



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

March 15, 2002

Richardson Operating Company
1700 Lincoln Street
Suite 1700
Denver, Colorado 80203

Attn: Mr. Jim Richardson

Re: *Injection Pressure Increase - 171*
Salty Dog Well No. 2
San Juan County, New Mexico

Dear Mr. Richardson:

Reference is made to your request dated March 4, 2002, to increase the surface injection pressure on the above referenced well. This request is based on a step rate test conducted on the well on March 1, 2002. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

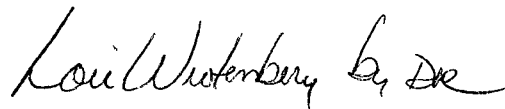
You are therefore authorized to increase the surface injection pressure on the following well:

Well and Location	Maximum Surface Injection Pressure
Salty Dog Well No. 2	1,050 PSIG
Located in Unit J, Section 5, Township 29 North, Range 14 West, NMPM, San Juan County, New Mexico.	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Injection Pressure Increase
Richardson Operating Company
Salty Dog Well No. 2
Page 2

Sincerely,

A handwritten signature in cursive script, appearing to read "Lori Wrotenberg", followed by a small mark that looks like "by Dr".

Lori Wrotenberg
Director

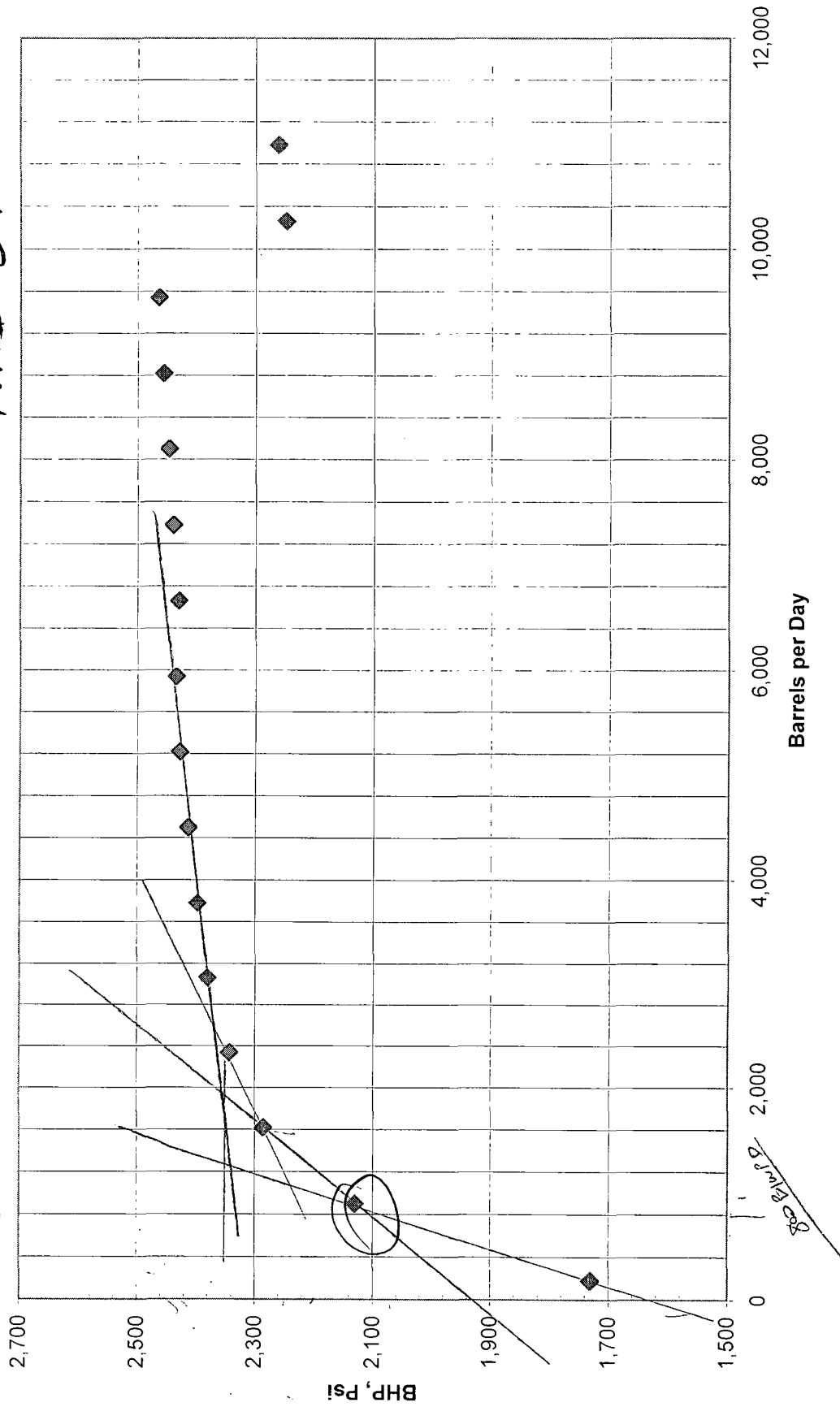
cc: Oil Conservation Division - Aztec
Files: SWD-811; PSI-X, 2002

$1050 = 0.44 \times 800 \text{ BWP}$

J/5/29N/14W

Step Rate Test Salty Dog No 2

2388' TO TOP PERF
MVRD ZONE



PKRVO206531085

1P1-171 N/R

FAX COVER SHEET

Richardson Operating Company
3100 La Plata Highway
Farmington, NM 87401
505-564-3100
Fax 505-564-3109

SEND TO STATE OFFICE	
Company name	From
OIL AND GAS COMMISSION	JIM RICHARDSON
Attention	Date
DAVID CATANACH	3-4-02
Office location	Office location
SANTA FE	Farmington NM
Fax number	Phone number
505 476-3491	505-564-3100

☐ Urgent ☐ Reply ASAP ☐ Please comment ☒ Please review ☐ For your information

Total pages, including cover: _____

COMMENTS

AMERICAN — PUMPING

TEFTELLER — DOWN HOLE PRESSURE RECORDING.

COMPLETE TEST RESULTS WILL BE FED-X SHIPPED
TODAY TO YOU.

THANK YOU

Jim Richardson

TEFTELLER

PAGE 1

03/01/02

Page A

File Reference F154301.DAT

Customer RICHARDSON OPERATING COMPANY
Street 3100 LA PLATA HIGHWAY
City/State FARMINGTON, NM 87401
Country USA
Service Company TEFTELLER, INC.

Well Name SALTY DOG NO. 2
Well Location SAN JUAN COUNTY, NM
Field / Pool MESA VERDE FORMATION
Status (Oil, Gas, Other) GAS

(30-045-30812)

Test Type STEP RATE TEST
Date of Test 3-1-2002
Producing Interval 2388' - 3096'
Recorder Depth 2954'
Recorder Position 2954'
Shut In Date Start: 3-1-2002
Stop: 3-1-2002
Duration: 10 HOURS

Bottom Hole Temperature

Gauge Identification

Gauge Manufacturer MICRO-SMART SYSTEMS
Serial Number 154
Model Number SP2000
Pressure Range
Battery Type
Calibration I,D.
Last Calibration 12/17/ 1

Gauge Setup Parameters

Probe Set Up Time 3/ 1/ 2 7:58: 0
Time Delay to First Reading
Test Type Selection STEP RATE TEST
Test Duration Selection 10 HOURS

* EVENT SUMMARY *

-- PAGE 2

— TELLER —

COMPANY : RICHARDSON OPERATING COMPANY

PAGE : B1

WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: P154301.DAT

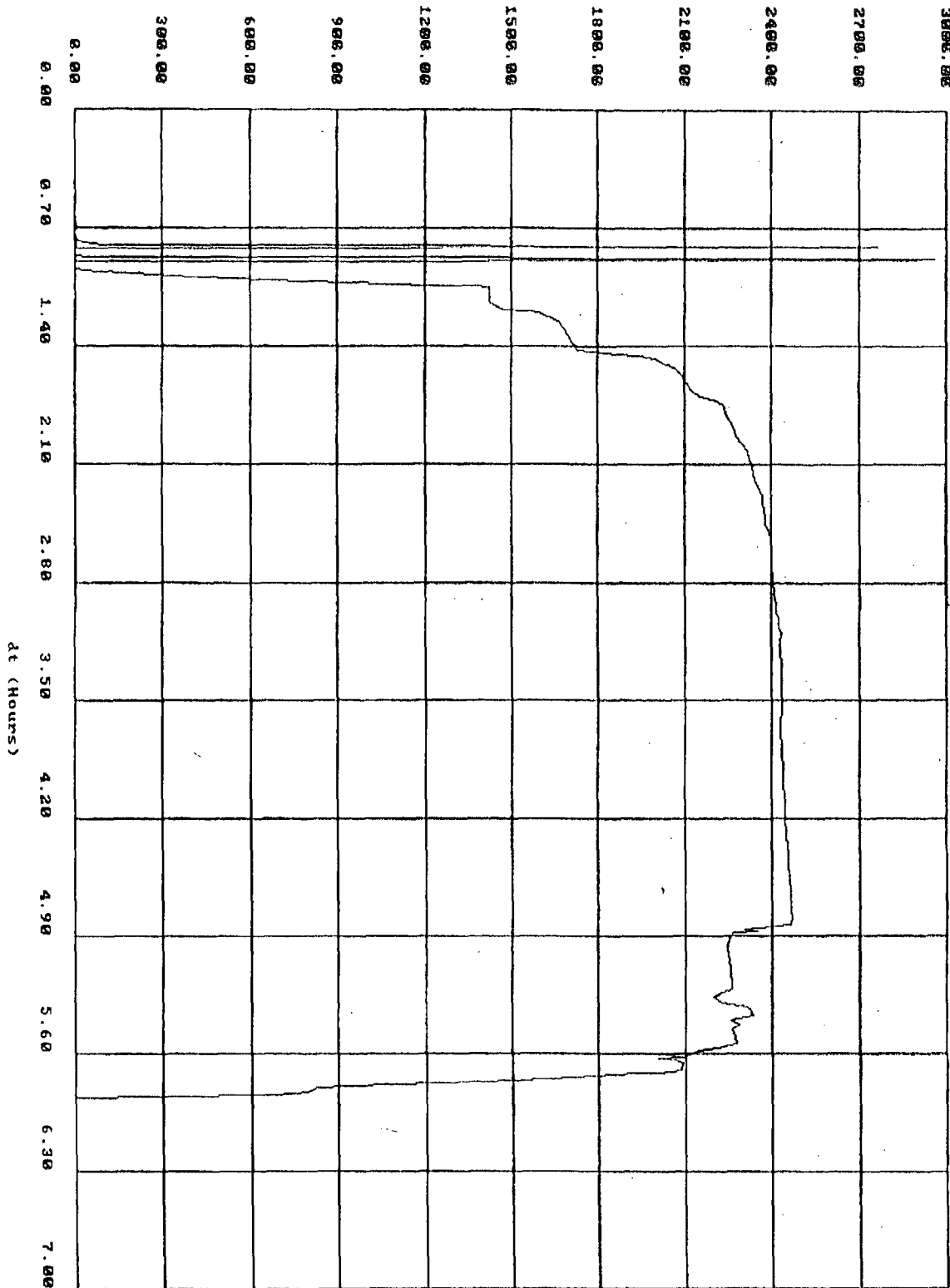
DOWN HOLE
↓

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmm	Key Event	Pressure Psig	Temp Deg F
03/01	09:01:30	63.5000	TANDEM INST. @ 2954' KB	1425.72	62.97
03/01	09:08:30	70.5000	BEGIN RATE #1	1426.99	100.31
03/01	09:24:00	86.0000	END RATE #1 - .151 BPM	1731.09	111.48
03/01	09:39:00	101.0000	END RATE #2 - .637 BPM	2130.20	111.02
03/01	09:56:00	118.0000	END RATE #3 - 1.282 BPM	2286.23	109.31
03/01	10:11:00	133.0000	END RATE #4 - 1.689 BPM	2343.35	108.60
03/01	10:26:00	148.0000	END RATE #5 - 2.211 BPM	2380.16	106.01
03/01	10:41:00	163.0000	END RATE #6 - 2.676 BPM	2397.14	99.51
03/01	10:56:00	178.0000	END RATE #7 - 3.177 BPM	2413.74	91.91
03/01	11:11:00	193.0000	END RATE #8 - 3.614 BPM	2428.19	86.94
03/01	11:27:00	209.0000	END RATE #9 - 4.155 BPM	2434.03	83.98
03/01	11:42:00	224.0000	END RATE #10 - 4.608 BPM	2430.78	81.62
03/01	11:57:00	239.0000	END RATE #11 - 5.077 BPM	2439.23	80.37
03/01	12:13:00	255.0000	END RATE #12 - 5.550 BPM	2446.85	79.77
03/01	12:28:00	270.0000	END RATE #13 - 6.138 BPM	2456.39	78.24
03/01	12:44:00	286.0000	END RATE #14 - 6.572 BPM	2464.13	71.31
03/01	12:59:00	301.0000	END RATE #15 - 7.157 BPM	2249.89	61.36
03/01	13:11:00	313.0000	END RATE #16 - 7.629 BPM	2262.70	58.15
03/01	13:12:00	314.0000	END STEP RATE TEST	2231.62	57.87

Pressure (Psig)

TEFTELLER

PAGE - 3



SALTY DOG NO. 2
SAN JUAN COUNTY, NM
F154301.DAT

RICHARDSON OPERATING COMPANY
Pressure vs dt

TEFTELLER, INC.
3-1-2002
STEP RATE TEST

ALC SURFACE RATE
BHP PRESSURE BPM
↓ ↓ ↓

AMERICAN
PAGE 4

214.453	2400.60	1908.0000000	6.5810000	8.1610000
214.703	2398.60	1906.0000000	6.5810000	8.1520000
214.969	2431.00	1936.0000000	6.5640000	8.1300000
215.219	2401.10	1905.0000000	6.5560000	8.1050000
215.469	2443.90	1948.0000000	6.5580000	8.0810000
215.719	2422.70	1928.0000000	6.5660000	8.1170000
215.969	2370.90	1877.0000000	6.5720000	8.1130000
216.219	2417.10	1942.0000000	6.7030000	8.3540000
216.485	2465.40	2026.0000000	6.9500000	8.7140000
216.736	2450.40	2025.0000000	7.0460000	8.7040000
216.986	2483.80	2064.0000000	7.0840000	8.7690000
217.236	2490.30	2081.0000000	7.1560000	8.8980000
217.502	2484.20	2082.0000000	7.2040000	8.8980000
217.752	2377.10	1974.0000000	7.1980000	8.8640000
218.002	2442.40	2034.0000000	7.1620000	8.8210000
218.252	2458.50	2046.0000000	7.1340000	8.8350000
218.502	2471.10	2058.0000000	7.1300000	8.8070000
218.752	2474.70	2061.0000000	7.1260000	8.7920000
219.019	2455.20	2042.0000000	7.1290000	8.7740000
219.269	2454.50	2042.0000000	7.1340000	8.8110000
219.519	2479.10	2066.0000000	7.1300000	8.8070000
219.769	2462.70	2049.0000000	7.1260000	8.8140000
220.035	2479.80	2066.0000000	7.1250000	8.7990000
220.285	2439.00	2025.0000000	7.1240000	8.8060000
220.535	2460.80	2048.0000000	7.1320000	8.8100000
220.785	2451.10	2039.0000000	7.1370000	8.8180000
221.035	2315.70	1905.0000000	7.1460000	8.8370000
221.302	2338.80	1932.0000000	7.1730000	8.8590000
221.552	2319.20	1916.0000000	7.1970000	8.8870000
221.802	2367.40	1965.0000000	7.2030000	8.8970000
222.052	2348.90	1946.0000000	7.1990000	8.9060000
222.302	2318.40	1915.0000000	7.1960000	8.9050000
222.568	2281.80	1880.0000000	7.2070000	8.9110000
222.819	2282.40	1883.0000000	7.2230000	8.9320000
223.084	2253.10	1855.0000000	7.2320000	8.9110000
223.334	2291.30	1894.0000000	7.2370000	8.9090000
223.585	2280.20	1882.0000000	7.2310000	8.9300000
223.835	2276.40	1877.0000000	7.2230000	8.9420000
224.085	2261.70	1862.0000000	7.2210000	8.9340000
224.335	2266.90	1867.0000000	7.2200000	8.9170000
224.585	2250.10	1847.0000000	7.1980000	8.8580000
224.835	2268.80	1861.0000000	7.1660000	8.8190000
225.101	2273.40	1864.0000000	7.1550000	8.8240000
225.351	2253.10	1844.0000000	7.1570000	8.8390000
225.601	2268.10	1859.0000000	7.1570000	8.8110000
225.851	2245.70	1836.0000000	7.1530000	8.8260000
226.101	2276.30	1867.0000000	7.1560000	8.8310000
226.368	2255.40	1846.0000000	7.1550000	8.7900000
226.618	2261.70	1852.0000000	7.1530000	8.8450000
226.868	2247.50	1839.0000000	7.1610000	8.8130000
227.118	2245.50	1837.0000000	7.1610000	8.8520000
227.384	2276.60	1869.0000000	7.1670000	8.8580000
227.634	2244.90	1838.0000000	7.1720000	8.8440000
227.884	2260.40	1853.0000000	7.1690000	8.8310000
228.134	2253.60	1846.0000000	7.1670000	8.8090000
228.384	2233.90	1826.0000000	7.1650000	8.8180000
228.634	2248.10	1840.0000000	7.1640000	8.8190000

