

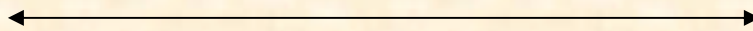
API Standard 607 Fourth Edition
Fire Test Report

Performed for

Novus Sealing Limited
Hunsworth Lane, Cleckheaton,
West Yorkshire, United Kingdom BD19 3UJ
www.novussealing.com



Novus 10
6 inch Class 300 Gaskets
Project Number: 20469
July 2004



Performed by

YARMOUTH RESEARCH AND TECHNOLOGY

92 East Elm Street
Yarmouth, ME 04096 USA
(207) 829-5359
yrtlab@maine.rr.com
www.yarmouthresearch.com

Yarmouth Research and Technology

API 607 4th Edition Fire Test Data

Customer: Novus Sealing Ltd	Date: 7/30/2004
Project Number: PN20469	
Specification: API 607 4th Edition	
Product Code: Novus 10 - 1/16 inch thickness	
Flange Mfgr: Weldbend	Nut Mfgr: Shih Hsang
Bolt Mfgr: Alloy & Stainless Fasteners VA	
Comments: New bolts/nuts, Used but good condition flanges.	
YRT Technician: Matthew J. Wasielewski, P.E.	

Bolt Torques (ft-lbs)

Bolt Location	At Start of Test	At End of Test
Upstream #1	200	30
Upstream #2	200	50
Upstream #3	200	60
Upstream #4	200	50
Downstream #1	200	60
Downstream #2	200	40
Downstream #3	200	50
Downstream #4	200	50

Fire and Cooldown Data:

Start Time:	12:04 PM	(EST)
Average Test Pressure:	31.2	psig
Combined Leak Rate of Both Gaskets:	16	ml/min
Allowable Leakage:	150	ml/min
Is Leakage Below Allowable?:	YES	

Post Burn Leakage Test

Start Time:	12:46 PM	(EST)
Average Test Pressure:	30.4	psig
Leak Rate Side A:	9.2	ml/min
Leak Rate Side B:	134	ml/min
Combined Leak Rate of Both Gaskets:	143	ml/min
Allowable Leakage:	150	ml/min
Is Leakage Below Allowable?:	YES	

