

A Study for the Bureau of Safety and Environmental Enforcement (BSEE)



Decommissioning Cost Update for Pacific OCS Region Facilities

Volume 2

Conducted by



TSB OFFSHORE

TSB OFFSHORE, INC.
THE WOODLANDS, TX
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Decommissioning Cost Update for Pacific OCS Region Facilities

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Volume 2

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TSB Offshore

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Decommissioning Cost Update for Pacific OCS Region Facilities

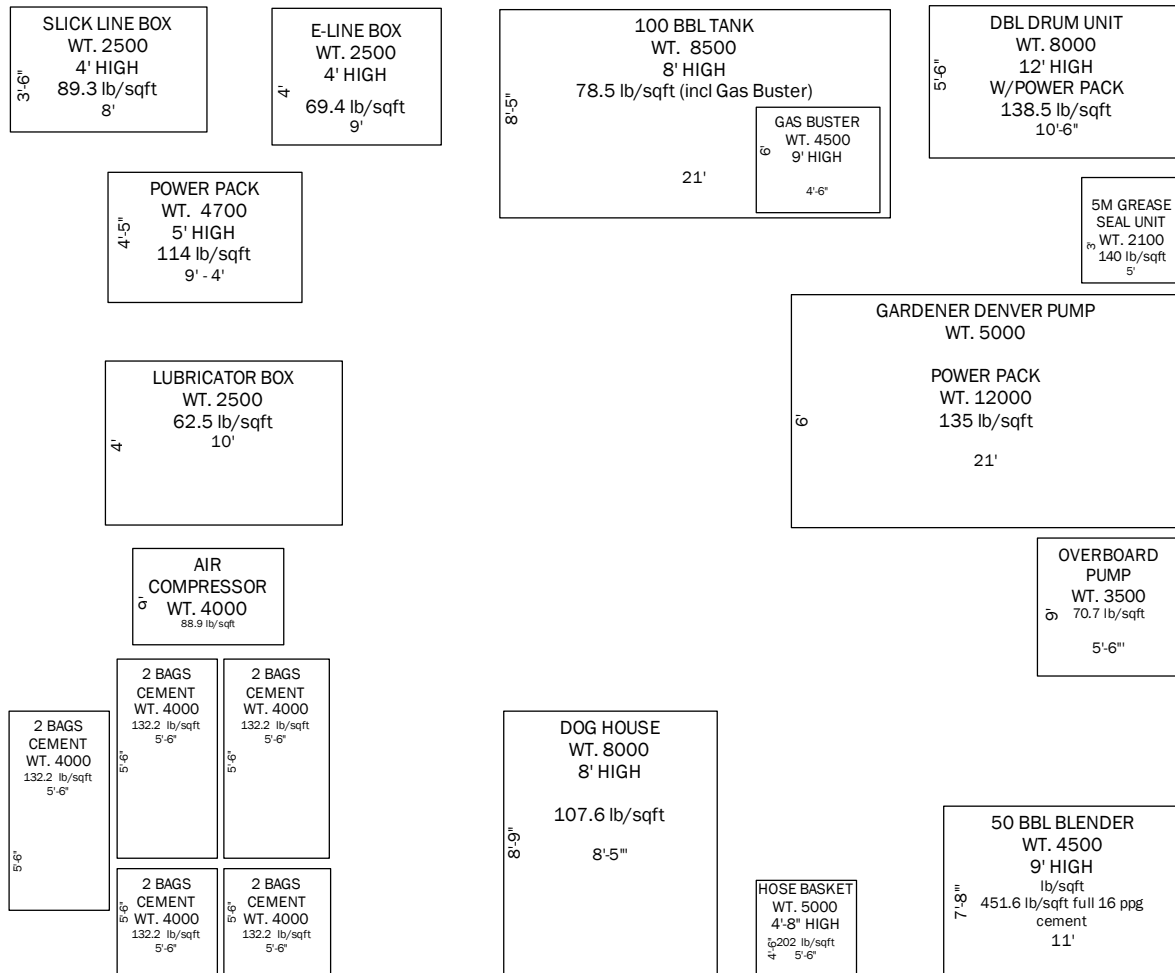
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Appendices

Appendix 1: Typical Rig-Less P&A Spread Footprint

P&A EQUIPMENT
LARGE SPREAD





Appendix 2: Complete Rig-Less Well P&A Estimates

Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
A	52	0.1	0.15	0.08	45	5	1	1	13	168

Well Complexity Work Days Table				
Well Complexity	Low	Med-Low	Med-High	High
Days/Well	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		170	\$493,340.00
Rental Crane	174	days	\$800.00	\$139,200.00	1	\$139,200.00
Supply Boat	170	days	\$7,500.00	\$1,275,000.00	1	\$1,275,000.00
Catering, Meals & Lodging	170	days	\$3,090.00	\$525,300.00	1	\$525,300.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$2,462,840.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		172	\$1,403,520.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		172	\$868,944.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		172	\$430,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		3.9	\$62,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	52	\$265,200.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	52	\$2,340,000.00
			Misc. Total=			\$5,398,032.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
**Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
			Total w/o Cont.:			\$7,860,872.00

Cost per Well	\$ 151,171
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
B	57	0.1	0.15	0.08	49	6	1	1	13	184

Well Complexity Work Days Table				
Well Complexity	Low	Med-Low	Med-High	High
Days/Well	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		186	\$539,772.00
Rental Crane	190	days	\$800.00	\$152,000.00	1	\$152,000.00
Supply Boat	186	days	\$7,500.00	\$1,395,000.00	1	\$1,395,000.00
Catering, Meals & Lodging	186	days	\$3,090.00	\$574,740.00	1	\$574,740.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$2,691,512.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		188	\$1,534,080.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		188	\$949,776.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		188	\$470,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		3.9	\$62,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	57	\$290,700.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	57	\$2,565,000.00
			Misc. Total=			\$5,899,924.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$8,591,436.00

Cost per Well	\$ 150,727
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
C	38	0.1	0.15	0.08	33	3	1	1	13	124

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		126	\$365,652.00
Rental Crane	130	days	\$800.00	\$104,000.00	1	\$104,000.00
Supply Boat	126	days	\$7,500.00	\$945,000.00	1	\$945,000.00
Catering, Meals & Lodging	126	days	\$3,090.00	\$389,340.00	1	\$389,340.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$1,833,992.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		128	\$1,044,480.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		128	\$646,656.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		128	\$320,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		3.9	\$62,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	38	\$193,800.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	38	\$1,710,000.00
			Misc. Total=			\$4,005,304.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$5,839,296.00

Cost per Well	\$ 153,666
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Edith	18	0.05	0.15	0.08	12	4	1	1	13	65

Well Complexity Work Days Table				
Well Complexity	Low	Med-Low	Med-High	High
Days/Well	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		67	\$194,434.00
Rental Crane	71	days	\$800.00	\$56,800.00	1	\$56,800.00
Supply Boat	67	days	\$7,500.00	\$502,500.00	1	\$502,500.00
Catering, Meals & Lodging	67	days	\$3,090.00	\$207,030.00	1	\$207,030.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$990,764.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		69	\$563,040.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		69	\$348,588.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		69	\$172,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		3.9	\$62,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	18	\$91,800.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	18	\$810,000.00
			Misc. Total=			\$2,076,296.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$3,067,060.00

Cost Per Well	\$ 170,392
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Ellen	63	0.05	0.15	0.08	18	41	3	1	23	241

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		243	\$705,186.00
Rental Crane	247	days	\$800.00	\$197,600.00	1	\$197,600.00
Supply Boat	243	days	\$7,500.00	\$1,822,500.00	1	\$1,822,500.00
Catering, Meals & Lodging	243	days	\$3,090.00	\$750,870.00	1	\$750,870.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$3,506,156.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		245	\$1,999,200.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		245	\$1,237,740.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		245	\$612,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		6.9	\$110,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	63	\$321,300.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	63	\$2,835,000.00
			Misc. Total=			\$7,144,108.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
					Total w/o Cont.:	\$10,650,264.00

Cost Per Well	\$	169,052
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Ely	-	0.05	0.15	0.08	-	-	-	-	-	-

