PLATFORM ANNA		
Field Name:	Granite Point Field	
Platform Operator:	Hilcorp	
Platform Owner(s):	Hilcorp	
Original operator:	Атосо	
Structural Design firm:	Earl & Wright/McDermott	
Fabrication yard (structure):	Kaiser Steel in Oakland, California	
Installation year and contractor:	1965; McDermott	
Water depth (at MLLW):	77 feet	
Number and diameter of legs:	Four legs; 14 feet diameter	
Number, size and penetration of piling:	Eight piles per leg; 30 inch diameter; 87 feet penetration	
Number, size and penetration of inner piling:	None	
Method of installation (driven, drilled, combination):	Combination	
Length of grouted interval in legs:	137 feet	
Design codes used (UBC, AISC, API RP 2A, etc.)	UBC, AISC	
Number of completed wells in each leg:	Leg 1: 8 wells Leg 2: 8 wells Leg 3: 7 wells Leg 4: 7 wells	
Top girders storage tank liquid & capacity:	Crude Oil (A-T-0160, A-T-0170): 105,000 gal Power Oil (A-T-0220): 96,600 gal Produced Water (A-T-0310, A-T-0320): 25,200 gal Diesel Storage (A-T-0850): 105,000 gal Potable Water (A-T-3070): 50,4000 gal	
Design criteria		
Ice thickness and strength:	Front legs 120 kips/ft. of diameter, back legs 50 kips/ft.	
Wave height and period:	30 feet with 9 second period	
Wind:	80 mph above elevation 25 feet	
Earthquake:	0.1 seismic ground motion	
Current:	3900 kips per leg impact load, seismic, ice and current loads applied simultaneously	
Other Considerations:	Shadow effect	
Unusual circumstances during installation:	None	

Significant modification or damage to topsides:	Minor module additions. Damaged structural members requiring engineering evaluation, moderate general/local corrosion, extreme general corrosion on electrical connections and boxes, unsecured drums, valves, racks, chemical totes, ladders, piping and dunnage. Last inspected: 3/13
Significant structural damage incidents:	Crack in top portion of weld connecting the west end of the center horizontal to the west horizontal (spans 7" and total length of 10"). Inspected in 2008 and 2011 with no signs of change in it's condition.
	2001 - Hopper Elmore and Associates

Type of steel used	
Above water:	Low temp steel (50 ksi)
Below water:	50 MV steel (50 ksi)
Steel corrosion allowance:	A-36 Steel corrosion wrap through tidal zone: 40' x 1/2"
Type of cathodic protection:	Impressed current cathodic protection system
Dates and API RP 2A levels of underwater inspection:	Summer 2008 & Summer 2011 (Combined), Global Diving and Salvage carried out a scheduled Level 2 and Level 3 inspection.

PLATFORM BAKER	
Field Name:	Middle Ground Shoal Field
Platform Operator:	Hilcorp
Platform Owner(s):	Hilcorp
Original operator:	Атосо
Structural Design firm:	Earl & Wright/McDermott
Fabrication yard (structure):	Kaiser Steel in Oakland, California
Installation year and contractor:	1965; McDermott
Water depth (at MLLW):	102 feet
Number and diameter of legs:	Four legs; 14 feet diameter; one well protector leg
Number, size and penetration of piling:	Each leg has seven piles in an outer ring and one pile in the center
Number, size and penetration of inner piling:	None
Method of installation (driven, drilled, combination):	Combination
Length of grouted interval in legs:	136 feet
Design codes used (UBC, AISC, API RP 2A, etc.)	UBC, AISC
Number of completed wells in each leg:	Leg 1: 8 wells Leg 2: 8 wells Leg 3: 0 wells Leg 4: 8 wells Leg 5: 1 well
Top girders storage tank liquid & capacity:	Produced Water (B-T-0380): 112,728 gal Crude Oil (B-T-0381, B-T-0382): 112,728 gal Produced Water (B-T-0383): 27,720 gal Power Oil (B-T-0384): 27,720 gal Diesel (B-T-0385): 112,728 gal
Design c	riteria
Ice thickness and strength:	Front legs 120 kips/ft. of diameter, back legs 50 kips/ft.
Wave height and period:	30 feet with 9 second period
Wind:	80 mph above elevation 25 feet
Earthquake:	0.1 seismic ground motion
Current:	3900 kips per leg impact load, seismic, ice and current loads applied simultaneously
Other Considerations:	Shadow effect

