104		1859
04:30	22.29	"	"	"				1.2102		1858
05:00	22.59	"	"	"				"		"
05:30	23.29	"	445	"				"		"
06:00	23.59	"	"	"				1.2106		1859
06:30	24.29	"	443	"				"		"
07:00	24.59	"	"	"				1.2103		1858
07:30	25.29	"	"	"				1.2101		"
08:00	25.59	"	"	"				1.2099		"
08:30	26.29	"	"	"				"		"
09:00	26.59	"	"	"				1.2100		"
09:30	27.29	"	"	"				1.2101		"
10:00	27.59	"	444	"				"		"
10:30	28.29	"	445	"				"		"
11:00	28.59	"	"	"				"		"
11:30	29.29	"	"	"				1.2094		1857
12:00	29.59	"	446	"				1.2102		1858
12:30	30.29	"	445	"				1.2100		"
13:00	30.59	"	"	"				1.2090		1856
13:30	31.29	"	"	"				1.2094		1857
13:45	31.44	"	"	"				1.2090		1856
14:00	31.59	"	"	"				"		"
14:15	32.14	"	"	"				1.2093		1857
14:30	32.29	"	445	"				1.2090		1856
15:00	32.59	"	"	"				"		"
15:30	33.29	"	446	"				1.2092		1857
16:00	33.59	"	"	"				1.2088		1856

In DOP 106 Litografen 8/75

- B.H. PRESSURE CALCULATIONS (Continuation) -

				LOWER GAUGE			UPPER GAUGE			
DATE - TIME		Choke size INCH	W H pressure PSIG	Depth M	Y	C *	P	Y	C *	P
Time HR:MIN	Cumul HR:MIN									
30/6/81										
16:30	34.29	64/64	446	1576				1.2090		1856
16:38	34.37	SAND TRAP "ON" BOTH SIDES								
17:00	34.59	64/64	446	1576				1.2105		1859
17:30	35.29	"	"	"				1.2115		1860
18:00	35.59	"	448	"				1.2126		1862
18:30	36.29	"	450	"				1.2134		1863
19:00	36.59	"	452	"				1.2153		1866
19:30	37.29	"	"	"				1.2157		1867
20:00	37.59	"	453	"				1.2160		"
20:30	38.29	"	452	"				1.2165		1868
21:00	38.59	"	453	"				1.2180		1870
21:30	39.29	"	455	"				1.2183		1871
22:00	39.59	"	"	"				1.2187		"
22:30	40.29	"	457	"				1.2194		1872
23:00	40.59	"	"	"				1.2198		1873
23:30	41.29	"	"	"				1.2204		1874
23:43	41.42	BYPASS THORNTON MANIFOLD								
24:00	41.59	64/64	443	1576				1.2056		1851
1/7/81										
00:30	42.29	"	446	"				1.2061		1852
00:30	42.29	CHANGE FLOW TO PORT BURNER. SIEZED VALVE ON RIG BULKHEAD. CAUSED PRESSURE BUILD-UP.								
01:00	42.59	64/64	450	1576				1.2225		1877
01:30	43.29	"	"	"				1.2210		1875
02:00	43.59	"	"	"				1.2214		"
02:30	44.29	"	453	"				1.2200		1873
03:00	44.59	"	452	"				1.2194		1872
03:30	45.29	"	"	"				1.2205		1874

_ B. H. PRESSURE CALCULATIONS (Continuation) _

DATE - TIME				Choke size	W H pressure	LOWER GAUGE				UPPER GAUGE		
Time	Cumul					Depth	Y	C *	P	Y	C *	P
HR:MIN	HR:MIN	INCH	PSIG	M				INCH		PSIG		
1/7/81												
04:00	45.59	64/64	453	1576				1.2202		1874		
04:30	46.29	"	455	"				1.2217		1876		
05:00	46.59	"	457	"				1.2220		"		
05:30	47.29	"	"	"				"		"		
05:35	47.34	SAND TRAP BYPASSED										
06:00	47.59	64/64	435	1576				1.2033		1848		
06:12	48.11	FLOW THROUGH SAND TRAP, 1 SIDE ONLY										
06:30	48.29	64/64	437	1576				1.2044		1849		
07:00	48.59	"	"	"				"		"		
07:30	49.29	"	"	"				"		"		
07:54	49.53	FLOW THROUGH THORNTON MANIFOLD										
08:00	49.59	64/64	446	1576				1.2152		1866		
08:30	50.29	"	448	"				1.2162		1867		
09:00	50.50	"	447	"				1.2153		1866		
09:30	51.29	"	"	"				1.2145		1865		
10:00	51.59	"	"	"				"		"		
10:30	52.29	"	"	"				1.2147		"		
11:00	52.59	"	"	"				"		"		
11:30	53.29	"	"	"				"		"		
12:00	53.59	"	"	"				"		"		
12:30	54.29	"	448	"				"		"		
13:00	54.59	"	"	"				1.2149		"		
13:30	55.29	"	"	"				1.2153		1866		
14:00	55.59	"	"	"				"		"		
14:30	56.29	"	450	"				"		"		
15:00	56.59	"	"	"				1.2156		1867		
15:30	57.29	"	"	"				"		"		
16:00	57.59	"	452	"				1.2162		"		

