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CUSTOM REPORT SELECTION ON SALT WATER PROJECTS

* LASCELLES WHARF

No: 09081

	GEELONG
	AUSTRALIA
Owner	PORT OF GEELONG AUTHORITY
Designer	DIMAC CONSTRUCTORS
Contractor	PIONEER CONCRETE PTY LTD
Applicator	BATCHING & POUR SUPERVISED BY XYPEX AUSTRALIA
Proj. Type	FLOATING CONCRETE STRUCTURES
	CHEMICAL & CHLORIDE PROTECTION
Total	40 SLABS
Comments	XYPEX C-2000 WAS ADDED TO THE CONCRETE SLABS. EACH SLAB USED 11 CUBIC METERS OF CONCRETE. THIS WHARF IS USED MAINLY FOR UNLOADING BULK FERTILIZERS. THE AREAS OF CONCERN ARE; 1) DEGRADATION OF THE CONCRETE DUE TO CHEMICAL ACTION OF FERTILIZERS, AND 2) BEING IN THE SALT WATER SPLASH ZONE.

* VISITORS MARINA - DARLING HARBOUR

No: 11688

	SYDNEY
	AUSTRALIA
Contractor	SEA SLIP PTY LTD.
Proj. Type	FLOATING CONCRETE STRUCTURES
	CHEMICAL & CHLORIDE PROTECTION
Comments	XYPEX ADMIX C-2000 WAS USED TO WATERPROOF AND PREVENT THE INGRESS OF CHLORIDES TO THE PRESTRESSED, PRECAST UNITS, WHICH ENSURE A LONGER LIFE FOR THE STRUCTURE.

* CHISWICK WHARF

No: 09104

	SYDNEY, NEW SOUTH WALES
	AUSTRALIA
Owner	NEW SOUTH WALES DEPT OF TRANSPORT
Designer	TAYLOR LAUDER CONSULTANTS (ENGINEERS)
Contractor	AUSMAR PTY LTD
Applicator	KLADIS BROS.
Proj. Type	FLOATING CONCRETE STRUCTURES
	CHEMICAL & CHLORIDE PROTECTION
Completed	02/00/95
Comments	ADMIX C-2000 WAS USED TO REDUCE THE COVER OVER THE STEEL FROM 65 MM TO 30 MM. THIS REDUCED THE WEIGHT ON PONTOON AND ACHIEVED AN IMPERMEABLE SURFACE TO PROTECT THE STEEL FROM CHLORIDES. CONCENTRATE USED IN CONST. JOINTS WALKWAYS TO PONTOON TREATED WITH ADMIX C-2000 AND IT IS NOTED THAT CONCRETE IN TREATED AREAS IS STAIN FREE AND WHITE.

* DOMAIN TUNNEL/YARRA CROSSING - STAGE 1 AND 2

No: 11683

MELBOURNE
AUSTRALIA
Proj. Type TUNNELS & SUBWAY SYSTEMS
Comments ADMIX C-1000NF WAS USED TO WATERPROOF THE CONCRETE PAVEMENT AND LINING OF THE DOMAIN TUNNEL IN THYE SECTION OF YARRA CROSSING STAGE 1. STAGE 2 OF THE SAME TUNNEL (CUT & COVER CONSTRUCTION) USED CONCENTRATE/MODIFIED COATINGS ON WALL SEGMENTS. XYPEX DS1 CONCENTRATE WAS USED ON THE HORIZONTAL SURFACES OF THE CONCRETE PAVEMENT AND ROOF SEGMENTS.

* SYDNEY HARBOUR TUNNEL

No: 08315

SYDNEY
AUSTRALIA
Owner SYDNEY HARBOUR TUNNEL COMPANY LIMITED
Contractor TRANSFIELD-KUMAGAI GUMI JOINT VENTURE
Applicator SEAL-MAX CONCRETE WATERPROOFING
Proj. Type TUNNELS AND SUBWAY SYSTEM
Completed 1992
Comments EXTENSIVE HAIRLINE CRACK REPAIR UNDERTAKEN WHEN OTHER PRODUCTS FAILED TO SEAL WATER SEEPAGE. TWO WORK CREWS SPENT APPROXIMATELY THREE MONTHS IN THE TUNNEL USING BOTH PATCH'N PLUG AND XYPEX CONCENTRATE TO STOP LEAKS. 52 PRODUCTS WERE TESTED AND XYPEX WAS THE ONLY ONE THAT PASSED.