Does Gasket Pass API 607 Leakage Requirements?:	YES
---	------------

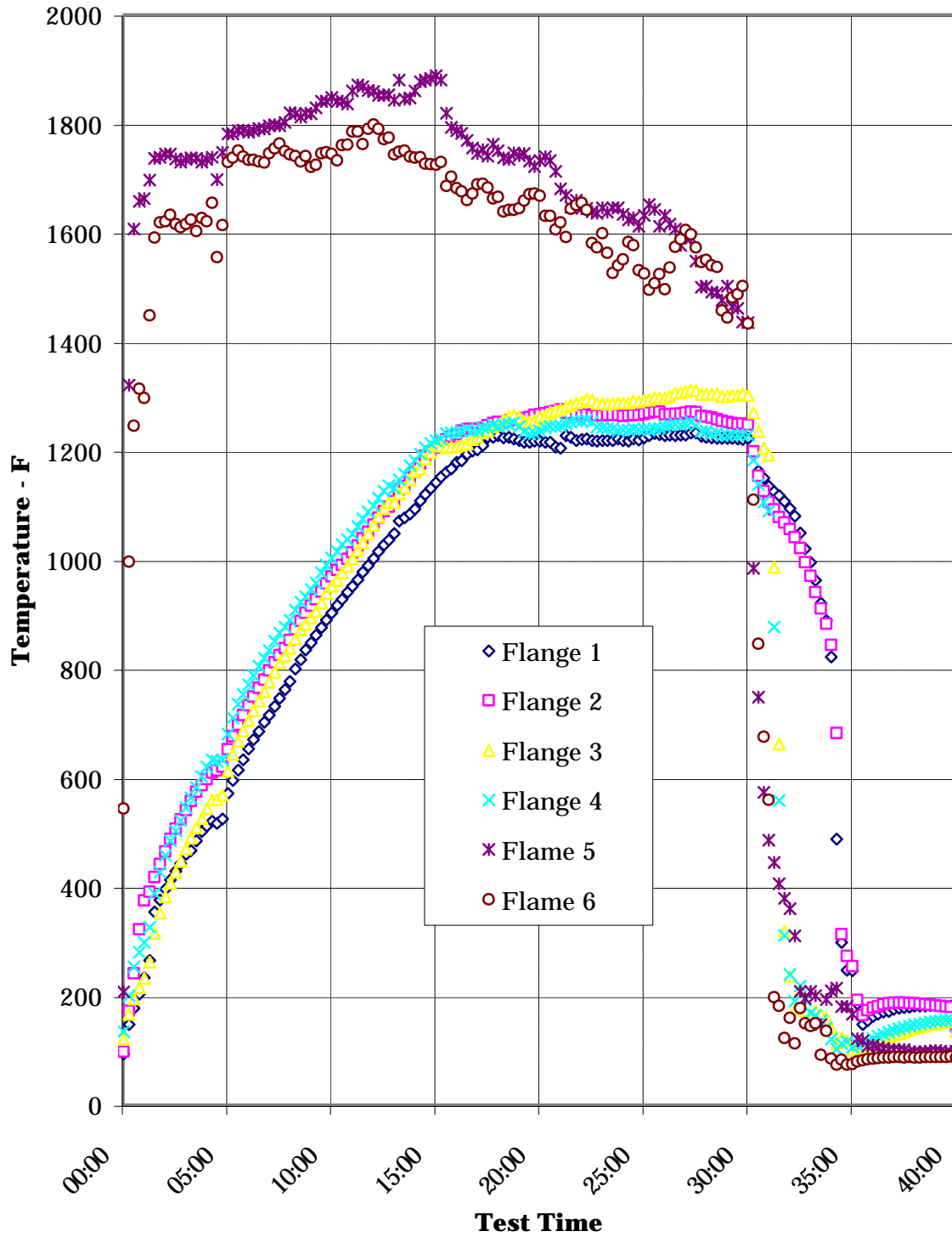
Witnesses

Matthew J. Wasielewski



Yarmouth Research and Technology

Time versus Temperature Chart



Yarmouth Research and Technology



Sample of Gasket Before Test

Yarmouth Research and Technology



Flange Assembly During Burn

Yarmouth Research and Technology



(Downstream)



(Upstream Leakage)
Gaskets After Test

Yarmouth Research and Technology

Fire Test Information

Customer: Novus Sealing Ltd

Date: 7/30/2004

Product Code: Novus 10 - 1/16 inch thickness

Project Number: PN20469

Burn and Cooldown Raw Data

Time	Pressure (psig)	Water Volume (mls)	Upstream Flange 1 Temp - F	Upstream Flange 2 Temp - F	Downstrm Flange 3 Temp - F	Downstrm Flange 4 Temp - F	Upstream Flame 5 Temp - F	Downstrm Flame 6 Temp - F
12:04:00	30.3	20996	93	97	120	134	206	543
12:04:15	30.3	21015	147	171	166	200	1320	996
12:04:30	29.8	21017	176	240	193	252	1606	1245
12:04:45	29.8	21023	202	322	214	279	1657	1313
12:05:00	29.6	21020	233	374	232	297	1662	1296
12:05:15	30.3	21026	264	390	261	325	1696	1447
12:05:30	30.5	21000	353	417	314	387	1736	1590
12:05:45	30.2	21010	375	441	351	426	1738	1618
12:06:00	30.4	21045	395	464	381	457	1744	1620
12:06:15	29.9	21039	412	487	406	484	1744	1632
12:06:30	30.0	21040	428	506	426	502	1735	1615
12:06:45	29.9	21060	442	523	446	521	1729	1609
12:07:00	30.2	21072	459	540	469	545	1734	1615
12:07:15	30.0	21099	466	556	489	563	1737	1623
12:07:30	29.9	21096	483	573	507	582	1736	1602
12:07:45	30.1	21123	501	586	525	601	1729	1626
12:08:00	30.0	21135	511	597	543	619	1734	1620
12:08:15	30.2	21150	519	609	558	632	1738	1654
12:08:30	30.2	21184	516	612	560	629	1697	1554
12:08:45	30.2	21211	524	619	568	632	1747	1613
12:09:00	30.3	21251	570	651	611	679	1781	1729
12:09:15	30.3	21328	595	676	642	709	1781	1737
12:09:30	30.5	21401	614	697	667	734	1787	1750
12:09:45	30.3	21537	632	714	685	752	1788	1739
12:10:00	30.9	21681	652	732	704	770	1784	1733
12:10:15	30.6	21889	670	748	723	787	1787	1733
12:10:30	30.5	22292	684	764	740	804	1791	1730
12:10:45	30.5	23051	701	780	757	819	1790	1728
12:11:00	31.0	23465	715	796	775	833	1796	1745
12:11:15	30.8	23862	730	811	793	850	1798	1754
12:11:30	32.1	25246	745	824	810	865	1796	1763
12:11:45	31.4	24977	761	837	823	876	1801	1749
12:12:00	31.4	25197	776	852	837	889	1819	1743
12:12:15	31.2	25222	799	872	853	907	1817	1740
12:12:30	29.8	25375	816	886	871	922	1811	1730
12:12:45	31.9	25354	834	902	881	932	1818	1740
12:13:00	31.8	25420	847	915	893	945	1817	1720