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- B.H. PRESSURE CALCULATIONS (Continuation) -

DATE - TIME		Choke size	W H pressure	Depth	LOWER GAUGE			UPPER GAUGE		
Time	Cumul				Y	C *	P	Y	C *	P
HR:MIN	HR:MIN	INCH	PSIG	M				INCH	PSIG	
1/7/81										
16:30	58.29	64/64	452	1576				1.2162	1867	
17:00	58.59	"	453	"				1.2176	1870	
17:30	59.29	"	"	"				"	"	
18:00	59.59	"	"	"				1.2180	"	
18:30	60.29	"	"	"				"	"	
19:00	60.59	"	"	"				1.2190	1872	
19:30	61.29	"	455	"				"	"	
20:00	61.59	"	456	"				"	"	
20:30	62.29	"	"	"				1.2199	1873	
21:00	62.59	"	"	"				"	"	
21:30	63.29	"	"	"				1.2205	1874	
22:00	63.59	"	"	"				"	"	
22:30	64.29	"	457	"				"	"	
23:00	64.59	"	458	"				1.2218	1876	
23:30	65.29	"	"	"				"	"	
24:00	65.59	"	457	"				1.2223	1877	
2/7/81										
00:30	66.29	"	458	"				1.2231	1878	
01:00	66.59	"	"	"				"	"	
01:30	67.29	"	"	"				1.2220	1876	
02:00	67.59	"	459	"				"	"	
02:30	68.29	"	460	"				1.2230	1878	
03:00	68.59	"	"	"				1.2234	"	
03:30	69.29	"	"	"				"	"	
04:00	69.59	"	"	"				1.2252	1881	
04:30	70.29	"	461	"				1.2240	1879	
05:00	70.59	"	462	"				1.2245	1880	
05:30	71.29	"	"	"				1.2264	1883	

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_ B. H. PRESSURE CALCULATIONS (Continuation) _

				LOWER GAUGE			UPPER GAUGE			
DATE - TIME		Choke	W H	Depth	Y	C *	P	Y	C *	P
Time	Cumul	size	pressure							
HR:MIN	HR:MIN	INCH	PSIG	M				INCH		PSIG
2/7/81										
06:00	71.59	64/64	463	1576				1.2264		1883
06:22	72.21	SWITCH TO SEPARATOR *2								
06:30	72.29	64/64		1576				1.2341		1895
07:00	72.59	"	468	"				1.2297		1888
07:30	73.29	"	"	"				1.2312		1890
07:44	73.43	SWITCH TO SEPARATOR *1								
07:45	73.44	SAND FILTER ON LINE								
08:00	73.59	64/64	447	1576				1.2105		1859
08:30	74.29	"	"	"				"		"
09:00	74.59	"	"	"				1.2113		1860
09:30	75.29	"	"	"				"		"
10:00	75.59	"	"	"				1.2118		1861
10:30	76.29	"	448	"				"		"
11:00	76.59	"	"	"				1.2130		1862
11:30	77.29	"	"	"				"		"
12:00	77.59	"	450	"				1.2134		1863
12:30	78.29	"	"	"				"		"
13:00	78.59	"	"	"				"		"
13:30	79.29	"	"	"				"		"
14:00	79.59	"	"	"				1.2138		1864
14:30	80.29	"	"	"				"		"
15:00	80:59	"	"	"				1.2145		1865
15:30	81.29	"	"	"				"		"
16:00	81.59	"	452	"				1.2157		1867
16:30	82.29	"	451	"				"		"
17:00	82.59	"	"	"				"		"
17:30	83.29	"	452	"				"		"
18:00	83.59	"	453	"				1.2168		1868

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B. H. PRESSURE CALCULATIONS (Continuation)