Desc: Salty Dog #2

Mesaverde

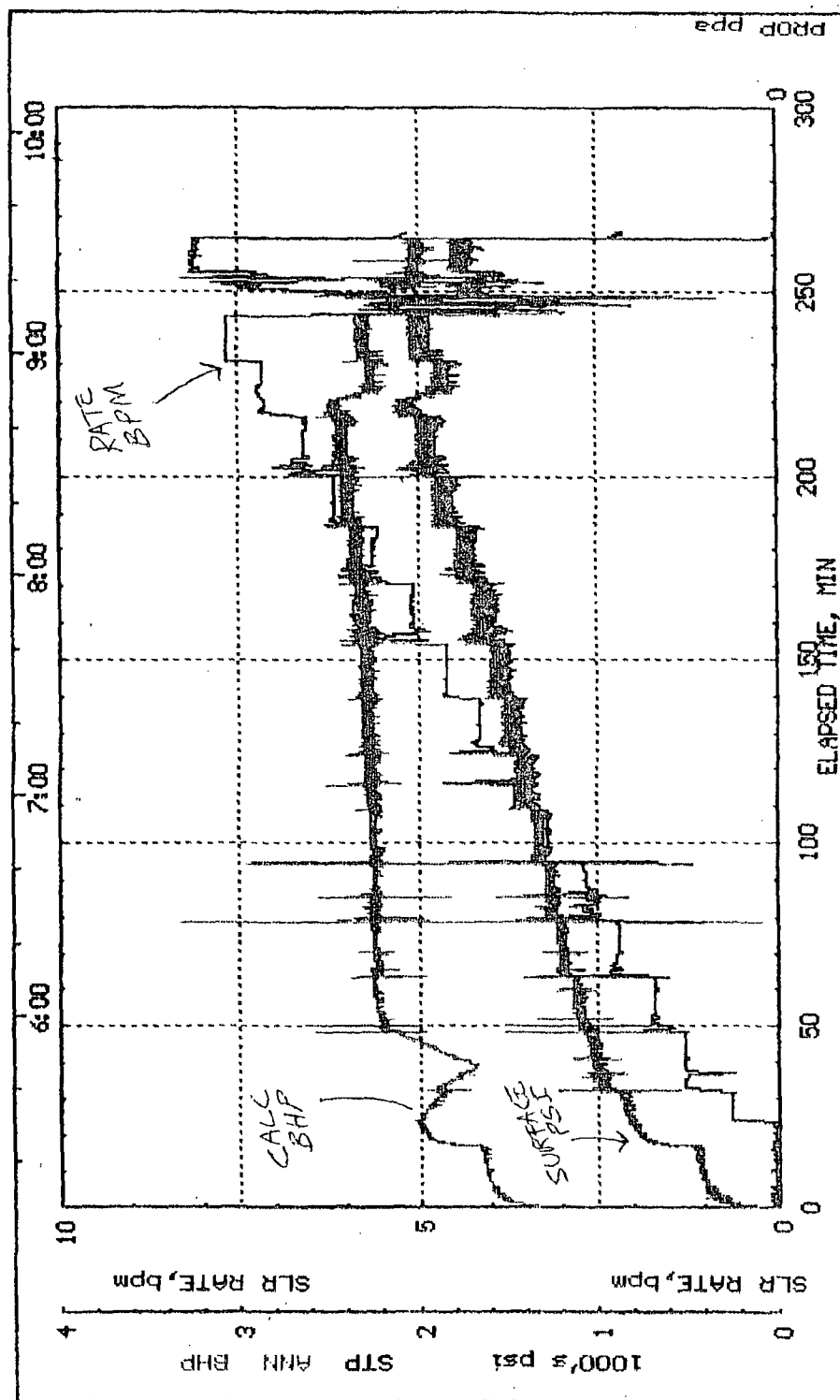
Richardson Operating

Step Rate Test / March 1, 2001 / Second Attempt

PAGE : 17-G (3/1/2002 13:32:23) Data stored in C:\SMARTS\DATADIR\SD2STE

AMERICAN

PAGE 5



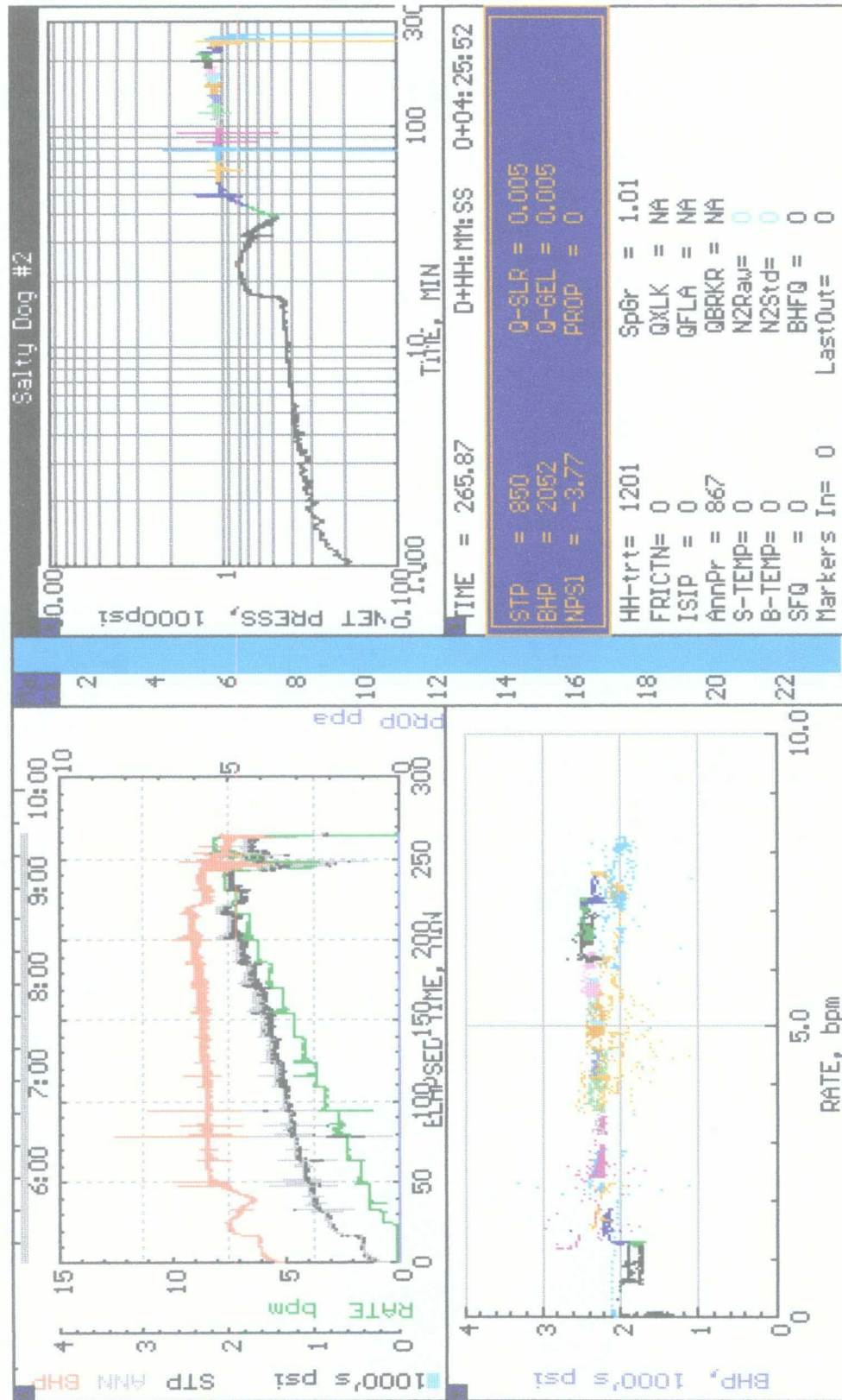
Desc: Salty Dog #2

Mesaverde

Richardson Operating

Step Rate Test / March 1, 2001 / Second Attempt

PAGE : 7-G (3/1/2002 13:32:23) Data stored in C:\SMARTS\DATADIR\SD2STEP



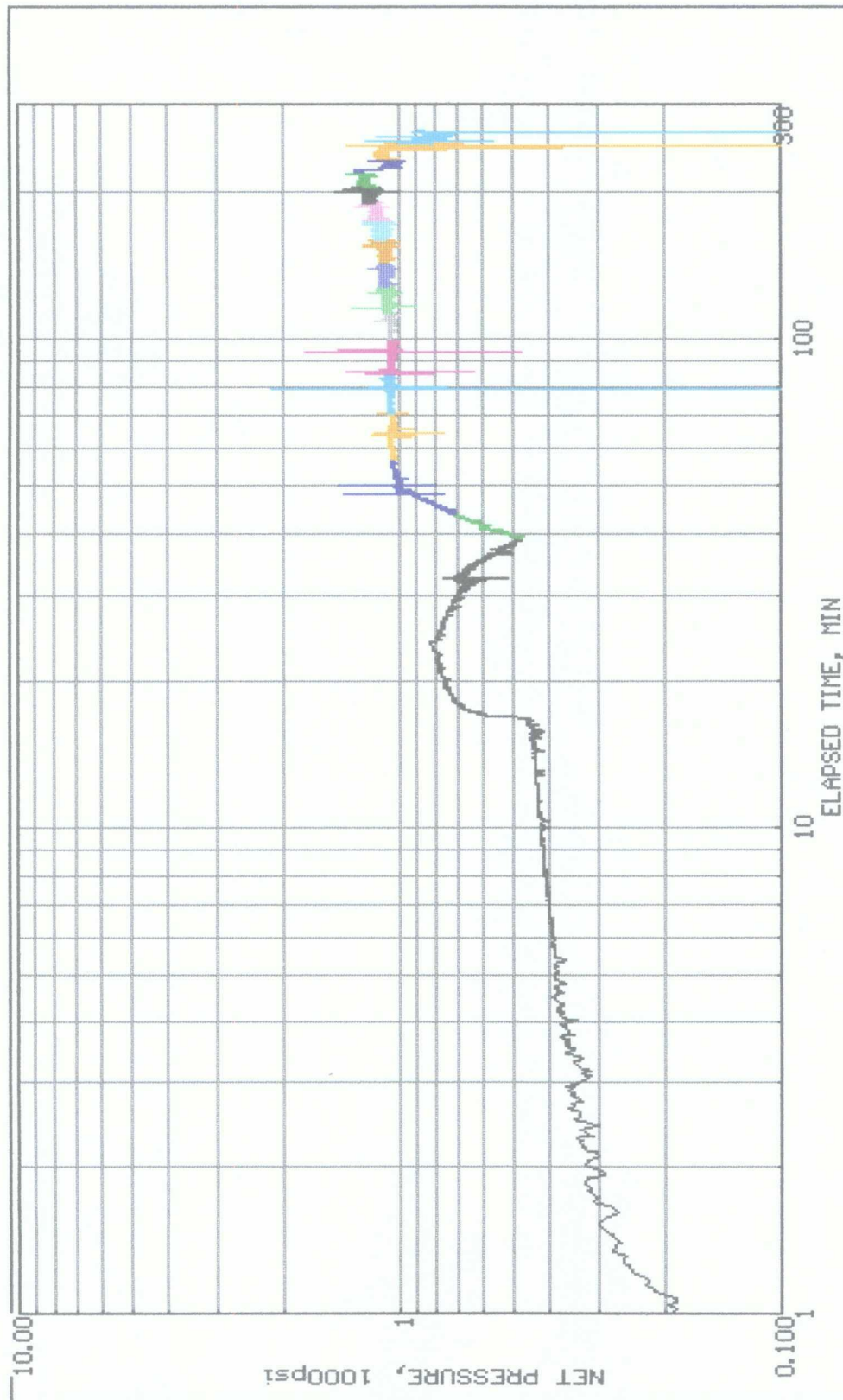
Desc: Salty Dog #2

Mesaverde

Richardson Operating

Step Rate Test / March 1, 2001 / Second Attempt

PAGE : 12-G (3/1/2002 13:32:23) Data stored in C:\SMARTS\DATADIR\SD2STE



Desc: Salty Dog #2

Mesaverde

Richardson Operating

Step Rate Test / March 1, 2001 / Second Attempt

PAGE : 3-G (3/1/2002 13:32:23) Data stored in C:\SMARTS\DATADIR\SD2STEP



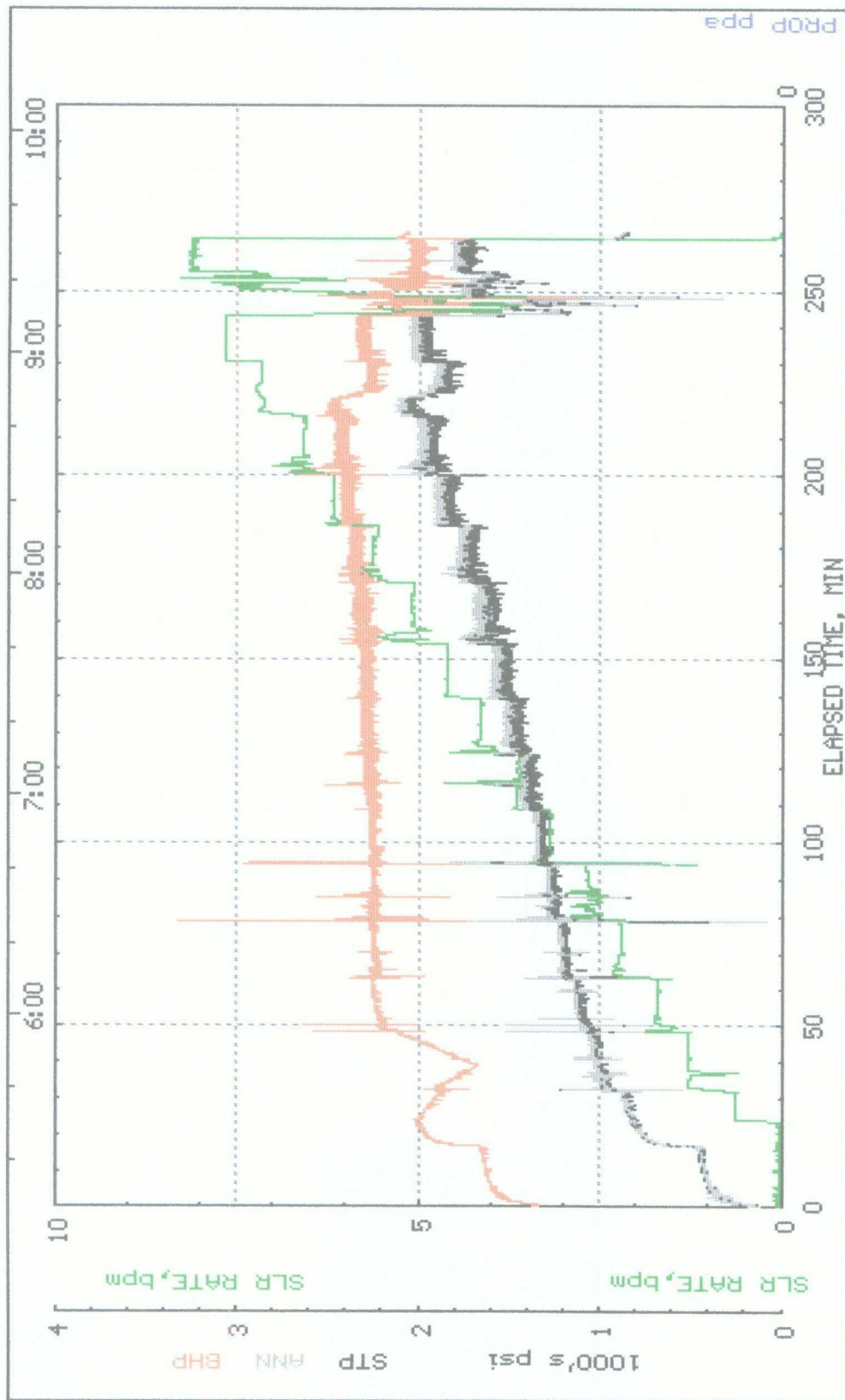
Desc: Salty Dog #2

Mesaverde

Richardson Operating

Step Rate Test / March 1, 2001 / Second Attempt

PAGE : 16-G (3/1/2002 13:32:23) Data stored in C:\SMARTS\DATADIR\SD2STE



Description : Richardson Operating

Salty Dog #2 / Step Rate Test / March 1, 2002

PAGE :1 Data printed approx. every 0.25 min. Data stored in

C:\SMARTS\DATADIR\SD2STEP2.DAT

+++++

ELAPSED	Calc	A	SLURRY	SLURRY
TIME	BH	TREATING	PRIMARY	FOUR
min.	Press	PRESSURE	RATE	INCH
	psi	PSI	BPM	BPM
0.262	1365.50	167.0000000	0.0030000	0.0160000
0.513	1364.30	167.0000000	0.0030000	0.0040000
0.779	1343.60	165.0000000	0.0270000	0.0170000
1.029	1387.50	181.0000000	0.1460000	0.0070000
1.279	1454.90	279.0000000	0.1540000	0.0070000
1.529	1498.60	303.0000000	0.1570000	0.0040000
1.783	1516.40	342.0000000	0.1520000	0.0320000
2.045	1519.90	305.0000000	0.1510000	0.0400000
2.295	1538.20	364.0000000	0.1480000	0.0090000
2.545	1533.70	326.0000000	0.1510000	0.0190000
2.796	1542.00	342.0000000	0.1570000	0.0250000
3.046	1526.60	339.0000000	0.1220000	0.0130000
3.312	1546.40	350.0000000	0.1110000	0.0100000
3.562	1565.20	389.0000000	0.1440000	0.0080000
3.812	1558.10	349.0000000	0.1500000	0.0060000
4.078	1568.10	378.0000000	0.1510000	0.0100000
4.328	1579.80	358.0000000	0.1490000	0.0060000
4.578	1586.30	375.0000000	0.1450000	0.0050000
4.828	1565.90	339.0000000	0.1460000	0.0070000
5.079	1590.30	404.0000000	0.1460000	0.0060000
5.329	1581.70	368.0000000	0.1380000	0.0070000
5.579	1590.70	386.0000000	0.1330000	0.0080000
5.845	1593.70	392.0000000	0.1280000	0.0020000
6.095	1593.60	392.0000000	0.1290000	0.0030000
6.345	1597.40	395.0000000	0.1330000	0.0080000
6.595	1599.60	403.0000000	0.1330000	0.0050000
6.845	1602.60	407.0000000	0.1340000	0.0130000
7.100	1605.30	407.0000000	0.1310000	0.0080000
7.350	1605.80	407.0000000	0.1330000	0.0010000
7.600	1607.00	414.0000000	0.1330000	0.0010000
7.862	1610.10	415.0000000	0.1310000	0.0060000
8.128	1613.10	414.0000000	0.1320000	0.0070000
8.378	1615.00	419.0000000	0.1330000	0.0120000
8.628	1615.60	418.0000000	0.1320000	0.0110000
8.878	1618.50	419.0000000	0.1330000	0.0060000
9.128	1619.80	423.0000000	0.1330000	0.0020000
9.378	1621.20	425.0000000	0.1330000	0.0000000
9.645	1622.70	427.0000000	0.1310000	0.0030000
9.895	1622.40	422.0000000	0.1300000	0.0020000
10.145	1622.90	427.0000000	0.1320000	0.0090000
10.395	1607.70	431.0000000	0.1310000	0.0090000
10.667	1626.70	430.0000000	0.1310000	0.0090000
10.917	1629.30	437.0000000	0.1320000	0.0040000
11.177	1627.10	430.0000000	0.1330000	0.0050000
11.427	1628.60	432.0000000	0.1330000	0.0110000
11.677	1631.30	439.0000000	0.1330000	0.0040000

11.928	1630.70	435.0000000	0.1330000	0.0040000
12.178	1630.40	430.0000000	0.1320000	0.0030000
12.428	1635.20	440.0000000	0.1320000	0.0020000
12.683	1638.50	444.0000000	0.1330000	0.0000000
12.933	1628.10	443.0000000	0.1320000	0.0050000
13.183	1635.10	439.0000000	0.1310000	0.0080000
13.433	1635.90	442.0000000	0.1300000	0.0050000
13.683	1638.00	438.0000000	0.1300000	0.0060000
13.933	1641.30	443.0000000	0.1330000	0.0090000
14.183	1641.30	449.0000000	0.1320000	0.0040000
14.433	1626.10	443.0000000	0.1310000	0.0050000
14.700	1641.30	449.0000000	0.1320000	0.0050000
14.950	1640.40	446.0000000	0.1310000	0.0040000
15.200	1649.20	456.0000000	0.1300000	0.0090000
15.450	1644.80	452.0000000	0.1310000	0.0100000
15.700	1620.40	423.0000000	0.1330000	0.0100000
15.950	1634.60	430.0000000	0.1380000	0.0130000
16.200	1655.80	458.0000000	0.1470000	0.0060000
16.450	1658.90	463.0000000	0.1450000	0.0090000
16.700	1657.40	442.0000000	0.1510000	0.0100000
16.950	1764.90	564.0000000	0.2630000	0.2160000
17.200	1823.70	638.0000000	0.4930000	0.6250000
✓ 17.450	1861.20	681.0000000	0.6260000	0.6500000
17.700	1878.60	679.0000000	0.6290000	0.6410000
17.950	1886.30	730.0000000	0.6280000	0.6420000
18.200	1914.80	722.0000000	0.6280000	0.6500000
18.450	1915.50	709.0000000	0.6290000	0.6440000
18.700	1925.10	745.0000000	0.6290000	0.6550000
18.950	1934.80	748.0000000	0.6310000	0.6470000
19.200	1942.90	743.0000000	0.6300000	0.6540000
19.450	1948.90	769.0000000	0.6300000	0.6530000
19.700	1955.50	758.0000000	0.6310000	0.6430000
19.950	1954.50	754.0000000	0.6320000	0.6480000
20.200	1960.10	775.0000000	0.6320000	0.6450000
20.450	1965.30	772.0000000	0.6310000	0.6680000
20.700	1977.10	784.0000000	0.6320000	0.6560000
20.950	1977.60	795.0000000	0.6320000	0.6490000
21.200	1971.60	780.0000000	0.6320000	0.6540000
21.450	1979.10	784.0000000	0.6320000	0.6530000
21.700	1982.20	804.0000000	0.6330000	0.6590000
21.950	1988.50	784.0000000	0.6330000	0.6560000
22.200	1999.70	812.0000000	0.6320000	0.6550000
22.450	1987.90	783.0000000	0.6350000	0.6510000
22.700	1981.30	759.0000000	0.6350000	0.6660000
22.950	1986.20	813.0000000	0.6340000	0.6700000
23.200	2005.90	822.0000000	0.6330000	0.6610000
24.200	2026.00	809.5000000	0.6320000	0.6640000
24.450	1985.80	818.0000000	0.6330000	0.6620000
24.715	1990.20	836.0000000	0.6310000	0.6600000
24.967	1981.40	827.0000000	0.6300000	0.6690000
25.233	1974.00	834.0000000	0.6320000	0.6590000
25.499	1970.90	829.0000000	0.6330000	0.6530000
25.749	1963.20	818.0000000	0.6350000	0.6540000
25.999	1968.70	842.0000000	0.6350000	0.6560000
26.249	1962.30	833.0000000	0.6340000	0.6520000
26.499	1963.60	838.0000000	0.6330000	0.6460000
26.766	1954.50	829.0000000	0.6330000	0.6490000

27.016	1955.10	843.0000000	0.6330000	0.6500000
27.266	1942.60	833.0000000	0.6350000	0.6570000
27.516	1945.20	844.0000000	0.6340000	0.6590000
27.782	1944.50	857.0000000	0.6330000	0.6630000
28.033	1937.60	841.0000000	0.6330000	0.6710000
28.298	1922.90	849.0000000	0.6320000	0.6440000
28.548	1920.30	835.0000000	0.6330000	0.6490000
28.798	1923.80	860.0000000	0.6340000	0.6410000
29.049	1920.30	863.0000000	0.6340000	0.6500000
29.299	1914.80	847.0000000	0.6340000	0.6520000
29.549	1904.70	869.0000000	0.6330000	0.6560000
29.799	1898.50	847.0000000	0.6330000	0.6620000
30.049	1898.30	847.0000000	0.6340000	0.6520000
30.315	1897.90	848.0000000	0.6350000	0.6520000
30.565	1890.90	865.0000000	0.6350000	0.6710000
30.815	1851.70	833.0000000	0.6320000	0.6840000
31.065	1887.90	861.0000000	0.6330000	0.6550000
31.315	1866.00	838.0000000	0.6330000	0.6570000
31.565	1858.50	841.0000000	0.6350000	0.6700000
✓ 31.815	1889.30	866.0000000	0.6370000	0.6650000
32.065	1877.90	884.0000000	0.7830000	0.9360000
32.315	1880.30	1130.0000000	0.8930000	1.0130000
32.565	1899.40	907.0000000	0.9830000	1.2420000
32.815	1900.90	952.0000000	1.1910000	1.5120000
33.065	1873.90	973.0000000	1.2830000	1.5080000
33.315	1885.70	970.0000000	1.2780000	1.5130000
33.565	1859.30	991.0000000	1.2790000	1.4980000
33.815	1873.30	975.0000000	1.2830000	1.5060000
34.065	1860.40	976.0000000	1.2860000	1.5080000
34.331	1849.40	979.0000000	1.2830000	1.5050000
34.581	1838.20	973.0000000	1.2800000	1.5090000
34.831	1820.00	977.0000000	1.2790000	1.5090000
35.082	1805.30	944.0000000	1.2700000	1.4840000
35.348	1810.70	1016.0000000	1.2560000	1.4690000
35.598	1770.10	951.0000000	1.2460000	1.4790000
35.848	1764.20	930.0000000	1.2350000	1.4520000
36.098	1781.30	1012.0000000	1.2380000	1.4400000
36.348	1746.60	984.0000000	1.2350000	1.4530000
36.598	1716.10	1007.0000000	1.1210000	1.2640000
36.864	1738.00	969.0000000	0.7110000	0.5540000
37.114	1765.00	949.0000000	0.6750000	0.8830000
37.365	1730.00	938.0000000	1.0520000	1.3860000
37.615	1708.60	983.0000000	1.2370000	1.5040000
37.881	1702.80	947.0000000	1.2830000	1.5050000
38.131	1704.40	1003.0000000	1.2830000	1.5030000
38.381	1706.10	1002.0000000	1.2810000	1.4990000
38.631	1684.50	984.0000000	1.2790000	1.4970000
38.881	1681.60	1000.0000000	1.2760000	1.4950000
39.147	1680.60	1012.0000000	1.2790000	1.4930000
39.397	1694.30	1006.0000000	1.2790000	1.4940000
39.648	1678.50	955.0000000	1.2770000	1.5000000
39.898	1713.20	993.0000000	1.2770000	1.4980000
40.148	1730.40	1009.0000000	1.2770000	1.4970000
40.414	1731.80	968.0000000	1.2750000	1.4950000
40.664	1768.00	1067.0000000	1.2550000	1.4630000
40.914	1776.80	1032.0000000	1.2270000	1.4680000
41.164	1787.30	1010.0000000	1.2490000	1.4730000

