

## Inspection, Repair & Maintenance Track Record

Operator	Client	Project Name	Action Taken	Year
Williams	Saipem	Williams Clamp	Pipeline repair clamp & supporting formwork	2011
Shell	Wood Group	Brent Charlie	Grouted repair clamp	2011
Shell	Subsea 7	Gannet	Cassion repair clamp	2011
Qatar Gas	Penspen	Contingency repair clamp	Repair clamp trial	2011
Talisman	Talisman	Bunga Raya	Repair clamp	2011
Shell	Subsea 7	Clipper	Remedial grouting to jacket/pile connection	2011
Shell	AJS	Leman AD1	Clamp Grouting and tubular strengthening	2010
BP	IK Stavanger	Valhall	Jacket Upgrade Operations	2010
Shell	Integrated Subsea Services	Fulmar	Repair Clamp	2010
Shell	AJS	Leman AD1	Clamp Grouting	2009
Woodside Energy	Transfield Worley Services	NRA	Jacket Strengthening	2009
ConocoPhillips	DeepOcean	Ekofisk C	Tubular strengthening	2008
ConocoPhillips	DeepOcean	Ekofisk B	Tubular strengthening	2008
ConocoPhillips	DeepOcean	Ekofisk A	Tubular strengthening	2008
Shell	Sigma 3	North Cormorant	GRP repair sleeve	2008
Shell	Sigma 3	Brent C	Caisson Clamp grouting	2008
Shell	Sigma 3	Brent C	Caisson Clamp grouting	2007
Shell	Sigma 3	Brent A	Caisson Clamp grouting	2007
BP	Technip	BP CATS pipeline	Repair clamp grouting	2007
Shell	Sigma 3	Nelson	Caisson Clamp grouting	2007
BP	Wood Group	Rhum		2006
Costain-Petrofac	Underwater Diving	Morecambe Bay DP6		2006
GEC	BIFAB Methil		Splice Grouting	2006
Exxon Mobil	Exxon Mobil	Thebaud A	Leg Strengthening	2006
BP	Consolidated Contractors	Kura River crossings	Tunnel annulus grouting	2005
Chevron	Oil States		Platform strengthening, clamp grouting	2005
British Gas	Underwater Diving		Tubular strengthening by grout filling	2004
BP	Saipem	Valhall WIP	Piggy-back pile strengthening using	2004

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			Ducorit grouts	
Shell Expro	OIL Eng	Brent C	Conductor repair clamp	2003
BP	Stolt Offshore	Indefatible 49/18 AD	K-joint repair	2003
Kvaerner Oil & Gas	Aker Maritime	Siri Tank	Leg infilling/strengthening	2003
Total Fina Elf	Technip	NAB	Brace strengthening	2002
Talisman	Technip	Claymore CPP	Caisson clamp grouting	2002
Total Fina Elf	Bomel	North Alwyn 'B'	Caisson Repair	2002
Adma Opco	International Naval Works	ZK 86 Repair Project	platform grouting	2001
BP	Wood Group	QU	Tubular strengthening	2001
Exxon Mobil	Subsea 7	Skene	Pipe Bundle Repair	2001
Maersk Oil & Gas	Technip	Tyra West A,B,C	Leg and tubular strengthening	2001
Adma Opco	Mutawa Marine	USSC Platform	Grouting freespan correction	1999
Elf Exploration	Saipem	Franklin Jacket Leg N7	Strengthening	1998
NAM	DSND		Material evaluation test programme	1998
Shell Expro	SubSea Offshore	Dunlin Alpha CGF	Infill strengthening & clamps	1998
BP	Stolt Offshore	BP Forties 20" & Amethyst pipelines	Repair clamps	1998
Maersk Oil & Gas	Technip	Tyra E & W	Clamp grouting	1997
BP	BP	ULA Development	Longterm materials test programme	1997
British Aerospace	BA		Strengthening of range towers by member infilling and structural clamps	1997
Maersk Oil & Gas	Stolt Offshore	Harald	Clamp grouting	1997
Maersk Oil & Gas	Oceantech	Gorm C	Riser protection & sleeve grouting	1996
ConocoPhillips	ConocoPhillips	Ekofisk Complex	Strengthening of tubulars and nodes by high strength fibre reinforced grout	1995
Shell Expro	Technip	Cormorant 'A'	Installation of new riser pipe & supports; Epoxy resin & grouting services	1995