				LOWER GAUGE				UPPER GAUGE			
DATE - TIME		Choke	W H	Depth	Y	C *	P	Y	C *	P	
Time	Cumul	size	pressure								
HR:MIN	HR:MIN	INCH	PSIG	M				INCH		PSIG	
2/7/81											
18:30	84.29	64/64	453					1.2168		1868	
19:00	84.59	"	454					1.2172		1869	
19:30	85.29	"	456					1.2181		1870	
20:00	85.59	"	"					1.2190		1872	
02:30	86.29	"	"					"		"	
03:00	86.59	"	"					1.2198		1873	
21:30	87.29	"	"					1.2205		1874	
22:00	87.59	"	458					1.2211		1875	
22:30	88.29	"	460					1.2222		1877	
23:00	88.59	"	"					1.2231		1878	
23:30	89.29	"	"					"		"	
24:00	89.59	"	461					1.2236		1879	
3/7/81											
00:30	90.29	"	"					"		"	
00:45	90.44	CHANGE SAND FILTERS									
01:00	90.59	64/64	446					1.2098		1858	
01:30	91.29	"	448					1.2125		1862	
02:00	91.59	"	450					1.2130		"	
02:30	92.29	"	"					"		"	
03:00	92.59	"	452					1.2140		1864	
03:30	93.29	"	"					1.2150		1866	
04:00	93.59	"	"					1.2154		1866	
04:30	94.29	"	455					1.2162		1867	
05:00	94.59	"	"					1.2173		1869	
05:30	95.29	"	457					1.2175		"	
06:00	95.59	"	460					1.2195		1872	
06:30	96.29	"	"					1.2218		1876	
07:00	96.59	"	461					1.2225		1877	

No DOP 116 Litografen 8/75

- B.H. PRESSURE CALCULATIONS (Continuation) -

				LOWER GAUGE			UPPER GAUGE			
DATE - TIME		Choke size	W H pressure	Depth	Y	C *	P	Y	C *	P
Time	Cumul									
HR:MIN	HR:MIN	INCH	PSIG	M				INCH		PSIG
3/7/81										
07:30	97.29	64/64	461	1576				1.2240		1879
08:00	97.59	CHANGE SAND FILTER								
08:00	97.59	64/64	451	1576				1.2114		1860
08:30	98.29	"	450	"				1.2123		1861
09:00	98.59	"	"	"				1.2135		1863
09:30	99.29	"	"	"				1.2148		1865
10:00	99.59	"	451	"				1.2152		1866
10:30	100.29	"	"	"				1.2157		1867
11:00	100.59	"	452	"				"		"
11:30	101.29	"	"	"				1.2175		1869
12:00	101.59	"	453	"				1.2180		1870
12:30	102.29	"	455	"				"		"
13:00	102.59	"	"	"				1.2185		1871
13:30	103.29	"	"	"				1.2196		1873
14:00	103.59	"	"	"				1.2204		1874
14:30	104.29	"	457	"				1.2216		1876
15:00	104.59	"	458	"				1.2225		1877
15:30	105.29	"	459	"				1.2237		1879
16:00	105.59	"	461	"				1.2241		"
16:30	106.29	"	463	"				1.2250		1881
17:00	106.59	"	464	"				1.2261		1883
17:15	107.14	CHANGE SAND FILTERS								
17:30	107.29	64/64	454	1576				1.2125		1862
18:00	107.59	"	450	"				1.2133		1863
18:30	108.29	"	"	"				1.2137		1864
19:00	108.59	"	451	"				1.2145		1865
19:15	109.14	"	SWITCH FLOW TO SURGE TANK							
19:30	109.29	64/64	451	1576				1.2150		1866

- B. H. PRESSURE CALCULATIONS (Continuation) -

				LOWER GAUGE				UPPER GAUGE		
DATE - TIME		Choke	W H	Depth	Y	C *	P	Y	C *	P
Time	Cumul	size	pressure							
HR:MIN	HR:MIN	INCH	PSIG	M				INCH		PSIG
3/7/81										
19:33	109.32	64/64	SWITCH FLOW		BACK TO BURNERS.					
20:00	109.59	"	452	1576				1.2162		1867
20:30	110.29	"	453	"				1.2170		1869
21:00	110.59	"	"	"				1.2174		"
21:30	111.29	"	455	"				1.2181		1870
22:00	111.59	"	"	"				1.2186		1871
22:30	112.29	"	456	"				1.2194		1872
23:00	112.59	"	457	"				1.2202		1873
23:30	113.29	"	"	"				1.2213		1875
24:00	113.59	"	458	"				"		"
4/7/81										
00:30	114.29	"	459	"				1.2224		1877
01:00	114.59	"	460	"				1.2232		1878
01:30	115.29	"	"	"				1.2228		1877
02:00	115.59	"	"	"				1.2238		1879
02:30	116.29	"	"	"				1.2246		1880
03:00	116.59	"	462	"				1.2249		1881
03:30	117.29	"	463	"				"		"
04:00	117.59	"	"	"				1.2260		1882
04:05	118.04	"	CHANGE SAND		FILTERS					
04:30	118.29	"	450	1576				1.2108		1859
05:00	118.59	"	"	"				1.2117		1860
05:30	119.29	"	"	"				"		"
06:00	119.59	"	"	"				"		"
06:30	120.29	"	"	"				1.2127		1862
07:00	120.59	"	"	"				1.2130		"
07:30	121.29	"	"	"				1.2136		1863
08:00	121.59	"	"	"				"		"