None
Minor module additions (quarters extension and Sea King crane). Damaged structural members and structural member removal requiring engineering evaluation of structural integrity. Light, moderate and extreme local and general corrosion. Last inspected: 9/12
Tank explosion in 1968/1969
2001 - Hopper Elmore Associates
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Type of steel used	
Above water:	A-537 Sheffield Low Temp
Below water:	50 MV Steel (50 ksi)
Steel corrosion allowance:	A-36 Steel corrosion wrap. 44' x 1/2"
Type of cathodic protection:	Impressed current cathodic protection system
Dates and API RP 2A levels of underwater inspection:	April, June and July of 2008, Offshore Divers carried out a scheduled API Level 2 and 3 inspection.

PLATFORM BRUCE	
Field Name:	Granite Point Field
Platform Operator:	Hilcorp
Platform Owner(s):	Hilcorp
Original operator:	Атосо
Structural Design firm:	Earl & Wright/McDermott
Fabrication yard (structure):	Kaiser Steel in Oakland, California
Installation year and contractor:	1966; McDermott
Water depth (at MLLW):	62 feet
Number and diameter of legs:	Four legs; 14 feet diameter
Number, size and penetration of piling:	Eight piles per leg; 30 inch diameter; 65 feet penetration
Number, size and penetration of inner piling:	None
Method of installation (driven, drilled, combination):	Combination
Length of grouted interval in legs:	122 feet
Design codes used (UBC, AISC, API RP 2A, etc.)	UBC, AISC
Number of completed wells in each leg:	Leg 1: 7 wells Leg 2: 1 well Leg 3: 7 wells Leg 4: 6 wells
Top girders storage tank liquid & capacity:	Crude Oil (U-T-0180, U-T-0190): 105,000 gal Produced Water (U-T-0240, U-T-0250): 26,250 gal Power Oil (U-T-0320): 184,800 gal Diesel Storage (U-T-0890): 105,000 gal
Design c	riteria

Design criteria	
Ice thickness and strength:	Front legs 120 k/ft. of diameter, back legs 50 k/ft.
Wave height and period:	30 feet with 9 second period
Wind:	80 mph above elevation 25 feet
Earthquake:	0.1 g seismic ground motion
Current:	3900 kips per leg impact load, seismic, ice and current load applied simultaneously
Other Considerations:	Shadow effect
Unusual circumstances during installation:	None

	Minor module additions. Damaged structural members and removal of structural members,
Significant modification or damage to topsides:	requiring engineering evaluation of structural
	corrosion.
	Last inspected: 9/12
Significant structural damage incidents:	See above
Platform structural design reassessment company	
& year:	2001 - Hopper Elmore and Associates
Type of ste	eel used
Above water:	A-537 Sheffield
Below water:	A-50
Steel corrosion allowance:	A-36 Steel corrosion wrap. 40' x 1/2"
Type of cathodic protection:	Impressed current cathodic protection system
Dates and API RP 2A levels of underwater inspection:	July 2009, Global Offshore Divers carried out a scheduled Level 2 and 3 inspection.

PLATFORM DILLON	
Field Name:	Middle Ground Shoal Field
Platform Operator:	Hilcorp
Platform Owner(s):	Hilcorp
Original operator:	Атосо
Structural Design firm:	Earl & Wright/McDermott
Fabrication yard (structure):	Kaiser Steel in Oakland, California
Installation year and contractor:	1966; McDermott
Water depth (at MLLW):	92 feet
Number and diameter of legs:	Four legs; 14 feet diameter
Number, size and penetration of piling:	Eight piles per leg; 30 inch diameter; 88 feet penetration
Number, size and penetration of inner piling:	None
Method of installation (driven, drilled, combination):	Combination
Length of grouted interval in legs:	152 feet
Design codes used (UBC, AISC, API RP 2A, etc.)	UBC, AISC
Number of completed wells in each leg:	Leg 1: 5 wells Leg 2: 7 wells Leg 3: 0 well Leg 4: 5 wells
Top girders storage tank liquid & capacity:	Diesel Storage (D-T-0140): 105,000 gal Power Oil (D-T-0160): 184,800 gal Crude Oil (D-T-0240, D-T-0250): 105,000 gal Produced Water (D-T-0600, D-T-0620): 25,200 gal
Design ci	riteria
Ice thickness and strength:	Front legs 120 kips/ft. of diameter, back legs 50 kips/ft.
Wave height and period:	30 feet with 9 second period
Wind:	80 mph above elevation 25 feet
Earthquake:	0.1 seismic ground motion
Current:	3900 kips per leg impact load, seismic, ice and current loads applied simultaneously
Other Considerations:	Shadow effect
Unusual circumstances during installation:	None