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Shell Expro	Shell Expro	Brent 'A'	Engineering Consultancy; Remedial works for pipe sealing/plugging	1995
Shell Expro	Technip	Fulmar AD	Clamp grouting	1995
Apache Oil	Subsea Offshore	S Tamballer 143	Caisson strengthening, annulus grouting	1995
Amoco	Technip	Leman 49/27 'CD'	Strengthening of K & X-joints by stress grouted clamps. Also at 49/18 AD & 49/27 BP	1994
Shell	Technip	Dunlin 'A'	Clamp grouting	1994
Elf Aquitaine	EAN	Frigg DP II	Structural clamp grouting	1993
Texaco	Technip	Tartan	Structural member infilling	1993
Unocal	Unocal	Eva	Leg strengthening/infilling, clamps & pile plugs	1992
British Gas	British Gas	South Morecombe	Tubular strengthening and reinforcing collars	1992
Chevron	WOECL	Ninian Central	J-tube strengthening	1992
Elf Aquitaine	Stolt Offshore	Frigg DP II	Structural clamp grouting	1992
EPA/MMS	Subsea Offshore	New Jersey	Environmental clean up and encapsulation of hazardous materials	1992
Marathon	Technip	Kinsale Head A	Node strengthening clamp installation	1992
Mobil	Mobil	High Isl. A574A	Structural repair grouting	1991
Mobil	Technip	Beryl B	Member strengthening	1991
ConocoPhillips	OTS	Hewett '52/5A'	Structural repair grouting	1991
ConocoPhillips	Shiers Diving	Hewett '52/5A'	Structural repair grouting	1990
Occidental	Occidental	Claymore 'A'	Clamp grouting	1990
Mobil	CalDive	High Isl. A572C & A573B	Structural repair grouting on 2 no. platforms	1990
Mobil	Mobil	Beryl A	Inspection & pipe coating	1990
Shell Expro	Gotech	Brent	Conductor repairs and talon connector installation	1989
Mobil	Mobil	Beryl B	Member strengthening	1989
Occidental	Occidental	Claymore	Clamp grouting	1989
Mobil	Mobil	Beryl A	Utility shaft penetrations	1989
Marathon	Technip	Kinsale Head	Member and clamp grouting	1988

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Mobil	Mobil	Beryl A	Utility shaft penetrations	1988
Occidental	WOECL	Claymore	Clamp grouting	1988
BP	Press	West Sole 'WA'	Leg grouting for deck strengthening	1988
Shell Expro	Gotech	Brent 'C'	Sleeve grouting	1987
Shell Expro	Gotech	Brent 'D'	Grout plugging to redundant pipe work	1987
Shell Expro	Shell	Inde 'J'	Grouting to crane pedestal	1987
Mobil	Mobil	Beryl A	Ballast bean encasement	1987
AGIP	Saipem	Bouri 'DP3'	Clamp grouting	1987
Marathon	Marathon	Kinsale Head	Member and clamp grouting	1987
Britoil	Britoil	Beatrice	Clamp grouting	1987
ConocoPhillips	PPCoN	Ekofisk Deck Elev	Leg and clamp grouting	1987
Total	BUE	MCP-01	Scour protection	1987
Britoil	Britoil	Clyde Module	Pad ear resin grouting	1986
Shell Expro	Gotech	Brent 'B'	Sealing redundant pipe work	1986
Shell Expro	WOECL	Dunlin 'A'	Sleeve grouting	1986
Shell Expro	Shell Expro	Brent 'B'	Concrete repairs	1986
Shell Expro	Shell Expro	Brent 'B'	Remedial works	1986
Occidental	Occidental	Claymore	Riser restraint	1986
British Gas	Stolt Offshore	Rough 47-8AD	Grouting of clamps and braces	1986
BP	BP	Buchan 'A'	Template strengthening	1986
Petroland	CCC Oil & Gas	Zuidwal Platform	Casing grouting	1986
BP	BP	Forties 'B'	Clamp grouting	1985
Unocal	Unocal	Heather 'A'	Clamp grouting	1985
Shell Expro	Shell Expro	Brent 'D'	Drain caisson repair grouting	1985
BP	Stolt Offshore	Forties 'FA/FC'	Clamp grouting	1984
Shell Expro	Shell Expro	Brent 'B'	Clamp grouting	1984
Shell Expro	WOECL	Dunlin 'A'	Sleeve grouting	1984
Shell Brunei	Shell Brunei	AMDP-2	Structural repair grouting	1984
ConocoPhillips	ConocoPhillips	Viking	Grouting sleeves	1983
Elf Aquitaine	EAN	Frigg DP II	Design & fab. of strengthening scheme &	1983

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			subsequent grouting of clamps	
Mobil	Mobil	Beryl A	Pipe penetrations	1983
Shell Expro	Shell Expro	Auk	Design & grouting of clamps	1983
ConocoPhillips	ConocoPhillips	Viking	Design & grouting of sleeves	1982
Shell Expro	Shell Expro	Auk	Design & grouting of clamps	1982
BP	BP	Forties 'FA/FC'	Clamp grouting	1982
BP	BP	Forties 'FD'	Sleeve grouting	1982
ConocoPhillips	ConocoPhillips	Murchison	Caisson strengthening, design & grouting of sleeves	1981
Elf Aquitaine	EAN	Frigg QP	Design & fab. of strengthening scheme & subsequent grouting of clamps	1981
Shell Expro	Shell Expro	N Cormorant	Resin repairs	1981
Shell Expro	Shell Expro	Brent 'A'	Design & grouting of clamps	1981
BP	BP	West Sole 'WA'	Grouting of steel members	1981
ConocoPhillips	ConocoPhillips	Viking	Design & grouting of sleeves	1980
BNOC	BNOC	Thistle A	Duct grouting (leak sealing)	1979
Chevron	Chevron	Ninian Central	Grouting of steel members	1979
BNOC	BNOC	Thistle A	Duct grouting (leak sealing)	1978
Shell Expro	Shell Expro	Cormorant 'A'	Drilling and grouting	1978
BP	BP	West Sole 'WB'	Clamp grouting	1976