_ B. H. PRESSURE CALCULATIONS (Continuation) _

				LOWER GAUGE				UPPER GAUGE			
DATE - TIME		Choke size	W H pressure	Depth	Y	C *	P	Y	C *	P	
Time	Cumul										
HR:MIN	HR:MIN	INCH	PSIG	M				INCH		PSIG	
4/7/81											
08:30	122.29	64/64	450	1576				1.2138		1864	
09:00	122.59	"	"	"				"		"	
09:30	123.29	"	451	"				"		"	
10:00	123.59	"	"	"				1.2154		1866	
10:30	124.29	"	"	"				"		"	
11:00	124.59	"	452	"				"		"	
11:30	125.29	"	"	"				"		"	
12:00	125.59	"	"	"				1.2169		1868	
12:30	126.29	"	"	"				"		"	
13:00	126.59	"	453	"				"		"	
13:30	127.29	"	"	"				"		"	
14:00	127.59	"	"	"				"		"	
14:30	128.29	"	455	"				1.2194		1872	
15:00	128.59	"	456	"				1.2196		1873	
15:30	129.29	"	458	"				1.2199		"	
16:00	129.59	"	457	"				1.2209		1875	
16:30	130.29	"	"	"				1.2214		"	
17:00	130.59	"	"	"				"		"	
17:30	131.29	"	"	"				1.2200		1873	
18:00	131.59	"	458	"				1.2214		1875	
18:30	132.29	"	460	"				"		"	
19:00	132.59	"	"	"				1.2225		1877	
19:30	133.29	"	"	"				1.2236		1879	
20:00	133.59	"	"	"				1.2232		1878	
20:30	134.29	"	462	"				1.2234		"	
21:00	134.59	"	461	"				"		"	
21:12	135.01	CHANGE SAND FILTERS									
21:30	135.29	64/64		1576				1.2102		1858	

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_ B. H. PRESSURE CALCULATIONS (Continuation) _

				LOWER GAUGE				UPPER GAUGE		
DATE - TIME		Choke Size	W H pressure	Depth M	Y	C *	P	Y	C *	P
Time	Cumul									
HR:MIN	HR:MIN	INCH	PSIG	M				INCH		PSIG
6/7/81										
22:40	0.58	64/64	SWITCH TO 64/64" FIXED CHOKE.					1.2630		1939
22:45	63	"	476	1576				1.2588		1933
22:50	68	"						1.2569		1930
23:00	78	"	476	"				1.2608		1936
23:15	93	"	480	"				1.2651		1942
23:30	108	"	486	"				1.2673		1946
23:45	123	"	490	"				1.2693		1949
23:51	129	CHANGE SAND FILTER.								
7/7/81										
00:00	0	"	466	"				1.2390		1902
00:15	15	"	460	"				1.2353		1897
00:30	30	"	459	"				1.2388		1902
00:45	45	"	461	"				1.2390		"
01:00	60	"	462	"				1.2388		"
01:15	75	"	461	"				1.2381		1901
01:30	90	"	460	"				1.2385		"
01:45	105	"	463	"				1.2375		1900
02:00	120	"	"	"				1.2380		1901
02:15	135	"	460	"				1.2384		"
02:30	150	"	463	"				1.2382		"
02:45	165	"	462	"				1.2384		"
03:00	180	"	465	"				1.2385		"
03:15	195	"	466	"				1.2382		"
03:30	210	"	465	"				1.2398		1903
03:45	225	"	"	"				1.2400		1904
04:00	240	"	466	"				1.2385		1901
04:15	255	"	"	"				1.2388		1902
04:30	270	"	467	"				1.2398		1903

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- B.H. PRESSURE CALCULATIONS (Continuation) -