Well Complexity Work Days Table				
Well Complexity	Low	Med-Low	Med-High	High
Days/Well	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		0	-
Rental Crane	6	days	\$800.00	\$0.00	0	-
Supply Boat	2	days	\$7,500.00	\$0.00	0	-
Catering, Meals & Lodging	2	days	\$3,090.00	\$0.00	0	-
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$0.00	0	-
			Spread Total=			-
						-
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						-
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$0.00	0	-
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		0	-
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		0	-
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		0	-
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		0	-
Cement	300	sacks per well	\$17.00	\$0.00	0	-
Misc. Consumables**	1	per well	\$45,000.00	\$0.00	0	-
			Misc. Total=			-
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
**Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges				Total w/o Cont.:		-

Cost Per Well	-
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Eureka	50	0.05	0.15	0.08	6	38	5	1	33	203

Well Complexity Work Days Table				
Well Complexity	Low	Med-Low	Med-High	High
Days/Well	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		205	\$594,910.00
Rental Crane	209	days	\$800.00	\$167,200.00	1	\$167,200.00
Supply Boat	205	days	\$7,500.00	\$1,537,500.00	1	\$1,537,500.00
Catering, Meals & Lodging	205	days	\$3,090.00	\$633,450.00	1	\$633,450.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$2,963,060.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		207	\$1,689,120.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		207	\$1,045,764.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		207	\$517,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		9.9	\$158,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	50	\$255,000.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	50	\$2,250,000.00
			Misc. Total=			\$5,943,752.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
					Total w/o Cont.:	\$8,906,812.00

Cost per Well	\$ 178,136
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Gail	27	0.1	0.15	0.08	0	21	2	4	42	126

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		128	\$371,456.00
Rental Crane	132	days	\$800.00	\$105,600.00	1	\$105,600.00
Supply Boat	128	days	\$7,500.00	\$960,000.00	1	\$960,000.00
Catering, Meals & Lodging	128	days	\$3,090.00	\$395,520.00	1	\$395,520.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$1,862,576.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		130	\$1,060,800.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		130	\$656,760.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		130	\$325,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		12.6	\$201,600.00
Cement	300	sacks per well	\$17.00	\$5,100.00	27	\$137,700.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	27	\$1,215,000.00
			Misc. Total=			\$3,624,828.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$5,487,404.00

Cost per Well	\$	203,237
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Gilda	63	0.1	0.15	0.08	8	47	6	2	46	258

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		260	\$754,520.00
Rental Crane	264	days	\$800.00	\$211,200.00	1	\$211,200.00
Supply Boat	260	days	\$7,500.00	\$1,950,000.00	1	\$1,950,000.00
Catering, Meals & Lodging	260	days	\$3,090.00	\$803,400.00	1	\$803,400.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$3,749,120.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		262	\$2,137,920.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		262	\$1,323,624.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		262	\$655,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		13.8	\$220,800.00
Cement	300	sacks per well	\$17.00	\$5,100.00	63	\$321,300.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	63	\$2,835,000.00
			Misc. Total=			\$7,521,612.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
					Total w/o Cont.:	\$11,270,732.00

Cost per Well	\$	178,901
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Gina	12	0.1	0.15	0.08	7	3	1	1	13	46

Well Complexity Work Days Table				
Well Complexity	Low	Med-Low	Med-High	High
Days/Well	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		48	\$139,296.00
Rental Crane	52	days	\$800.00	\$41,600.00	1	\$41,600.00
Supply Boat	48	days	\$7,500.00	\$360,000.00	1	\$360,000.00
Catering, Meals & Lodging	48	days	\$3,090.00	\$148,320.00	1	\$148,320.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$719,216.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		50	\$408,000.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		50	\$252,600.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		50	\$125,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		3.9	\$62,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	12	\$61,200.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	12	\$540,000.00
			Misc. Total=			\$1,477,168.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$2,196,384.00

Cost Per Well	\$	183,032
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Grace	28	0.1	0.15	0.08	0	13	13	2	81	133

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		135	\$391,770.00
Rental Crane	139	days	\$800.00	\$111,200.00	1	\$111,200.00
Supply Boat	135	days	\$7,500.00	\$1,012,500.00	1	\$1,012,500.00
Catering, Meals & Lodging	135	days	\$3,090.00	\$417,150.00	1	\$417,150.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$1,962,620.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		137	\$1,117,920.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		137	\$692,124.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		137	\$342,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		24.3	\$388,800.00
Cement	300	sacks per well	\$17.00	\$5,100.00	28	\$142,800.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	28	\$1,260,000.00
			Misc. Total=			\$3,972,112.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$5,934,732.00

Cost per Well	\$	211,955
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Habitat	20	0.1	0.15	0.08	1	16	2	1	18	85

Well Complexity Work Days Table				
Well Complexity	Low	Med-Low	Med-High	High
Days/Well	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		87	\$252,474.00
Rental Crane	91	days	\$800.00	\$72,800.00	1	\$72,800.00
Supply Boat	87	days	\$7,500.00	\$652,500.00	1	\$652,500.00
Catering, Meals & Lodging	87	days	\$3,090.00	\$268,830.00	1	\$268,830.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$1,276,604.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		89	\$726,240.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		89	\$449,628.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		89	\$222,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		5.4	\$86,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	20	\$102,000.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	20	\$900,000.00
			Misc. Total=			\$2,514,736.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$3,791,340.00

Cost Per Well	\$	189,567
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Harmony	34	0.1	0.15	0.08	0	0	20	14	212	212

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		214	\$621,028.00
Rental Crane	218	days	\$800.00	\$174,400.00	1	\$174,400.00
Supply Boat	214	days	\$7,500.00	\$1,605,000.00	1	\$1,605,000.00
Catering, Meals & Lodging	214	days	\$3,090.00	\$661,260.00	1	\$661,260.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$3,091,688.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		216	\$1,762,560.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		216	\$1,091,232.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		216	\$540,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		63.6	\$1,017,600.00
Cement	300	sacks per well	\$17.00	\$5,100.00	34	\$173,400.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	34	\$1,530,000.00
			Misc. Total=			\$6,142,760.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
					Total w/o Cont.:	\$9,234,448.00

Cost Per Well	\$	271,601
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Harvest	19	0.15	0.15	0.08	0	0	14	5	110	110

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		112	\$325,024.00
Rental Crane	116	days	\$800.00	\$92,800.00	1	\$92,800.00
Supply Boat	112	days	\$7,500.00	\$840,000.00	1	\$840,000.00
Catering, Meals & Lodging	112	days	\$3,090.00	\$346,080.00	1	\$346,080.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$1,633,904.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		114	\$930,240.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		114	\$575,928.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		114	\$285,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		33	\$528,000.00
Cement	300	sacks per well	\$17.00	\$5,100.00	19	\$96,900.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	19	\$855,000.00
			Misc. Total=			\$3,299,036.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
					Total w/o Cont.:	\$4,932,940.00

Cost Per Well	\$	259,628
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Henry	23	0.1	0.15	0.08	20	1	1	1	13	77

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		79	\$229,258.00
Rental Crane	83	days	\$800.00	\$66,400.00	1	\$66,400.00
Supply Boat	79	days	\$7,500.00	\$592,500.00	1	\$592,500.00
Catering, Meals & Lodging	79	days	\$3,090.00	\$244,110.00	1	\$244,110.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$1,162,268.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		81	\$660,960.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		81	\$409,212.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		81	\$202,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		3.9	\$62,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	23	\$117,300.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	23	\$1,035,000.00
			Misc. Total=			\$2,515,340.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
					Total w/o Cont.:	\$3,677,608.00

Cost Per Well	\$	159,896
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Heritage	48	0.1	0.15	0.08	0	0	25	23	309	309

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		311	\$902,522.00
Rental Crane	315	days	\$800.00	\$252,000.00	1	\$252,000.00
Supply Boat	311	days	\$7,500.00	\$2,332,500.00	1	\$2,332,500.00
Catering, Meals & Lodging	311	days	\$3,090.00	\$960,990.00	1	\$960,990.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$4,478,012.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		313	\$2,554,080.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		313	\$1,581,276.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		313	\$782,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		92.7	\$1,483,200.00
Cement	300	sacks per well	\$17.00	\$5,100.00	48	\$244,800.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	48	\$2,160,000.00
			Misc. Total=			\$8,833,824.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$13,311,836.00

Cost Per Well	\$ 277,330
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Hermosa	13	0.15	0.15	0.08	0	0	10	3	74	74