41.414	1801.80	1031.0000000	1.2760000	1.4980000
41.680	1806.30	1007.0000000	1.2770000	1.5010000
41.931	1829.50	1030.0000000	1.2690000	1.4880000
42.181	1839.30	1023.0000000	1.2660000	1.4800000
42.431	1844.90	1018.0000000	1.2760000	1.4980000
42.681	1858.40	1018.0000000	1.2760000	1.4940000
42.931	1874.70	1021.0000000	1.2660000	1.4770000
43.181	1879.70	1015.0000000	1.2640000	1.4870000
43.447	1894.60	1022.0000000	1.2740000	1.4940000
43.697	1914.20	1046.0000000	1.2760000	1.4920000
43.947	1921.00	1021.0000000	1.2760000	1.4920000
44.214	1916.10	1013.0000000	1.2760000	1.4970000
44.464	1942.60	1046.0000000	1.2750000	1.4980000
44.714	1943.40	991.0000000	1.2760000	1.5100000
44.964	1971.90	1024.0000000	1.2770000	1.5080000
45.230	1963.20	1029.0000000	1.2760000	1.5020000
45.480	1994.00	1024.0000000	1.2770000	1.5050000
45.730	1984.70	1024.0000000	1.2800000	1.5000000
45.980	1992.10	990.0000000	1.2780000	1.4990000
46.230	2028.10	1046.0000000	1.2780000	1.5050000
46.480	2045.20	1027.0000000	1.2780000	1.5050000
46.747	2060.50	1029.0000000	1.2780000	1.5020000
46.997	2052.30	1047.0000000	1.2760000	1.4950000
47.247	2081.40	1049.0000000	1.2760000	1.5030000
47.497	2103.40	1038.0000000	1.2810000	1.5030000
47.763	2102.70	1022.0000000	1.2840000	1.5030000
✓ 48.013	2102.30	1007.0000000	1.2820000	1.5020000
48.263	2109.30	983.0000000	1.3200000	1.5540000
48.513	2153.40	1110.0000000	1.6040000	2.1090000
48.763	2120.30	1046.0000000	1.8460000	2.2330000
49.013	2137.70	1054.0000000	1.7290000	1.9930000
49.263	2198.80	1085.0000000	1.5020000	1.7180000
49.513	2219.70	1062.0000000	1.4430000	1.7710000
49.763	2173.70	1012.0000000	1.5090000	1.8030000
50.013	2004.10	860.0000000	1.4760000	1.7390000
50.263	2225.20	1099.0000000	1.5770000	1.9370000
50.513	2187.80	1088.0000000	1.7230000	2.0620000
50.763	2203.50	1062.0000000	1.7200000	2.0750000
51.013	2199.50	1100.0000000	1.7210000	2.0790000
51.263	2212.20	1092.0000000	1.7220000	2.0690000
51.513	2211.00	1092.0000000	1.7230000	2.0680000
51.763	2181.10	1029.0000000	1.7190000	2.0580000
52.013	2194.40	1099.0000000	1.6700000	1.9900000
52.280	2226.70	1102.0000000	1.6710000	2.0730000
52.530	2224.30	1106.0000000	1.7240000	2.0610000
52.796	2218.90	1107.0000000	1.7260000	2.0600000
53.046	2215.00	1069.0000000	1.7260000	2.0620000
53.296	2223.70	1108.0000000	1.7190000	2.0590000
53.546	2201.80	1103.0000000	1.7080000	2.0480000
53.796	2225.30	1110.0000000	1.6950000	2.0320000
54.046	2230.30	1105.0000000	1.6840000	2.0150000
54.312	2231.40	1110.0000000	1.6840000	2.0270000
54.563	2233.00	1107.0000000	1.6860000	2.0170000
54.813	2233.50	1107.0000000	1.6870000	2.0220000
55.063	2236.70	1113.0000000	1.6830000	2.0140000
55.329	2225.60	1106.0000000	1.6830000	2.0200000
55.579	2213.70	1062.0000000	1.6830000	2.0200000

55.829	2238.80	1111.0000000	1.6840000	2.0200000
56.079	2237.80	1113.0000000	1.6860000	2.0290000
56.329	2235.60	1116.0000000	1.6870000	2.0260000
56.595	2220.60	1100.0000000	1.6870000	2.0220000
56.846	2236.50	1105.0000000	1.6840000	2.0260000
57.096	2230.40	1112.0000000	1.6840000	2.0210000
57.346	2203.70	1068.0000000	1.6860000	2.0240000
57.596	2242.00	1115.0000000	1.6870000	2.0250000
57.862	2202.80	1063.0000000	1.6880000	2.0280000
58.112	2244.50	1119.0000000	1.6880000	2.0320000
58.362	2243.10	1108.0000000	1.6870000	2.0190000
58.612	2244.20	1119.0000000	1.6880000	2.0190000
58.862	2225.10	1079.0000000	1.6860000	2.0180000
59.129	2222.20	1081.0000000	1.6860000	2.0310000
59.379	2242.20	1099.0000000	1.6870000	2.0280000
59.629	2241.70	1107.0000000	1.6870000	2.0280000
59.879	2256.90	1111.0000000	1.6850000	2.0190000
60.129	2241.00	1111.0000000	1.6720000	2.0230000
60.395	2245.50	1118.0000000	1.6760000	2.0240000
60.645	2247.50	1112.0000000	1.6800000	1.9970000
60.895	2256.10	1126.0000000	1.6810000	2.0030000
61.145	2252.90	1122.0000000	1.6890000	2.0210000
61.395	2253.60	1125.0000000	1.6880000	2.0180000
61.662	2247.70	1119.0000000	1.6870000	2.0320000
61.912	2252.00	1124.0000000	1.6880000	2.0250000
62.162	2251.00	1124.0000000	1.6880000	2.0210000
62.412	2250.20	1120.0000000	1.6890000	2.0290000
62.662	2239.50	1103.0000000	1.6850000	2.0290000
62.912	2249.00	1124.0000000	1.6850000	2.0320000
✓ 63.178	2229.10	1098.0000000	1.6890000	2.0260000
63.428	2314.10	1173.0000000	1.6410000	1.9390000
63.678	2279.30	1170.0000000	1.9400000	2.7730000
63.928	2217.40	1176.0000000	2.3010000	2.7850000
64.195	2254.30	1194.0000000	2.1820000	2.5670000
64.445	2235.70	1176.0000000	2.1830000	2.7860000
64.695	2215.50	1176.0000000	2.3040000	2.8030000
64.945	2235.40	1196.0000000	2.3020000	2.7950000
65.211	2227.10	1188.0000000	2.3010000	2.7910000
65.461	2167.50	1116.0000000	2.2230000	2.6500000
65.719	2258.70	1200.0000000	2.1750000	2.5730000
65.978	2231.30	1182.0000000	2.2310000	2.7270000
66.228	2219.20	1177.0000000	2.2720000	2.7550000
66.478	2228.60	1189.0000000	2.2850000	2.7720000
66.728	2238.40	1200.0000000	2.2890000	2.7870000
66.978	2233.60	1196.0000000	2.2920000	2.7810000
67.228	2239.60	1200.0000000	2.2810000	2.7650000
67.478	2221.60	1179.0000000	2.2640000	2.7550000
67.736	2231.30	1186.0000000	2.2490000	2.7310000
67.986	2239.90	1192.0000000	2.2340000	2.7060000
68.236	2246.70	1197.0000000	2.2240000	2.7010000
68.502	2235.10	1185.0000000	2.2230000	2.7040000
68.761	2247.60	1198.0000000	2.2270000	2.7140000
69.011	2247.80	1198.0000000	2.2270000	2.7040000
69.269	2244.00	1194.0000000	2.2270000	2.7030000
69.519	2233.40	1182.0000000	2.2200000	2.6960000
69.769	2239.20	1187.0000000	2.2110000	2.6760000
70.019	2248.70	1196.0000000	2.2080000	2.6740000

70.269	2227.40	1167.0000000	2.1590000	2.6000000
70.519	2241.30	1180.0000000	2.1530000	2.6710000
70.785	2245.00	1191.0000000	2.2000000	2.6780000
71.036	2243.60	1190.0000000	2.2020000	2.6700000
71.286	2249.30	1196.0000000	2.2040000	2.7220000
71.536	2242.80	1190.0000000	2.2070000	2.6950000
71.786	2251.40	1199.0000000	2.2100000	2.6860000
72.052	2250.40	1198.0000000	2.2100000	2.6890000
72.302	2249.20	1197.0000000	2.2110000	2.6790000
72.552	2236.50	1184.0000000	2.2090000	2.6930000
72.802	2253.40	1201.0000000	2.2100000	2.7140000
73.052	2235.40	1183.0000000	2.2100000	2.7130000
73.319	2241.40	1189.0000000	2.2100000	2.6980000
73.569	2247.40	1195.0000000	2.2100000	2.6880000
73.819	2256.40	1204.0000000	2.2100000	2.7010000
74.069	2247.40	1195.0000000	2.2100000	2.6690000
74.319	2255.50	1203.0000000	2.2090000	2.6720000
74.585	2237.70	1185.0000000	2.2080000	2.6710000
74.835	2256.50	1204.0000000	2.2090000	2.6710000
75.085	2250.50	1198.0000000	2.2090000	2.6850000
75.335	2241.40	1189.0000000	2.2100000	2.6970000
75.585	2240.50	1188.0000000	2.2090000	2.6860000
75.835	2247.50	1195.0000000	2.2090000	2.6980000
76.085	2250.40	1198.0000000	2.2100000	2.6920000
76.335	2226.40	1174.0000000	2.2100000	2.6760000
76.585	2256.40	1204.0000000	2.2100000	2.6810000
76.835	2241.20	1189.0000000	2.2110000	2.6850000
77.093	2256.20	1204.0000000	2.2110000	2.6980000
77.351	2242.00	1190.0000000	2.2120000	2.6770000
77.601	2246.90	1195.0000000	2.2130000	2.6950000
77.851	2254.40	1202.0000000	2.2100000	2.7030000
78.101	2259.20	1207.0000000	2.2110000	2.6720000
78.351	2262.60	1213.0000000	2.2270000	2.6970000
78.601	2250.80	1208.0000000	2.2690000	2.8050000
78.851	2240.40	1203.0000000	2.3010000	2.7920000
79.101	2393.30	1355.0000000	2.2960000	2.7440000
79.351	2320.20	1333.0000000	2.6840000	3.7980000
79.601	2220.00	1247.0000000	2.8160000	3.2980000
79.851	2276.10	1284.0000000	2.6380000	3.2960000
80.101	2247.00	1272.0000000	2.7970000	3.5290000
80.351	2235.80	1259.0000000	2.7810000	3.3260000
80.601	2232.90	1233.0000000	2.5650000	3.0550000
80.851	2261.90	1252.0000000	2.4700000	3.0090000
81.101	2262.80	1260.0000000	2.5370000	3.1550000
81.351	2236.60	1238.0000000	2.5770000	3.1460000
81.601	2259.10	1264.0000000	2.6100000	3.1990000
81.851	2252.90	1265.0000000	2.6780000	3.3260000
82.114	2236.10	1245.0000000	2.6480000	3.2050000
82.368	2248.40	1249.0000000	2.5700000	3.1230000
82.618	2272.70	1283.0000000	2.6610000	3.3040000
82.868	2203.30	1228.0000000	2.7950000	3.4810000
83.118	2224.60	1255.0000000	2.8470000	3.4500000
83.384	2209.40	1222.0000000	2.6820000	3.1680000
83.634	2242.00	1237.0000000	2.5160000	3.0610000
83.884	2246.40	1240.0000000	2.5030000	3.0440000
84.134	2255.50	1246.0000000	2.4730000	3.0160000
84.384	2250.10	1248.0000000	2.5440000	3.1470000

84.634	2261.00	1268.0000000	2.6300000	3.2350000
84.901	2243.40	1251.0000000	2.6360000	3.2090000
85.151	2247.00	1248.0000000	2.5730000	3.1100000
85.401	2280.40	1269.0000000	2.4550000	3.0010000
85.651	2250.30	1236.0000000	2.4330000	2.9760000
85.917	2208.30	1207.0000000	2.5520000	3.1260000
86.167	2307.20	1304.0000000	2.5340000	2.8520000
86.417	2261.30	1274.0000000	2.6830000	3.6130000
86.667	2219.40	1258.0000000	2.9220000	3.5050000
86.917	2241.50	1257.0000000	2.7090000	3.2250000
87.184	2243.30	1243.0000000	2.5610000	3.1110000
87.434	2245.60	1243.0000000	2.5390000	3.0950000
87.684	2246.80	1245.0000000	2.5470000	3.1210000
87.934	2242.90	1247.0000000	2.6030000	3.2210000
88.184	2251.20	1261.0000000	2.6560000	3.2550000
88.450	2240.50	1251.0000000	2.6630000	3.2450000
88.700	2250.50	1261.0000000	2.6630000	3.2400000
88.950	2256.40	1267.0000000	2.6640000	3.2510000
89.200	2248.20	1259.0000000	2.6660000	3.2530000
89.450	2250.20	1261.0000000	2.6660000	3.2560000
89.717	2248.90	1260.0000000	2.6680000	3.2550000
89.967	2233.70	1245.0000000	2.6700000	3.2570000
90.217	2245.70	1257.0000000	2.6700000	3.2580000
90.467	2246.90	1258.0000000	2.6680000	3.2520000
90.717	2233.90	1245.0000000	2.6680000	3.2520000
90.983	2250.80	1262.0000000	2.6690000	3.2560000
91.233	2242.00	1252.0000000	2.6580000	3.2340000
91.483	2237.80	1246.0000000	2.6410000	3.2070000
91.733	2233.00	1242.0000000	2.6490000	3.2420000
91.983	2235.90	1247.0000000	2.6680000	3.2420000
92.234	2242.70	1254.0000000	2.6700000	3.2500000
92.500	2214.50	1226.0000000	2.6720000	3.2640000
92.750	2245.30	1257.0000000	2.6740000	3.2610000
93.000	2245.30	1257.0000000	2.6740000	3.2670000
93.266	2231.10	1243.0000000	2.6760000	3.2620000
93.516	2252.90	1265.0000000	2.6780000	3.2750000
✓ 93.766	2218.10	1230.0000000	2.6760000	3.2790000
94.016	2329.60	1101.0000000	1.9370000	2.0800000
94.266	2624.70	1460.0000000	1.1920000	1.1350000
94.516	2446.60	1379.0000000	2.1090000	4.0380000
94.766	2223.20	1312.0000000	3.3630000	4.2080000
95.016	2221.90	1316.0000000	3.4090000	3.9640000
95.266	2239.20	1315.0000000	3.2500000	3.9810000
95.516	2246.40	1324.0000000	3.2660000	3.9890000
95.766	2263.50	1339.0000000	3.2470000	3.9850000
96.016	2244.80	1318.0000000	3.2270000	3.9260000
96.266	2227.40	1300.0000000	3.2220000	3.9580000
96.516	2245.70	1317.0000000	3.2100000	3.9370000
96.766	2241.80	1310.0000000	3.1830000	3.8780000
97.016	2255.60	1322.0000000	3.1670000	3.8740000
97.282	2250.10	1316.0000000	3.1630000	3.8730000
97.532	2236.30	1302.0000000	3.1610000	3.8690000
97.783	2249.00	1313.0000000	3.1460000	3.8450000
98.033	2257.80	1321.0000000	3.1390000	3.8370000
98.283	2257.60	1324.0000000	3.1670000	3.8690000
98.549	2239.40	1308.0000000	3.1870000	3.8840000
98.799	2258.10	1326.0000000	3.1840000	3.8890000

99.049	2240.30	1308.0000000	3.1820000	3.8980000
99.299	2248.50	1316.0000000	3.1800000	3.8820000
99.549	2261.00	1328.0000000	3.1760000	3.8830000
99.815	2236.40	1304.0000000	3.1810000	3.8920000
100.066	2262.60	1331.0000000	3.1880000	3.8800000
100.316	2243.70	1312.0000000	3.1870000	3.8790000
100.566	2262.30	1330.0000000	3.1820000	3.8700000
100.816	2241.70	1309.0000000	3.1780000	3.8820000
101.066	2239.20	1306.0000000	3.1740000	3.8850000
101.332	2241.30	1308.0000000	3.1730000	3.8690000
101.582	2254.00	1321.0000000	3.1760000	3.8640000
101.832	2251.00	1318.0000000	3.1760000	3.8820000
102.082	2259.50	1326.0000000	3.1710000	3.8860000
102.349	2240.50	1307.0000000	3.1710000	3.8820000
102.599	2250.50	1317.0000000	3.1710000	3.8730000
102.849	2241.90	1308.0000000	3.1680000	3.8530000
103.099	2245.90	1312.0000000	3.1680000	3.8680000
103.365	2256.90	1323.0000000	3.1680000	3.8540000
103.615	2254.30	1321.0000000	3.1730000	3.8850000
103.865	2238.70	1306.0000000	3.1780000	3.9020000
104.115	2248.60	1316.0000000	3.1790000	3.8850000
104.365	2238.50	1306.0000000	3.1800000	3.8860000
104.632	2242.00	1309.0000000	3.1760000	3.8840000
104.882	2246.20	1313.0000000	3.1740000	3.9050000
105.132	2242.20	1309.0000000	3.1740000	3.8900000
105.382	2239.00	1306.0000000	3.1760000	3.8790000
105.632	2252.20	1319.0000000	3.1740000	3.8520000
105.898	2248.50	1315.0000000	3.1710000	3.8760000
106.148	2245.60	1312.0000000	3.1700000	3.8740000
106.398	2207.60	1274.0000000	3.1700000	3.8610000
106.648	2252.70	1317.0000000	3.1520000	3.8400000
106.898	2254.90	1318.0000000	3.1410000	3.8490000
107.148	2244.50	1309.0000000	3.1540000	3.8600000
107.415	2213.00	1279.0000000	3.1670000	3.8700000
107.665	2248.50	1315.0000000	3.1710000	3.8730000
107.915	2245.50	1312.0000000	3.1710000	3.8550000
108.165	2244.50	1311.0000000	3.1710000	3.8830000
108.431	2247.00	1314.0000000	3.1760000	3.8690000
108.681	2208.90	1276.0000000	3.1770000	3.8870000
108.931	2315.10	1390.0000000	3.2450000	4.0150000
109.181	2281.40	1386.0000000	3.5020000	4.4530000
109.431	2231.90	1358.0000000	3.6850000	4.5080000
109.681	2249.40	1373.0000000	3.6640000	4.4870000
109.931	2221.10	1344.0000000	3.6580000	4.4430000
110.181	2266.30	1389.0000000	3.6560000	4.4700000
110.431	2276.10	1399.0000000	3.6580000	4.4780000
110.681	2264.30	1387.0000000	3.6560000	4.4700000
110.931	2245.70	1368.0000000	3.6530000	4.4520000
111.181	2245.10	1367.0000000	3.6490000	4.4820000
111.431	2280.10	1402.0000000	3.6490000	4.4830000
111.681	2276.80	1399.0000000	3.6520000	4.5090000
111.931	2264.00	1386.0000000	3.6500000	4.4770000
112.181	2229.20	1351.0000000	3.6480000	4.4880000
112.431	2289.80	1411.0000000	3.6430000	4.4740000
112.698	2236.40	1357.0000000	3.6380000	4.4670000
112.948	2273.60	1394.0000000	3.6370000	4.4710000
113.198	2235.10	1355.0000000	3.6320000	4.4670000