				LOWER GAUGE			UPPER GAUGE			
DATE - TIME		Choke Size	W H pressure	Depth	Y	C *	P	Y	C *	P
Time	Cumul									
HR:MIN	HR:MIN									
7/7/81										
14:30	870	64/64	468	1576				1.2380		1901
15:00	900	"	"	"				1.2382		1902
15:30	390	"	469	"				1.2392		1903
16:00	960	"	CHANGE SAND FILTER					1.2400		1094
16:00	0	"	470	"						
16:15	15	"		"				1.2330		1878
16:30	30	"	453	"				1.2249		1881
16:45	45	"		"				1.2259		1882
17:00	60	"	"	"				1.2263		1883
17:30	90	"	456	"				1.2275		1885
18:00	120	"	"	"				1.2282		1886
18:30	150	"	457	"				1.2283		"
19:00	180	"	458	"				1.2290		1887
19:30	210	"	459	"				1.2293		"
20:00	240	"	460	"				"		"
20:30	270	"	459	"				1.2291		"
21:00	300	"	460	"				"		"
21:30	330	"	"	"				1.2288		"
22:00	360	"	"	"				1.2291		"
22:30	390	"	"	"				1.2292		"
23:00	420	"	"	"				"		"
23:30	450	"	"	"				1.2290		"
24:00	480	"	459	"				1.2295		1888
8/7/81										
01:00	540	"	460	"				1.2294		"
02:00	600	"	461	"				1.2295		"
03:00	660	"	460	"				1.2298		"
04:00	720	"	462	"				1.2295		"

- B. H. PRESSURE CALCULATIONS (Continuation) -

				LOWER GAUGE				UPPER GAUGE		
DATE - TIME		Choke size	W H pressure	Depth	Y	C *	P	Y	C *	P
Time	Cumul									
HR:MIN	HR:MIN	INCH	PSIG	M				INCH		PSIG
8/7/81										
05:00	780	64/64	463	1576				1.2313		1890
06:00	840	"	465	"				1.2320		1892
07:00	900	"	463	"				1.2336		1894
08:00	960	"	465	"				1.2333		"
09:00	1020	"	463	"				1.2315		1891
10:00	1080	"	"	"				1.2320		1892
11:00	1140	"	462	"				1.2313		1890
12:00	1200	"	465	"				1.2319		1891
13:00	1260	"	463	"				1.2315		"
14:00	1320	"	"	"				1.2318		"
14:33	1353	"		"				1.2320		1892
14:33	0	CHANGE SAND FILTER FLOWING THROUGH THORNTON SAMPLING LINE ONE SIDE ONLY								
14:55	12	"		"				1.2234		1878
15:00	27	"	457	"				1.2239		1879
15:15	42	"		"				1.2245		1880
15:30	57	"	456	"				1.2248		1881
15:45	72	"		"				1.2249		"
16:00	87	"	457	"				"		"
16:15	102	"		"				1.2252		"
16:30	117	"	"	"				1.2258		1882
16:45	132	"	"	"				1.2261		1883
17:00	147	"	458	"				1.2270		1884
17:15	162	"		"				1.2290		1887
17:30	177	"	"	"				1.2299		1888
17:45	192	"		"				1.2295		"
18:00	207	"	462	"				1.2308		1890
18:30	237	"	464	"				1.2308		1891
19:00	267	"	465	"				1.2317		"

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- B H. PRESSURE CALCULATIONS (Continuation) -

				LOWER GAUGE				UPPER GAUGE		
DATE - TIME		Choke size	W H pressure	Depth	Y	C *	P	Y	C *	P
Time	Cumul									
HR:MIN	HR:MIN									
8/7/81										
19:30	297	64/64	463	1576				1.2320		1892
20:00	327	"	465	"				1.2326		"
20:30	357	"	466	"				1.2332		1893
21:00	387	"	467	"				1.2335		1894
21:30	417	"	"	"				1.2340		1895
22:00	447	"	"	"				1.2343		"
22:30	477	"	"	"				1.2345		"
23:00	507	"	"	"				1.2339		1894
23:30	537	"	"	"				1.2350		1896
24:00	567	"	468	"				1.2353		1897
9/7/81										
01:00	627	"	470	"				1.2360		1898
02:00	687	"	"	"				"		"
03:00	747	"	"	"				1.2362		"
04:00	807	"	471	"				1.2368		1899
05:00	867	"	472	"				1.2372		1900
06:00	927	"	471	"				1.2378		"
07:00	987	"	"	"				1.2380		1901
08:00	1047	"	"	"				1.2382		1901
09:00	1107	"	472	"				1.2389		1902
10:00	1167	"	"	"				"		"
11:00	1227	"	"	"				"		"
12:00	1287	"	474	"				1.2387		"
13:00	1347	"	"	"				1.2385		1901
14:00	1407	"	473	"				1.2378		1900
15:00	1467	"	472	"				1.2374		"
15:22	1489	"	"	"				1.2376		"
15:22	0	CHANGE TO 48/64" ADJ. CHOKE MANIFOLD *1								

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- B H. PRESSURE CALCULATIONS (Continuation) -