Well Complexity Work Days Table				
Well Complexity	Low	Med-Low	Med-High	High
Days/Well	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		76	\$220,552.00
Rental Crane	80	days	\$800.00	\$64,000.00	1	\$64,000.00
Supply Boat	76	days	\$7,500.00	\$570,000.00	1	\$570,000.00
Catering, Meals & Lodging	76	days	\$3,090.00	\$234,840.00	1	\$234,840.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$1,119,392.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		78	\$636,480.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		78	\$394,056.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		78	\$195,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		22.2	\$355,200.00
Cement	300	sacks per well	\$17.00	\$5,100.00	13	\$66,300.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	13	\$585,000.00
			Misc. Total=			\$2,260,004.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$3,379,396.00

Cost Per well	\$	259,954
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Hidalgo	14	0.15	0.15	0.08	0	0	8	6	88	88

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		90	\$261,180.00
Rental Crane	94	days	\$800.00	\$75,200.00	1	\$75,200.00
Supply Boat	90	days	\$7,500.00	\$675,000.00	1	\$675,000.00
Catering, Meals & Lodging	90	days	\$3,090.00	\$278,100.00	1	\$278,100.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$1,319,480.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		92	\$750,720.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		92	\$464,784.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		92	\$230,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		26.4	\$422,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	14	\$71,400.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	14	\$630,000.00
			Misc. Total=			\$2,597,272.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$3,916,752.00

Cost Per well	\$	279,768
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Hillhouse	47	0.1	0.15	0.08	40	5	1	1	13	153

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		155	\$449,810.00
Rental Crane	159	days	\$800.00	\$127,200.00	1	\$127,200.00
Supply Boat	155	days	\$7,500.00	\$1,162,500.00	1	\$1,162,500.00
Catering, Meals & Lodging	155	days	\$3,090.00	\$478,950.00	1	\$478,950.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$2,248,460.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		157	\$1,281,120.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		157	\$793,164.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		157	\$392,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		3.9	\$62,400.00
Cement	300	sacks per well	\$17.00	\$5,100.00	47	\$239,700.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	47	\$2,115,000.00
			Misc. Total=			\$4,911,852.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$7,160,312.00

Cost Per well	\$	152,347
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Hogan	39	0.1	0.15	0.08	13	18	4	4	52	163

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		165	\$478,830.00
Rental Crane	169	days	\$800.00	\$135,200.00	1	\$135,200.00
Supply Boat	165	days	\$7,500.00	\$1,237,500.00	1	\$1,237,500.00
Catering, Meals & Lodging	165	days	\$3,090.00	\$509,850.00	1	\$509,850.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$2,391,380.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		167	\$1,362,720.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		167	\$843,684.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		167	\$417,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		15.6	\$249,600.00
Cement	300	sacks per well	\$17.00	\$5,100.00	39	\$198,900.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	39	\$1,755,000.00
			Misc. Total=			\$4,855,372.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$7,246,752.00

Cost Per Well	\$ 185,814
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Hondo	28	0.1	0.15	0.08	0	0	24	4	152	152

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		154	\$446,908.00
Rental Crane	158	days	\$800.00	\$126,400.00	1	\$126,400.00
Supply Boat	154	days	\$7,500.00	\$1,155,000.00	1	\$1,155,000.00
Catering, Meals & Lodging	154	days	\$3,090.00	\$475,860.00	1	\$475,860.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$2,234,168.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		156	\$1,272,960.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		156	\$788,112.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		156	\$390,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		45.6	\$729,600.00
Cement	300	sacks per well	\$17.00	\$5,100.00	28	\$142,800.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	28	\$1,260,000.00
			Misc. Total=			\$4,611,440.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
					Total w/o Cont.:	\$6,845,608.00

Cost Per well	\$ 244,486
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Houchin	35	0.1	0.15	0.08	12	15	5	3	49	145

Well Complexity Work Days Table				
Well Complexity	Low	Med-Low	Med-High	High
Days/Well	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		147	\$426,594.00
Rental Crane	151	days	\$800.00	\$120,800.00	1	\$120,800.00
Supply Boat	147	days	\$7,500.00	\$1,102,500.00	1	\$1,102,500.00
Catering, Meals & Lodging	147	days	\$3,090.00	\$454,230.00	1	\$454,230.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$2,134,124.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		149	\$1,215,840.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		149	\$752,748.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		149	\$372,500.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		14.7	\$235,200.00
Cement	300	sacks per well	\$17.00	\$5,100.00	35	\$178,500.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	35	\$1,575,000.00
			Misc. Total=			\$4,357,756.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$6,491,880.00

Cost Per Well	\$	185,482
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Platform Rig-less Estimate										
Platform	Wells to P&A	Weather Cont.	Provisional Cont.	Engineering Cont.	Low # of Wells	Med Low # of Wells	Med High # of Wells	High # of Wells	# Med-High and High Well P&A Days	Well P&A Work Days
Irene	26	0.15	0.15	0.08	0	2	20	4	132	140

Well Complexity Work Days Table				
Well Complexity Days/Well	Low	Med-Low	Med-High	High
	3	4	5	8

DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost	Qty.	Subtotals
Well P&A Fuel Costs	3-8	days (See Table)	\$2,902.00		142	\$412,084.00
Rental Crane	146	days	\$800.00	\$116,800.00	1	\$116,800.00
Supply Boat	142	days	\$7,500.00	\$1,065,000.00	1	\$1,065,000.00
Catering, Meals & Lodging	142	days	\$3,090.00	\$438,780.00	1	\$438,780.00
Workboat to Mob/Demob equipment and crew	4	days	\$7,500.00	\$30,000.00	1	\$30,000.00
			Spread Total=			\$2,062,664.00
DESCRIPTION	DURATION	UNITS	RATE	Estimated Cost		
Miscellaneous						
Crew and Spread travel/shipping costs from GOM (round trip)	1	Lump Sum	\$27,968.00	\$27,968.00	1	\$27,968.00
10 Man P&A Crew (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$8,160.00		144	\$1,175,040.00
10k P&A Equip Spread (Includes Mob/Demob)	3-8	days (See Table)	\$5,052.00		144	\$727,488.00
Rentals (Includes Setup, Breakdown, Mob/Demob)	3-8	days (See Table)	\$2,500.00		144	\$360,000.00
Coiled Tubing Unit*	2-3	days (See Table)	\$16,000.00		39.6	\$633,600.00
Cement	300	sacks per well	\$17.00	\$5,100.00	26	\$132,600.00
Misc. Consumables**	1	per well	\$45,000.00	\$45,000.00	26	\$1,170,000.00
			Misc. Total=			\$4,226,696.00
* Coil Tubing Unit only used on Med-High & High complexity wells @ 30% of P&A work days						
** Consumables include Cast Iron Bridge Plugs, Perforating Charges, and Tubular Cutting Charges						
				Total w/o Cont.:		\$6,289,360.00

Cost Per Well	\$	241,898
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Appendix 3: Conductor Removal Cost Calculations