Significant modification or damage to topsides:	Minor module additions. Damaged structural members and removal of structural members, requiring engineering evaluation of structural integrity. Light to extreme general and localized corrosion. Loose bolts/studs, missing sections of grating. Last inspected: 9/12
Significant structural damage incidents:	See above
Platform structural design reassessment company & year:	2001 - Hopper Elmore and Associates
Type of ste	el used
Above water:	50 MV Steel (50 ksi)
Below water:	50 MV Steel (50 ksi)
Steel corrosion allowance:	A-36 Steel corrosion wrap. 40' x 1/2"
Type of cathodic protection:	Impressed current cathodic protection system
Dates and API RP 2A levels of underwater inspection:	May 2006, Offshore Divers carried out a scheduled API Level 2 and 3 inspection.

PLATFORM DOLLY VARDEN	
Field Name:	McArthur River Field
Platform Operator:	Hilcorp
Platform Owner(s):	Hilcorp
Original operator:	Marathon
Structural Design firm:	McDermott
Fabrication yard (structure):	American Pipe & Construction, Vancouver, Washington
Installation year and contractor:	1967; McDermott
Water depth (at MLLW):	112 feet
Number and diameter of legs:	Four; 17 feet diameter
Number, size and penetration of piling:	Twelve per leg; 34.5 inch diameter; 180 feet penetration
Number, size and penetration of inner piling:	None
Method of installation (driven, drilled, combination):	Combination
Length of grouted interval in legs:	Bottom to top in annulus. Bottom to minus 12 feet inside inner sleeve.
Design codes used (UBC, AISC, API RP 2A, etc.)	AISC, UBC
Number of completed wells in each leg:	Leg A-1: 12 wells Leg B-1: 12 wells Leg B-2: 0 wells Leg A-2: 12 wells
Top girders storage tank liquid & capacity:	Waste Oil (V-T-0001): 18,480 gal Waste Water (V-T-0002, V-T-0004): 24,780 gal Diesel Storage (V-T-0005): 49,980 gal
Design criteria	
	6 ft on two front logs 2 ft on two back logs

Design chiteria	
Ice thickness and strength:	6 ft. on two front legs, 3 ft. on two back legs; 300 psi
Wave height and period:	28 feet, 8.5 second period
Wind:	60 mph with 80 mph gusts
Earthquake:	0.1 g per 1967 UBC
Temperature:	Minus 40° F above water, plus 20° F below water
Current:	10 feet per second
Other Considerations:	Twenty year design life
Unusual circumstances during installation:	None

Significant modification or damage to topsides:	Minor module additions. Non-typical configurations of beam flanges, damage to structural members and metal deformation on production deck, all requiring engineering evaluation of structural integrity. Light to extreme corrosion (general and local). Last inspected: 4/12 & 5/12
Significant structural damage incidents:	See above
Platform structural design reassessment company & year:	2001 - Hopper Elmore and Associates
Type of ste	eel used
Above water:	A-537
Below water:	A-36 Steel
Steel corrosion allowance:	1/2 inch through tidal zone. 40' x 1/2" + ice breaker
Type of cathodic protection:	Impressed current cathodic protection system

