

## **2004 FIELD INSPECTION PROGRAM**

### **DIVERTER TESTS**

Commission Inspectors witnessed 16% of all diverter tests (11 of 69) performed during 2004. Diverter tests on 9 of 27 exploration wells drilled during the year were witnessed; 14 of these were in remote locations. Seven diverter tests were witnessed on the 14 remote exploratory wells. Scheduling conflicts, weather, and the remoteness of operations contributed to the inability to witness diverter tests on 3 remote exploratory operations; diverter requirements were waived for 4 of the wells.

### **BLOWOUT PREVENTION EQUIPMENT**

Past performance has a strong influence on which rigs will be visited to witness blowout prevention equipment (“BOPE”) testing, particularly when scheduling conflicts arise. As a guide, AOGCC’s goal is to witness the initial BOPE test on all exploratory wells and rig startups (after the rig has been shut down for an extended time period), and at least one test on each operating rig every two months. Based on 175 rig-months for calendar year 2004, the Commission’s minimum goal was to witness 90 BOPE tests. There were 500 BOPE tests performed during 2004; the PI Team witnessed 108 BOPE tests (21.6% of the total, which is 120% of our stated goal). Initial BOPE tests were witnessed on 16 of 27 exploration wells; 13 of 15 initial BOPE tests were witnessed on rigs that started operations after an extended shut down. AOGCC witness of initial BOPE tests on three of the remote exploratory wells in NPRA was waived since a BLM inspector was available to witness these tests. Witness of the initial BOPE test on the remaining wells was waived for logistical reasons and taking into account recent equipment performance during testing.

### **RIG INSPECTIONS**

The PI Team conducted 123 rig inspections.

### **SAFETY VALVE SYSTEMS**

The SVS on a well is required to be tested at a maximum interval of every 6 months or more frequently if the failure rate from the prior test exceeded 10%. AOGCC’s minimum goal is to witness 25% of the tests performed during a year. During 2004, the PI Team witnessed 2,147 of the 4,423 SVS tests, or about 49% of the tests performed. There were 9,515 components tested in the 4,423 system tests. The Commission identified 4 defeated safety valve systems during 2004 inspections; operators implemented corrective action on all defeated systems by year-end.

### **WELL HOUSE INSPECTIONS**

The PI Team inspected 2,290 wellhead and well house systems on the North Slope and in Cook Inlet.

### **MECHANICAL INTEGRITY TESTS**

There were 1,155 wells engaged in underground injection activities by year-end 2004. Included were 1,088 Class II enhanced recovery wells, 56 Class II disposal wells, seven Class I disposal wells, and four Class II gas storage injectors. Operators added 50 injection wells during 2004, including 43 new wells and seven wells converted to injection service. Ten injectors were abandoned and one was suspended in 2004. MITs were performed on 427 injection wells throughout the state.

AOGCC inspectors witnessed:

- 312 of the 465 MITs;
- 3 of 11 MITs on the Class I non-hazardous disposal injection wells;
- MITs on 28 of the 50 new/converted wells;

The number of witnessed MITs on new/converted injectors is directly impacted by when the well begins injection. Twenty-two injectors were completed during 2004, but had not initiated injection as of the year-end. The Commission does not routinely witness an MIT until the well's operating condition has stabilized.

### **WELL BORE PLUGS**

Commission Inspectors witnessed abandonment activities on 27 wells during 2004; seven of these were new remote exploratory wells located throughout the state. Inspections of the remaining 20 wells included verification of deep plug placement or surface abandonment of old exploration and development wells in the NW Eileen area of Prudhoe Bay, Swanson River Unit, and Houston Gas field (coalbed methane development).

### **LOCATION CLEARANCE**

Eight location clearance inspections were conducted during 2004, including 6 abandoned exploratory well locations.

### **METERING**

**Gas Meters:** There were 26 gas measurement facilities in the State of Alaska by year-end 2004. The PI Team inspected 12 of the 25 active gas measurement facilities (16 of 28 meters) during 2004.