113.464	2257.50	1377.0000000	3.6290000	4.4540000
113.714	2241.50	1361.0000000	3.6290000	4.4420000
113.964	2266.10	1386.0000000	3.6320000	4.4630000
114.214	2276.80	1397.0000000	3.6350000	4.4690000
114.464	2260.10	1380.0000000	3.6320000	4.4430000
114.730	2264.00	1384.0000000	3.6330000	4.4350000
114.981	2249.80	1370.0000000	3.6350000	4.4770000
115.231	2249.30	1368.0000000	3.6220000	4.4320000
115.481	2249.20	1364.0000000	3.5890000	4.4020000
115.731	2392.70	1525.0000000	3.7370000	4.6810000
115.997	2322.70	1523.0000000	4.2930000	5.6220000
116.247	2171.60	1406.0000000	4.5640000	5.5710000
116.497	2187.50	1357.0000000	4.0440000	4.6700000
116.747	2278.50	1395.0000000	3.6040000	4.4050000
116.997	2271.70	1393.0000000	3.6440000	4.5240000
117.261	2264.30	1385.0000000	3.6390000	4.4460000
117.514	2288.70	1406.0000000	3.6100000	4.4350000
117.764	2254.60	1370.0000000	3.5940000	4.4230000
118.014	2290.00	1404.0000000	3.5820000	4.4150000
118.280	2264.60	1379.0000000	3.5860000	4.4000000
118.530	2218.60	1335.0000000	3.6030000	4.4650000
118.780	2272.30	1391.0000000	3.6220000	4.4630000
119.030	2287.90	1407.0000000	3.6260000	4.4650000
119.280	2260.40	1379.0000000	3.6210000	4.4640000
119.530	2262.60	1382.0000000	3.6280000	4.4880000
119.797	2266.70	1387.0000000	3.6360000	4.4740000
120.047	2239.90	1360.0000000	3.6340000	4.4470000
120.297	2277.50	1397.0000000	3.6290000	4.4880000
120.547	2275.10	1394.0000000	3.6240000	4.4880000
120.813	2276.60	1395.0000000	3.6200000	4.4630000
121.063	2294.60	1413.0000000	3.6200000	4.4790000
121.313	2251.30	1370.0000000	3.6220000	4.4770000
121.563	2268.10	1387.0000000	3.6240000	4.4550000
121.821	2278.40	1398.0000000	3.6300000	4.4750000
122.071	2270.70	1390.0000000	3.6270000	4.4650000
122.322	2247.10	1366.0000000	3.6240000	4.4590000
122.580	2275.80	1394.0000000	3.6180000	4.4670000
122.830	2246.70	1365.0000000	3.6190000	4.4530000
123.080	2272.40	1390.0000000	3.6130000	4.4300000
123.354	2278.30	1395.0000000	3.6050000	4.4550000
123.604	2277.30	1395.0000000	3.6140000	4.4740000
✓123.854	2263.90	1383.0000000	3.6260000	4.4600000
124.104	2356.30	1504.0000000	3.8650000	4.9050000
124.354	2308.90	1517.0000000	4.3560000	5.6650000
124.605	2253.70	1487.0000000	4.5550000	5.6250000
124.855	2237.10	1433.0000000	4.2580000	5.1460000
125.113	2257.40	1417.0000000	3.9630000	4.8350000
125.371	2286.70	1444.0000000	3.9440000	4.9160000
125.621	2227.70	1389.0000000	3.9770000	4.9590000
125.871	2264.30	1423.0000000	3.9560000	4.8550000
126.121	2292.30	1453.0000000	3.9720000	4.9180000
126.387	2282.30	1459.0000000	4.1030000	5.1500000
126.637	2266.60	1456.0000000	4.2060000	5.2130000
126.888	2262.50	1454.0000000	4.2230000	5.2420000
127.138	2284.10	1477.0000000	4.2340000	5.2390000
127.388	2292.20	1486.0000000	4.2410000	5.2290000
127.638	2271.80	1462.0000000	4.2120000	5.1690000

127.888	2246.50	1432.0000000	4.1740000	5.1290000
128.154	2264.10	1446.0000000	4.1450000	5.1060000
128.404	2284.70	1464.0000000	4.1240000	5.1160000
128.654	2297.50	1478.0000000	4.1340000	5.1240000
128.920	2285.70	1468.0000000	4.1480000	5.0980000
129.171	2221.60	1404.0000000	4.1490000	5.1030000
129.421	2273.90	1456.0000000	4.1470000	5.1290000
129.671	2273.60	1456.0000000	4.1490000	5.1240000
129.921	2285.10	1467.0000000	4.1450000	5.0990000
130.187	2296.00	1477.0000000	4.1380000	5.0860000
130.437	2274.50	1456.0000000	4.1420000	5.0940000
130.687	2260.90	1442.0000000	4.1390000	5.1050000
130.937	2255.20	1436.0000000	4.1360000	5.0860000
131.187	2305.80	1486.0000000	4.1310000	5.0980000
131.454	2307.60	1489.0000000	4.1410000	5.1300000
131.704	2262.50	1445.0000000	4.1500000	5.1190000
131.954	2305.10	1488.0000000	4.1530000	5.1440000
132.204	2296.80	1480.0000000	4.1560000	5.1650000
132.470	2267.90	1451.0000000	4.1550000	5.1530000
132.720	2265.00	1446.0000000	4.1380000	5.1180000
132.970	2270.80	1451.0000000	4.1310000	5.1180000
133.220	2311.70	1493.0000000	4.1400000	5.1210000
133.470	2250.20	1431.0000000	4.1360000	5.1190000
133.720	2300.60	1482.0000000	4.1410000	5.0920000
133.987	2284.50	1466.0000000	4.1420000	5.1140000
134.237	2267.90	1450.0000000	4.1470000	5.1190000
134.487	2302.90	1485.0000000	4.1470000	5.1010000
134.737	2272.40	1454.0000000	4.1430000	5.1230000
135.003	2272.60	1454.0000000	4.1410000	5.0940000
135.253	2273.00	1455.0000000	4.1460000	5.1190000
135.503	2251.60	1434.0000000	4.1490000	5.1060000
135.753	2300.50	1482.0000000	4.1420000	5.1000000
136.003	2297.70	1479.0000000	4.1400000	5.1000000
136.270	2290.60	1472.0000000	4.1410000	5.1230000
136.520	2299.90	1481.0000000	4.1390000	5.1080000
136.770	2249.60	1431.0000000	4.1410000	5.1250000
137.020	2290.90	1472.0000000	4.1390000	5.1080000
137.270	2260.60	1441.0000000	4.1330000	5.0930000
137.536	2289.90	1469.0000000	4.1220000	5.1430000
137.786	2300.80	1479.0000000	4.1150000	5.1070000
138.036	2278.90	1457.0000000	4.1140000	5.0790000
138.286	2301.10	1481.0000000	4.1290000	5.1090000
138.536	2302.00	1484.0000000	4.1460000	5.1290000
138.803	2285.40	1468.0000000	4.1510000	5.1680000
139.053	2303.20	1486.0000000	4.1520000	5.1440000
✓ 139.303	2281.90	1465.0000000	4.1550000	5.1570000
139.553	2358.60	1569.0000000	4.3740000	5.5110000
139.803	2274.40	1513.0000000	4.5970000	5.7090000
140.069	2292.50	1534.0000000	4.6200000	5.6890000
140.319	2245.60	1487.0000000	4.6190000	5.6930000
140.569	2274.70	1516.0000000	4.6180000	5.7120000
140.819	2250.00	1491.0000000	4.6160000	5.6950000
141.069	2262.30	1503.0000000	4.6130000	5.6600000
141.319	2267.20	1508.0000000	4.6140000	5.6380000
141.569	2300.60	1541.0000000	4.6110000	5.6700000
141.820	2311.20	1552.0000000	4.6140000	5.6450000
142.086	2277.80	1519.0000000	4.6170000	5.6620000

142.365	2282.30	1523.00000000	4.6130000	5.6650000
142.619	2258.60	1499.00000000	4.6110000	5.6670000
142.869	2288.60	1529.00000000	4.6110000	5.6710000
143.119	2304.00	1544.00000000	4.6080000	5.6680000
143.369	2270.90	1511.00000000	4.6090000	5.6790000
143.619	2274.30	1515.00000000	4.6130000	5.6530000
143.869	2284.90	1525.00000000	4.6090000	5.6420000
144.119	2280.70	1521.00000000	4.6100000	5.6530000
144.369	2300.00	1541.00000000	4.6160000	5.6330000
144.619	2268.70	1510.00000000	4.6180000	5.6540000
144.885	2276.10	1517.00000000	4.6150000	5.6500000
145.135	2320.50	1561.00000000	4.6120000	5.6730000
145.385	2305.20	1546.00000000	4.6140000	5.6680000
145.635	2266.90	1507.00000000	4.6090000	5.6430000
145.886	2261.50	1501.00000000	4.6040000	5.6750000
146.152	2267.40	1507.00000000	4.6050000	5.6690000
146.402	2266.00	1506.00000000	4.6080000	5.6650000
146.652	2310.70	1551.00000000	4.6100000	5.6590000
146.902	2273.60	1514.00000000	4.6110000	5.6300000
147.152	2275.00	1515.00000000	4.6080000	5.6080000
147.418	2300.10	1540.00000000	4.6070000	5.6550000
147.668	2253.00	1493.00000000	4.6080000	5.6670000
147.918	2297.00	1537.00000000	4.6080000	5.6430000
148.169	2273.00	1513.00000000	4.6080000	5.6730000
148.435	2297.70	1538.00000000	4.6100000	5.7070000
148.685	2271.20	1511.00000000	4.6060000	5.6420000
148.935	2275.40	1515.00000000	4.6050000	5.6420000
149.185	2293.90	1534.00000000	4.6090000	5.6510000
149.435	2280.40	1520.00000000	4.6050000	5.6500000
149.685	2282.00	1521.00000000	4.6000000	5.6870000
149.951	2265.10	1504.00000000	4.5990000	5.6690000
150.201	2269.10	1508.00000000	4.5990000	5.6610000
150.452	2300.90	1540.00000000	4.6010000	5.6640000
150.702	2300.90	1540.00000000	4.6010000	5.6370000
150.968	2276.90	1516.00000000	4.6010000	5.6830000
151.218	2303.10	1543.00000000	4.6070000	5.6680000
151.468	2274.00	1514.00000000	4.6080000	5.6530000
151.718	2269.20	1509.00000000	4.6060000	5.6510000
151.968	2247.40	1487.00000000	4.6050000	5.6530000
152.218	2297.90	1538.00000000	4.6090000	5.6690000
152.484	2265.10	1505.00000000	4.6070000	5.6990000
152.735	2267.60	1507.00000000	4.6030000	5.6930000
152.985	2293.20	1533.00000000	4.6060000	5.7030000
153.235	2311.40	1551.00000000	4.6050000	5.6860000
153.501	2279.60	1519.00000000	4.6030000	5.6680000
153.751	2325.00	1565.00000000	4.6080000	5.6630000
✓ 154.001	2283.30	1524.00000000	4.6130000	5.6780000
154.251	2422.40	1677.00000000	4.7220000	5.8510000
154.501	2333.00	1638.00000000	5.1090000	6.4890000
154.767	2276.20	1613.00000000	5.3480000	6.5170000
155.018	2263.10	1564.00000000	5.0780000	6.1550000
155.268	2376.00	1651.00000000	4.8800000	5.9950000
155.518	2389.20	1716.00000000	5.2730000	6.7200000
155.768	2327.30	1712.00000000	5.7030000	7.0950000
156.034	2285.30	1656.00000000	5.6000000	6.8130000
156.284	2235.90	1581.00000000	5.4100000	6.6450000
156.534	2301.60	1638.00000000	5.3450000	6.5400000

156.784	2290.00	1623.00000000	5.32000000	6.55000000
157.034	2290.00	1622.00000000	5.31200000	6.54000000
157.301	2270.60	1575.00000000	5.10400000	6.17100000
157.551	2306.10	1581.00000000	4.87900000	5.94200000
157.801	2252.60	1528.00000000	4.88300000	6.01500000
158.051	2322.10	1602.00000000	4.91700000	6.05400000
158.301	2383.30	1663.00000000	4.91600000	6.08500000
158.567	2349.90	1644.00000000	5.02600000	6.26000000
158.817	2317.00	1621.00000000	5.10100000	6.24300000
159.067	2229.30	1531.00000000	5.08400000	6.22200000
159.317	2334.40	1634.00000000	5.06800000	6.20200000
159.567	2318.60	1619.00000000	5.07400000	6.22100000
159.834	2305.30	1607.00000000	5.08400000	6.21400000
160.084	2322.90	1624.00000000	5.07900000	6.23900000
160.334	2290.20	1589.00000000	5.06200000	6.21300000
160.584	2294.30	1591.00000000	5.04600000	6.18800000
160.850	2307.90	1605.00000000	5.04900000	6.21500000
161.100	2328.60	1627.00000000	5.05900000	6.25500000
161.350	2284.30	1583.00000000	5.06100000	6.24600000
161.600	2348.40	1648.00000000	5.06800000	6.25400000
161.850	2335.20	1634.00000000	5.06200000	6.24000000
162.100	2323.50	1623.00000000	5.06700000	6.27300000
162.367	2283.10	1583.00000000	5.07000000	6.26400000
162.617	2313.30	1614.00000000	5.07600000	6.25300000
162.867	2271.80	1573.00000000	5.08000000	6.26900000
163.117	2347.10	1648.00000000	5.07800000	6.26800000
163.383	2243.10	1544.00000000	5.07800000	6.25900000
163.633	2348.50	1649.00000000	5.07500000	6.25900000
163.883	2306.80	1607.00000000	5.07200000	6.26200000
164.133	2309.90	1611.00000000	5.07900000	6.27400000
164.383	2310.80	1612.00000000	5.08000000	6.29000000
164.633	2280.00	1582.00000000	5.08600000	6.25600000
164.883	2346.00	1648.00000000	5.08600000	6.26800000
165.133	2284.40	1586.00000000	5.08300000	6.27400000
165.383	2333.40	1635.00000000	5.08300000	6.26000000
165.633	2322.50	1624.00000000	5.08200000	6.26800000
165.883	2274.70	1576.00000000	5.08100000	6.24400000
166.133	2308.30	1609.00000000	5.07600000	6.24500000
166.383	2297.30	1599.00000000	5.08400000	6.28500000
166.633	2355.10	1657.00000000	5.08500000	6.25600000
166.883	2255.40	1557.00000000	5.08300000	6.28600000
167.133	2303.60	1604.00000000	5.07400000	6.26900000
167.399	2327.10	1627.00000000	5.07000000	6.24300000
167.650	2333.80	1634.00000000	5.07200000	6.27200000
167.900	2265.10	1566.00000000	5.07800000	6.31000000
168.150	2314.70	1615.00000000	5.07300000	6.26800000
168.416	2337.00	1636.00000000	5.06300000	6.26600000
168.666	2329.20	1627.00000000	5.05400000	6.28100000
168.916	2320.70	1618.00000000	5.05000000	6.25600000
169.166	2332.30	1630.00000000	5.05300000	6.26000000
169.416	2329.00	1627.00000000	5.05600000	6.24100000
169.666	2313.10	1611.00000000	5.05500000	6.22500000
169.933	2322.30	1620.00000000	5.05300000	6.24400000
170.183	2299.80	1598.00000000	5.05700000	6.23000000
170.433	2339.20	1639.00000000	5.06900000	6.23700000
170.683	2306.20	1607.00000000	5.07700000	6.26700000
170.949	2334.30	1664.00000000	5.29500000	6.66300000

171.199	2252.90	1614.0000000	5.5290000	6.8470000
171.449	2263.50	1628.0000000	5.5540000	6.8600000
171.699	2361.30	1726.0000000	5.5560000	6.8780000
171.949	2366.90	1731.0000000	5.5510000	6.8510000
172.216	2367.80	1730.0000000	5.5370000	6.8180000
172.466	2338.60	1701.0000000	5.5390000	6.8800000
172.716	2415.50	1785.0000000	5.5910000	6.9930000
172.966	2413.20	1802.0000000	5.7330000	7.1910000
173.216	2329.00	1730.0000000	5.8220000	7.2040000
173.482	2294.80	1688.0000000	5.7650000	7.1050000
173.732	2340.20	1714.0000000	5.6230000	6.8640000
173.982	2373.30	1736.0000000	5.5410000	6.8640000
174.232	2424.70	1789.0000000	5.5530000	6.8650000
174.482	2358.70	1738.0000000	5.6630000	7.0820000
174.749	2349.00	1744.0000000	5.7780000	7.1710000
174.999	2343.60	1739.0000000	5.7810000	7.1620000
175.249	2348.40	1742.0000000	5.7680000	7.1440000
175.499	2371.80	1756.0000000	5.6990000	7.0250000
175.749	2335.30	1712.0000000	5.6440000	6.9650000
176.015	2339.90	1716.0000000	5.6400000	6.9660000
176.265	2360.50	1735.0000000	5.6280000	6.9440000
176.515	2367.30	1742.0000000	5.6290000	6.9350000
176.765	2363.80	1738.0000000	5.6260000	6.9420000
177.015	2378.30	1752.0000000	5.6220000	6.9320000
177.274	2327.10	1700.0000000	5.6160000	6.9140000
177.524	2344.40	1717.0000000	5.6140000	6.9550000
177.782	2344.80	1718.0000000	5.6180000	6.9610000
178.032	2361.40	1735.0000000	5.6210000	6.9360000
178.298	2381.40	1754.0000000	5.6140000	6.9560000
178.548	2340.90	1713.0000000	5.6100000	6.9330000
178.806	2326.70	1700.0000000	5.6190000	6.9330000
179.056	2323.00	1697.0000000	5.6240000	6.9470000
179.306	2370.00	1744.0000000	5.6240000	6.9420000
179.557	2348.70	1722.0000000	5.6190000	6.9510000
179.807	2307.70	1681.0000000	5.6190000	6.9110000
180.073	2300.10	1673.0000000	5.6160000	6.9250000
180.339	2317.90	1690.0000000	5.6100000	6.9510000
180.589	2331.10	1703.0000000	5.6090000	6.9490000
180.839	2371.80	1744.0000000	5.6110000	6.9550000
181.089	2314.50	1687.0000000	5.6130000	6.9610000
181.339	2333.40	1707.0000000	5.6210000	6.9790000
181.589	2367.00	1740.0000000	5.6170000	6.9750000
181.840	2328.90	1701.0000000	5.6100000	6.9650000
182.090	2328.80	1701.0000000	5.6110000	6.9460000
182.340	2367.80	1740.0000000	5.6110000	6.9250000
182.606	2341.90	1714.0000000	5.6100000	6.9050000
182.856	2370.40	1743.0000000	5.6140000	6.9080000
183.106	2316.60	1688.0000000	5.6050000	6.9410000
183.356	2342.20	1711.0000000	5.5860000	6.8900000
183.606	2372.20	1738.0000000	5.5640000	6.8890000
183.856	2339.00	1704.0000000	5.5580000	6.8800000
184.123	2351.60	1717.0000000	5.5610000	6.8820000
184.373	2353.80	1720.0000000	5.5670000	6.8810000
184.623	2368.70	1734.0000000	5.5600000	6.8730000
184.873	2360.00	1725.0000000	5.5580000	6.8650000
185.139	2350.40	1716.0000000	5.5620000	6.8830000
185.389	2317.10	1682.0000000	5.5570000	6.8860000

✓ 185.639	2366.90	1731.0000000	5.5510000	6.8790000
185.889	2324.10	1688.0000000	5.5500000	6.8920000
186.139	2445.70	1831.0000000	5.7070000	7.1560000
186.406	2430.30	1868.0000000	6.0870000	7.7340000
186.656	2380.20	1847.0000000	6.2950000	7.8000000
186.906	2349.90	1803.0000000	6.1970000	7.6230000
187.156	2319.00	1752.0000000	6.0530000	7.4400000
187.406	2393.60	1823.0000000	6.0270000	7.4770000
187.672	2361.00	1802.0000000	6.1110000	7.6250000
187.922	2353.50	1805.0000000	6.1860000	7.6630000
188.172	2356.00	1808.0000000	6.1890000	7.6710000
188.422	2359.90	1811.0000000	6.1830000	7.6310000
188.672	2389.40	1839.0000000	6.1720000	7.6190000
188.939	2401.60	1851.0000000	6.1710000	7.6140000
189.189	2379.60	1829.0000000	6.1710000	7.6190000
189.439	2390.10	1839.0000000	6.1670000	7.6610000
189.689	2370.10	1819.0000000	6.1670000	7.6330000
189.939	2405.30	1855.0000000	6.1730000	7.6080000
190.205	2386.40	1835.0000000	6.1650000	7.6290000
190.455	2426.70	1875.0000000	6.1630000	7.6100000
190.705	2404.80	1854.0000000	6.1690000	7.6290000
190.955	2424.80	1874.0000000	6.1690000	7.5970000
191.205	2422.00	1872.0000000	6.1750000	7.6010000
191.472	2401.60	1852.0000000	6.1780000	7.6270000
191.722	2400.10	1850.0000000	6.1740000	7.6430000
191.972	2380.10	1830.0000000	6.1740000	7.6590000
192.222	2381.30	1831.0000000	6.1730000	7.6420000
192.488	2426.90	1877.0000000	6.1760000	7.6520000
192.738	2423.40	1874.0000000	6.1790000	7.6030000
192.988	2390.30	1841.0000000	6.1800000	7.6230000
193.238	2378.70	1829.0000000	6.1770000	7.6360000
193.488	2382.20	1833.0000000	6.1810000	7.6310000
193.738	2395.60	1846.0000000	6.1780000	7.6630000
193.988	2396.50	1845.0000000	6.1640000	7.6600000
194.238	2378.40	1826.0000000	6.1580000	7.6490000
194.488	2385.00	1833.0000000	6.1610000	7.6310000
194.738	2385.80	1834.0000000	6.1620000	7.6420000
194.988	2376.50	1825.0000000	6.1640000	7.6210000
195.238	2425.00	1874.0000000	6.1680000	7.6350000
195.488	2419.40	1868.0000000	6.1650000	7.5800000
195.738	2393.30	1842.0000000	6.1660000	7.6120000
195.988	2396.30	1845.0000000	6.1660000	7.6580000
196.238	2382.70	1831.0000000	6.1630000	7.6270000
196.504	2419.40	1868.0000000	6.1650000	7.6260000
196.754	2419.10	1868.0000000	6.1670000	7.6050000
197.005	2380.80	1830.0000000	6.1690000	7.6200000
197.255	2376.80	1826.0000000	6.1690000	7.6150000
197.521	2370.70	1819.0000000	6.1630000	7.6100000
197.771	2426.70	1876.0000000	6.1700000	7.6090000
198.021	2375.70	1825.0000000	6.1700000	7.6250000
198.271	2350.40	1800.0000000	6.1720000	7.6510000
198.521	2384.40	1834.0000000	6.1720000	7.6300000
198.771	2366.40	1816.0000000	6.1720000	7.6250000
199.037	2359.40	1810.0000000	6.1790000	7.6140000
199.288	2392.60	1843.0000000	6.1780000	7.6180000
199.538	2397.10	1847.0000000	6.1740000	7.6430000
199.788	2278.90	1729.0000000	6.1760000	7.6400000