Yarmouth Research and Technology

Time	Pressure (psig)	Water Volume (mls)	Upstream Flange 1 Temp - F	Upstream Flange 2 Temp - F	Downstrm Flange 3 Temp - F	Downstrm Flange 4 Temp - F	Upstream Flame 5 Temp - F	Downstrm Flame 6 Temp - F
12:13:15	31.8	25529	861	927	905	957	1828	1724
12:13:30	30.8	25655	875	941	920	976	1840	1745
12:13:45	31.1	25722	888	955	937	990	1840	1747
12:14:00	31.4	25775	902	969	950	1002	1847	1744
12:14:15	31.3	25823	916	981	962	1014	1840	1732
12:14:30	31.0	25829	927	989	976	1027	1840	1760
12:14:45	31.1	25875	939	1001	988	1036	1835	1761
12:15:00	31.3	25967	951	1012	1001	1046	1859	1785
12:15:15	31.3	26110	963	1025	1017	1060	1870	1785
12:15:30	31.7	26123	977	1038	1031	1074	1867	1762
12:15:45	31.4	26192	989	1050	1046	1087	1860	1790
12:16:00	31.7	26350	1002	1064	1062	1098	1858	1798
12:16:15	31.5	25984	1015	1076	1078	1112	1851	1790
12:16:30	31.4	25925	1026	1089	1093	1125	1851	1771
12:16:45	31.2	25857	1035	1096	1105	1135	1852	1774
12:17:00	31.5	26005	1047	1107	1105	1130	1842	1743
12:17:15	31.5	26086	1070	1128	1120	1146	1879	1748
12:17:30	31.7	26072	1076	1135	1131	1156	1844	1750
12:17:45	31.4	26069	1083	1149	1146	1172	1846	1739
12:18:00	31.6	26064	1092	1160	1161	1181	1859	1737
12:18:15	31.5	26068	1107	1175	1166	1193	1876	1738
12:18:30	31.6	25998	1119	1190	1184	1205	1879	1726
12:18:45	31.3	26064	1130	1197	1196	1213	1882	1725
12:19:00	31.5	26025	1141	1205	1210	1218	1887	1724
12:19:15	31.0	26028	1151	1213	1208	1221	1879	1729
12:19:30	31.5	26050	1160	1220	1205	1231	1818	1685
12:19:45	31.5	26049	1166	1225	1206	1232	1793	1702
12:20:00	31.2	26024	1178	1229	1207	1233	1787	1681
12:20:15	31.4	25991	1181	1236	1209	1235	1782	1675
12:20:30	31.7	25978	1193	1239	1212	1239	1769	1659
12:20:45	31.6	25968	1199	1239	1220	1236	1755	1671
12:21:00	31.3	25929	1201	1239	1224	1236	1745	1688
12:21:15	31.6	25911	1209	1241	1232	1241	1752	1689
12:21:30	31.3	25910	1224	1246	1236	1242	1740	1682
12:21:45	31.7	25930	1224	1250	1243	1247	1762	1662
12:22:00	31.2	25918	1227	1252	1247	1244	1750	1665
12:22:15	31.5	25915	1223	1252	1256	1247	1737	1638
12:22:30	31.5	25920	1224	1255	1262	1248	1734	1641
12:22:45	31.4	25924	1221	1257	1264	1251	1746	1641
12:23:00	31.6	25920	1218	1257	1261	1244	1741	1644
12:23:15	31.6	25931	1215	1259	1253	1234	1745	1658
12:23:30	31.8	25945	1215	1261	1252	1230	1731	1670
12:23:45	31.7	25966	1217	1265	1255	1231	1721	1671
12:24:00	31.3	25975	1217	1266	1261	1236	1732	1667
12:24:15	31.7	25956	1215	1268	1264	1241	1739	1630
12:24:30	31.9	25940	1215	1270	1270	1244	1732	1630