DATE - TIME		Choke size INCH	W H pressure PSIG	Depth M	LOWER GAUGE			UPPER GAUGE		
Time HR:MIN	Cumul HR:MIN				Y	C *	P	Y	C *	P
								INCH		PSIG
9/7/81										
15:28	6	OPEN CHOKE MANIFOLD						1.2920		1983
15:35	13	INCREASE CHOKE TO 48/64" ADJ. ON MANIFOLD *2						1.2524		1923
15:40	18	48/64 48/64		1576				1.2030		1847
15:45	23	"		"				1.1983		1840
15:50	28	"		"				1.1967		1838
15:55	33	"		"				1.1950		1835
16:00	38	"	437	"				1.2025		1846
16:05	43	"		"				1.2055		1851
16:10	48	"		"				1.2063		1852
16:15	53	"	438	"				1.2074		1854
16:30	68	"	"	"				1.2077		"
16:45	83	"	440	"				1.2075		"
17:00	98	"	"	"				1.2074		"
17:15	113	"	"	"				1.2081		1855
17:30	128	"	442	"				1.2088		1856
17:45	143	"	445	"				1.2116		1860
18:00	158	"	446	"				1.2123		1861
18:30	188	"	"	"				1.2127		1862
19:00	218	"	447	"				1.2136		1863
19:30	248	"	448	"				1.2140		1864
20:00	278	"	"	"				1.2151		1866
20:30	308	"		"				1.2156		"
21:00	338	"		"				1.2160		1867
21:04	342	"		"				"		"
21:04	0	INCREASE CHOKE SIZE TO 52/64" ADJ ON *2								
21:07	3	INCREASE CHOKE SIZE TO 52/64" ADJ ON *1						1.2031		1847
21:12	8	INCREASE CHOKE SIZE TO 56/64" ON *1						1.1989		1841
21:13	9	INCREASE CHOKE TO 56/64" ADJ *2						1.1882		1825

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FLOMETROL

Section: ANNEX 1.2

B. H. PRESSURE CALCULATIONS (Continuation)

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				LOWER GAUGE				UPPER GAUGE		
DATE - TIME		Choke size	W H pressure	Depth	Y	C *	P	Y	C *	P
Time	Cumul									
HR:MIN	HR:MIN									
9/7/81										
21:17	13	INCREASE CHOKE TO 64/64" ADJ *2					1.1785		1810	
21:19	15	INCREASE CHOKE TO 64/64" ADJ. *1					1.1691		1795	
21:20	16	64/64 64/64		1576			1.1691		"	
21:25	21	"		"			1.1541		1772	
21:27	23	CHANGE TO 64/64" FIXED CHOKES ON *2 AND *1					1.1619		1784	
21:30	26	"		"			1.1500		1766	
21:35	31	"		"			1.1397		1750	
21:38	34	OPEN THORNTON BYPASS LEG.					1.1432		1756	
21:38	0	"		"						
21:40	2	"		"			1.1401		1751	
21:45	7	"		"			1.1331		1740	
21:50	12	"		"			1.1354		1744	
21:55	17	"		"			1.1335		1741	
22:00	22	"	396	"			1.1368		1746	
22:15	37	"	415	"			1.1389		1749	
22:30	52	"	428	"			1.1403		1751	
22:45	67	"	440	"			1.1425		1755	
23:00	82	"	455	"			1.1434		1756	
23:05	87	CHANGE SAND FILTER					1.1435		"	
23:05	0	"		"						
23:10	5	"		"			1.1061		1699	
23:15	10	"	415	"			1.0979		1686	
23:20	15	"		"			1.0979		"	
23:25	20	"		"			1.1068		1700	
23:30	25	"	430	"			1.1094		1704	
23:45	40	"	455	"			1.1107		1706	
24:00	55	"	478	"			1.1129		1709	
10/7/81										

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B.H. PRESSURE CALCULATIONS (Continuation)

				LOWER GAUGE			UPPER GAUGE			
DATE - TIME		Choke size	W H pressure	Depth	Y	C *	P	Y	C *	P
Time	Cumul									
HR:MIN	HR:MIN	INCH	PSIG	M						
10/7/81										
00:15	70	64/64		1576				1.1148		1712
00:30	85	"	503	"				1.1166		1715
00:45	100	"		"				1.1183		1718
01:00	115	"	518					1.1197		1720
01:15	130	"						1.1208		1721
01:25	140	CHANGE SAND FILTER						"		"
01:25	0									
01:30	5		470					1.0753		1652
01:35	10							1.0718		1646
01:40	15							1.0773		1655
01:45	20							1.0836		1665
01:50	25							1.0861		1668
01:55	30							1.0873		1670
02:00	35		520					1.0875		"
02:10	45							1.0883		1672
02:20	55	CHANGE SAND FILTER						1.0890		1673
02:25	60							1.0713		1646
02:30	65		501					1.0678		1640
02:45	80							1.0689		1642
03:00	95		524					1.0703		1644
03:15	110							1.0726		1648
03:20	115	CLOSE BYPASS LEG OF THORNTON MANIFOLD						1.0735		1649
03:25	120							1.0892		1673
03:30	125		552					1.0898		1674
03:45	140							1.0896		"
04:00	155		572					"		"
04:10	165	CHANGE SAND FILTER						"		"
04:15	170							1.0536		1619