* AOMORI BAY BRIDGE - PRECAST CONCRETE MAIN BEAMS

No: 10444

AOMORI
JAPAN
Proj. Type BRIDGE STRUCTURES
Total 6,200 SQ METRES
Completed 1992
Comments THE AOMORI BAY BRIDGE, MEASURING 25 METERS IN WIDTH AND 1,219 METERS IN LENGTH, IS EXPOSED TO SALT FROM THE OCEAN CAUSING DAMAGE TO THE PRECAST CONCRETE GIRDER BOX MAIN BEAMS. XYPEX WAS APPLIED TO THE FLOOR OF THE MAIN BEAM FROM THE INSIDE OF THE GIRDER BOX TO RENDER THE STRUCTURE IMPERVIOUS TO THE ELEMENTS.

* FISHING JETTY - CONSTRUCTION/MODIFICATION

No: 11975

	CONSETT BAY, ST. JOHN BARBADOS, WEST INDIES
Owner	GOVERNMENT OF BARBADOS
Designer	DAVID LASHLEY & PARTNERS
Contractor	EDGHILL CONSTRUCTION
Applicator	MARKHAM CONSTRUCTION
Proj. Type	FLOATING CONCRETE STRUCTURES CHEMICAL & CHLORIDE PROTECTION
Comments	THIS JETTY, CONSTRUCTED OUT OF PRE-CAST SLABS, WAS TREATED WITH A TWO COAT APPLICATION OF XYPEX CONCENTRATE (42 PAILS) TO PREVENT DETERIORATION DUE TO EXTREME EXPOSURE TO SALT AIR AND SEA WATER.

* VANCOUVER SEABUS FLOATING DOCKS

No: 01021

	VANCOUVER, BRITISH COLUMBIA CANADA
Owner	GREATER VANCOUVER REGIONAL DISTRICT
Designer	CASE EXISTOLOGICAL LABORATORIES LTD
Contractor	DILLINGHAM CORPORATION
Applicator	DILLINGHAM CORPORATION
Proj. Type	FLOATING CONCRETE STRUCTURES CHEMICAL & CHLORIDE PROTECTION
Completed	1976
Comments	XYPEX PRODUCTS WERE APPLIED TO UNDERSIDE OF TWO LARGE FLOATING DOCKS AFTER THE POST TENSIONED CABLES WERE FOUND TO BE, IN SOME PLACES, NO MORE THAN 1/2" FROM BOTTOM SURFACE. THE XYPEX SYSTEM WAS USED AS A PROTECTION AGAINST FURTHER CHLORIDE (SALT) ATTACK ON STEEL AND POST-TENSIONED CABLES.

* AOMORI BAY BRIDGE - PRECAST CONCRETE MAIN BEAMS

No: 10444

	AOMORI JAPAN
Proj. Type	BRIDGE STRUCTURES
Total	6,200 SQ METRES
Completed	1992
Comments	THE AOMORI BAY BRIDGE, MEASURING 25 METERS IN WIDTH AND 1,219 METERS IN LENGTH, IS EXPOSED TO SALT FROM THE OCEAN CAUSING DAMAGE TO THE PRECAST CONCRETE GIRDER BOX MAIN BEAMS. XYPEX WAS APPLIED TO THE FLOOR OF THE MAIN BEAM FROM THE INSIDE OF THE GIRDER BOX TO RENDER THE STRUCTURE IMPERVIOUS TO THE ELEMENTS.

* U.S. NAVAL FACILITIES DRY DOCK (2)

No: 02628

	LONG BEACH, CALIFORNIA
	U.S.A.
Owner	U.S. DEPARTMENT OF THE NAVY
Designer	MOFFATT & NICHOL ENGINEERS
Contractor	DELTA PACIFIC BUILDERS INC.
Applicator	DELTA PACIFIC BUILDERS INC.
Proj. Type	FLOATING CONCRETE STRUCTURES CHEMICAL & CHLORIDE PROTECTION
Total	15,000 SQ FT
Completed	1985
Comments	TWO COATS OF XYPEX CONCENTRATE WERE APPLIED TO THE EXTERIOR (TWO SIDES) OF THE DRY DOCK.