Platform	Distance to Port of Long Beach (mi)	Number of Wells to Plug	Number of Conductors to Remove	Water Depth (ft)	Conductor OD (in)	Conductor Length (ft)	Total Conductor Length (ft)	Weight per Foot (lb)	Weight per Conductor (lb)	Weight per Conductor (Ton)	Jack Cost during mob	Ft / section	Sections per conductor	Cut & Pull time per section (Hr)	Cut & Pull Time per conductor (Hr)	Cost per Abrasive Cut	Abrasive Cut Cost per Platform	Abr. Lump Mob/Demob Costs from GOM to POCS
A	96	52	55	188	9.625	268	14,740	195	52,260	26.13	9,408	40	7	4	27	2,486	136,730	16,781
B	96	57	56	190	9.625	270	15,120	195	52,650	26.33	9,408	40	7	4	27	2,486	139,216	16,781
C	96	38	37	192	13.375	272	10,064	387	105,264	52.63	9,408	40	7	4	27	2,486	91,982	16,781
Edith	12	18	29	161	9.625	241	6,989	187	45,067	22.53	5,292	40	6	4	24	2,486	72,094	27,968
Ellen	14	63	64	265	9.625	345	22,080	187	64,515	32.26	5,390	40	9	4	35	2,486	159,104	27,968
Elly	14	0	0	257	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eureka	16	50	60	700	9.625	780	46,800	187	145,860	72.93	5,488	40	20	4	78	2,486	149,160	27,968
Gail	78	27	29	739	18.625	819	23,751	539	441,441	220.72	8,918	40	20	4	82	2,486	72,094	13,984
Gilda	77	63	62	205	13.375	285	17,670	356	101,460	50.73	8,477	40	7	4	29	2,486	154,132	27,968
Gina	70	12	12	95	13.375	175	2,100	356	62,300	31.15	8,134	40	4	4	18	2,486	29,832	27,968
Grace	82	28	38	318	18.625	398	15,124	654	260,292	130.15	8,722	40	10	4	40	2,486	94,468	13,984
Habitat	92	20	21	29	18.625	370	7,770	553	204,610	102.31	9,212	40	9	4	37	2,486	52,206	27,968
Harmony	124	34	54	1,198	18.625	1,278	69,012	645	824,310	412.16	14,300	40	32	4	128	2,486	134,244	27,968
Harvest	153	19	25	675	18.625	755	18,875	647	488,485	244.24	12,761	40	19	4	76	2,486	62,150	13,984
Henry	92	23	24	173	13.375	253	6,072	387	97,911	48.96	9,212	40	6	4	25	2,486	59,664	16,781
Heritage	128	48	49	1,075	16.000	1,155	56,595	459	530,145	265.07	14,560	40	29	4	116	2,486	121,814	27,968
Hermosa	150	13	29	603	18.625	683	19,807	647	441,901	220.95	12,608	40	17	4	68	2,486	72,094	13,984
Hidalgo	155	14	14	430	18.625	510	7,140	654	333,540	166.77	12,864	40	13	4	51	2,486	34,804	13,984
Hillhouse	95	47	50	192	13.375	272	13,600	387	105,264	52.63	9,359	40	7	4	27	2,486	124,300	16,781
Hogan	92	39	39	154	10.750	234	9,126	313	73,242	36.62	9,212	40	6	4	23	2,486	96,954	41,952
Hondo	120	28	28	842	16.000	922	25,816	549	506,178	253.09	14,040	40	23	4	92	2,486	69,608	27,968
Houchin	92	35	35	163	10.750	243	8,505	317	77,031	38.52	9,212	40	6	4	24	2,486	87,010	41,952
Irene	175	26	28	242	13.375	322	9,016	397	127,834	63.92	13,279	40	8	4	32	2,486	69,608	13,984

Total 754 838 425,772

Load & unload	\$ 10,998
Crew Airfare per person times 10 heads from LFT to LAX	\$ 4,218
Crew Hourly pay 12 hrs times 10 heads	\$ 48,000
Spread Shipping Costs per mile times distance from Houma to LA (Abrasive Spread)	\$ 20,688
Total	\$ 83,904



Removal Cost w/ Casing Jacks (USD)	Removal cost/ft w/ Jacks (USD)
4,461,149	303
4,567,877	302
3,127,066	311
2,186,159	313
6,378,165	289
-	-
12,622,709	270
6,566,624	276
5,338,098	302
819,314	390
4,466,019	295
2,403,884	309
18,874,783	274
5,319,490	282
1,965,108	324
15,542,468	275
5,605,618	283
2,188,946	307
4,169,988	307
2,906,310	318
7,252,563	281
2,706,725	318
2,807,010	311

Total	\$	122,276,073
Average per Conductor	\$	145,914
Average per foot	\$	287



Appendix 4: Power Cable Removal Cost Calculations

Cable Origin	Cable Terminus	Length (ft)	Depth (ft)	Mobilization	Cargo Barge Mobilization	Remove cable from J-Tube	Reel Cable	Demobilization	Weather	Cargo Barge Demob	Total Excluding Engineering Contingencies	Weather	Work (15%)	Engineering (8%)	Total
A	B	2640	188-190	\$5,914	\$6,050	\$64,890	\$60,427	\$5,914	10%	\$6,050	\$180,575	\$12,532	\$18,798	\$10,025	\$190,600
B	C	2640	190-192	\$5,914	\$6,050	\$64,890	\$60,427	\$5,914	10%	\$6,050	\$180,575	\$12,532	\$18,798	\$10,025	\$190,600
C	Shore	26400	160-0	\$5,914	\$12,100	\$129,780	\$604,267	\$5,914	10%	\$12,100	\$953,587	\$73,405	\$110,107	\$58,724	\$1,012,311
Edith	Shore	36960	160-0	\$17,743	\$12,100	\$129,780	\$845,973	\$17,743	5%	\$12,100	\$1,230,590	\$48,788	\$146,363	\$78,060	\$1,308,650
Ellen^		0									\$0				
Elly		0									\$0				
Eureka	Ellen (2)	15297	700-265	\$17,743	\$12,100	\$86,520	\$175,066	\$17,743	5%	\$12,100	\$373,589	\$13,079	\$39,238	\$20,927	\$394,516
Gail		0									\$0				
Gilda	Shore	36960	205-0	\$11,829	\$12,100	\$129,780	\$845,973	\$11,829	10%	\$12,100	\$1,267,549	\$97,575	\$146,363	\$78,060	\$1,345,609
Gina	Shore	1584	90-0	\$5,914	\$12,100	\$129,780	\$36,256	\$5,914	10%	\$12,100	\$243,574	\$16,604	\$24,905	\$13,283	\$256,857
Grace		0									\$0				
Habitat	P/F A	19536	290-188	\$11,829	\$12,100	\$129,780	\$447,157	\$11,829	10%	\$12,100	\$769,029	\$57,694	\$86,541	\$46,155	\$815,184
Harmony	Shore (2)	59664	1198-0	\$11,829	\$12,100	\$155,736	\$682,821	\$11,829	10%	\$12,100	\$1,096,054	\$83,856	\$125,784	\$67,085	\$1,163,139
Harvest		0									\$0				
Henry	Hillhouse	13200	173-190	\$5,914	\$12,100	\$129,780	\$302,133	\$5,914	10%	\$12,100	\$575,920	\$43,191	\$64,787	\$34,553	\$610,473
Heritage	Harmony	39072	1075-1198	\$5,914	\$12,100	\$155,736	\$2,392,896	\$5,914	10%	\$12,100	\$3,221,819	\$254,863	\$382,295	\$203,891	\$3,425,709
Heritage	Shore	104544	1075-0	\$5,914	\$12,100	\$155,736	\$894,315	\$5,914	10%	\$12,100	\$1,348,592	\$105,005	\$157,508	\$84,004	\$1,432,596
Hermosa		0									\$0				
Hildalgo		0									\$0				
Hillhouse	Shore	17952	175-0	\$5,914	\$12,100	\$129,780	\$410,901	\$5,914	10%	\$12,100	\$711,880	\$54,068	\$81,102	\$43,255	\$755,135
Hogan	Shore	4752	154-0	\$23,793	\$12,100	\$129,780	\$108,768	\$23,793	10%	\$12,100	\$369,971	\$23,855	\$35,782	\$19,084	\$389,055
Hondo	Harmony (2)	47520	842-1198	\$11,829	\$12,100	\$155,736	\$543,840	\$11,829	10%	\$12,100	\$922,327	\$69,958	\$104,936	\$55,966	\$978,293
Houchin	Hogan	3800	163-154	\$23,793	\$12,100	\$129,780	\$86,978	\$23,793	10%	\$12,100	\$342,733	\$21,676	\$32,514	\$17,341	\$360,074
Irene	Shore	14784	242-0	\$11,829	\$12,100	\$129,780	\$338,389	\$11,829	15%	\$12,100	\$656,477	\$70,225	\$70,225	\$37,454	\$693,931
Total											\$14,444,841				\$15,322,731

Resource	Cost/Hr
Workboat	\$583
ROV	\$800
PL Survey	\$230
Cargo Barge 180 & Tug	\$550
Spread Rate	\$2,163

Total feet Total miles avg/mi
447305 84.72 \$170,507



Appendix 5: Schnitzer Disposal Proposal

The following disposal estimate was developed by Schnitzer Steel Products Company in 1996 revalidated in 2004. The methodology remains the same. Pricing was updated with current rates either directly or by applying construction inflation rates.

100 Site Preparation

A. Scope

Engineer and provide labor, material and equipment to prepare a site suitable for the receipt, transport, handling, storage, demolition and scrap processing.

Prepare a graded, graveled and drained site of about 30 acres. Provide additional compacted gravel areas for crane and crawler transporter haul roads. Install drainage basins and piping. Install protection for under ground utilities. Install protection for railroad crossings. Provide security fencing and temporary lighting.

Construct a barge reception facility suitable for barges to 150 feet in beam and 450 feet in length and 20 feet loaded draft. Install structures adequate for the anticipated ground loading of up to 10,000 psf. Installation will include a sheet pile dock structure with tie backs. To accommodate a range of river stages, provide for adding courses to the dock.

Install barge mooring fittings. Install barge utility connections for water and electricity. Perform maintenance dredging in way of the barge approach.