Yarmouth Research and Technology

Time	Pressure (psig)	Water Volume (mls)	Upstream Flange 1 Temp - F	Upstream Flange 2 Temp - F	Downstrm Flange 3 Temp - F	Downstrm Flange 4 Temp - F	Upstream Flame 5 Temp - F	Downstrm Flame 6 Temp - F
12:24:45	31.9	26232	1206	1272	1273	1244	1712	1605
12:25:00	31.5	26265	1204	1275	1275	1245	1680	1618
12:25:15	31.3	26249	1227	1269	1280	1249	1668	1591
12:25:30	31.8	26125	1224	1268	1283	1252	1646	1643
12:25:45	31.6	26188	1218	1265	1287	1254	1659	1650
12:26:00	31.8	26127	1220	1265	1289	1254	1644	1654
12:26:15	31.7	26205	1221	1266	1294	1256	1644	1641
12:26:30	31.5	26174	1218	1264	1292	1252	1638	1580
12:26:45	31.8	26124	1217	1264	1286	1243	1635	1572
12:27:00	31.7	26118	1218	1264	1286	1242	1645	1598
12:27:15	31.6	26150	1218	1265	1285	1240	1637	1562
12:27:30	31.5	26136	1218	1265	1286	1240	1645	1525
12:27:45	31.9	26099	1221	1265	1287	1236	1645	1539
12:28:00	32.0	26104	1218	1263	1287	1237	1633	1550
12:28:15	31.5	26135	1217	1264	1287	1237	1623	1582
12:28:30	31.8	26112	1221	1265	1291	1240	1627	1576
12:28:45	32.1	26075	1219	1265	1289	1238	1611	1530
12:29:00	31.5	26103	1223	1267	1292	1238	1631	1524
12:29:15	31.5	26099	1227	1269	1293	1238	1651	1494
12:29:30	32.0	26088	1231	1271	1297	1240	1642	1506
12:29:45	31.5	26050	1229	1271	1296	1241	1611	1523
12:30:00	32.1	26076	1227	1266	1296	1244	1631	1495
12:30:15	31.8	26070	1228	1266	1300	1246	1615	1535
12:30:30	31.9	26082	1227	1267	1305	1248	1606	1573
12:30:45	31.5	26077	1228	1267	1306	1247	1576	1587
12:31:00	31.7	26086	1228	1269	1308	1249	1589	1604
12:31:15	31.6	26115	1232	1271	1311	1252	1590	1596
12:31:30	32.1	26099	1232	1270	1310	1246	1547	1572
12:31:45	31.4	26125	1226	1263	1303	1235	1499	1545
12:32:00	31.7	26098	1224	1262	1303	1235	1501	1549
12:32:15	31.9	26107	1223	1260	1303	1231	1490	1539
12:32:30	31.8	26112	1222	1257	1304	1232	1489	1536
12:32:45	32.5	26100	1222	1254	1299	1227	1475	1456
12:33:00	31.7	26094	1222	1252	1299	1227	1501	1443
12:33:15	31.3	26089	1222	1250	1301	1229	1463	1480
12:33:30	32.1	26123	1221	1248	1301	1228	1460	1486
12:33:45	31.9	26103	1220	1249	1304	1229	1435	1501
12:34:00	31.9	26113	1222	1247	1301	1228	1434	1432
12:34:15	31.6	26095	1192	1198	1269	1182	984	1109
12:34:30	31.8	26069	1162	1153	1235	1137	747	845
12:34:45	31.4	25205	1149	1125	1204	1105	573	674
12:35:00	32.0	26292	1134	1105	1191	1088	485	559
12:35:15	31.9	26200	1124	1091	986	876	444	197
12:35:30	34.5	25988	1117	1077	661	558	405	181
12:35:45	31.9	26162	1106	1067	318	310	378	122
12:36:00	32.6	26141	1093	1055	235	238	359	159