PLATFORM GRANITE POINT	
Field Name:	Granite Point Field
Platform Operator:	Hilcorp
Platform Owner(s):	Hilcorp
Original operator:	Mobil
Structural Design firm:	Brown & Root
Fabrication yard (structure):	Kaiser Steel, Oakland, California
Installation year and contractor:	1966; Brown & Root
Water depth (at MLLW):	75 feet
Number and diameter of legs:	Four legs; 17 feet diameter
Number, size and penetration of piling:	Twelve piles per leg; 33 inch diameter; driven to 40 feet
Number, size and penetration of inner piling:	Twelve piles per leg; 26 inch diameter; driven to 105 feet
Method of installation (driven, drilled,	
combination):	Driven
Length of grouted interval in legs:	137 feet
Design codes used (UBC, AISC, API RP 2A, etc.)	UBC, AISC
	Leg 1: 8 wells
Number of completed wells in each leg:	Leg 2: 0 wells
	Leg 3: 11 wells
	Leg 4: 2 wells
	Crude Oil (P-T-0180): 21.000 gal
	Diesel Based Mud (P-T-0480): 119,700 gal
Top girders storage tank liquid & capacity:	Seawater (P-T-0780)
	Potable Water (P-T-0890B): 24,612 gal
	Produced Water (P-T-3050): 57,750 gal
	Diesel Storage (P-T-3210): 118,860 gal
Design c	riteria
Ice thickness and strength:	5 feet thickness; 43.2 kips/ft.
Wave height and period:	28 feet
Temperature:	Minus 38° F to plus 70° F
Current:	Current speed 8 knots
Other Considerations:	
Unusual circumstances during installation:	Platform adrift prior to setting down

Significant modification or damage to topsides:	Module additions and replacement of living quarters (Unocal). Added waterflood (expansion of waterhandling capacity). Damaged structural members and removal of structural members, requiring engineering evaluation of structural integrity. Light to extreme general and local corrosion. Last inspected: 6/12
Significant structural damage incidents:	Jan 15 2009, OSV Monarch struck South two legs of the platform, causing damage to the leg 4 ice-breaker and out of service pump house, as well as the subsea pile guide on the south side of Leg 1
Platform structural design reassessment company & year:	2001 - Hopper Elmore and Associates
Turna of sta	ad used
Above water:	
Below water:	A-36
Steel corrosion allowance:	1/2 inch corrosion wrap through the tidal zone. 40' x 1/2" + ice breaker
Type of cathodic protection:	Impressed current cathodic protection system
Dates and API RP 2A levels of underwater	May 2009, Global Offshore Divers carried out a

PLATFORM GRAYLING		
Field Name:	McArthur River Field	
Platform Operator:	Hilcorp	
Platform Owner(s):	Hilcorp	
Original operator:	Unocal	
Structural Design firm:	Brown & Root	
Fabrication yard (structure):	American Pipe & Construction, Vancouver, Washington	
Installation year and contractor:	1967; Brown & Root	
Water depth (at MLLW):	125 feet	
Number and diameter of legs:	Four legs; 17 feet diameter	
Number, size and penetration of piling:	Twelve piles per leg; 33 inch diameter; driven to 70 feet	
Number, size and penetration of inner piling:	Twelve piles per leg; 26 inch diameter; driven to 130 feet. Leg 1 has 20 inch inner piles to 190 feet.	
Method of installation (driven, drilled, combination):	Combination	
Length of grouted interval in legs:	192 feet	
Design codes used (UBC, AISC, API RP 2A, etc.)	UBC, AISC	
Number of completed wells in each leg:	Leg 1: 1 well Leg 2: 12 wells Leg 3: 12 wells Leg 4: 12 wells	
Top girders storage tank liquid & capacity:	Potable Water Crude Oil (G-T-0380A, G-T-0380B): 21,000 gal Waste Water (G-T-0720) Waste Oil (G-T-0760) Diesel Storage (G-T-3090): 106.974 gal	

Design criteria	
Ice thickness and strength:	Front legs 260 kips/ft. of diameter, back legs 160 kips/ft.
Wave height and period:	28 feet with 8.5 second period
Wind:	100 mph
Earthquake:	0.1 g seismic ground motion
Temperature:	Minus 15° F to plus 70° F
Current:	
Other Considerations:	

Unusual circumstances during installation:	Yes, tower leak required to repair
Significant modification or damage to topsides:	Minor module additions. Damaged structural members and structural member removal, requiring engineering evaluation of structural integrity. Light to extreme general and local corrosion issues. Last inspected: 5/12
Significant structural damage incidents:	See above
Platform structural design reassessment company & year:	2001 - Hopper Elmore and Associates

Type of steel used	
Above water:	A-537
Below water:	A-36
Steel corrosion allowance:	1/2 inch corrosion wrap through tidal zone. 40' x $1/2$ " + ice breakers
Type of cathodic protection:	Impressed current cathodic protection system
Dates and API RP 2A levels of underwater inspection:	July and August 2008, Offshore Divers carried out a scheduled API Level 2 and 3 inspection.