B. Key Assumptions

1. Twelve months is adequate to perform the project.
2. Use of a 30 acre site is adequate for the project.
3. There is no allowance for unknowns in the geo-technical qualities of the site.
4. Use of a single live loading facility is adequate for the project.

C. Estimate Accuracy

To improve estimate accuracy, the following steps are recommended:

1. Perform a detailed project review to determine optimum project schedule.
2. Analyze the site logistics, material and scrap operational work flow to determine optimum site.
3. Perform a rough geo-technical study of the site.
4. Prepare preliminary engineering for the live loading facility.



200 Lampson Material Handling

A. Scope

Engineer and provide labor, material and equipment to move offshore platform topsides and jackets. These movements include removal from the delivery barges, movements to and from site storage, movement to demolition and scrap preparation operations.

Engineering effort include design of the connecting structures between crawler transporters, cranes and the platform sections.

Engineering effort includes assistance with site layout, live loading facilities, haul roads and collaboration with Chevron and Twatchman, Snyder & Thornton engineering effort. The collaboration will strive for a seamless project engineering result.

Mobilize, demobilize and operate the following equipment:

- Two—Transilift 1100 Cranes
- Two—Manitowoc 230 Ton 4100 Cranes
- One—35 Ton Rough Terrain Crane
- One—Mobile Rigging Loft
- Three—2,000 Ton Crawler Transporters
- One—70 Ton Rough Terrain Crane
- One—30 Ton Forklift
- One—Set Heavy Rigging Equipment

B. Key Assumptions

1. Fabrication of the connecting structures between cranes, crawlers and platform pieces in not included.
2. Pricing is subject to further definition of the project requirements.
3. One Transilift crane will operate for 9 months the other will operate for 12 months.
4. Transilift 1100 cranes will directly offload smaller sections from the delivery barge.

C. Estimate Accuracy

To improve estimate accuracy, the following steps are recommended:

1. Provide data and perform engineering analysis to define transport interface structures.
2. Analyze the site logistics, material and scrap operational work flow to determine optimum site.



300 Platform Offloading

A. Scope

Provide labor and equipment to receive, offload and let go barges delivering the platform sections to the scrap facility.

Provide labor to tie up, standby and let go the barges during the offloading cycle. Provide standby tugs during the heavy lift transfer operations. Provide idle berths, electric and water support utilities for towing tugs and their barges.

Provide labor to assist with the installation of the connecting framing and rigging for the crane and crawler transport operation. Remove and re-use this framing to extent possible.

Install, position and adjust temporary support structures in the onshore storage locations.

Perform a material investigation of each section for hazardous materials, non-ferrous metals, re-usable machinery and equipment, and safety hazards.

B. Key Assumptions

1. There is a total of 47 platform sections with a total weight of 37,000 short tons.
2. There is a total of 16 barges arriving over a nine month period. Best effort will be made for a barge turnaround of about 72 hours.
3. Labor and equipment for ballast additions and adjustments for offloading will be provided by the barge operator.
4. Fabrication of the connecting structure between cranes, crawlers and platform sections is not included.

C. Estimate Accuracy

To improve estimate accuracy, the following steps are recommended:

1. Perform a detailed project review to determine optimum project schedule.
2. Provide data and perform engineering analysis to define transport interface structures.



400 Platform Scrapping

A. Scope

Provide labor, material and equipment for the demolition and scrap processing of 37,000 tons of offshore platform topside structures.

Remove and properly dispose of asbestos, PCB's and other hazardous materials. Perform the personnel safety procedures required by federal, state and local regulations.

Remove major non-ferrous materials for recycling.

Remove major machinery and equipment items that are found appropriate for resale, and reconditioning for resale.

Process the platform steel to a suitable grade for steel mill recycling.

B. Key Assumptions

1. Demolition of the large platform structures to 40 or 50 ton pieces is not well defined. Processing the 40 to 50 ton pieces is well defined.
2. Total platform topsides weigh 37,000 short tons according to Twatchman, Snyder & Thornton drawing take off and estimates. More or less weight will impact the estimate.
3. This estimate provides for minimal measures for dealing with lead or other heavy metals.

C. Estimate Accuracy

To improve estimate accuracy, the following steps are recommended:

1. Perform an analysis of the platform demolition process.
2. Perform an analysis of platform weights.
3. Perform an analysis of hazardous materials including asbestos, PCB's, and heavy metals.



500 Jacket & Piling Offloading

A. Scope

Provide labor and equipment to receive, offload and let go barges delivering the jacket and piling sections to the scrap facility.

Provide labor to tie up, standby and let go the barges during the offloading cycle. Provide standby tugs during the heavy lift transfer operations. Provide idle berths, electric and water support utilities for towing tugs and their barges.

Provide labor to assist with the installation of the connecting framing and rigging for the crane and crawler transport operation. Remove and re-use this framing to extent possible.

Install, position and adjust temporary support structures in the onshore storage locations.

Perform a material investigation of each section for hazardous materials, non-ferrous metals, re-usable machinery and equipment, and safety hazards.

B. Key Assumptions

1. There is a total of 28 jacket sections with a total weight of 81,300 short tons.
2. There is a total of 28 barges arriving over a nine month period. Best effort will be made for a barge turnaround of about 72 hours.
3. Labor and equipment for ballast additions and adjustments for offloading will be provided by the barge operator.
4. Fabrication of the connecting structure between cranes, crawlers and jacket and piling sections is not included.

C. Estimate Accuracy

To improve estimate accuracy, the following steps are recommended:

1. Perform a detailed project review to determine optimum project schedule.
2. Provide data and perform engineering analysis to define transport interface structures for the 28 jacket and piling sections



600 Jacket Demolition

A. Scope

Engineer and provide labor, material and equipment for the demolition of 81,300 tons of offshore platform jacket structures.

Remove and dispose of marine growth from the topmost sections of each of five jackets. Provide other health and safety precautions as required by federal, state and local regulations.

Design the rigging and cutting scheme to reduce the jacket section on “on ground” parts as rapidly as possible. Reduce the major sections to 40 and 50 ton sections for delivery to scrap processing operations.

Remove and dispose of the grout installed between the piling and jacket components.

Process the platform steel to a suitable grade for steel mill recycling.

B. Key Assumptions

1. Demolition of the large platform structures to 40 or 50 ton pieces is not well defined. Processing the 40 to 50 ton pieces is well defined.
2. There is a total of 28 jacket sections with a total weight of 81,300 short tons according to Twatchman, Snyder & Thornton drawing take off and estimates. More or less weight will impact the estimate.
3. Lampson crawler and crane equipment will be used to reposition the jacket sections and “unroll” them in the most convenient method.
4. Grout between pilings and jacket sections in low density concrete without aggregate.

C. Estimate Accuracy

To improve estimate accuracy, the following steps are recommended:

1. Perform an analysis of the platform demolition process.
2. Perform an analysis of platform weights.
3. Perform an analysis of hazardous materials including heavy metals.



700 Jacket Scrap Processing

A. Scope

Provide labor, material and equipment for scrap processing of 81,300 tons of offshore platform jacket structures.

Process the platform steel to a suitable grade for steel mill recycling.

B. Key Assumptions

1. Scrap processing the 40 to 50 ton pieces is well defined.
2. There is a total of 28 jacket sections with a total weight of 81,300 short tons according to Twatchman, Snyder & Thornton drawing take off and estimates. More or less weight will impact the estimate.

C. Estimate Accuracy

To improve estimate accuracy, the following steps are recommended:

1. Perform an analysis of platform weights.
2. Perform an analysis of hazardous materials including heavy metals.



800 Scrap Credit

A. Scope

Provide a credit for the steel scrap obtained from the scrap processing operations.

Provide a credit for the non-ferrous scrap obtained from the scrap processing operations.

Provide a credit for the resale machinery and equipment items that are removed from the topside platform sections.

B. Key Assumptions

1. The scrap credit is subject to further discussions and understanding of Chevron's expectations.
2. Schnitzer Steel Products Company has a sister company specializing in the reconditioning and resale market that can provide an assessment of the platform's potential.
3. Credit for scrap will be determined by the then-prevailing scrap price posted in "American Metal Market" (a daily publication of the scrap industry) for the Portland-Seattle market area.
4. Today's prevailing price for mill delivered short ton (2,000 pounds) is \$77 to \$79.
5. The credit is estimated to include 121,300 short tons of steel, 60 short tons of non-ferrous, 80 major items of reusable machinery and equipment.