* PANAMA CANAL GATUN LOCKS CULVERTS

No: 09781

	PANAMA CITY
	PANAMA
Owner	PANAMA CANAL COMMISSION
Designer	PANAMA CANAL ENGINEERING DIVISION
Contractor	PANAMA CANAL MAINTENANCE DIVISION
Applicator	PANAMA CANAL MAINTENANCE DIVISION
Proj. Type	TUNNELS & SUBWAY SYSTEMS ADMIX PROJECTS
Comments	XYPEX ADMIX WAS ADDED TO THE SHOTCRETE MIX AND APPLIED TO ALL CULVERT (TUNNELS) SURFACES. THE ORIGINAL SPEC CALLED FOR APPLICATION OF XYPEX CONCENTRATE FOLLOWED BY SHOTCRETE, HOWEVER USE OF XYPEX ADMIX SIMPLIFIED THE PROCESS AND REDUCED COSTS.

* PANAMA CANAL - PEDRO MIGUEL LOCKS TRANSFORMER ROOM

No: 09949

	PANAMA CITY
	PANAMA
Owner	PANAMA CANAL COMMISSION
Designer	PANAMA CANAL ENGINEERING DIVISION
Applicator	PANAMA CANAL - MAINTENANCE DIVISION
Proj. Type	VAULTS & ELEVATOR PITS TUNNELS & SUBWAY SYSTEMS
Completed	1995
Comments	XYPEX CONCENTRATE AND MODIFIED WERE USED TO REPAIR AND TREAT THE WALLS OF THE TRANSFORMER ROOM OF THE PEDRO MIGUEL FLOODGATE ACCESS TUNNELS.

* TREASURE ISLAND NAVAL BERTHING PIER 503

No: 02755

SAN DIEGO, CALIFORNIA
U.S.A.

Owner U.S. NAVY
Designer WESTERN NAVAL COMMAND
Contractor MORRISON-KNUDSEN CO. INC.
Applicator MORRISON-KNUDSON CO. INC.
Proj. Type CHEMICAL & CHLORIDE PROTECTION
VAULTS & ELEVATOR PITS

Total 8,400 SQ FT
Completed 1985

Comments XYPEX WAS APPLIED TO LARGE ELECTRICAL VAULT SO AS TO PROTECT
CONCRETE AND REBAR FROM SALT WATER ATTACK. THE DRY BROAD-
CAST METHOD WAS USED FOR THE SLAB AREA (3,000 SQF) WHILE
EXTERIOR WALLS (5,400 SQF) RECEIVED A TWO COAT APPLICATION. THIS
BERTHING PIER IS THE OCEAN-SIDE PIER FOR THE U.S.S. MISSOURI.

* FLOATING OFFSHORE CONCRETE BARGES

No: 01037

GULF OF MEXICO, LOUISIANA
U.S.A.

Contractor MARINE CONCRETE STRUCTURES, INC.
Applicator MARINE CONCRETE STRUCTURES, INC.
Proj. Type FLOATING CONCRETE STRUCTURES

Total 7,500 LBS

Comments INTERIOR OF THE WATER STORAGE AND HEAVY OIL STORAGE CELLS
WERE TREATED WITH XYPEX. THIS FLOATING OIL FIELD PRODUCTION
FACILITY HAS A TOP AREA OF 5,000 SQ FT AND IS 12 FEET DEEP.

* HOOD CANAL FLOATING BRIDGE

No: 01399

OLYMPIC PENINSULA, WASHINGTON
U.S.A.

Owner WASHINGTON STATE DEPT OF TRANSPORTATION
Designer PARSONS BRINKERHOFF QUADE & DOUGLAS
Contractor J.A. JONES CONSTRUCTION COMPANY
Proj. Type BRIDGE STRUCTURES
CHEMICAL & CHLORIDE PROTECTION

Completed 1983

Comments XYPEX WAS USED TO LINE WET CELLS THAT HOLD SALT WATER. THESE
CELLS ARE USED AS VARIABLE STABILIZERS FOR THE FLOATING
PONTOONS WHICH SUPPORT THE BRIDGE STRUCTURE. TOTAL COST OF
PROJECT WAS \$212 MILLION.