✓ 200.054	2416.20	1861.0000000	6.1380000	7.5380000
200.304	2504.90	1982.0000000	6.3680000	7.9300000
200.554	2455.10	1980.0000000	6.7030000	8.3750000
200.804	2385.90	1916.0000000	6.7390000	8.3070000
201.054	2399.90	1907.0000000	6.5790000	8.0040000
201.304	2418.20	1907.0000000	6.4500000	7.9620000
201.571	2377.10	1867.0000000	6.4580000	7.9940000
201.821	2431.50	1924.0000000	6.4760000	8.0040000
202.071	2425.10	1946.0000000	6.6750000	8.3310000
202.321	2459.30	2017.0000000	6.9300000	8.6810000
202.587	2338.10	1891.0000000	6.8970000	8.4930000
202.837	2324.10	1832.0000000	6.5840000	7.9930000
203.087	2484.00	1977.0000000	6.4800000	8.1640000
203.337	2426.40	1947.0000000	6.6730000	8.2760000
203.587	2417.10	1947.0000000	6.7380000	8.3210000
203.854	2418.50	1949.0000000	6.7420000	8.3500000
204.104	2437.20	1968.0000000	6.7440000	8.3220000
204.354	2395.30	1925.0000000	6.7360000	8.3000000
204.604	2415.00	1930.0000000	6.6340000	8.1170000
204.854	2355.00	1853.0000000	6.5150000	8.0000000
205.120	2445.00	1946.0000000	6.5360000	8.1020000
205.370	2406.10	1915.0000000	6.5910000	8.1510000
205.620	2417.00	1927.0000000	6.5990000	8.1880000
205.870	2401.40	1911.0000000	6.5960000	8.1750000
206.120	2431.10	1941.0000000	6.5980000	8.1770000
206.387	2403.70	1914.0000000	6.6010000	8.1420000
206.637	2433.90	1944.0000000	6.6000000	8.1360000
206.887	2441.90	1952.0000000	6.6000000	8.1750000
207.137	2430.60	1940.0000000	6.5950000	8.1590000
207.387	2435.10	1944.0000000	6.5910000	8.1500000
207.653	2413.60	1921.0000000	6.5810000	8.1620000
207.903	2418.30	1926.0000000	6.5830000	8.1660000
208.153	2434.70	1944.0000000	6.5940000	8.1290000
208.403	2436.00	1946.0000000	6.5990000	8.1240000
208.653	2402.30	1912.0000000	6.5970000	8.1610000
208.903	2407.90	1917.0000000	6.5930000	8.1280000
209.153	2395.70	1904.0000000	6.5870000	8.1140000
209.403	2439.00	1947.0000000	6.5850000	8.1440000
209.653	2404.10	1912.0000000	6.5840000	8.1530000
209.903	2397.40	1905.0000000	6.5820000	8.1280000
210.153	2405.90	1913.0000000	6.5790000	8.1200000
210.403	2423.00	1929.0000000	6.5710000	8.1450000
210.653	2406.00	1912.0000000	6.5710000	8.1410000
210.903	2458.70	1965.0000000	6.5730000	8.0870000
211.153	2442.60	1950.0000000	6.5810000	8.1060000
211.419	2395.90	1904.0000000	6.5860000	8.1290000
211.669	2433.30	1941.0000000	6.5830000	8.1340000
211.919	2411.30	1918.0000000	6.5760000	8.1360000
212.170	2393.10	1899.0000000	6.5700000	8.1320000
212.420	2406.70	1912.0000000	6.5660000	8.1250000
212.686	2398.70	1902.0000000	6.5520000	8.1240000
212.936	2415.60	1918.0000000	6.5460000	8.1340000
213.186	2414.00	1917.0000000	6.5500000	8.0970000
213.436	2408.70	1913.0000000	6.5590000	8.1010000
213.686	2452.00	1956.0000000	6.5570000	8.1220000
213.952	2411.40	1916.0000000	6.5610000	8.0710000
214.202	2421.70	1928.0000000	6.5730000	8.0990000

214.453	2400.60	1908.0000000	6.5810000	8.1610000
214.703	2398.60	1906.0000000	6.5810000	8.1520000
214.969	2431.00	1936.0000000	6.5640000	8.1300000
215.219	2401.10	1905.0000000	6.5560000	8.1050000
215.469	2443.90	1948.0000000	6.5580000	8.0810000
215.719	2422.70	1928.0000000	6.5660000	8.1170000
215.969	2370.90	1877.0000000	6.5720000	8.1130000
216.219	2417.10	1942.0000000	6.7030000	8.3540000
216.485	2465.40	2026.0000000	6.9500000	8.7140000
216.736	2450.40	2025.0000000	7.0460000	8.7040000
216.986	2483.80	2064.0000000	7.0840000	8.7690000
217.236	2490.30	2081.0000000	7.1560000	8.8980000
217.502	2484.20	2082.0000000	7.2040000	8.8980000
217.752	2377.10	1974.0000000	7.1980000	8.8640000
218.002	2442.40	2034.0000000	7.1620000	8.8210000
218.252	2458.50	2046.0000000	7.1340000	8.8350000
218.502	2471.10	2058.0000000	7.1300000	8.8070000
218.752	2474.70	2061.0000000	7.1260000	8.7920000
219.019	2455.20	2042.0000000	7.1290000	8.7740000
219.269	2454.50	2042.0000000	7.1340000	8.8110000
219.519	2479.10	2066.0000000	7.1300000	8.8070000
219.769	2462.70	2049.0000000	7.1260000	8.8140000
220.035	2479.80	2066.0000000	7.1250000	8.7990000
220.285	2439.00	2025.0000000	7.1240000	8.8060000
220.535	2460.80	2048.0000000	7.1320000	8.8100000
220.785	2451.10	2039.0000000	7.1370000	8.8180000
221.035	2315.70	1905.0000000	7.1460000	8.8370000
221.302	2338.80	1932.0000000	7.1730000	8.8590000
221.552	2319.20	1916.0000000	7.1970000	8.8870000
221.802	2367.40	1965.0000000	7.2030000	8.8970000
222.052	2348.90	1946.0000000	7.1990000	8.9060000
222.302	2318.40	1915.0000000	7.1960000	8.9050000
222.568	2281.80	1880.0000000	7.2070000	8.9110000
222.819	2282.40	1883.0000000	7.2230000	8.9320000
223.084	2253.10	1855.0000000	7.2320000	8.9110000
223.334	2291.30	1894.0000000	7.2370000	8.9090000
223.585	2280.20	1882.0000000	7.2310000	8.9300000
223.835	2276.40	1877.0000000	7.2230000	8.9420000
224.085	2261.70	1862.0000000	7.2210000	8.9340000
224.335	2266.90	1867.0000000	7.2200000	8.9170000
224.585	2250.10	1847.0000000	7.1980000	8.8580000
224.835	2268.80	1861.0000000	7.1660000	8.8190000
225.101	2273.40	1864.0000000	7.1550000	8.8240000
225.351	2253.10	1844.0000000	7.1570000	8.8390000
225.601	2268.10	1859.0000000	7.1570000	8.8110000
225.851	2245.70	1836.0000000	7.1530000	8.8260000
226.101	2276.30	1867.0000000	7.1560000	8.8310000
226.368	2255.40	1846.0000000	7.1550000	8.7900000
226.618	2261.70	1852.0000000	7.1530000	8.8450000
226.868	2247.50	1839.0000000	7.1610000	8.8130000
227.118	2245.50	1837.0000000	7.1610000	8.8520000
227.384	2276.60	1869.0000000	7.1670000	8.8580000
227.634	2244.90	1838.0000000	7.1720000	8.8440000
227.884	2260.40	1853.0000000	7.1690000	8.8310000
228.134	2253.60	1846.0000000	7.1670000	8.8090000
228.384	2233.90	1826.0000000	7.1650000	8.8180000
228.634	2248.10	1840.0000000	7.1640000	8.8190000

228.884	2256.40	1848.0000000	7.1620000	8.8060000
229.134	2267.50	1859.0000000	7.1610000	8.8300000
229.384	2267.00	1858.0000000	7.1580000	8.8460000
229.634	2279.00	1870.0000000	7.1580000	8.8110000
229.884	2165.70	1757.0000000	7.1600000	8.8200000
230.134	2271.80	1863.0000000	7.1590000	8.8580000
✓ 230.384	2243.10	1834.0000000	7.1570000	8.8220000
230.634	2314.70	1919.0000000	7.2480000	9.0050000
230.884	2297.20	1936.0000000	7.4810000	9.4060000
231.134	2313.40	1977.0000000	7.6470000	9.4200000
231.400	2292.80	1957.0000000	7.6510000	9.4190000
231.651	2311.60	1976.0000000	7.6520000	9.4290000
231.901	2309.20	1974.0000000	7.6550000	9.4220000
232.151	2277.30	1942.0000000	7.6540000	9.4040000
232.409	2304.60	1969.0000000	7.6520000	9.4050000
232.659	2288.90	1953.0000000	7.6500000	9.4310000
232.909	2292.20	1956.0000000	7.6480000	9.4650000
233.167	2308.90	1973.0000000	7.6500000	9.4480000
233.417	2246.00	1911.0000000	7.6560000	9.4460000
233.667	2221.20	1885.0000000	7.6480000	9.4080000
233.942	2313.00	1976.0000000	7.6430000	9.4040000
234.192	2264.20	1929.0000000	7.6550000	9.4700000
234.442	2321.50	1988.0000000	7.6660000	9.4400000
234.692	2308.50	1975.0000000	7.6660000	9.4130000
234.942	2312.80	1979.0000000	7.6640000	9.4300000
235.192	2329.10	1995.0000000	7.6620000	9.4330000
235.442	2279.60	1945.0000000	7.6590000	9.4400000
235.700	2323.60	1989.0000000	7.6590000	9.4570000
235.958	2307.50	1974.0000000	7.6660000	9.4740000
236.208	2295.90	1963.0000000	7.6700000	9.4590000
236.458	2294.50	1961.0000000	7.6660000	9.4440000
236.708	2294.70	1960.0000000	7.6580000	9.4270000
236.958	2275.60	1941.0000000	7.6590000	9.4410000
237.208	2285.60	1951.0000000	7.6590000	9.4260000
237.458	2297.50	1962.0000000	7.6530000	9.4290000
237.709	2338.20	2003.0000000	7.6550000	9.4280000
237.975	2330.00	1995.0000000	7.6560000	9.4530000
238.241	2301.50	1966.0000000	7.6530000	9.4190000
238.491	2282.30	1947.0000000	7.6540000	9.4420000
238.741	2282.50	1947.0000000	7.6530000	9.4430000
238.992	2306.80	1971.0000000	7.6510000	9.4020000
239.258	2301.30	1966.0000000	7.6540000	9.4230000
239.508	2321.20	1986.0000000	7.6550000	9.4180000
239.758	2318.60	1983.0000000	7.6520000	9.4320000
240.008	2285.80	1950.0000000	7.6510000	9.4200000
240.258	2329.30	1992.0000000	7.6410000	9.4020000
240.524	2321.40	1984.0000000	7.6400000	9.4120000
240.774	2328.60	1993.0000000	7.6520000	9.4250000
241.024	2312.90	1977.0000000	7.6500000	9.4130000
241.275	2329.20	1994.0000000	7.6550000	9.4150000
241.525	2311.70	1977.0000000	7.6580000	9.4000000
241.791	2314.60	1980.0000000	7.6590000	9.4120000
242.041	2319.40	1985.0000000	7.6600000	9.4220000
242.291	2302.60	1968.0000000	7.6590000	9.4120000
242.541	2321.30	1986.0000000	7.6540000	9.4180000
242.791	2289.10	1953.0000000	7.6490000	9.4090000
243.057	2254.10	1915.0000000	7.6290000	9.3980000

✓ 243.307	2070.90	1684.0000000	7.3080000	8.8580000
243.558	2065.30	1558.0000000	6.4780000	7.5960000
243.808	2113.00	1525.0000000	5.9020000	7.2400000
244.058	2001.80	1375.0000000	5.6180000	6.8330000
244.324	1950.30	1207.0000000	4.7380000	5.4890000
244.574	2023.00	1191.0000000	4.0320000	4.7350000
244.824	2123.00	1284.0000000	3.9750000	4.8870000
245.074	2245.90	1505.0000000	4.7570000	6.2230000
245.324	2105.80	1458.0000000	5.4630000	6.8050000
245.590	2116.70	1475.0000000	5.5080000	6.7840000
245.841	2122.80	1485.0000000	5.5370000	6.8520000
246.091	1697.90	967.0000000	4.8340000	6.8620000
246.341	2263.20	1397.0000000	3.7490000	6.0550000
246.607	2210.20	1392.0000000	4.1440000	6.0380000
246.857	2097.40	1376.0000000	4.9070000	6.0310000
247.107	2109.10	1356.0000000	4.6620000	6.0220000
247.357	2134.60	1381.0000000	4.6580000	5.9870000
247.607	2078.90	1356.0000000	4.8960000	6.0000000
247.857	2353.20	1535.0000000	4.1440000	6.0000000
248.124	2182.00	1357.0000000	4.0890000	6.0660000
248.374	1570.70	770.0000000	4.2850000	4.3930000
248.624	2476.20	1621.0000000	3.8410000	6.0740000
248.874	2373.00	1653.0000000	4.9180000	7.5860000
249.140	2198.10	1655.0000000	6.2240000	7.6400000
249.390	2260.20	1701.0000000	6.1090000	7.4190000
250.534	2044.40	1666.5000000	6.0390000	7.3680000
250.794	1933.00	1551.0000000	6.0300000	7.3410000
251.044	2087.60	1700.0000000	5.9880000	7.3030000
251.294	2020.60	1649.0000000	5.9760000	7.4110000
251.544	2046.80	1640.0000000	5.9140000	7.1730000
251.794	2152.50	1790.0000000	6.0180000	7.4720000
252.045	1824.40	1472.0000000	6.0840000	7.5400000
252.295	1808.80	1353.0000000	5.8610000	6.8370000
252.545	1984.40	1478.0000000	5.3080000	6.4840000
252.823	2060.00	1491.0000000	4.9160000	6.0390000
253.084	2222.10	1685.0000000	5.0480000	6.2670000
253.334	2167.80	1834.0000000	5.8510000	7.6640000
253.584	1878.00	1619.0000000	6.5600000	8.1570000
253.834	1975.20	1578.0000000	6.1950000	7.2380000
254.094	1984.90	1562.0000000	5.7730000	7.0630000
254.344	1964.20	1546.0000000	5.8110000	7.0950000
254.594	2000.30	1606.0000000	5.8790000	7.2580000
254.844	1945.80	1549.0000000	5.8920000	7.2410000
255.094	2097.90	1768.0000000	6.1470000	7.6900000
255.344	2004.50	1738.0000000	6.5000000	8.1080000
255.594	1993.10	1730.0000000	6.6230000	8.1300000
255.844	2022.00	1748.0000000	6.6160000	8.0590000
256.094	2033.90	1761.0000000	6.6100000	8.0660000
256.344	2042.50	1774.0000000	6.6110000	8.0950000
256.611	2052.30	1786.0000000	6.6030000	8.1090000
256.861	2004.80	1744.0000000	6.6060000	8.1450000
257.111	2001.00	1735.0000000	6.6120000	8.1110000
257.361	2005.50	1743.0000000	6.6220000	8.1340000
257.627	1989.80	1727.0000000	6.6450000	8.1320000
257.877	2016.80	1754.0000000	6.6420000	8.1320000
258.128	2045.60	1786.0000000	6.6310000	8.1530000
258.393	1996.70	1732.0000000	6.6020000	8.1200000

258.643	2032.80	1764.0000000	6.5990000	8.0930000
258.894	2001.60	1732.0000000	6.6170000	8.0880000
259.144	2031.60	1750.0000000	6.6210000	8.0090000
259.394	2015.00	1739.0000000	6.6170000	8.0460000
259.644	2018.60	1750.0000000	6.6200000	8.0940000
259.894	2004.90	1739.0000000	6.6250000	8.1120000
260.160	2032.40	1770.0000000	6.6100000	8.1350000
260.410	1978.10	1716.0000000	6.6020000	8.1370000
260.660	2016.70	1750.0000000	6.6060000	8.1070000
260.910	1970.60	1702.0000000	6.6110000	8.0940000
261.160	2003.50	1731.0000000	6.6160000	8.0690000
261.427	2037.90	1767.0000000	6.6110000	8.0790000
261.677	1994.80	1730.0000000	6.6070000	8.1190000
261.927	2023.70	1757.0000000	6.6070000	8.1070000
262.177	1978.70	1712.0000000	6.6040000	8.1070000
262.427	2000.80	1732.0000000	6.6060000	8.0930000
262.693	2003.10	1739.0000000	6.6030000	8.1240000
262.943	1988.10	1719.0000000	6.6000000	8.0910000
263.193	2044.70	1769.0000000	6.5930000	8.0480000
263.443	2008.60	1741.0000000	6.5990000	8.1010000
263.693	2016.30	1749.0000000	6.6090000	8.1030000
263.943	1817.60	922.0000000	5.3000000	3.5010000
264.193	2085.30	913.0000000	2.1310000	0.9480000
264.443	2103.40	899.0000000	0.0040000	0.1110000
264.693	2089.60	888.0000000	0.0040000	0.1150000
264.943	2080.30	876.0000000	0.0040000	0.0050000
265.193	2061.00	871.0000000	0.0040000	0.0070000
265.443	2064.40	863.0000000	0.0040000	0.0070000
265.693	2057.00	854.0000000	0.0040000	0.0050000

COMPANY: RICHARDSON OPERATING COMPANY

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WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
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03/01	08:00:30	2.5000	.01	65.79	.00	
03/01	08:01:00	3.0000	.01	65.18	.00	
03/01	08:01:30	3.5000	.01	64.55	.00	
03/01	08:02:00	4.0000	.01	63.93	.00	
03/01	08:02:30	4.5000	.01	63.30	.00	
03/01	08:03:00	5.0000	.01	62.68	.00	
03/01	08:03:30	5.5000	.01	62.05	.00	
03/01	08:04:00	6.0000	.01	61.42	.00	
03/01	08:04:30	6.5000	.01	60.79	.00	
03/01	08:05:00	7.0000	.01	60.16	.00	
03/01	08:05:30	7.5000	.01	59.52	.00	
03/01	08:06:00	8.0000	.01	58.89	.00	
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03/01	08:07:30	9.5000	.01	57.75	.00	
03/01	08:08:00	10.0000	.01	57.41	.00	
03/01	08:08:30	10.5000	.01	57.07	.00	
03/01	08:09:00	11.0000	.01	56.73	.00	
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03/01	08:24:00	26.0000	.01	48.65	.00	
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03/01	08:25:00	27.0000	.01	48.12	.00	
03/01	08:25:30	27.5000	.01	47.87	.00	
03/01	08:26:00	28.0000	.01	47.63	.00	
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03/01	08:31:30	33.5000	.01	45.03	.00	
03/01	08:32:00	34.0000	.01	44.83	.00	