PLATFORM KING SALMON		
Field Name:	McArthur River Field	
Platform Operator:	Hilcorp	
Platform Owner(s):	Hilcorp	
Original operator:	Arco	
Structural Design firm:	Earl & Wright	
Fabrication yard (structure):	Kaiser Steel in Oakland, California	
Installation year and contractor:	1967; McDermott	
Water depth (at MLLW):	73 feet	
Number and diameter of legs:	Four legs; 15.5 feet	
Number, size and penetration of piling:	Eight piles per leg; 36 inch diameter; 100 feet penetration; 33 inch sleeves near mudline	
Number, size and penetration of inner piling:	Eight per leg; 24 inch diameter; 260 feet penetration	
Method of installation (driven, drilled, combination):	Combination	
Length of grouted interval in legs:	128 feet	
Design codes used (UBC, AISC, API RP 2A, etc.)	UBC, AISC	
	•	
Number of completed wells in each leg:	Leg 1: 8 wells Leg 2: 8 wells Leg 3: 0 wells Leg 4: 8 wells	
Top girders storage tank liquid & capacity:	Produced Water (L-T-0160): 16,800 gal Crude Oil (L-T-0170): 29,400 gal Crude Oil (L-T-0180, L-T-0180A, L-T-0180B): 31,248 gal Waste Oil (L-T-0190): 15,540 gal Diesel (L-T-1750): 99,960 gal Diesel (L-T-1830): 3,192 gal Potable Water (L-T-2010, L-T-2020): 21,000 gal	
Design criteria		
Ice thickness and strength:	42 inch; 300 psi	
Wave height and period:	28 feet with 8.5 second period	
Wind:	65 mph with 100 mph gusts	
Earthquake:	0.06 g per UBC 1964	
Temperature:	Minus 40° F above water, plus 28° F below water	
Current:	12 feet per second	

Other Considerations:	20 year design life
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Unusual circumstances during installation:	None
Significant modification or damage to topsides:	Minor module additions. Damaged structural members, non-typical configuration and missing joints, and deflections in the plate girders, all requiring engineering evaluation of structural integrity. Light to extreme general and localized corrosion. Last inspected: 11/12
Significant structural damage incidents:	See above
Platform structural design reassessment company & year:	2001 - Hopper Elmore and Associates
Type of ste	el used
Above water:	A-537 Grade A (above Elev -25)
Below water:	A-537 Grade B (below Elev -25)
Steel corrosion allowance:	0.7" of extra wall thickness in the tidal zone. 40' x 1/2"
Type of cathodic protection:	Impressed current cathodic protection system
Dates and API RP 2A levels of underwater inspection:	July, October and November 2007, Offshore Divers carried out a scheduled API Level 2 and 3 inspection.

PLATFORM MONOPOD		
Field Name:	Trading Bay Field	
Platform Operator:	Hilcorp	
Platform Owner(s):	Hilcorp	
Original operator:	Unocal	
Structural Design firm:	Brown & Root	
Fabrication yard (structure):	American Pipe & Construction, Vancouver, Washington	
Installation year and contractor:	1966; Brown & Root	
Water depth (at MLLW):	66 feet	
Number and diameter of legs:	One leg, 28.5 feet in diameter	
Number, size and penetration of piling:	32 piles; 36 inch diameter with 101 feet penetration	
Number, size and penetration of inner piling:	32 conductor piles; 20 inch diameter with 97 feet penetration	
Method of installation (driven, drilled,		
combination):	Driven	
Length of grouted interval in legs:	Center leg has 33 feet of grout	
Design codes used (UBC, AISC, API RP 2A, etc.)	UBC, AISC	
Number of completed wells in each leg:	31 wells	
Top girders storage tank liquid & capacity:	Potable Water (M-T-NA): 19,698 gal Drilling Mud (M-T-1000): 16,296 gal Diesel Storage (M-T-3000): 100,548 gal	
Design criteria		
Ice thickness and strength:	Six feet; 300 psi (7300 kips)	
Wave height and period:	28 feet with 8.5 second period	
Wind:	100 mph	
Earthquake:	0.1 g seismic ground motion	
Current:	10 ft./sec	
Other Considerations:	Single caisson	
Unusual circumstances during installation:	None	