C. Estimate Accuracy

To improve estimate accuracy, the following steps are recommended:

1. Perform an analysis of platform weights.
2. Perform an analysis of hazardous materials including heavy metals.
3. Provide an analysis of the resale market for platform machinery and equipment.



Schnitzer Steel Products Co. Offshore Platform Scrapping Program Rough Order of Magnitude Estimate					
Item	Description	Unit	Quantity	Unit Cost	Total
	Program Summary				
100	Site Preparation				\$4,490,540
200	Lampson Material Handling				\$9,457,365
300	Platform Offloading				\$1,847,325
400	Platform Scrapping				\$9,639,701
500	Jacket & Piling Offloading				\$3,339,000
600	Jacket & Piling Demolition				\$10,502,640
700	Jacket & Piling Scrap Processing				\$6,449,892
	Subtotal				\$45,726,463
	Contingency			15%	\$6,858,969
	Program Total				\$52,585,432
800	Scrap Credit				Negotiable



Schnitzer Steel Products Co. Offshore Platform Scrapping Program Platform & Jacket Steel Weights				
Item	Description	Short Tons	Total	Total
	Topside Platform Structure			
1	GAIL	6,817		
2	GRACE	3,460		
3	HERMOSA	6,632		
4	HIDALGO	6,775		
5	HARVEST	8,500		
	Subtotal		32,184	
	Jacket			
6	GAIL	14,390		
7	GRACE	3,262		
8	HERMOSA	14,702		
9	HIDALGO	8,896		
10	HARVEST	14,350		
	Subtotal		55,600	
	Piling			
11	GAIL	3,099		
12	GRACE	1,746		
13	HERMOSA	3,953		
14	HIDALGO	2,689		
15	HARVEST	3,631		
	Subtotal		15,118	
	Other Components			
16	Conductors	3,500		
17	Anodes, Non-Ferrous	3,000		
	Subtotal		6,500	
	Total			102,902
18	Additions & Not Detailed		15%	15,435
	Total			118,337



Schnitzer Steel Products Offshore Platform Scrapping Program Lay Down Foot Print						
Item	Description	Length	Width	Item Area	50 Foot Access	Total
GAIL Topsides						
1	Flare Boom	140	12	1,680	10,100	
2	Sulferox	50	50	2,500	7,500	
3	Compressor-Scrubber	130	64	8,320	12,200	
4	Driller	130	50	6,500	11,500	
5	Quarters-Helo	70	70	4,900	9,500	
6	Generator-Switchgear	130	64	8,320	12,200	
7	West Deck	141	108	15,228	14,950	
8	East Deck	137	104	14,248	14,550	
	Subtotal			61,696	92,500	154,196
GRACE Topsides						
1	Flare Boom	120	21	2,520	9,550	
2	Cantilever	70	15	1,050	6,750	
3	Compressor	124	50	6,200	11,200	
4	BOP	120	40	4,800	10,500	
5	Process	142	50	7,100	12,100	
6	Wellhead	138	40	5,520	11,400	
7	Quarters-Helo	70	70	4,900	9,500	
8	MUD	90	65	5,850	10,250	
9	Personnell-MCC	61	66	4,026	8,850	
10	Generator	70	80	5,600	10,000	
11	West Cap Truss	119	62	7,378	11,550	
12	East Cap Truss	119	82	9,758	12,550	
	Subtotal			64,702	124,200	188,902
HERMOSA Topsides						
1	Flare Boom	117	12	1,404	8950	
2	Quarters-Helo	67	61	4,087	8900	
3	Power	156	50	7,800	12800	
4	Pipe Rack	100	73	7,300	11150	
5	Utility	156	50	7,800	12800	
6	Compression	156	40	6,240	12300	
7	Production	156	40	6,240	12300	
8	Well Head	156	49	7,644	12750	
9	Cap Truss	210	100	21,000	18000	
	Subtotal			69,515	61,696	131,211



Schnitzer Steel Products Offshore Platform Scrapping Program Lay Down Foot Print						
Item	Description	Length	Width	Item Area	50 Foot Access	Total
HIDALGO Topsides						
1	Flare Boom	115	12	1,380	8,850	
2	Quarters-Helo	67	63	4,221	9,000	
3	Power	156	49	7,644	12,750	
4	Pipe Rack	101	69	6,969	11,000	
5	Utility	156	49	7,644	12,750	
6	Compression	156	37	5,772	12,150	
7	Production	156	37	5,772	12,150	
8	Well Head	156	49	7,644	12,750	
9	Cap Truss	210	100	21,000	18,000	
	Subtotal			68,046	109,400	177,446
HARVEST Topsides						
1	Flare Boom	115	12	1,380	8850	
2	Quarters-Helo	67	63	4,221	9000	
3	Power	156	49	7,644	12750	
4	Pipe Rack	101	69	6,969	11000	
5	Utility	156	49	7,644	12750	
6	Compression	156	37	5,772	12150	
7	Production	156	37	5,772	12150	
8	Well Head	156	49	7,644	12750	
9	Cap Truss	210	100	21,000	18000	
	Subtotal			68,046	109,400	177,446
GAIL Jacket						
1	A-Top	90	190	17,100	16,500	
2	B	112	212	23,744	18,700	
3	C	137	237	32,469	21,200	
4	D	164	264	43,296	23,900	
5	E	180	280	50,400	25,500	
6	F-Bottom	197	297	58,509	27,200	
	Subtotal			225,518	133,000	358,518
GRACE Jacket						
1	A-Top	113	168	18,984	16,550	
2	B	141	196	27,636	19,350	
3	C-Bottom	158	213	33,654	21,050	
	Subtotal			80,274	56,950	137,224



Schnitzer Steel Products Offshore Platform Scrapping Program Lay Down Foot Print						
Item	Description	Length	Width	Item Area	50 Foot Access	Total
HERMOSA Jacket						
1	A-Top	118	198	23,364	18,300	
2	B	137	218	29,866	20,250	
3	C	149	229	34,121	21,400	
4	D	161	241	38,801	22,600	
5	E	173	253	43,769	23,800	
6	F	187	267	49,929	25,200	
7	G-Bottom	200	279	55,800	26,450	
	Subtotal			275,650	158,000	433,650
HIDALGO Jacket						
1	A-Top	123	203	24,969	18,800	
2	B	149	229	34,121	21,400	
3	C-Bottom	176	257	45,232	24,150	
	Subtotal			104,322	64,350	168,672
HARVEST Jacket						
1	A-Top	201	62	12,462	15,650	
2	B	212	75	15,900	16,850	
3	C	225	90	20,250	18,250	
4	D	237	105	24,885	19,600	
5	E	251	121	30,371	21,100	
6	F	257	139	35,723	22,300	
7	G	281	158	44,398	24,450	
8	H	298	178	53,044	26,300	
9	I-Bottom	315	200	63,000	28,250	
	Subtotal			300,033	192,750	492,783
Total Square Feet				1,092,284	969,246	2,061,530
Total Acres				25	22	47
<p>Note: "Fifty (50) foot access" is a clear "L" shaped crane access and traffic way allowance on the one (1) length and one (1) width of each item. This must be balanced in requirements for small topside sections and large jacket sections.</p>						



Schnitzer Steel Products Co. Offshore Platform Scrapping Program 100 x 400 Barge Loads				
Item	Description	Barges	Total	Total
	Topside Platform Structure			
1	GAIL	3		
2	GRACE	4		
3	HERMOSA	3		
4	HIDALGO	3		
5	HARVEST	3		
	Subtotal		16	
	Jacket			
6	GAIL	7		
7	GRACE	3		
8	HERMOSA	7		
9	HIDALGO	7		
10	HARVEST	7		
	Subtotal		31	
	Piling			
11	GAIL	Included		
12	GRACE	Included		
13	HERMOSA	Included		
14	HIDALGO	Included		
15	HARVEST	Included		
	Subtotal		0	
	Total			47
Important Note: All the barges will be 100 x 400 Alaska Sealift-Type, except one. This exception will be 150 x 450.				