Yarmouth Research and Technology

Time	Pressure (psig)	Water Volume (mls)	Upstream Flange 1 Temp - F	Upstream Flange 2 Temp - F	Downstrm Flange 3 Temp - F	Downstrm Flange 4 Temp - F	Upstream Flame 5 Temp - F	Downstrm Flame 6 Temp - F
12:36:15	29.0	26170	1079	1040	176	190	309	112
12:36:30	32.3	26124	1048	1020	207	217	207	177
12:36:45	32.3	25870	1019	995	173	192	195	149
12:37:00	32.2	25886	995	970	161	168	207	144
12:37:15	32.7	25867	962	940	172	164	200	149
12:37:30	32.3	25771	920	910	164	154	147	91
12:37:45	31.3	24609	888	882	159	141	193	135
12:38:00	30.8	21551	821	843	140	120	208	84
12:38:15	30.9	23028	487	681	112	102	213	73
12:38:30	31.1	22814	297	312	122	112	180	82
12:38:45	30.8	21531	246	272	117	115	180	73
12:39:00	30.4	21669	245	253	100	105	166	74
12:39:15	30.6	21612	185	192	102	110	121	79
12:39:30	31.1	21501	147	164	102	111	117	81
12:39:45	30.7	21390	154	173	106	116	107	83
12:40:00	30.5	21303	162	178	111	121	109	84
12:40:15	30.6	21259	166	180	115	126	105	85
12:40:30	30.6	21156	170	184	120	129	103	86
12:40:45	30.6	21063	171	186	124	133	101	86
12:41:00	30.5	20988	175	187	127	136	101	87
12:41:15	30.6	20904	177	187	130	139	100	87
12:41:30	30.4	20851	178	187	133	142	101	86
12:41:45	30.8	20790	179	186	137	144	97	87
12:42:00	30.6	20736	181	186	140	147	97	86
12:42:15	30.6	20701	181	185	142	148	96	86
12:42:30	30.4	20616	181	184	144	150	97	87
12:42:45	30.6	20575	182	183	147	152	98	87
12:43:00	30.3	20542	182	182	148	153	99	87
12:43:15	31.0	20500	182	181	150	154	98	87
12:43:30	30.2	20437	181	180	152	155	96	87
12:43:45	30.2	20382	181	179	153	156	96	88
12:44:00	30.3	20348	152	143	134	144	98	86

End of 30 minute Burn and 10 minute Cooldown

Yarmouth Research and Technology

Leakage Summary for Burn and Cool Down Periods

Leakage was collected electronically.

Start Water Volume:	20996	mls
End Water Volume:	20348	mls
Total Water Lost During 40 Minute Burn and Cooldown:	648	mls
Calculated Average Leak Rate Over 40 Minute Duration:	16.2	ml/min

Summary of Test Parameters During Burn and Cool Down Periods

Pressure Information

Amount of Time Pressure Dropped Below 15 psig:	0	minutes
Maximum Allowable Low Pressure Time:	2	minutes
Average Pressure During Burn:	31.2	psig
Maximum Pressure During Burn/Cool Down:	34.5	psig
Minimum Pressure During Burn/Cool Down:	29.0	psig

Flange Temperature Information

Three out of four times must be below 15:00.