COMPANY: RICHARDSON OPERATING COMPANY

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WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
03/01	08:32:30	34.5000	.01	44.64	.00	
03/01	08:33:00	35.0000	.01	44.45	.00	
03/01	08:33:30	35.5000	.01	44.26	.00	
03/01	08:34:00	36.0000	.01	44.07	.00	
03/01	08:34:30	36.5000	.01	43.88	.00	
03/01	08:35:00	37.0000	.01	43.69	.00	
03/01	08:35:30	37.5000	.01	43.49	.00	
03/01	08:36:00	38.0000	.01	43.24	.00	
03/01	08:36:30	38.5000	.01	43.10	.00	
03/01	08:37:00	39.0000	.01	42.95	.00	
03/01	08:37:30	39.5000	.01	42.81	.00	
03/01	08:38:00	40.0000	.01	42.67	.00	
03/01	08:38:30	40.5000	.08	42.51	.07	
03/01	08:39:00	41.0000	4.56	42.37	4.48	
03/01	08:39:30	41.5000	4.54	42.22	-.02	
03/01	08:40:00	42.0000	17.24	42.08	12.70	
03/01	08:40:30	42.5000	12.85	41.93	-4.40	
03/01	08:41:00	43.0000	15.88	41.78	3.04	
03/01	08:41:30	43.5000	7.49	41.64	-8.39	
03/01	08:42:00	44.0000	.07	41.49	-7.42	
03/01	08:42:30	44.5000	.07	41.36	.00	
03/01	08:43:00	45.0000	8.21	41.25	8.14	
03/01	08:43:30	45.5000	22.53	41.14	14.33	
03/01	08:44:00	46.0000	4.09	41.04	-18.44	
03/01	08:44:30	46.5000	10.02	40.93	5.93	
03/01	08:45:00	47.0000	8.10	40.83	-1.92	
03/01	08:45:30	47.5000	17.33	40.72	9.23	
03/01	08:46:00	48.0000	89.47	40.61	72.14	
03/01	08:46:30	48.5000	2761.19	40.51	2671.71	
03/01	08:47:00	49.0000	2517.42	40.40	-243.77	
03/01	08:47:30	49.5000	.56	40.29	-2516.86	
03/01	08:48:00	50.0000	.56	40.19	.00	
03/01	08:48:30	50.5000	.58	40.06	.02	
03/01	08:49:00	51.0000	.60	40.00	.02	
03/01	08:49:30	51.5000	.62	39.93	.02	
03/01	08:50:00	52.0000	.68	39.87	.06	
03/01	08:50:30	52.5000	45.07	39.80	44.39	
03/01	08:51:00	53.0000	2960.71	39.73	2915.64	
03/01	08:51:30	53.5000	2840.31	39.67	-120.41	
03/01	08:52:00	54.0000	1.15	39.61	-2839.15	
03/01	08:52:30	54.5000	1.18	39.54	.02	
03/01	08:53:00	55.0000	1.17	39.49	-.00	
03/01	08:53:30	55.5000	1.19	39.42	.02	
03/01	08:54:00	56.0000	1.17	39.35	-.03	
03/01	08:54:30	56.5000	1.19	39.36	.02	
03/01	08:55:00	57.0000	11.83	40.56	10.64	
03/01	08:55:30	57.5000	77.27	41.77	65.43	
03/01	08:56:00	58.0000	98.36	42.99	21.09	
03/01	08:56:30	58.5000	286.32	44.19	187.96	
03/01	08:57:00	59.0000	319.01	45.41	32.69	
03/01	08:57:30	59.5000	428.42	46.62	109.42	
03/01	08:58:00	60.0000	547.21	47.84	118.79	
03/01	08:58:30	60.5000	665.08	49.05	117.87	
03/01	08:59:00	61.0000	796.28	50.27	131.20	
03/01	08:59:30	61.5000	934.10	51.49	137.82	
03/01	09:00:00	62.0000	1080.57	52.71	146.48	
03/01	09:00:30	62.5000	1228.63	56.18	148.05	
03/01	09:01:00	63.0000	1374.58	59.58	145.96	
03/01	09:01:30	63.5000	1425.72	62.97	51.14	
03/01	09:02:00	64.0000	1425.72	66.23	.00	
03/01	09:02:30	64.5000	1425.54	69.79	-.18	
03/01	09:03:00	65.0000	1425.41	73.22	-.14	
03/01	09:03:30	65.5000	1425.11	76.66	-.29	
03/01	09:04:00	66.0000	1425.65	80.11	.54	
03/01	09:04:30	66.5000	1425.93	83.57	.28	

TANDEM INST. @ 2954' KB

COMPANY: RICHARDSON OPERATING COMPANY

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WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
03/01	09:05:00	67.0000	1425.96	87.04	.03	
03/01	09:05:30	67.5000	1426.01	90.52	.05	
03/01	09:06:00	68.0000	1426.05	94.02	.05	
03/01	09:06:30	68.5000	1426.16	96.07	.11	
03/01	09:07:00	69.0000	1426.34	97.12	.18	
03/01	09:07:30	69.5000	1426.54	98.18	.20	
03/01	09:08:00	70.0000	1426.77	99.24	.23	
03/01	09:08:30	70.5000	1426.99	100.31	.22	
03/01	09:09:00	71.0000	1471.27	101.37	44.28	BEGIN RATE #1
03/01	09:09:30	71.5000	1559.69	102.43	88.42	
03/01	09:10:00	72.0000	1594.59	103.50	34.90	
03/01	09:10:30	72.5000	1617.02	104.57	22.43	
03/01	09:11:00	73.0000	1590.99	105.64	-26.02	
03/01	09:11:30	73.5000	1626.54	106.71	35.54	
03/01	09:12:00	74.0000	1646.78	107.77	20.25	
03/01	09:12:30	74.5000	1644.88	108.25	-1.90	
03/01	09:13:00	75.0000	1661.85	108.49	16.97	
03/01	09:13:30	75.5000	1659.88	108.73	-1.96	
03/01	09:14:00	76.0000	1666.03	108.97	6.15	
03/01	09:14:30	76.5000	1670.02	109.21	3.98	
03/01	09:15:00	77.0000	1674.94	109.45	4.93	
03/01	09:15:30	77.5000	1678.66	109.68	3.72	
03/01	09:16:00	78.0000	1683.45	109.92	4.79	
03/01	09:16:30	78.5000	1685.95	110.16	2.49	
03/01	09:17:00	79.0000	1692.09	110.40	6.14	
03/01	09:17:30	79.5000	1693.78	110.64	1.68	
03/01	09:18:00	80.0000	1696.81	110.88	3.04	
03/01	09:18:30	80.5000	1699.48	110.98	2.67	
03/01	09:19:00	81.0000	1702.44	111.03	2.96	
03/01	09:19:30	81.5000	1704.32	111.07	1.88	
03/01	09:20:00	82.0000	1709.58	111.12	5.26	
03/01	09:20:30	82.5000	1711.05	111.17	1.47	
03/01	09:21:00	83.0000	1713.87	111.21	2.82	
03/01	09:21:30	83.5000	1718.59	111.26	4.71	
03/01	09:22:00	84.0000	1718.68	111.30	.09	
03/01	09:22:30	84.5000	1722.07	111.35	3.40	
03/01	09:23:00	85.0000	1723.55	111.39	1.47	
03/01	09:23:30	85.5000	1726.10	111.44	2.55	
03/01	09:24:00	86.0000	1731.09	111.48	4.99	
03/01	09:24:30	86.5000	1740.27	111.50	9.18	END RATE #1 - .151 BPM
03/01	09:25:00	87.0000	1868.79	111.50	128.52	
03/01	09:25:30	87.5000	1940.94	111.51	72.16	
03/01	09:26:00	88.0000	1975.94	111.51	35.00	
03/01	09:26:30	88.5000	1993.10	111.52	17.16	
03/01	09:27:00	89.0000	2009.32	111.52	16.22	
03/01	09:27:30	89.5000	2021.48	111.52	12.16	
03/01	09:28:00	90.0000	2032.16	111.52	10.68	
03/01	09:28:30	90.5000	2040.67	111.53	8.51	
03/01	09:29:00	91.0000	2049.31	111.53	8.65	
03/01	09:29:30	91.5000	2057.69	111.54	8.37	
03/01	09:30:00	92.0000	2063.36	111.54	5.68	
03/01	09:30:30	92.5000	2070.26	111.54	6.89	
03/01	09:31:00	93.0000	2076.61	111.52	6.36	
03/01	09:31:30	93.5000	2081.08	111.50	4.47	
03/01	09:32:00	94.0000	2084.74	111.47	3.66	
03/01	09:32:30	94.5000	2089.07	111.45	4.33	
03/01	09:33:00	95.0000	2093.95	111.43	4.88	
03/01	09:33:30	95.5000	2096.53	111.40	2.58	
03/01	09:34:00	96.0000	2100.46	111.38	3.93	
03/01	09:34:30	96.5000	2103.84	111.36	3.39	
03/01	09:35:00	97.0000	2106.69	111.33	2.85	
03/01	09:35:30	97.5000	2109.40	111.31	2.71	
03/01	09:36:00	98.0000	2112.25	111.28	2.85	
03/01	09:36:30	98.5000	2115.51	111.24	3.26	
03/01	09:37:00	99.0000	2118.09	111.20	2.58	

COMPANY: RICHARDSON OPERATING COMPANY

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WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
03/01	09:37:30	99.5000	2121.36	111.15	3.26	
03/01	09:38:00	100.0000	2124.89	111.11	3.53	
03/01	09:38:30	100.5000	2127.34	111.06	2.45	
03/01	09:39:00	101.0000	2130.20	111.02	2.85	
03/01	09:39:30	101.5000	2133.32	110.97	3.13	
03/01	09:40:00	102.0000	2151.99	110.93	18.67	
03/01	09:40:30	102.5000	2175.93	110.88	23.94	
03/01	09:41:00	103.0000	2199.47	110.83	23.54	
03/01	09:41:30	103.5000	2212.33	110.79	12.86	
03/01	09:42:00	104.0000	2219.38	110.74	7.05	
03/01	09:42:30	104.5000	2224.94	110.68	5.57	
03/01	09:43:00	105.0000	2229.02	110.62	4.08	
03/01	09:43:30	105.5000	2233.64	110.57	4.62	
03/01	09:44:00	106.0000	2236.64	110.50	3.00	
03/01	09:44:30	106.5000	2238.83	110.45	2.19	
03/01	09:45:00	107.0000	2217.90	110.39	-20.93	
03/01	09:45:30	107.5000	2236.18	110.33	18.27	
03/01	09:46:00	108.0000	2241.88	110.27	5.70	
03/01	09:46:30	108.5000	2244.74	110.22	2.86	
03/01	09:47:00	109.0000	2248.15	110.15	3.41	
03/01	09:47:30	109.5000	2250.74	110.10	2.59	
03/01	09:48:00	110.0000	2253.74	110.04	3.00	
03/01	09:48:30	110.5000	2255.66	109.98	1.92	
03/01	09:49:00	111.0000	2258.25	109.93	2.59	
03/01	09:49:30	111.5000	2263.13	109.88	4.89	
03/01	09:50:00	112.0000	2265.46	109.82	2.32	
03/01	09:50:30	112.5000	2267.91	109.78	2.45	
03/01	09:51:00	113.0000	2269.55	109.73	1.64	
03/01	09:51:30	113.5000	2271.74	109.67	2.19	
03/01	09:52:00	114.0000	2273.39	109.62	1.64	
03/01	09:52:30	114.5000	2275.03	109.57	1.64	
03/01	09:53:00	115.0000	2276.54	109.52	1.51	
03/01	09:53:30	115.5000	2278.45	109.47	1.91	
03/01	09:54:00	116.0000	2279.96	109.42	1.51	
03/01	09:54:30	116.5000	2281.74	109.38	1.78	
03/01	09:55:00	117.0000	2283.24	109.36	1.50	
03/01	09:55:30	117.5000	2284.60	109.33	1.36	
03/01	09:56:00	118.0000	2286.23	109.31	1.63	
03/01	09:56:30	118.5000	2299.22	109.29	12.99	
03/01	09:57:00	119.0000	2303.82	109.27	4.60	
03/01	09:57:30	119.5000	2305.59	109.25	1.77	
03/01	09:58:00	120.0000	2303.98	109.23	-1.61	
03/01	09:58:30	120.5000	2312.91	109.21	8.93	
03/01	09:59:00	121.0000	2316.57	109.19	3.66	
03/01	09:59:30	121.5000	2319.42	109.17	2.85	
03/01	10:00:00	122.0000	2319.57	109.14	.16	
03/01	10:00:30	122.5000	2322.27	109.14	2.69	
03/01	10:01:00	123.0000	2324.17	109.12	1.90	
03/01	10:01:30	123.5000	2325.67	109.10	1.50	
03/01	10:02:00	124.0000	2325.80	109.09	.14	
03/01	10:02:30	124.5000	2328.11	109.07	2.31	
03/01	10:03:00	125.0000	2328.23	109.06	.11	
03/01	10:03:30	125.5000	2330.01	109.05	1.79	
03/01	10:04:00	126.0000	2331.51	109.03	1.50	
03/01	10:04:30	126.5000	2331.69	109.02	.18	
03/01	10:05:00	127.0000	2333.82	109.00	2.13	
03/01	10:05:30	127.5000	2335.31	108.99	1.49	
03/01	10:06:00	128.0000	2336.68	108.97	1.36	
03/01	10:06:30	128.5000	2336.79	108.94	.11	
03/01	10:07:00	129.0000	2338.73	108.91	1.94	
03/01	10:07:30	129.5000	2339.97	108.86	1.24	
03/01	10:08:00	130.0000	2339.99	108.83	.02	
03/01	10:08:30	130.5000	2341.76	108.79	1.77	
03/01	10:09:00	131.0000	2342.99	108.75	1.23	
03/01	10:09:30	131.5000	2343.04	108.71	.05	

END RATE #2 - .637 BPM

END RATE #3 - 1.282 BPM

COMPANY: RICHARDSON OPERATING COMPANY

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WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
03/01	10:10:00	132.0000	2343.03	108.68	-.01	
03/01	10:10:30	132.5000	2343.17	108.63	.14	
03/01	10:11:00	133.0000	2343.35	108.60	.19	
03/01	10:11:30	133.5000	2348.62	108.56	5.27	END RATE #4 - 1.689 BPM
03/01	10:12:00	134.0000	2350.53	108.52	1.91	
03/01	10:12:30	134.5000	2358.27	108.46	7.74	
03/01	10:13:00	135.0000	2361.95	108.39	3.68	
03/01	10:13:30	135.5000	2361.98	108.32	.02	
03/01	10:14:00	136.0000	2364.87	108.23	2.89	
03/01	10:14:30	136.5000	2366.66	108.16	1.79	
03/01	10:15:00	137.0000	2366.75	108.08	.10	
03/01	10:15:30	137.5000	2368.49	108.00	1.73	
03/01	10:16:00	138.0000	2368.54	107.93	.05	
03/01	10:16:30	138.5000	2368.74	107.85	.20	
03/01	10:17:00	139.0000	2369.03	107.77	.29	
03/01	10:17:30	139.5000	2369.30	107.70	.26	
03/01	10:18:00	140.0000	2369.71	107.62	.41	
03/01	10:18:30	140.5000	2370.24	107.54	.53	
03/01	10:19:00	141.0000	2374.41	107.46	4.17	
03/01	10:19:30	141.5000	2374.51	107.36	.10	
03/01	10:20:00	142.0000	2374.71	107.27	.20	
03/01	10:20:30	142.5000	2374.95	107.18	.24	
03/01	10:21:00	143.0000	2375.23	107.09	.28	
03/01	10:21:30	143.5000	2375.58	107.00	.35	
03/01	10:22:00	144.0000	2375.99	106.91	.41	
03/01	10:22:30	144.5000	2376.43	106.82	.44	
03/01	10:23:00	145.0000	2376.92	106.73	.49	
03/01	10:23:30	145.5000	2377.40	106.64	.48	
03/01	10:24:00	146.0000	2377.92	106.55	.52	
03/01	10:24:30	146.5000	2378.47	106.45	.55	
03/01	10:25:00	147.0000	2379.03	106.30	.56	
03/01	10:25:30	147.5000	2379.58	106.16	.55	
03/01	10:26:00	148.0000	2380.16	106.01	.58	END RATE #5 - 2.211 BPM
03/01	10:26:30	148.5000	2380.83	105.88	.67	
03/01	10:27:00	149.0000	2381.56	105.73	.73	
03/01	10:27:30	149.5000	2392.59	105.59	11.03	
03/01	10:28:00	150.0000	2395.36	105.44	2.78	
03/01	10:28:30	150.5000	2394.21	105.30	-1.15	
03/01	10:29:00	151.0000	2394.35	105.16	.15	
03/01	10:29:30	151.5000	2396.77	105.02	2.42	
03/01	10:30:00	152.0000	2396.85	104.87	.08	
03/01	10:30:30	152.5000	2396.98	104.65	.13	
03/01	10:31:00	153.0000	2400.16	104.42	3.18	
03/01	10:31:30	153.5000	2398.52	104.18	-1.65	
03/01	10:32:00	154.0000	2398.47	103.94	-.05	
03/01	10:32:30	154.5000	2399.82	103.70	1.35	
03/01	10:33:00	155.0000	2399.73	103.47	-.09	
03/01	10:33:30	155.5000	2397.87	103.23	-1.85	
03/01	10:34:00	156.0000	2395.27	102.99	-2.60	
03/01	10:34:30	156.5000	2400.80	102.76	5.52	
03/01	10:35:00	157.0000	2399.01	102.52	-1.78	
03/01	10:35:30	157.5000	2398.92	102.28	-.09	
03/01	10:36:00	158.0000	2398.97	102.04	.05	
03/01	10:36:30	158.5000	2398.99	101.79	.02	
03/01	10:37:00	159.0000	2398.98	101.54	-.01	
03/01	10:37:30	159.5000	2398.92	101.28	-.06	
03/01	10:38:00	160.0000	2398.78	101.02	-.14	
03/01	10:38:30	160.5000	2398.57	100.77	-.21	
03/01	10:39:00	161.0000	2398.30	100.51	-.27	
03/01	10:39:30	161.5000	2397.96	100.26	-.34	
03/01	10:40:00	162.0000	2397.66	100.00	-.31	
03/01	10:40:30	162.5000	2397.37	99.75	-.28	
03/01	10:41:00	163.0000	2397.14	99.51	-.24	END RATE #6 - 2.676.BPM
03/01	10:41:30	163.5000	2396.99	99.25	-.15	
03/01	10:42:00	164.0000	2381.95	98.99	-15.04	

COMPANY: RICHARDSON OPERATING COMPANY

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WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
03/01	10:42:30	164.5000	2394.81	98.73	12.86	
03/01	10:43:00	165.0000	2401.58	98.44	6.77	
03/01	10:43:30	165.5000	2403.89	98.15	2.30	
03/01	10:44:00	166.0000	2405.38	97.86	1.49	
03/01	10:44:30	166.5000	2405.49	97.58	.11	
03/01	10:45:00	167.0000	2405.70	97.29	.21	
03/01	10:45:30	167.5000	2405.96	96.99	.26	
03/01	10:46:00	168.0000	2406.18	96.72	.22	
03/01	10:46:30	168.5000	2406.52	96.42	.34	
03/01	10:47:00	169.0000	2406.87	96.13	.35	
03/01	10:47:30	169.5000	2407.32	95.84	.45	
03/01	10:48:00	170.0000	2407.79	95.55	.47	
03/01	10:48:30	170.5000	2408.26	95.26	.48	
03/01	10:49:00	171.0000	2408.75	95.03	.49	
03/01	10:49:30	171.5000	2409.22	94.81	.47	
03/01	10:50:00	172.0000	2409.67	94.57	.45	
03/01	10:50:30	172.5000	2410.07	94.36	.40	
03/01	10:51:00	173.0000	2410.44	94.13	.38	
03/01	10:51:30	173.5000	2410.86	93.88	.41	
03/01	10:52:00	174.0000	2411.21	93.66	.35	
03/01	10:52:30	174.5000	2411.53	93.43	.33	
03/01	10:53:00	175.0000	2411.84	93.21	.30	
03/01	10:53:30	175.5000	2412.18	92.96	.35	
03/01	10:54:00	176.0000	2412.49	92.75	.31	
03/01	10:54:30	176.5000	2412.75	92.54	.26	
03/01	10:55:00	177.0000	2413.04	92.32	.29	
03/01	10:55:30	177.5000	2413.41	92.11	.37	
03/01	10:56:00	178.0000	2413.74	91.91	.33	
03/01	10:56:30	178.5000	2414.14	91.69	.40	
03/01	10:57:00	179.0000	2418.95	91.48	4.81	
03/01	10:57:30	179.5000	2420.95	91.27	2.00	
03/01	10:58:00	180.0000	2421.15	91.06	.20	
03/01	10:58:30	180.5000	2421.51	90.85	.36	
03/01	10:59:00	181.0000	2421.99	90.64	.48	
03/01	10:59:30	181.5000	2422.47	90.43	.48	
03/01	11:00:00	182.0000	2422.98	90.21	.51	
03/01	11:00:30	182.5000	2423.51	90.03	.53	
03/01	11:01:00	183.0000	2424.03	89.86	.52	
03/01	11:01:30	183.5000	2424.49	89.71	.46	
03/01	11:02:00	184.0000	2424.96	89.53	.47	
03/01	11:02:30	184.5000	2425.36	89.38	.40	
03/01	11:03:00	185.0000	2425.68	89.21	.32	
03/01	11:03:30	185.5000	2425.91	89.03	.23	
03/01	11:04:00	186.0000	2432.68	88.86	6.78	
03/01	11:04:30	186.5000	2428.69	88.70	-4.00	
03/01	11:05:00	187.0000	2428.66	88.54	-.02	
03/01	11:05:30	187.5000	2428.63	88.37	-.04	
03/01	11:06:00	188.0000	2428.43	88.20	-.20	
03/01	11:06:30	188.5000	2428.18	88.05	-.25	
03/01	11:07:00	189.0000	2427.96	87.94	-.23	
03/01	11:07:30	189.5000	2427.80	87.81	-.16	
03/01	11:08:00	190.0000	2427.73	87.68	-.07	
03/01	11:08:30	190.5000	2427.74	87.56	.00	
03/01	11:09:00	191.0000	2427.76	87.44	.02	
03/01	11:09:30	191.5000	2427.87	87.30	.11	
03/01	11:10:00	192.0000	2427.98	87.19	.11	
03/01	11:10:30	192.5000	2428.08	87.06	.10	
03/01	11:11:00	193.0000	2428.19	86.94	.11	
03/01	11:11:30	193.5000	2428.31	86.83	.12	
03/01	11:12:00	194.0000	2431.00	86.69	2.69	
03/01	11:12:30	194.5000	2434.86	86.58	3.86	
03/01	11:13:00	195.0000	2433.14	86.49	-1.72	
03/01	11:13:30	195.5000	2433.16	86.40	.02	
03/01	11:14:00	196.0000	2433.19	86.30	.03	
03/01	11:14:30	196.5000	2434.64	86.20	1.45	