Schnitzer Steel Products Co.					
Offshore Platform Scrapping Program					
Rough Order of Magnitude Estimate					
Item	Description	Unit	Quantity	Unit Cost	Total
100	Site Preparation				
	Assumes: 30 acre site, fenced, graded, graveled, portable work lights, fire protection, drainage, underground utility protection, Willamette greenway measures.				
110	Engineering				
	Design site layout	hours	320	\$120	\$38,400
	Design live loading facility	hours	640	\$120	\$76,800
	Layout for cranes & crawlers	hours	240	\$120	\$28,800
	Geo-technical investigation	hours	240	\$120	\$28,800
	Other studies & permits	hours	240	\$120	\$28,800
	Subtotal				\$201,600
120	Site Construction				
	Assumes: No geo-technical difficulties				
	Site preparations	acres	30	\$1,150	\$34,500
	Grade, 6" lift, <3/4" gravel, 30 acres	cu. yd.	24,250	\$30	\$727,500
	Grade, 6" lift, <3/4" gravel, 15 acres	cu. yd.	12,125	\$30	\$363,750
	Drainage piping & tiles	lot	1	\$114,000	\$114,000
	Protect underground utilities	lot	1	\$57,000	\$57,000
	Protect rail crossings	lot	1	\$57,000	\$57,000
	Other measures	lot	1	\$60,000	\$60,000
	Subtotal				\$1,413,750
120	Site Utilization				
	Assumes: Site utilization of 18 months including construction.				
	Rental equivalent rate	acre-mo.	540	\$1,208	\$652,050
	Utilities	acre-mo.	360	\$184	\$66,240
	Subtotal				\$718,290



Schnitzer Steel Products Co. Offshore Platform Scrapping Program Rough Order of Magnitude Estimate					
Item	Description	Unit	Quantity	Unit Cost	Total
130	Offloading Facility Construction				
	Assumes: One live loading position for barges to 150 foot beam, 450 foot length, 20 foot draft, adjustable for river stages by addition of tied back portable concrete barriers in 2 foot increments.				
	Excavation & back fill	cu. yd.	10,000	\$40	\$400,000
	Sheet pile bulkhead, 60 feet deep	lin. ft.	300	\$4,200	\$1,260,000
	Tie backs & anchoring arrangement	lot	1	\$228,000	\$228,000
	Adjustable concrete structures	lot	1	\$80,500	\$80,500
	Barge mooring arrangements	lot	1	\$33,000	\$33,000
	Barge electric & water utility station	lot	1	\$35,400	\$35,400
	Barge slip maintenance dredging	lot	1	\$120,000	\$120,000
	Subtotal				\$2,156,900
100	Total Site Preparation				\$4,490,540



<p align="center">Schnitzer Steel Products Co. Offshore Platform Scrapping Program Rough Order of Magnitude Estimate</p>					
Item	Description	Unit	Quantity	Unit Cost	Total
200	Lampson Material Handling				
210	Engineering				
	Layout cranes & crawlers	hours	400	\$125	\$50,000
	Design crawler-component interface	hours	400	\$125	\$50,000
	Rigging design	hours	400	\$125	\$50,000
	Logistic coordination	hours	200	\$125	\$25,000
	Obtain permits	hours	100	\$125	\$12,500
	Subtotal				\$187,500
220	Equipment Mobilization				
	Translift 1100	each	1	\$72,000	\$72,000
	Translift 1100	each	1	\$60,000	\$60,000
	Crawler transporter 2,000 tons	each	3	\$17,250	\$51,750
	Manitowoc 4100 crane, 230 tons	each	1	\$12,000	\$12,000
	Rigging loft & gear	each	1	\$2,300	\$2,300
	Stop logs for portable supports	lot-70	1	\$24,000	\$24,000
	70 ton rough terrain crane	each	1	\$4,025	\$4,025
	35 ton rough terrain crane	each	1	\$4,025	\$4,025
	25 ton fork lift	each	1	\$4,025	\$4,025
	Subtotal				\$234,125
230	Equipment Demobilization				
	Translift 1100	each	1	\$72,000	\$72,000
	Translift 1100	each	1	\$60,000	\$60,000
	Crawler transporter 2,000 tons	each	3	\$18,000	\$54,000
	Manitowoc 4100 crane, 230 tons	each	1	\$12,000	\$12,000
	Rigging loft & gear	each	1	\$2,400	\$2,400
	Stop logs for portable supports	lot-70	1	\$24,000	\$24,000
	70 ton rough terrain crane	each	1	\$4,200	\$4,200
	35 ton rough terrain crane	each	1	\$4,200	\$4,200
	25 ton fork lift	each	1	\$4,200	\$4,200
	Subtotal				\$237,000



Schnitzer Steel Products Co.					
Offshore Platform Scrapping Program					
Rough Order of Magnitude Estimate					
Item	Description	Unit	Quantity	Unit Cost	Total
240	Equipment Use				
	Translift 1100	month	9	\$165,000	\$1,485,000
	Translift 1100	month	12	\$148,500	\$1,782,000
	Crawler transporter 2,000 tons	month	36	\$55,000	\$1,980,000
	Manitowoc 4100 crane, 230 tons	month	24	\$16,500	\$396,000
	Rigging loft & gear	month	12	\$6,600	\$79,200
	Stop logs for portable supports	month	12	\$5,500	\$66,000
	70 ton rough terrain crane	month	12	\$7,150	\$85,800
	35 ton rough terrain crane	month	12	\$6,050	\$72,600
	25 ton fork lift	month	12	\$4,950	\$59,400
	Subtotal				\$6,006,000
250	Operating Labor				
	Superintendent	hours	4,242	\$72	\$305,424
	Translift crew	hours	12,672	\$62	\$780,595
	Crawler transporter operators	hours	6,336	\$62	\$390,298
	Crane & fork lift operators	hours	6,336	\$55	\$348,480
	Crane oiler	hours	4,224	\$50	\$209,088
	Rigging crew	hours	6,336	\$55	\$348,480
	Subtotal				\$2,382,365
260	Operator Lodging & Subsistence				
	Lodging	crew-mo.	12		\$187,018
	Subsistence	crew-mo.	12		\$187,018
	Mobilization & mileage	crew-mo.	12		\$36,340
	Subtotal				\$410,375
200	Total Lampson Material Handling				\$9,457,365



Schnitzer Steel Products Co.					
Offshore Platform Scrapping Program					
Rough Order of Magnitude Estimate					
Item	Description	Unit	Quantity	Unit Cost	Total
300	Platform Offloading				
310	Barge Receipt				
	Assumes: 16 barges with 72 hour turnaround, over a 9 month period, labor & equipment for barge ballasting provided by barge operator.				
	Tie up & let go barge	event	32	\$2,300	\$73,600
	Offloading standby labor	event	32	\$2,300	\$73,600
	Offloading standby tugs	event	16	\$11,500	\$184,000
	Utility and other assistance	event	16	\$2,300	\$36,800
	Subtotal				\$368,000
320	Crawler & Crane Connecting Frames				
	Assumes: 5 platforms, 47 topside sections, 32,184 short tons + 15% margin = 37,000 short tons. Estimate does not include fabrication of connecting frames.				
	Assemble connecting frames	each	94	\$2,875	\$270,250
	Install connecting frames	each	94	\$5,750	\$540,500
	Remove connecting frames for re-use	each	94	\$2,875	\$270,250
	Subtotal				\$1,081,000
330	Topsides Rigging Assistance				
	Assist Lampson with rigging	section	47	\$4,025	\$189,175
	Position stop log supports	section	47	\$575	\$27,025
	Other Lampson support	section	47	\$575	\$27,025
	Subtotal				\$243,225



**Schnitzer Steel Products Co.
Offshore Platform Scrapping Program
Rough Order of Magnitude Estimate**

Item	Description	Unit	Quantity	Unit Cost	Total
340	Topsides Material Investigation				
	HazMat survey	section	47	\$900	\$42,300
	Non-ferrous material survey	section	47	\$900	\$42,300
	Re-usable equipment survey	section	47	\$900	\$42,300
	Signage & safety measures	section	47	\$600	\$28,200
	Subtotal				\$155,100
300	Total Platform Offloading				\$1,847,325



Schnitzer Steel Products Co. Offshore Platform Scrapping Program Rough Order of Magnitude Estimate					
Item	Description	Unit	Quantity	Unit Cost	Total
400	Platform Scrapping				
410	HazMat Removal				
	Remove asbestos	tons	20	\$6,000	\$120,000
	Dispose of asbestos	tons	20	\$6,000	\$120,000
	Remove PCB's	tons	10	\$6,000	\$60,000
	Dispose of PCB's	tons	10	\$12,000	\$120,000
	Other HazMat removal & disposal	tons	10	\$6,000	\$60,000
	Subtotal				\$480,000
420	Remove Major Non-Ferrous				
	Remove copper	tons	20	\$900	\$18,000
	Remove stainless steel	tons	20	\$900	\$18,000
	Other non-ferrous materials	tons	20	\$900	\$18,000
	Subtotal				\$54,000
430	Remove Major Resale Machinery				
	Remove, support, store & handle	each	80	\$3,450	\$276,000
440	Topside Demolition				
	Assumes: Reducing topside sections into 40 and 50 short ton units for scrap processing.				
	Demolition of topsides	short tons	37,000	\$136	\$5,020,900
450	Topside Scrap Processing				
	Assumes: 37,000 short tons reduced to charging size.				
	Scrap processing of topsides	short tons	37,000	\$74	\$2,723,200
400	Total Platform Scrapping				\$9,639,701