Significant modification or damage to topsides:	Minor module additions. Addition of waterflood system. Damaged or removed structural members, non-typical configuration in Bingham room, incomplete welding, and extreme general and local corrosion on walkway leading to flare tip, all requiring engineering evaluation. Light to extreme general and local corrosion elsewhere. Last inspected: 10/12
Significant structural damage incidents:	South horizontal separated from the West pontoon at the SW weld. SE weld had heavy knife-corrosion but no crack (2011). NW weld had open crack (water flowing in and out, 2011).
Platform structural design reassessment company & year:	2001 - Hopper Elmore and Associates
Type of ste	el used
Above water:	A-537
Below water:	A-36
Steel corrosion allowance:	1/2 inch wear plate through tidal zone. 35' x 1/2"
Type of cathodic protection:	Impressed current cathodic protection system
Dates and API RP 2A levels of underwater inspection:	September and October 2010, Global Offshore Divers carried out a scheduled API Level 2 and 3 inspection.

PLATFORM STEELHEAD	
Field Name:	McArthur Divor Field
Platform Operator:	
Platform Owner(s):	Hilcorp
Prigipal operator:	Marsthan
Structural Design firms	Marathon
Schuctural Design Inni.	
Pablication yard (structure).	NKK, Japan
Water depth (at MULW):	1986; Brown & Root
Water depth (at MLLW):	183 feet
Number and diameter of legs:	Four; 18 feet diameter
Number, size and penetration of piling:	Twelve per leg; 34 inch diameter; 135 feet penetration
Number, size and penetration of inner piling:	Ten 26 inch drilled inner piling installed to 650 feet in Leg B1 following blowout
Method of installation (driven, drilled, combination):	24 driven, 24 combination with drilled pilot hole
Length of grouted interval in legs:	Annulus grouted from bottom to top of leg
Design codes used (UBC, AISC, API RP 2A, etc.)	API RP 2A
Number of completed wells in each leg:	Leg A-1: 10 wells Leg A-2: 0 wells Leg B-1: 8 wells Leg B-2: 10 wells
Top girders storage tank liquid & capacity:	Diesel Storage (H-T-0032A): 71,400 gal Diesel Storage (H-T-0032B): 35,700 gal Diesel Storage (H-T-0032C): 42,480 gal Waste Water (H-T-0037): 42,000 gal
Design criteria	
Ice thickness and strength:	50 inch thick; 300 psi
Wave height and period:	28 feet with 8.5 second period
Wind:	80 mph with 107 mph gusts
Earthquake:	Site specific, Ertec, C.B. Krause
· · · · · · · · · · · · · · · · · · ·	Minus 20° F above water, plus 28.6° F below
Temperature:	water
Current:	12.65 feet per second
Other Considerations:	Twenty year design life
Unusual circumstances during installation:	None

Significant modification or damage to topsides:	Minor module additions. Damaged or removed/missing structural members, damaged insulation and non-typical configuration on deck beams, requiring engineering evaluation of structural integrity and replacement potential. Light to extreme general and local corrosion. Last inspected: 11/12
Significant structural damage incidents:	See above
Platform structural design reassessment company & year:	2001 - Hopper Elmore and Associates
Type of steel used	
Above water:	A-633 Gr. C
Below water:	A-633 Gr. C
Steel corrosion allowance:	40' x 1/2"
Type of cathodic protection:	Impressed current cathodic protection system
Dates and API RP 2A levels of underwater inspection:	September and October of 2008, Offshore Divers carried out a scheduled API Level 2 and 3 inspection.