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_ B.H PRESSURE CALCULATIONS (Continuation) _

DATE - TIME		Choke size	W H pressure	LOWER GAUGE			UPPER GAUGE		
Time	Cumul			Depth	Y	C *	P	Y	C *
HR:MIN	HR:MIN	INCH	PSIG	M				INCH	PSIG
10/7/81									
12:30	665	64/64 64/64	623	1576				1.0506	1614
13:00	695	"	625	"				1.0509	"
13:12	707	"	CHANGE SAND FILTER					1.0503	"
13:14	709	"	CLOSE BYPASS LEG ON THORNTON MANIFOLD					1.0378	1594
13:15	710	"		"				1.0408	1599
13:20	715	"		"				1.0440	1604
13:25	720	"		"				1.0445	1605
13:30	725	"		"				1.0442	1604
13:45	740	"		"				1.0436	1603
14:00	755	"	620	"				1.0433	"
14:30	785	"	622	"				1.0429	1602
15:00	815	"	620	"				1.0421	1601
15:30	845	"	623	"				1.0417	1600
16:00	875	"	627	"				1.0404	1598
16:30	905	"	"	"				1.0403	"
17:00	935	"	628	"				"	"
17:30	965	"	630	"				1.0410	1599
18:00	995	"	633	"				1.0411	"
18:30	1025	"	640	"				1.0413	1600
19:00	1055	"	"	"				1.0418	1601
19:30	1085	"	"	"				1.0423	"
20:00	1115	"	642	"				1.0428	1602
20:30	1145	"	644	"				1.0429	"
21:00	1175	"	468	"				1.0432	1603
21:05	1180	"	CHANGE SAND FILTER					1.0433	"
21:10	1185	"		"				1.0329	1587
21:15	1190	"		"				1.0325	1586
21:30	1205	"	640	"				1.0332	1587

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- B. H. PRESSURE CALCULATIONS (Continuation) -

DATE - TIME			Choke size INCH	W H pressure PSIG	LOWER GAUGE			UPPER GAUGE		
Time	Cumul	Depth			Y	C *	P	Y	C *	P
HR:MIN	HR:MIN	M						INCH		PSIG
10/7/81										
21:45	1220		64/64 64/64	1576				1.0333	1588	
22:00	1235		"	636	"			1.0330	1587	
22:15	1250		"	"	"			1.0328	"	
22:30	1265		"	636	"			1.0322	1586	
22:45	1280		OPEN BYPASS	LEG ON THORNTON MANIFOLD				1.0321	"	
22:50	1285		"	"				1.0131	1557	
22:55	1290		"	"				1.0157	1561	
23:00	1295		"	610	"			1.0161	"	
23:15	1310		"	"				1.0158	"	
23:17	1312		OPEN 4" BYPASS MANIFOLD.					"	"	
23:20	1315		"	"				0.9800	1506	
23:25	1320		"	"				0.9836	1512	
23:30	1325		"	560	"			0.9872	1517	
23:35	1330		"	"				0.9871	"	
23:40	1335		"	"				0.9872	"	
23:45	1340		"	"				0.9889	1520	
24:00	1355		"	565	"			0.9902	1522	
11/7/81										
00:15	1370		"	"				0.9902	"	
00:30	1385		"	575	"			0.9912	1523	
01:00	1415		"	583	"			0.9917	1524	
01:30	1445		"	588	"			0.9924	1525	
02:00	1475		"	595	"			0.9938	1527	
02:30	1505		"	600	"			0.9945	1528	
03:00	1535		"	603	"			0.9956	1530	
03:30	1565		"	607	"			0.9962	1531	
03:45	1580		"	CHANGE SAND FILTER				0.9972	1532	
03:50	1585		"	"				0.9772	1502	

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- B.H. PRESSURE CALCULATIONS (Continuation) -