Flange Number	Time Temp > 1200 deg.	Max Temp-F	Min Temp-F	Average Temp-F
1	13.0	1232	93	867
2	15.0	1275	97	912
3	15.0	1311	100	842
4	15.5	1256	102	847

Flame Temperature Information

Maximum Upstream Flame Temperature During Burn:	1887	deg. F
Average Upstream Flame Temperature During Burn:	1354	deg. F
Maximum Downstream Flame Temperature During Burn:	1798	deg. F
Average Downstream Flame Temperature During Burn:	1280	
Average of Both Flame Temperatures During Burn:	1317	deg. F

Notes

Yarmouth Research and Technology

Post Burn Test Information

Customer: Novus Sealing Ltd

Date: 7/30/2004

Product Code: Novus 10 - 1/16 inch thickness

Project Number: PN20469

Test Pressure: 30

Raw Data

Time	Pressure (psig)	Flange 1 Temp - F	Flange 2 Temp - F	Flange 3 Temp - F	Flange 4 Temp - F
12:46:03	30	154	147	139	140
12:46:18	31	154	147	139	141
12:46:33	30	154	147	140	141
12:46:48	31	153	147	141	141
12:47:03	30	153	147	142	142
12:47:18	30	152	146	143	142
12:47:33	30	153	146	143	142
12:47:48	30	152	146	144	143
12:48:03	31	152	145	144	143
12:48:18	30	151	145	145	143
12:48:33	31	152	145	145	143
12:48:48	32	151	145	145	143
12:49:03	29	151	144	146	143
12:49:18	33	151	144	146	144
12:49:33	31	151	144	146	144
12:49:48	27	151	144	146	144
12:50:03	32	150	144	147	144
12:50:18	30	150	143	147	144
12:50:33	30	150	143	147	144
12:50:48	31	150	143	147	144
12:51:03	30	149	142	147	143

Leakage Collected from Upstream Flange Gasket A:	46	mls
Average Leak Rate Over 5 Minute Duration:	9.2	ml/min
Leakage Collected from Downstream Flange Gasket B:	670	mls
Average Leak Rate Over 5 Minute Duration:	134	ml/min
Was the Combined Leakage Below 150 ml/min?	No	

Yarmouth Research and Technology

Exxon Additional Requirements to API 607 4th Edition Fire Test

Customer: Novus Sealing Ltd	Date: 7/30/2004
Project Number: PN20469	
Specification: Exxon additional requirements to API 607 4th Edition	
Product Code: Novus 10 - 1/16 inch thickness	
Gasket Thickness: 0.000 inches	
Flange Mfgr: Weldbend	Nut Mfgr: Shih Hsang
Bolt Mfgr: Alloy & Stainless Fasteners VA	
Comments:	
YRT Technician: Matthew J. Wasielewski, P.E.	

Bolt Torques (ft-lbs)

Bolt Location	At Start of Test	Before Adjustments	At Test Completion
Upstream #1	200	40	200
Upstream #2	200	40	200
Upstream #3	200	55	200
Upstream #4	200	50	200
Downstream #1	200	50	200
Downstream #2	200	50	200
Downstream #3	200	70	200
Downstream #4	200	25	200

Post Burn Allowable leakage = 150 ml/min

Test Pressure (psig)	Side A Leak Rate (ml/min)	Side B Leak Rate (ml/min)	Total Leak Rate (ml/min)	Flange Bolt Retorques
30	9.2	134	143	
50	16	468	484	YES
50	0.2	0.4	1	
100	0.4	0.4	1	
200	0.8	0.4	1	
300	1.0	0.4	1	
700	1.6	1.6	3	

Witnesses

Matthew J. Wasielewski



Yarmouth Research and Technology

Post Burn Test Information

Customer: Novus Sealing Ltd

Date: 7/30/2004

Product Code: Novus 10

Project Number: PN20469

Test Pressure: 50

Raw Data

Time	Pressure (psig)	Flange 1 Temp - F	Flange 2 Temp - F	Flange 3 Temp - F	Flange 4 Temp - F
12:58:45	51	141	133	141	137
12:59:00	50	140	133	141	137
12:59:15	50	140	133	140	137
12:59:30	50	140	133	140	137
12:59:45	49	140	132	140	137
13:00:00	51	139	132	140	136
13:00:15	50	139	132	139	136
13:00:30	50	139	131	139	136
13:00:45	50	139	131	139	136
13:01:00	50	138	131	138	135
13:01:15	50	138	131	138	135
13:01:30	49	138	130	138	135
13:01:45	48	138	130	137	134
13:02:00	49	137	129	137	134
13:02:15	48	136	129	136	133
13:02:30	48	137	128	136	133
13:02:45	48	135	128	136	133
13:03:00	47	136	127	135	132
13:03:15	47	135	127	135	132
13:03:30	47	135	127	134	132
13:03:45	47	134	126	134	131