**Oil Meters:** North Slope oil production represented 98% of Alaska's total oil production in 2004. There were 94 oil meter provings witnessed by Commission Inspectors; 62 of those were at North Slope facilities. A Commission Inspector witnessed the annual recertification of Alyeska's portable prover during 2004 at the Valdez Marine Facility. Members of the Inspection Team also witnessed subsequent re-certifications of the North Slope using the Alyeska portable prover.

# AOGCC FIELD INSPECTION SUMMARY 2004

## YEARLY WITNESSED TESTS AND INSPECTIONS

TABLE I

Year	Statistics	Drilling Rigs Diversers & BOPE					Safety Valve Systems			Mech. Integrity Tests		Well Abandonment		Oil & Gas Meters		
	No. Of Inspectors	Diversers	BOP	Rig	Totals	Non Compliance	Tested	Well House	Non Compliance	Tests	Non Compliance	Plugs	Locations	Oil Meters	Gas Meters	Non Compliance
1980	4	0	122	0	126	139	1,724	N/A	187	0	0	N/A	56	171	29	0
1981	5	18	162	0	185	178	1,487	N/A	142	0	0	N/A	136	104	14	45
1982	5	9	208	0	222	180	2,810	N/A	371	0	0	N/A	119	109	20	32
1983	5	7	165	0	177	90	2,750	N/A	245	0	0	N/A	138	147	36	54
1984	5	19	194	0	218	92	2,818	N/A	233	0	0	N/A	104	129	35	74
1985	4(5)*	18	227	0	245	228	4,765	N/A	408	43	0	N/A	53	88	15	19
1986	4	13	117	0	134	127	4,539	N/A	428	216	2	N/A	70	104	22	14
1987	3(4)**	8	41	0	49	21	4,949	N/A	413	265	23	N/A	48	69	8	10
1988	3(4)***	12	55	0	67	43	4,919	N/A	508	300	6	N/A	20	71	11	0
1989	3	13	53	0	69	55	5,208	N/A	511	132	8	N/A	23	71	13	14
1990	3	17	57	70	147	117	2,767	N/A	289	96	3	N/A	37	18	0	2
1991	3	17	70	105	195	295	734	N/A	116	132	8	N/A	26	68	7	1
1992	3(4)****	19	57	33	109	53	1,252	N/A	183	162	2	36	24	116	24	1
1993	5	49	152	74	280	196	1,294	796	459	218	0	72	25	163	32	4
1994	5	25	123	65	218	130	1,465	3274	445	190	4	52	74	197	35	1
1995	5	35	121	64	220	154	1,234	1,065	253	216	6	37	33	167	38	5
1996	4(5)*****	31	97	56	184	172	1,060	1,001	183	197	4	44	42	156	46	2
1997	4*****	24	114	97	235	125	1121	1369	138	148	22	40	19	139	12	3
1998	4	24	155	97	276	120	1250	1404	144	190	12	16	7	143	22	22
1999	4*****	11	89	73	173	72	1700	2841	230	211	7	7	7	199	18	43
2000	5*****	25	115	128	268	175	1663	1766	202	220	7	19	5	117	7	31
2001	5	30	148	186	364	270	1892	1837	247	251	18	23	8	134	28	43
2002	5	18	112	147	277	198	1993	1935	274	247	16	34	17	120	21	18
2003	5	15	103	131	249	164	2072	2044	226	239	16	14	20	131	19	17
<b>2004</b>	<b>5</b>	<b>11</b>	<b>108</b>	<b>123</b>	<b>242</b>	<b>148</b>	<b>2147</b>	<b>2082</b>	<b>232</b>	<b>312</b>	<b>17</b>	<b>29</b>	<b>8</b>	<b>94</b>	<b>12</b>	<b>21</b>

\* PI Retired  
 \*\* PI Off Duty  
 \*\*\* PI Transferred  
 \*\*\*\* Due to injuries, we had only one inspector for two months  
 \*\*\*\*\* Effectively 4 inspectors in-the-field due to resignation, reassignment, and leave for family illness.  
 \*\*\*\*\* Five Inspectors 3 Months, Four Inspectors for 6 Months, 3 Inspectors for 3 Months.  
 \*\*\*\*\* Five Inspectors for 8 Months, Four Inspectors for 4 Months.