END RATE #7 - 3.177 BPM

END RATE #8 - 3.614 BPM

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Date MM/DD	Time hh:mm:ss	Test Time mmmmmm mmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
03/01	11:15:00	197.0000	2434.71	86.10	.08	
03/01	11:15:30	197.5000	2434.75	86.01	.04	
03/01	11:16:00	198.0000	2434.73	85.91	-.02	
03/01	11:16:30	198.5000	2434.70	85.82	-.04	
03/01	11:17:00	199.0000	2434.65	85.72	-.05	
03/01	11:17:30	199.5000	2434.67	85.62	.02	
03/01	11:18:00	200.0000	2434.69	85.53	.02	
03/01	11:18:30	200.5000	2434.71	85.44	.02	
03/01	11:19:00	201.0000	2434.70	85.36	-.02	
03/01	11:19:30	201.5000	2434.76	85.27	.06	
03/01	11:20:00	202.0000	2434.79	85.19	.03	
03/01	11:20:30	202.5000	2434.82	85.11	.03	
03/01	11:21:00	203.0000	2434.83	85.03	.01	
03/01	11:21:30	203.5000	2434.81	84.95	-.02	
03/01	11:22:00	204.0000	2434.78	84.87	-.03	
03/01	11:22:30	204.5000	2434.74	84.77	-.04	
03/01	11:23:00	205.0000	2434.66	84.69	-.08	
03/01	11:23:30	205.5000	2434.57	84.61	-.09	
03/01	11:24:00	206.0000	2434.51	84.53	-.06	
03/01	11:24:30	206.5000	2434.43	84.43	-.08	
03/01	11:25:00	207.0000	2434.37	84.35	-.06	
03/01	11:25:30	207.5000	2434.30	84.24	-.07	
03/01	11:26:00	208.0000	2434.22	84.16	-.08	
03/01	11:26:30	208.5000	2434.13	84.07	-.08	
03/01	11:27:00	209.0000	2434.03	83.98	-.10	END RATE #9 - 4.155 BPM
03/01	11:27:30	209.5000	2435.07	83.88	1.04	
03/01	11:28:00	210.0000	2435.15	83.79	.07	
03/01	11:28:30	210.5000	2435.19	83.71	.04	
03/01	11:29:00	211.0000	2435.17	83.61	-.02	
03/01	11:29:30	211.5000	2435.04	83.53	-.12	
03/01	11:30:00	212.0000	2434.83	83.44	-.21	
03/01	11:30:30	212.5000	2434.53	83.33	-.30	
03/01	11:31:00	213.0000	2434.18	83.23	-.36	
03/01	11:31:30	213.5000	2433.82	83.13	-.36	
03/01	11:32:00	214.0000	2433.42	83.03	-.40	
03/01	11:32:30	214.5000	2432.98	82.93	-.44	
03/01	11:33:00	215.0000	2432.59	82.83	-.39	
03/01	11:33:30	215.5000	2432.25	82.74	-.34	
03/01	11:34:00	216.0000	2431.97	82.64	-.28	
03/01	11:34:30	216.5000	2431.71	82.53	-.26	
03/01	11:35:00	217.0000	2431.49	82.43	-.21	
03/01	11:35:30	217.5000	2431.29	82.33	-.21	
03/01	11:36:00	218.0000	2431.11	82.23	-.17	
03/01	11:36:30	218.5000	2430.95	82.17	-.17	
03/01	11:37:00	219.0000	2430.84	82.12	-.11	
03/01	11:37:30	219.5000	2430.71	82.07	-.12	
03/01	11:38:00	220.0000	2430.61	82.01	-.10	
03/01	11:38:30	220.5000	2430.58	81.96	-.03	
03/01	11:39:00	221.0000	2430.58	81.92	-.00	
03/01	11:39:30	221.5000	2430.56	81.87	-.02	
03/01	11:40:00	222.0000	2430.62	81.81	.06	
03/01	11:40:30	222.5000	2430.62	81.77	.01	
03/01	11:41:00	223.0000	2430.68	81.71	.05	
03/01	11:41:30	223.5000	2430.72	81.67	.05	
03/01	11:42:00	224.0000	2430.78	81.62	.06	END RATE #10 - 4.608 BPM
03/01	11:42:30	224.5000	2434.56	81.57	3.77	
03/01	11:43:00	225.0000	2434.40	81.51	-.15	
03/01	11:43:30	225.5000	2437.33	81.46	2.93	
03/01	11:44:00	226.0000	2437.35	81.41	.02	
03/01	11:44:30	226.5000	2437.43	81.35	.07	
03/01	11:45:00	227.0000	2437.49	81.30	.06	
03/01	11:45:30	227.5000	2435.81	81.23	-1.68	
03/01	11:46:00	228.0000	2435.91	81.18	.09	
03/01	11:46:30	228.5000	2436.08	81.12	.17	
03/01	11:47:00	229.0000	2436.27	81.07	.19	

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03/01	11:47:30	229.5000	2436.49	81.01	.21	
03/01	11:48:00	230.0000	2436.71	80.96	.23	
03/01	11:48:30	230.5000	2436.95	80.90	.24	
03/01	11:49:00	231.0000	2437.17	80.87	.22	
03/01	11:49:30	231.5000	2437.38	80.83	.21	
03/01	11:50:00	232.0000	2437.58	80.80	.19	
03/01	11:50:30	232.5000	2437.74	80.77	.17	
03/01	11:51:00	233.0000	2437.94	80.73	.20	
03/01	11:51:30	233.5000	2438.08	80.69	.14	
03/01	11:52:00	234.0000	2438.22	80.66	.14	
03/01	11:52:30	234.5000	2438.35	80.62	.14	
03/01	11:53:00	235.0000	2438.47	80.59	.12	
03/01	11:53:30	235.5000	2438.57	80.56	.10	
03/01	11:54:00	236.0000	2438.68	80.52	.11	
03/01	11:54:30	236.5000	2438.77	80.48	.09	
03/01	11:55:00	237.0000	2438.87	80.46	.10	
03/01	11:55:30	237.5000	2438.98	80.44	.11	
03/01	11:56:00	238.0000	2439.09	80.42	.11	
03/01	11:56:30	238.5000	2439.16	80.39	.07	
03/01	11:57:00	239.0000	2439.23	80.37	.06	END RATE #11 - 5.077 BPM
03/01	11:57:30	239.5000	2439.28	80.34	.05	
03/01	11:58:00	240.0000	2439.35	80.32	.07	
03/01	11:58:30	240.5000	2439.41	80.29	.06	
03/01	11:59:00	241.0000	2441.72	80.26	2.31	
03/01	11:59:30	241.5000	2441.84	80.24	.11	
03/01	12:00:00	242.0000	2441.98	80.22	.14	
03/01	12:00:30	242.5000	2442.12	80.19	.14	
03/01	12:01:00	243.0000	2444.75	80.18	2.63	
03/01	12:01:30	243.5000	2444.69	80.17	-.07	
03/01	12:02:00	244.0000	2444.61	80.15	-.08	
03/01	12:02:30	244.5000	2445.45	80.15	.84	
03/01	12:03:00	245.0000	2445.52	80.13	.07	
03/01	12:03:30	245.5000	2445.53	80.12	.01	
03/01	12:04:00	246.0000	2445.54	80.11	.01	
03/01	12:04:30	246.5000	2445.55	80.10	.01	
03/01	12:05:00	247.0000	2445.56	80.09	.01	
03/01	12:05:30	247.5000	2445.59	80.07	.03	
03/01	12:06:00	248.0000	2445.64	80.07	.05	
03/01	12:06:30	248.5000	2445.70	80.05	.06	
03/01	12:07:00	249.0000	2445.75	80.04	.05	
03/01	12:07:30	249.5000	2445.82	80.01	.07	
03/01	12:08:00	250.0000	2445.88	80.00	.06	
03/01	12:08:30	250.5000	2445.98	79.97	.10	
03/01	12:09:00	251.0000	2446.06	79.95	.08	
03/01	12:09:30	251.5000	2446.18	79.93	.12	
03/01	12:10:00	252.0000	2446.28	79.91	.10	
03/01	12:10:30	252.5000	2446.42	79.89	.13	
03/01	12:11:00	253.0000	2446.55	79.87	.13	
03/01	12:11:30	253.5000	2446.61	79.85	.07	
03/01	12:12:00	254.0000	2446.67	79.83	.06	
03/01	12:12:30	254.5000	2446.77	79.81	.10	
03/01	12:13:00	255.0000	2446.85	79.77	.08	END RATE #12 - 5.550 BPM
03/01	12:13:30	255.5000	2446.92	79.73	.07	
03/01	12:14:00	256.0000	2448.81	79.68	1.89	
03/01	12:14:30	256.5000	2450.73	79.64	1.92	
03/01	12:15:00	257.0000	2450.71	79.60	-.02	
03/01	12:15:30	257.5000	2450.83	79.55	.12	
03/01	12:16:00	258.0000	2451.05	79.51	.22	
03/01	12:16:30	258.5000	2451.29	79.47	.23	
03/01	12:17:00	259.0000	2451.57	79.43	.29	
03/01	12:17:30	259.5000	2451.84	79.39	.26	
03/01	12:18:00	260.0000	2452.13	79.35	.29	
03/01	12:18:30	260.5000	2452.38	79.31	.25	
03/01	12:19:00	261.0000	2452.60	79.27	.23	
03/01	12:19:30	261.5000	2452.84	79.23	.24	

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03/01	12:20:00	262.0000	2453.10	79.20	.25	
03/01	12:20:30	262.5000	2453.35	79.16	.26	
03/01	12:21:00	263.0000	2453.59	79.13	.24	
03/01	12:21:30	263.5000	2453.84	79.09	.25	
03/01	12:22:00	264.0000	2454.07	79.06	.23	
03/01	12:22:30	264.5000	2454.31	79.01	.24	
03/01	12:23:00	265.0000	2454.54	78.98	.23	
03/01	12:23:30	265.5000	2454.75	78.95	.21	
03/01	12:24:00	266.0000	2454.95	78.91	.20	
03/01	12:24:30	266.5000	2455.17	78.87	.22	
03/01	12:25:00	267.0000	2455.36	78.78	.18	
03/01	12:25:30	267.5000	2455.52	78.69	.16	
03/01	12:26:00	268.0000	2455.72	78.60	.19	
03/01	12:26:30	268.5000	2455.90	78.51	.18	
03/01	12:27:00	269.0000	2456.08	78.42	.19	
03/01	12:27:30	269.5000	2456.26	78.33	.18	
03/01	12:28:00	270.0000	2456.39	78.24	.12	END RATE #13 - 6.138 BPM
03/01	12:28:30	270.5000	2459.50	78.14	3.11	
03/01	12:29:00	271.0000	2459.46	78.05	-.04	
03/01	12:29:30	271.5000	2459.45	77.97	-.01	
03/01	12:30:00	272.0000	2461.13	77.87	1.68	
03/01	12:30:30	272.5000	2461.09	77.78	-.04	
03/01	12:31:00	273.0000	2461.12	77.62	.03	
03/01	12:31:30	273.5000	2461.25	77.47	.13	
03/01	12:32:00	274.0000	2461.41	77.32	.16	
03/01	12:32:30	274.5000	2461.49	77.16	.08	
03/01	12:33:00	275.0000	2461.64	77.01	.15	
03/01	12:33:30	275.5000	2461.76	76.87	.12	
03/01	12:34:00	276.0000	2461.93	76.71	.17	
03/01	12:34:30	276.5000	2462.10	76.56	.17	
03/01	12:35:00	277.0000	2462.27	76.41	.18	
03/01	12:35:30	277.5000	2462.44	76.27	.17	
03/01	12:36:00	278.0000	2462.61	76.12	.17	
03/01	12:36:30	278.5000	2462.73	75.90	.12	
03/01	12:37:00	279.0000	2462.84	75.62	.11	
03/01	12:37:30	279.5000	2462.94	75.34	.10	
03/01	12:38:00	280.0000	2463.01	75.04	.07	
03/01	12:38:30	280.5000	2463.08	74.76	.07	
03/01	12:39:00	281.0000	2463.15	74.47	.07	
03/01	12:39:30	281.5000	2463.25	74.18	.10	
03/01	12:40:00	282.0000	2463.43	73.82	.19	
03/01	12:40:30	282.5000	2463.57	73.54	.13	
03/01	12:41:00	283.0000	2463.70	73.24	.14	
03/01	12:41:30	283.5000	2463.80	72.96	.10	
03/01	12:42:00	284.0000	2463.89	72.68	.09	
03/01	12:42:30	284.5000	2463.95	72.33	.06	
03/01	12:43:00	285.0000	2464.00	71.99	.06	
03/01	12:43:30	285.5000	2464.07	71.66	.06	
03/01	12:44:00	286.0000	2464.13	71.31	.07	END RATE #14 - 6.572 BPM
03/01	12:44:30	286.5000	2467.06	70.90	2.93	
03/01	12:45:00	287.0000	2467.18	70.55	.12	
03/01	12:45:30	287.5000	2467.38	70.20	.20	
03/01	12:46:00	288.0000	2467.50	69.86	.13	
03/01	12:46:30	288.5000	2467.59	69.51	.09	
03/01	12:47:00	289.0000	2467.56	69.16	-.03	
03/01	12:47:30	289.5000	2465.39	68.81	-2.17	
03/01	12:48:00	290.0000	2463.11	68.47	-2.28	
03/01	12:48:30	290.5000	2459.51	68.03	-3.59	
03/01	12:49:00	291.0000	2350.92	67.53	-108.59	
03/01	12:49:30	291.5000	2307.09	67.04	-43.82	
03/01	12:50:00	292.0000	2346.07	66.55	38.98	
03/01	12:50:30	292.5000	2266.09	66.05	-79.98	
03/01	12:51:00	293.0000	2256.77	65.56	-9.32	
03/01	12:51:30	293.5000	2260.15	65.06	3.37	
03/01	12:52:00	294.0000	2258.60	64.57	-1.54	

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03/01	12:52:30	294.5000	2255.56	64.07	-3.04	
03/01	12:53:00	295.0000	2252.52	63.58	-3.04	
03/01	12:53:30	295.5000	2251.25	63.09	-1.27	
03/01	12:54:00	296.0000	2249.71	62.60	-1.54	
03/01	12:54:30	296.5000	2248.57	62.42	-1.14	
03/01	12:55:00	297.0000	2248.39	62.30	-.17	
03/01	12:55:30	297.5000	2248.10	62.19	-.29	
03/01	12:56:00	298.0000	2247.70	62.06	-.40	
03/01	12:56:30	298.5000	2247.25	61.95	-.46	
03/01	12:57:00	299.0000	2246.79	61.83	-.46	
03/01	12:57:30	299.5000	2246.50	61.72	-.28	
03/01	12:58:00	300.0000	2246.26	61.60	-.24	
03/01	12:58:30	300.5000	2246.04	61.48	-.22	
03/01	12:59:00	301.0000	2249.89	61.36	3.85	END RATE #15 - 7.157 BPM
03/01	12:59:30	301.5000	2251.31	61.25	1.42	
03/01	13:00:00	302.0000	2253.15	61.13	1.84	
03/01	13:00:30	302.5000	2253.33	61.02	.19	
03/01	13:01:00	303.0000	2253.49	60.89	.16	
03/01	13:01:30	303.5000	2253.72	60.75	.22	
03/01	13:02:00	304.0000	2254.00	60.62	.29	
03/01	13:02:30	304.5000	2254.43	60.48	.43	
03/01	13:03:00	305.0000	2254.85	60.35	.42	
03/01	13:03:30	305.5000	2255.28	60.21	.43	
03/01	13:04:00	306.0000	2255.80	60.07	.53	
03/01	13:04:30	306.5000	2256.30	59.94	.49	
03/01	13:05:00	307.0000	2256.67	59.80	.38	
03/01	13:05:30	307.5000	2257.04	59.67	.37	
03/01	13:06:00	308.0000	2257.45	59.54	.41	
03/01	13:06:30	308.5000	2257.97	59.40	.51	
03/01	13:07:00	309.0000	2258.50	59.25	.53	
03/01	13:07:30	309.5000	2259.11	59.11	.61	
03/01	13:08:00	310.0000	2259.64	58.99	.53	
03/01	13:08:30	310.5000	2260.25	58.84	.60	
03/01	13:09:00	311.0000	2260.85	58.70	.60	
03/01	13:09:30	311.5000	2261.43	58.56	.58	
03/01	13:10:00	312.0000	2261.92	58.43	.49	
03/01	13:10:30	312.5000	2262.42	58.28	.50	
03/01	13:11:00	313.0000	2262.70	58.15	.29	END RATE #16 - 7.629 BPM
03/01	13:11:30	313.5000	2245.76	58.01	-16.94	END STEP RATE TEST
03/01	13:12:00	314.0000	2231.62	57.87	-14.15	
03/01	13:12:30	314.5000	2209.94	57.76	-21.68	
03/01	13:13:00	315.0000	2220.69	57.85	10.75	
03/01	13:13:30	315.5000	2223.66	57.94	2.96	
03/01	13:14:00	316.0000	2198.05	58.04	-25.60	
03/01	13:14:30	316.5000	2215.09	58.13	17.04	
03/01	13:15:00	317.0000	2206.58	58.22	-8.52	
03/01	13:15:30	317.5000	2217.33	58.32	10.75	
03/01	13:16:00	318.0000	2228.90	58.41	11.57	
03/01	13:16:30	318.5000	2251.95	58.51	23.05	
03/01	13:17:00	319.0000	2292.48	58.60	40.53	
03/01	13:17:30	319.5000	2307.60	58.69	15.12	
03/01	13:18:00	320.0000	2322.72	58.79	15.12	
03/01	13:18:30	320.5000	2331.67	58.92	8.95	
03/01	13:19:00	321.0000	2337.88	58.81	6.20	
03/01	13:19:30	321.5000	2339.30	58.70	1.42	
03/01	13:20:00	322.0000	2339.30	58.59	.00	
03/01	13:20:30	322.5000	2333.40	58.48	-5.90	
03/01	13:21:00	323.0000	2333.40	58.37	.00	
03/01	13:21:30	323.5000	2332.14	58.26	-1.26	
03/01	13:22:00	324.0000	2258.68	58.14	-73.46	
03/01	13:22:30	324.5000	2254.63	58.04	-4.05	
03/01	13:23:00	325.0000	2271.22	57.92	16.59	
03/01	13:23:30	325.5000	2289.31	57.81	18.09	
03/01	13:24:00	326.0000	2295.52	57.70	6.21	
03/01	13:24:30	326.5000	2295.69	57.55	.17	

COMPANY: RICHARDSON OPERATING COMPANY

PAGE 11 OF 13

WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
03/01	13:25:00	327.0000	2261.88	57.47	-33.82	
03/01	13:25:30	327.5000	2258.23	57.39	-3.65	
03/01	13:26:00	328.0000	2258.35	57.31	.12	
03/01	13:26:30	328.5000	2264.32	57.23	5.97	
03/01	13:27:00	329.0000	2267.50	57.15	3.18	
03/01	13:27:30	329.5000	2270.14	57.06	2.64	
03/01	13:28:00	330.0000	2272.23	56.98	2.09	
03/01	13:28:30	330.5000	2273.64	56.90	1.41	
03/01	13:29:00	331.0000	2273.80	56.81	.17	
03/01	13:29:30	331.5000	2274.00	56.73	.19	
03/01	13:30:00	332.0000	2274.32	56.65	.33	
03/01	13:30:30	332.5000	2277.36	56.56	3.04	
03/01	13:31:00	333.0000	2277.50	56.52	.14	
03/01	13:31:30	333.5000	2277.73	56.47	.23	
03/01	13:32:00	334.0000	2211.54	56.41	-66.19	
03/01	13:32:30	334.5000	2173.29	56.36	-38.25	
03/01	13:33:00	335.0000	2154.04	56.31	-19.25	
03/01	13:33:30	335.5000	2138.48	56.26	-15.56	
03/01	13:34:00	336.0000	2124.43	56.20	-14.05	
03/01	13:34:30	336.5000	2112.55	56.16	-11.87	
03/01	13:35:00	337.0000	2084.97	56.10	-27.59	
03/01	13:35:30	337.5000	2007.20	56.05	-77.76	
03/01	13:36:00	338.0000	2059.04	56.00	51.83	
03/01	13:36:30	338.5000	2082.53	56.05	23.49	
03/01	13:37:00	339.0000	2092.92	56.34	10.39	
03/01	13:37:30	339.5000	2093.01	56.63	.09	
03/01	13:38:00	340.0000	2091.42	56.93	-1.59	
03/01	13:38:30	340.5000	2088.83	57.21	-2.59	
03/01	13:39:00	341.0000	2087.06	57.51	-1.78	
03/01	13:39:30	341.5000	2086.92	57.80	-.14	
03/01	13:40:00	342.0000	2075.18	58.10	-11.75	
03/01	13:40:30	342.5000	2009.32	58.38	-65.85	
03/01	13:41:00	343.0000	1933.50	58.68	-75.83	
03/01	13:41:30	343.5000	1859.59	58.97	-73.90	
03/01	13:42:00	344.0000	1783.65	59.26	-75.94	
03/01	13:42:30	344.5000	1707.53	60.04	-76.12	
03/01	13:43:00	345.0000	1627.17	59.75	-80.36	
03/01	13:43:30	345.5000	1509.08	59.45	-118.08	
03/01	13:44:00	346.0000	1384.55	59.15	-124.53	
03/01	13:44:30	346.5000	1239.90	58.85	-144.65	
03/01	13:45:00	347.0000	1089.87	58.56	-150.03	
03/01	13:45:30	347.5000	937.06	58.26	-152.81	
03/01	13:46:00	348.0000	824.01	57.96	-113.05	
03/01	13:46:30	348.5000	802.45	57.66	-21.56	
03/01	13:47:00	349.0000	802.32	57.37	-.13	
03/01	13:47:30	349.5000	800.10	57.07	-2.22	
03/01	13:48:00	350.0000	796.33	56.77	-3.77	
03/01	13:48:30	350.5000	681.57	55.58	-114.76	
03/01	13:49:00	351.0000	289.77	54.63	-391.80	
03/01	13:49:30	351.5000	.84	53.67	-288.93	
03/01	13:50:00	352.0000	.80	52.73	-.04	
03/01	13:50:30	352.5000	.74	51.81	-.06	
03/01	13:51:00	353.0000	.70	50.85	-.04	
03/01	13:51:30	353.5000	.68	49.94	-.01	
03/01	13:52:00	354.0000	.70	49.01	.01	
03/01	13:52:30	354.5000	.69	48.08	-.01	
03/01	13:53:00	355.0000	.68	47.16	-.01	
03/01	13:53:30	355.5000	.65	46.09	-.03	
03/01	13:54:00	356.0000	.61	45.18	-.05	
03/01	13:54:30	356.5000	.56	44.66	-.05	
03/01	13:55:00	357.0000	.49	44.34	-.07	
03/01	13:55:30	357.5000	.44	44.01	-.05	
03/01	13:56:00	358.0000	.39	43.69	-.04	
03/01	13:56:30	358.5000	.35	43.36	-.04	
03/01	13:57:00	359.0000	.33	43.03	-.03	