Leakage Collected from Upstream Flange Gasket A:	80	mls
Average Leak Rate Over 5 Minute Duration:	16	ml/min
Leakage Collected from Downstream Flange Gasket B:	2340	mls
Average Leak Rate Over 5 Minute Duration:	468	ml/min
Were Both Flange Leakages Below 150 ml/min?	No	

Yarmouth Research and Technology

Post Burn Test Information

Customer: Novus Sealing Ltd

Date: 7/30/2004

Product Code: Novus 10

Project Number: PN20469

Test Pressure: 50 **After Nut Retorque**

Raw Data

Time	Pressure (psig)	Flange 1 Temp - F	Flange 2 Temp - F	Flange 3 Temp - F	Flange 4 Temp - F
13:11:32	50	121	115	121	121
13:11:47	49	121	115	121	121
13:12:02	50	121	115	121	121
13:12:17	50	121	115	120	121
13:12:32	50	121	115	121	121
13:12:47	50	121	115	120	120
13:13:02	49	121	115	120	120
13:13:17	49	120	115	120	120
13:13:32	49	120	114	120	120
13:13:47	50	120	114	120	120
13:14:02	50	120	114	119	120
13:14:17	49	120	114	119	119
13:14:32	49	120	114	119	119
13:14:47	49	120	114	119	119
13:15:02	50	119	114	119	119
13:15:17	50	120	114	119	119
13:15:32	50	119	114	119	119
13:15:47	50	119	114	119	119
13:16:02	50	119	114	119	119
13:16:17	50	119	114	119	119
13:16:32	50	119	114	119	118

Leakage Collected from Upstream Flange Gasket A:	1	mls
Average Leak Rate Over 5 Minute Duration:	0.2	ml/min
Leakage Collected from Downstream Flange Gasket B:	2	mls
Average Leak Rate Over 5 Minute Duration:	0.4	ml/min
Were Both Flange Leakages Below 150 ml/min?	Yes	

Yarmouth Research and Technology

Post Burn Test Information

Customer: Novus Sealing Ltd

Date: 7/30/2004

Product Code: Novus 10

Project Number: PN20469

Test Pressure: 100

Raw Data

Time	Pressure (psig)	Flange 1 Temp - F	Flange 2 Temp - F	Flange 3 Temp - F	Flange 4 Temp - F
13:23:03	101	113	108	113	113
13:23:18	100	114	108	113	113
13:23:33	100	113	108	113	113
13:23:48	100	113	108	113	112
13:24:03	100	113	108	113	112
13:24:18	100	113	108	112	112
13:24:33	100	113	108	112	112
13:24:48	100	112	108	112	112
13:25:03	101	113	108	112	112
13:25:18	100	113	108	112	112
13:25:33	100	112	108	112	112
13:25:48	100	113	108	111	111
13:26:03	100	112	108	112	111
13:26:18	100	112	108	112	112
13:26:33	100	112	108	112	112
13:26:48	100	112	108	111	111
13:27:03	100	112	108	111	111
13:27:18	100	112	108	112	111
13:27:33	100	112	107	111	111
13:27:48	100	112	108	111	111
13:28:03	100	112	107	111	111

Leakage Collected from Upstream Flange Gasket A:	2	mls
Average Leak Rate Over 5 Minute Duration:	0.4	ml/min
Leakage Collected from Downstream Flange Gasket B:	2	mls
Average Leak Rate Over 5 Minute Duration:	0.4	ml/min
Were Both Flange Leakages Below 150 ml/min?	Yes	