DATE - TIME		Choke size	W H pressure	LOWER GAUGE			UPPER GAUGE		
Time	Cumul			Depth	Y	C *	P	Y	C *
HR:MIN	HR:MIN	INCH	PSIG	M			INCH		PSIG
11/7/81									
03:55	1590	64/64		1576			0.9777		1503
04:00	1595	"		"			0.9789		1504
04:15	1610	"		"			0.9791		1505
04:30	1625	"	575	"			0.9789		1504
04:45	1640	"		"			0.9788		"
05:00	1655	"	577	"			0.9786		"
05:30	1685	"	578	"			0.9778		1503
06:00	1715	"	580	"			0.9786		1501
06:30	1745	"	581	"			0.9762		1500
07:00	1775	"	"	"			0.9751		1499
07:30	1805	"	"	"			0.9750		1498
08:00	1835	"	583	"			"		"
09:00	1895	"	585	"			"		"
10:00	1955	"	587	"			0.9751		1499
11:00	2015	"	592	"			0.9759		1500
11:15	2030	"		"			0.9776		1502
11:30	2045	"	593	"			0.9779		1503
12:00	2075	"	596	"			0.9781		"
12:30	2105	"	598	"			0.9785		1504
13:00	2135	"	"	"			"		"
14:00	2195	"	"	"			0.9784		"
15:00	2255	"	599	"			0.9785		"
15:02	2257	"		"			"		"
15:02	0	CLOSE	CHOKE	MANIFOLD *2 FLOWING ON	64/64"	FIXED CHOKE	ON MANIFOLD *1		
15:05	3	64/64		"			1.0821		1662
15:10	8	"		"			1.1292		1734
15:12	10	CHANGE	SAND FILTER				1.1296		1735
15:15	13	"	860	"			1.1269		1731

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- B. H. PRESSURE CALCULATIONS (Continuation) -

				LOWER GAUGE				UPPER GAUGE			
DATE - TIME		Choke size INCH	W H pressure PSIG	Depth M	Y	C *	P	Y INCH	C *	P PSIG	
Time HR:MIN	Cumul HR:MIN										
12/7/81											
01:00	598	64/64	745	1576				1.1323		1739	
02:00	658	"	743	"				1.1325		"	
03:00	718	"	737	"				"		"	
04:00	778	"	"	"				1.1323		"	
05:00	838	"	735	"				1.1320		"	
06:00	898	"	733	"				1.1322		"	
07:00	958	"	732	"				"		"	
08:00	1018	"	"	"				1.1320		"	
09:00	1078	"	730	"				1.1316		1738	
10:00	1138	"	726	"				1.1312		1737	
10:30	1168	"	"	"				1.1315		1738	
10:33	1171	CHANGE TO 64/64" ADJ CHOKE.						"		"	
10:35	1173	CHANGE TO 56/64" ADJ CHOKE.						1.1368		1746	
10:40	1178	56/64		"				1.1967		1838	
10:45	1183	"		"				1.1989		1841	
10:50	1188	"		"				1.1992		"	
10:55	1193	"		"				1.2004		1843	
11:00	1198	"	780	"				1.2017		1845	
11:05	1203	"	CHANGE TO 56/64" FIXED CHOKE.						1.2022		1846
11:05	0	"		"							
11:10	5	"		"				1.1826		1816	
11:15	10	"		"				1.1785		1810	
11:30	25	"	741	"				1.1781		1809	
11:45	40	"		"				1.1782		"	
12:00	55	"	733	"				1.1783		"	
12:15	70	"		"				1.1784		1810	
12:30	85	"	730	"				1.1786		"	
12:45	100	"		"				1.1788		"	

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B.H. PRESSURE CALCULATIONS (Continuation)

DATE - TIME		Choke size INCH	W H pressure PSIG	Depth M	LOWER GAUGE			UPPER GAUGE			
Time HR:MIN	Cumul. HR:MIN				Y	C*	P	Y	C*	P	
12/7/81											
13:00	115	56/64	725	1576				1.1794		1811	
13:30	145	"	723	"				1.1798		1812	
14:00	175	"	717	"				1.1805		1813	
14:30	205	"	710	"				1.1807		"	
15:00	235	"	"	"				1.1810		1814	
15:30	265	"	"	"				1.1813		"	
15:31	266	WELL CLOSED IN AT CHOKE AMNIFOLD FOR BUILD-UP							"		"
15:31	0	0		"							
15:35	4	0	922	"				1.3649		2095	
15:40	9	0	1044	"				1.4800		2271	
15:45	14	0	"	"				1.4878		2283	
15:50	19	0	"	"				1.4890		2285	
15:55	24	0	"	"				1.4893		"	
16:00	29	0	"	"				1.4895		"	
16:15	44	0	"	"				1.4898		2286	
16:30	59	0	"	"				"		"	
16:45	74	0	"	"				"		"	
17:00	89	0	1049	"				"		"	
17:15	104	0	1050	"				"		"	
17:30	119	0	1053	"				"		"	
17:45	134	0	"	"				"		"	
18:00	149	0	1055	"				"		"	
18:15	164	COMMENCE TO PULL GAUGES.							"		"
18:20	169		1060	1st GRADIENT STOP 1279 m.				1.2868		1975	
				UNABLE TO READ OTHER GRADIENT STOPS, CLOCK RAN OUT.							

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