COMPANY: RICHARDSON OPERATING COMPANY

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WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
03/01	13:57:30	359.5000	.30	42.71	-.02	
03/01	13:58:00	360.0000	.29	42.38	-.02	
03/01	13:58:30	360.5000	.28	42.05	-.01	
03/01	13:59:00	361.0000	.24	41.72	-.03	
03/01	13:59:30	361.5000	.22	41.39	-.02	
03/01	14:00:00	362.0000	.20	41.06	-.02	
03/01	14:00:30	362.5000	.17	40.88	-.03	
03/01	14:01:00	363.0000	.14	40.89	-.03	
03/01	14:01:30	363.5000	.12	40.90	-.02	
03/01	14:02:00	364.0000	.10	40.90	-.02	
03/01	14:02:30	364.5000	.09	40.91	-.01	
03/01	14:03:00	365.0000	.08	40.92	-.01	
03/01	14:03:30	365.5000	.07	40.89	-.01	
03/01	14:04:00	366.0000	.06	40.90	-.01	
03/01	14:04:30	366.5000	.05	40.91	-.01	
03/01	14:05:00	367.0000	.04	40.92	-.01	
03/01	14:05:30	367.5000	.04	40.93	-.01	
03/01	14:06:00	368.0000	.03	40.94	-.00	
03/01	14:06:30	368.5000	.03	41.13	-.00	
03/01	14:07:00	369.0000	.03	41.28	-.00	
03/01	14:07:30	369.5000	.01	41.43	-.02	
03/01	14:08:00	370.0000	.01	41.58	.00	
03/01	14:08:30	370.5000	.01	41.73	.00	
03/01	14:09:00	371.0000	.01	41.88	.00	
03/01	14:09:30	371.5000	.01	42.03	.00	
03/01	14:10:00	372.0000	.01	42.18	.00	
03/01	14:10:30	372.5000	.01	42.33	.00	
03/01	14:11:00	373.0000	.01	42.48	.00	
03/01	14:11:30	373.5000	.01	42.63	.00	
03/01	14:12:00	374.0000	.01	42.78	.00	
03/01	14:12:30	374.5000	.01	42.82	.00	
03/01	14:13:00	375.0000	.01	42.79	.00	
03/01	14:13:30	375.5000	.01	42.77	.00	
03/01	14:14:00	376.0000	.01	42.76	.00	
03/01	14:14:30	376.5000	.01	42.73	.00	
03/01	14:15:00	377.0000	.01	42.71	.00	
03/01	14:15:30	377.5000	.01	42.69	.00	
03/01	14:16:00	378.0000	.01	42.67	.00	
03/01	14:16:30	378.5000	.01	42.64	.00	
03/01	14:17:00	379.0000	.01	42.62	.00	
03/01	14:17:30	379.5000	.01	42.60	.00	
03/01	14:18:00	380.0000	.01	42.57	.00	
03/01	14:18:30	380.5000	.01	42.53	.00	
03/01	14:19:00	381.0000	.01	42.51	.00	
03/01	14:19:30	381.5000	.01	42.48	.00	
03/01	14:20:00	382.0000	.01	42.46	.00	
03/01	14:20:30	382.5000	.01	42.44	.00	
03/01	14:21:00	383.0000	.01	42.41	.00	
03/01	14:21:30	383.5000	.01	42.39	.00	
03/01	14:22:00	384.0000	.01	42.36	.00	
03/01	14:22:30	384.5000	.01	42.34	.00	
03/01	14:23:00	385.0000	.01	42.31	.00	
03/01	14:23:30	385.5000	.01	42.29	.00	
03/01	14:24:00	386.0000	.01	42.26	.00	
03/01	14:24:30	386.5000	.01	42.26	.00	
03/01	14:25:00	387.0000	.01	42.24	.00	
03/01	14:25:30	387.5000	.01	42.23	.00	
03/01	14:26:00	388.0000	.01	42.22	.00	
03/01	14:26:30	388.5000	.01	42.20	.00	
03/01	14:27:00	389.0000	.01	42.19	.00	
03/01	14:27:30	389.5000	.01	42.18	.00	
03/01	14:28:00	390.0000	.01	42.17	.00	
03/01	14:28:30	390.5000	.01	42.15	.00	
03/01	14:29:00	391.0000	.01	42.14	.00	
03/01	14:29:30	391.5000	.01	42.13	.00	

COMPANY: RICHARDSON OPERATING COMPANY

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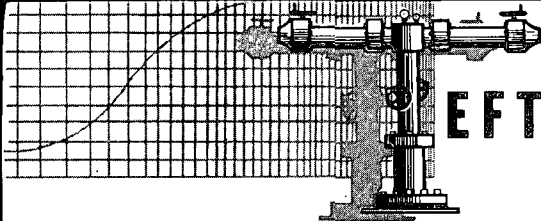
WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmm	Pressure Psig	Temp Deg F	deltaP Psi	Comment Ga. Press Ref. to 14.7 Psi Atm.
03/01	14:30:00	392.0000	.01	42.12	.00	
03/01	14:30:30	392.5000	.01	42.11	.00	
03/01	14:31:00	393.0000	.01	42.10	.00	
03/01	14:31:30	393.5000	.01	42.08	.00	
03/01	14:32:00	394.0000	.01	42.07	.00	
03/01	14:32:30	394.5000	.01	42.06	.00	
03/01	14:33:00	395.0000	.01	42.05	.00	
03/01	14:33:30	395.5000	.01	42.04	.00	
03/01	14:34:00	396.0000	.01	42.03	.00	
03/01	14:34:30	396.5000	.01	42.02	.00	
03/01	14:35:00	397.0000	.01	42.01	.00	
03/01	14:35:30	397.5000	.01	41.99	.00	
03/01	14:36:00	398.0000	.01	41.98	.00	
03/01	14:36:30	398.5000	.01	41.97	.00	
03/01	14:37:00	399.0000	.01	41.96	.00	
03/01	14:37:30	399.5000	.01	41.95	.00	
03/01	14:38:00	400.0000	.01	41.95	.00	
03/01	14:38:30	400.5000	.01	41.93	.00	
03/01	14:39:00	401.0000	.01	41.93	.00	
03/01	14:39:30	401.5000	.01	41.92	.00	
03/01	14:40:00	402.0000	.01	41.91	.00	
03/01	14:40:30	402.5000	.01	41.90	.00	
03/01	14:41:00	403.0000	.01	41.89	.00	
03/01	14:41:30	403.5000	.01	41.89	.00	
03/01	14:42:00	404.0000	.01	41.88	.00	



BHP • BU • PI • DD • GWT • RFS • GOR • FL • TS

EFTELLER, INC.

reservoir engineering data

MIDLAND, TEXAS / FARMINGTON, NEW MEXICO
GRAND JUNCTION, COLORADO

P. O. Box 1198
Farmington, New Mexico 87499
(505) 325-1731

Midland Fax (915) 694-7602
Farmington Fax (505) 325-1148
Grand Junction Fax (970) 241-7634

RICHARDSON OPERATING COMPANY

SALTY DOG NO. 2

MARCH 1, 2002

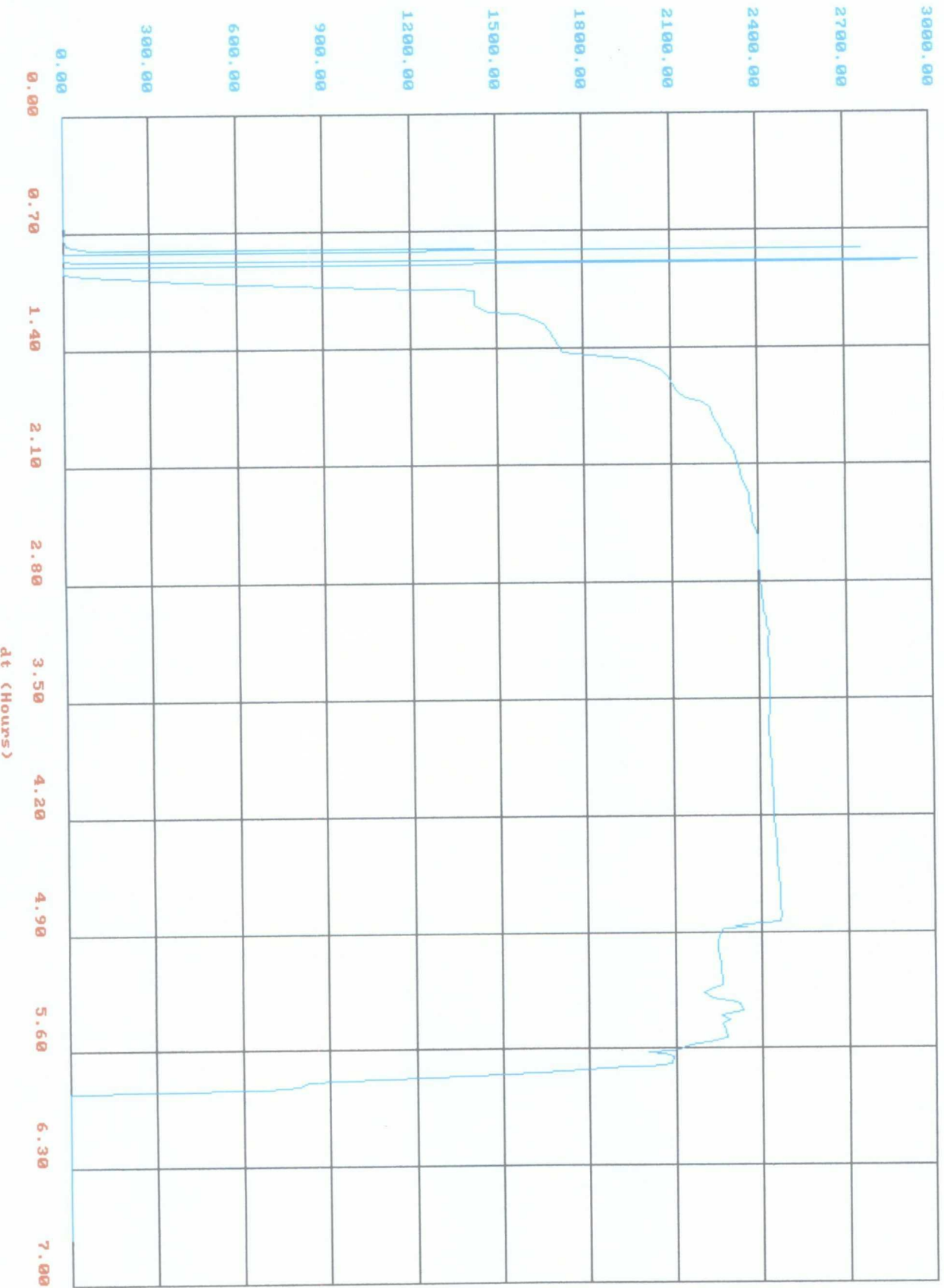
Serving the Permian Basin & Rocky Mountain Area

RICHARDSON OPERATING COMPANY

Pressure vs dt

SALTY DOG NO. 2
SAN JUAN COUNTY, NM
F154301.DAT

TEFTELLER, INC.
3-1-2002
STEP RATE TEST



 *
 * E V E N T S U M M A R Y *
 *

COMPANY : RICHARDSON OPERATING COMPANY

PAGE : B1

WELL NAME : SALTY DOG NO. 2

DATE : 03/01/02

WELL LOCATION : SAN JUAN COUNTY, NM

FILE REF: F154301.DAT

Date MM/DD	Time hh:mm:ss	Test Time mmmmmm.mmmm	Key Event	Pressure Psig	Temp Deg F
03/01	09:01:30	63.5000	TANDEM INST. @ 2954' KB	1425.72	62.97
03/01	09:08:30	70.5000	BEGIN RATE #1	1426.99	100.31
03/01	09:24:00	86.0000	END RATE #1 - .151 BPM	1731.09	111.48
03/01	09:39:00	101.0000	END RATE #2 - .637 BPM	2130.20	111.02
03/01	09:56:00	118.0000	END RATE #3 - 1.282 BPM	2286.23	109.31
03/01	10:11:00	133.0000	END RATE #4 - 1.689 BPM	2343.35	108.60
03/01	10:26:00	148.0000	END RATE #5 - 2.211 BPM	2380.16	106.01
03/01	10:41:00	163.0000	END RATE #6 - 2.676 BPM	2397.14	99.51
03/01	10:56:00	178.0000	END RATE #7 - 3.177 BPM	2413.74	91.91
03/01	11:11:00	193.0000	END RATE #8 - 3.614 BPM	2428.19	86.94
03/01	11:27:00	209.0000	END RATE #9 - 4.155 BPM	2434.03	83.98
03/01	11:42:00	224.0000	END RATE #10 - 4.608 BPM	2430.78	81.62
03/01	11:57:00	239.0000	END RATE #11 - 5.077 BPM	2439.23	80.37
03/01	12:13:00	255.0000	END RATE #12 - 5.550 BPM	2446.85	79.77
03/01	12:28:00	270.0000	END RATE #13 - 6.138 BPM	2456.39	78.24
03/01	12:44:00	286.0000	END RATE #14 - 6.572 BPM	2464.13	71.31
03/01	12:59:00	301.0000	END RATE #15 - 7.157 BPM	2249.89	61.36
03/01	13:11:00	313.0000	END RATE #16 - 7.629 BPM	2262.70	58.15
03/01	13:12:00	314.0000	END STEP RATE TEST	2231.62	57.87

Page A

```
Probe Set Up Time          3/ 1/ 2    7:58: 0
Time Delay to First Reading .....
Test Type Selection        STEP RATE TEST
Test Duration Selection    10 HOURS
```

Active Zone 2001	Last Prod/Inj	Gas Prod 2001	Oil Prod 2001	Water Prod 2001	Water Inj 2001	Days Prod 2001	Gas Prod 2000	Oil Prod 2000	Water Prod 2000
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
TWIN MOUNDS FRUITLAND SAND PC (GAS)	11-2001	10443	0	5660	0	182	0	0	0
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
BASIN FRUITLAND COAL (GAS)	11-2001	33994	0	51920	0	320	27778	0	45240
TWIN MOUNDS FRUITLAND SAND PC (GAS)	11-2001	83175	0	51580	0	324	11441	0	14640
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
TWIN MOUNDS FRUITLAND SAND PC (GAS)	11-2001	9383	0	960	0	44	0	0	0
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0
	NONE	0	0	0	0	0	0	0	0

BUSHMAN Fld
6 No. 1
Major Coal water
used
Xbrnle Trubly #012

Water Inj 2000	Days Prod 2000	Formation/ Notes	County
0	0	0 TWIN MDS FT SND PC/BASIN FRUIT COAL	SAN JUAN
0	0	0 TWIN MOUNDS PC/BASIN FRUITLAND COAL	SAN JUAN
0	0	0 TWIN MOUNDS PC	SAN JUAN
0	0	0 TWIN MOUNDS PC	SAN JUAN
0	0	0 TWIN MOUNDS PC/BASIN FT COAL	SAN JUAN
0	0	0 SWD, MESAVERDE	SAN JUAN
0	0	0 TWIN MDS FT SD PC	SAN JUAN
0	233	0 TWIN MOUNDS PC/BASIN FRUITLAND COAL	SAN JUAN
0	91	0 TWIN MOUNDS PC	SAN JUAN
0	0	0 TWIN MOUNDS PC/BASIN FRUITLAND COAL	SAN JUAN
0	0	0 TWIN MOUNDS PC	SAN JUAN
0	0	0 TWIN MOUNDS PC	SAN JUAN
0	0	0 TWIN MOUNDS FR SD PC(P&A 3-20-96)	SAN JUAN
0	0	0 TWIN MOUNDS PC/ BASIN FRUITLAND COAL	SAN JUAN
0	0	0 TWIN MOUNDS FR SD PC(P7A 3-20-96)	SAN JUAN
0	0	0 TWIN MO PC	SAN JUAN
0	0	0 TWIN MOUNDS PC	SAN JUAN
0	0	0 TWIN MDS FT SND PC EXT/BASIN FT COAL	SAN JUAN
0	0	0 TWIN MOUNDS PC/BASIN FR COAL	SAN JUAN

API	Well Name	Sec	Tsp	Rge	OC	NS Ftg	EW Ftg	OGRID	Operator	Prop Nbr	Lan Well	Plug Date	GL Elev	TVD D	Pool ID	
30-045-30394	ROPCO 4 #003	4	29N	14W	L	1830S	1060W	19219	RICHARDSON OPERATING CO	27506	F	G	9999-12-31	5435	1040	0
30-045-30366	ROPCO 4 #001	4	29N	14W	A	870N	1205E	19219	RICHARDSON OPERATING CO	27506	F	G	9999-12-31	5435	1130	0
30-045-30422	ROPCO 4 #002	4	29N	14W	I	1552S	784E	19219	RICHARDSON OPERATING CO	27506	F	G	9999-12-31	5495	1100	0
30-045-30443	ROPCO 4 #004	4	29N	14W	C	685N	1855W	19219	RICHARDSON OPERATING CO	27506	F	G	9999-12-31	5380	1000	0
30-045-30415	ROPCO 5 #004	5	29N	14W	G	1520N	1420E	19219	RICHARDSON OPERATING CO	27418	F	G	9999-12-31	5365	940	86620
30-045-30812	SALTY DOG SWD #002	5	29N	14W	J	1495S	1477E	19219	RICHARDSON OPERATING CO	24806	F	I	9999-12-31	5297	0	0
30-045-30259	WF FEDERAL 5 #001	5	29N	14W	E	1555N	660W	19219	RICHARDSON OPERATING CO	24390	F	G	9999-12-31	5370	905	0
30-045-29853	WF FEDERAL 5 #002	5	29N	14W	K	1655S	1570W	19219	RICHARDSON OPERATING CO	24390	F	G	9999-12-31	5320	860	71629
30-045-29852	WF FEDERAL 5 #003	5	29N	14W	O	975S	1855E	19219	RICHARDSON OPERATING CO	24390	F	G	9999-12-31	5320	843	86620
30-045-30459	ROPCO 8 #003	8	29N	14W	M	936S	1276W	19219	RICHARDSON OPERATING CO	27065	P	G	9999-12-31	5205	0	0
30-045-30460	ROPCO 8 #004	8	29N	14W	J	1607S	1451E	19219	RICHARDSON OPERATING CO	27065	P	G	9999-12-31	5270	0	0
30-045-30601	ROPCO 8 #002	8	29N	14W	E	1438N	1210W	19219	RICHARDSON OPERATING CO	27065	P	G	9999-12-31	5264	760	86620
30-045-22003	STERLING #001Y	8	29N	14W	H	1790N	1145E	6515	DUGAN PRODUCTION CORP	3853	P	G	1996-03-20	5325	850	0
30-045-30346	ROPCO 8 #001	8	29N	14W	B	850N	1850E	19219	RICHARDSON OPERATING CO	27065	F	G	9999-12-31	5315	0	0
30-045-22253	STERLING #002	8	29N	14W	J	1650S	1450E	6515	DUGAN PRODUCTION CORP	3853	P	G	1996-03-20	5277	800	0
30-045-30963	ROPCO 9 #002	9	29N	14W	P	1075S	715E	19219	RICHARDSON OPERATING CO	26505	F	G	9999-12-31	5335	0	0
30-045-30345	ROPCO 9 #004	9	29N	14W	F	1438N	1910W	19219	RICHARDSON OPERATING CO	26505	F	G	9999-12-31	5380	0	0
30-045-30322	ROPCO 9 #003	9	29N	14W	K	1404N	1508W	19219	RICHARDSON OPERATING CO	26505	P	G	9999-12-31	5300	0	0
30-045-30383	ROPCO 9 #001	9	29N	14W	A	835N	860E	19219	RICHARDSON OPERATING CO	26505	F	G	9999-12-31	5425	1050	0