

**HY-GRADE VALVE, INC.**  
PRECISION ENGINEERED CHECK VALVES

**Oil and Gas References**

<u>Company</u>	<u>Project / Location</u>	<u>Application</u>	<u>Time frame</u>	<u>Materials</u>	<u>Sizes</u>	<u>Classes</u>
ExxonMobil	Mobile Bay, Alabama Blocks 823, 869, 112, 114, 76	Sour Gas NACE MR01-75	1991 to present	Alloy 825 and 625	1" - 12"	150# - 900#
				Carbon Steel w/ SS disc	1" - 12"	150# - 2500#
				316 SS with SS disc	1" - 12"	150# - 1500#
				Alloy 718	4"	API 15,000 WP
Mobil Producing Nigeria	Nigeria - OSO and USARI fields	Sour Gas / Oil NACE MR01-75	Early 1990's	Carbon Steel w/ SS disc	2" - 36"	150# - 600#
Shell Deepwater	Enchilada and Salsa TLP platforms Garden Banks in Gulf of Mexico	Flow line with 2 phase flow	1996 - 1997	Carbon Steel w/ SS disc	2" - 16"	150# - 900#
BP - Amaco	Thunderhouse floating platform in Gulf of Mexico	CO2 + water injection	2002	API 75K alloy steel with stellite seats	1" - 14"	API 10,000 - 15,000 WP
Shell Deepwater	Brutus, Mars and Ram Powell platforms in Gulf of Mexico	Seawater USCG Class "P" shutoff	1997-1998	Nickel-Alum-Bronze	3" - 16"	150#
				Carbon Steel w/ Duplex SS disc	8" - 14"	600# - 900#
BP-ARCO El-Djazair	Algeria	Natural Gas Compressor	1998	API 75K Alloy steel	14"	API 10,000 WP
Shell Offshore, Inc	Mobile Bay, Alabama Fairway Field platform	Sour Gas NACE MR01-75	Early 1900's	Alloy 825 and Hastelloy C	2" - 12"	150# - 900# API 10,000 WP

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Statoil / Schlumberger	Offshore Norway YME Development Project	Sour oil NACE MR01-75 DNV certification	1995	A350-LF2 with 316 SS Disc	2-1/2" - 4"	API 5,000 WP
Anadarko	Marco Polo deepwater floating TLP production platform - GOM	Flow line with 2 phase flow	2002 to present	Carbon Steel w/ 316 SS disc	2" - 12"	150# - 900#
BP- Vastar	Horm Mountain deepwater SPAR floating platform - GOM	Flow line with 2 phase flow	2001	Carbon Steel w/ 316 SS disc	2" - 12"	150# - 900#
Encana	Foster Creek and Christina Lake SAGD project, Alberta CANADA	Steam and Gas injection	2003 to present	Carbon Steel w/ Duplex SS disc	2" - 8"	900# - 1500#
ExxonMobil, Chevron and Petro-Canada	Hibernia project in Grand Banks Newfoundland, CANADA	CO2 injection NACE MR01-75	2002 to 2004	Duplex SS (hub ended)	6" - 8"	2500#
Encana	Weyburn field Saskatchewan, CANADA	CO2 injection with mercaptans NACE MR01-75	2003 to present	316 SS	2"	
Taylor Energy	Mississippi Canyon Block 21 Gulf of Mexico	Pig launchers and receivers	2003	Carbon Steel with 316 SS disc	3" - 10"	600# - 900#
Chevron	Mobile Bay, Alabama Viosca Knoll 251	Sour Gas NACE MR01-75	1997	Alloy 825 with Hastelloy C276 disc	6"	900#