Yarmouth Research and Technology

Post Burn Test Information

Customer: Novus Sealing Ltd

Date: 7/30/2004

Product Code: Novus 10

Project Number: PN20469

Test Pressure: 200

Raw Data

Time	Pressure (psig)	Flange 1 Temp - F	Flange 2 Temp - F	Flange 3 Temp - F	Flange 4 Temp - F
13:34:22	201	109	105	109	108
13:34:37	201	109	105	108	108
13:34:52	201	110	105	108	106
13:35:07	200	109	105	108	108
13:35:22	200	109	105	108	108
13:35:37	200	109	105	108	108
13:35:52	200	109	105	108	108
13:36:07	200	109	105	108	108
13:36:22	200	109	105	108	108
13:36:37	200	109	105	108	108
13:36:52	200	109	105	108	108
13:37:07	200	109	105	107	108
13:37:22	200	109	105	108	108
13:37:37	200	108	105	108	107
13:37:52	200	109	104	108	107
13:38:07	200	109	105	107	107
13:38:22	200	109	105	107	107
13:38:37	200	108	104	107	107
13:38:52	200	109	105	107	107
13:39:07	200	108	105	107	107
13:39:22	200	108	105	107	107

Leakage Collected from Upstream Flange Gasket A:	4	mls
Average Leak Rate Over 5 Minute Duration:	0.8	ml/min
Leakage Collected from Downstream Flange Gasket B:	2	mls
Average Leak Rate Over 5 Minute Duration:	0.4	ml/min
Were Both Flange Leakages Below 150 ml/min?	Yes	

Yarmouth Research and Technology

Post Burn Test Information

Customer: Novus Sealing Ltd

Date: 7/30/2004

Product Code: Novus 10

Project Number: PN20469

Test Pressure: 300

Raw Data

Time	Pressure (psig)	Flange 1 Temp - F	Flange 2 Temp - F	Flange 3 Temp - F	Flange 4 Temp - F
13:45:57	299	106	102	105	104
13:46:12	299	106	102	105	105
13:46:27	299	106	102	105	105
13:46:42	301	106	102	105	104
13:46:57	300	106	102	105	105
13:47:12	301	106	102	104	104
13:47:27	300	106	102	105	104
13:47:42	300	105	102	104	104
13:47:57	300	106	102	104	104
13:48:12	300	106	102	104	104
13:48:27	300	106	102	104	104
13:48:42	300	106	102	105	104
13:48:57	299	105	102	104	104
13:49:12	300	105	102	104	104
13:49:27	300	106	102	104	104
13:49:42	300	105	102	104	104
13:49:57	300	105	102	104	104
13:50:12	300	105	101	104	103
13:50:27	300	105	101	104	104
13:50:42	300	105	101	104	103
13:50:57	300	105	102	104	103

Leakage Collected from Upstream Flange Gasket A:	5	mls
Average Leak Rate Over 5 Minute Duration:	1	ml/min
Leakage Collected from Downstream Flange Gasket B:	2	mls
Average Leak Rate Over 5 Minute Duration:	0.4	ml/min
Were Both Flange Leakages Below 150 ml/min?	Yes	

Yarmouth Research and Technology

Post Burn Test Information

Customer: Novus Sealing Ltd

Date: 7/30/2004

Product Code: Novus 10

Project Number: PN20469

Test Pressure: 700

Raw Data

Time	Pressure (psig)	Flange 1 Temp - F	Flange 2 Temp - F	Flange 3 Temp - F	Flange 4 Temp - F
13:58:57	705	103	99	101	101
13:59:12	703	103	99	101	100
13:59:27	702	103	99	101	100
13:59:42	702	102	99	101	100
13:59:57	701	103	99	101	100
14:00:12	701	102	99	101	100
14:00:27	700	102	99	101	100
14:00:42	700	103	99	101	100
14:00:57	700	102	99	100	100
14:01:12	700	102	99	101	100
14:01:27	700	102	99	100	100
14:01:42	700	102	99	100	100
14:01:57	699	102	99	100	100
14:02:12	699	102	99	100	100
14:02:27	699	102	99	100	100
14:02:42	699	102	98	100	100
14:02:57	699	102	98	100	100
14:03:12	699	102	98	100	100
14:03:27	699	102	98	100	100
14:03:42	699	102	98	100	100
14:03:57	699	102	98	100	100

Leakage Collected from Upstream Flange Gasket A:	8	mls
Average Leak Rate Over 5 Minute Duration:	1.6	ml/min
Leakage Collected from Downstream Flange Gasket B:	8	mls
Average Leak Rate Over 5 Minute Duration:	1.6	ml/min
Were Both Flange Leakages Below 150 ml/min?	Yes	