Schnitzer Steel Products Co.					
Offshore Platform Scrapping Program					
Rough Order of Magnitude Estimate					
Item	Description	Unit	Quantity	Unit Cost	Total
500	Jacket & Piling Offloading				
510	Barge Receipt				
	Assumes: 28 barges and 72 hour turnaround each. Labor and pumping equipment for ballast handling provided by barge operator.				
	Barge tie up and let go	event	56	\$2,300	\$128,800
	Offloading standby labor	event	56	\$2,300	\$128,800
	Offloading standby tugs	event	28	\$11,500	\$322,000
	Utility and other assistance	event	28	\$2,300	\$64,400
	Subtotal				\$644,000
520	Crawler & Crane Connecting Frames				
	Assumes: Total 28 jacket & piling sections, 2,000 to 4,000 short tons each, 70,700 short tons + 15% margin, total 81,300 short tons. Each has 3 connecting frames. Fabrication of frames is not included.				
	Assemble connecting frames	each	84	\$7,150	\$600,600
	Install connecting frames	each	84	\$13,750	\$1,155,000
	Remove connecting frames for re-use	each	84	\$7,150	\$600,600
	Subtotal				\$2,356,200
530	Jacket Rigging Assistance				
	Assist Lampson with rigging	section	28	\$5,500	\$154,000
	Position stop log supports	section	28	\$1,100	\$30,800
	Other Lampson support	section	28	\$3,850	\$107,800
	Subtotal				\$292,600
540	Jacket Investigation				
	Hazardous materials survey	section	28	\$1,100	\$30,800
	Signage & safety measures	section	28	\$550	\$15,400
	Subtotal				\$46,200
500	Total Jacket & Piling Offloading				\$3,339,000



Schnitzer Steel Products Co.					
Offshore Platform Scrapping Program					
Rough Order of Magnitude Estimate					
Item	Description	Unit	Quantity	Unit Cost	Total
600	Jacket & Piling Demolition				
610	Engineering				
	Assumes: 28 jacket & piling sections, 2,000 to 4,000 short tons each, 70,000 short tons + 15% margin, total 81,300 short tons reduced to 40 and 50 short ton units.				
	Design cutting arrangements	jackets	28	\$5,500	\$154,000
	Design rigging arrangements	sections	1,626	\$240	\$390,240
	Subtotal				\$544,240
620	Marine Growth Measures				
	Assumes: 10 uppermost jacket sections have marine growth to 6 inches.				
	Remove marine growth	sections	10	\$16,500	\$165,000
	Dispose of marine growth	tons	500	\$165	\$82,500
	Measures for health & safety	lot	5	\$5,500	\$27,500
	Subtotal				\$275,000
630	Jacket & Piling Demolition				
	Assumes: Use of cranes & crawlers to "unroll" jacket sections and place large sections a ground level quickly.				
	Demolition of jacket & piling	short tons	81,300	\$118	\$9,593,400
640	Piling & Grout Removal				
	Assumes: Aggregate free grout in one annular space between jacket & piling.				
	Remove & dispose of grout	tons	1,000	\$90	\$90,000
600	Total Jacket & Piling Demolition				\$10,502,640



Schnitzer Steel Products Co. Offshore Platform Scrapping Program Rough Order of Magnitude Estimate					
Item	Description	Unit	Quantity	Unit Cost	Total
700	Jacket & Piling Scrap Processing				
710	Jacket & Piling Scrap Processing				
	Assumes: 81,300 short tons reduced from 40 and 50 short ton units to charging size.				
	Jacket & piling section processing	tons	81,300	\$70	\$6,449,892



<p align="center">Schnitzer Steel Products Co. Offshore Platform Scrapping Program Rough Order of Magnitude Estimate</p>					
Item	Description	Unit	Quantity	Unit Cost	Total
800	Scrap Credit				
	Assumes: Scrap credit is subject to further discussions and understanding of Chevron's expectations. Credits will be based on the then prevailing prices in "American Metal Market" for Portland-Seattle.				
320	Credit Securing Frames				
	Net value of securing frames	each	94	Negotiable	Negotiable
420	Credit Copper & Stainless				
	Net value of copper & stainless	short tons	60	Negotiable	Negotiable
430	Resale Machinery & Equipment				
	Net value of machinery & equipment	each	80	Negotiable	Negotiable
440	Topsides Steel				
	Net value of topside steel	short tons	37,000	Negotiable	Negotiable
520	Barge Securing Frames				
	Net value of barge securing frames	each	84	Negotiable	Negotiable
710	Jacket & Piling Scrap				
	Net value of jacket & piling scrap	short tons	81,300	Negotiable	Negotiable
800	Total Scrap Credit			Negotiable	Negotiable



Appendix 6: Conductor Trucking Disposal Example Calculations

Platform	Conductor Count	Single Conductor Length (ft)	Total Conductor Length (ft)	Conductor Weight per Foot (lb)	Total Conductor Weight (Tons) ¹	Total Cost ²
A	55	268	14,740	195.2	1,439	\$252,964
B	56	270	15,120	195.2	1,476	\$259,485
C	37	272	10,064	386.6	1,945	\$341,980
Edith	29	241	6,989	187.1	654	\$114,922
Ellen	64	345	22,080	187.1	2,065	\$363,068
Elly	0	0	0	-	0	\$0
Eureka	60	780	46,800	187.1	4,377	\$769,546
Gail	29	819	23,751	638.9	7,587	\$1,333,884
Gilda	62	285	17,670	356.4	3,149	\$553,668
Gina	12	175	2,100	356.4	374	\$65,801
Grace	38	398	15,124	653.8	4,944	\$869,260
Habitat	21	370	7,770	553.3	2,149	\$377,907
Harmony	54	1,278	69,012	644.8	22,248	\$3,911,538
Harvest	25	755	18,875	647.4	6,110	\$1,074,253
Henry	24	253	6,072	386.6	1,174	\$206,330
Heritage	49	1,155	56,595	459.3	12,996	\$2,284,845
Hermosa	29	683	19,807	647.4	6,412	\$1,127,297
Hidalgo	14	510	7,140	653.8	2,334	\$410,375
Hillhouse	50	272	13,600	386.6	2,629	\$462,135
Hogan	39	234	9,126	312.5	1,426	\$250,705
Hondo	28	922	25,816	459.3	5,928	\$1,042,240
Houchin	35	243	8,505	317.4	1,350	\$237,267
Irene	28	322	9,016	396.9	1,789	\$314,590
Total	838		425,772		94,555	\$16,624,059

Note 1: Conductor weight includes weight of conductor, inner casing strings and annulus cement.

Note 2: Costs are calculated based on a disposal rate of \$1200/truckload at 21.5 tons/truck plus a \$120 per ton disposal fee.



Appendix 7: Explosives Rates and Supplemental Data



PRICE LIST – as of 02 February 2009
Proprietary Information

	<u>Charge type</u>	
<u>BULK CHARGE</u>		
a. Bulk charge (50#)		\$ 3,200.00
b. Bulk charge (80#)		\$ 5,120.00
c. Bulk charge (100#)		\$ 6,400.00
d. Bulk charge (150# with centralizer)		\$11,200.00
e. Bulk charge (200# with centralizer)		\$ 14,400.00
f. Bulk charge for subsea well (50#)		\$ 4,000.00

<u>SWEDE CHARGE*</u>		
g. 33" SWEDE for 42" Pile/Caisson (50#)		\$ 9,000.00
h. 39" SWEDE for 48" Pile/Caisson (50#)		\$10,000.00
i. SWEDE for 54" Pile/Caisson		upon request

* SWEDE charges are special order items that require a minimum of 4 weeks for fabrication
Please notify DEMEX as soon as possible if the task requires SWEDES

<u>FLEXIBLE LINEAR BULK CHARGE+</u>		
j. Flexible Linear Bulk Charge for 60" Pile/Caisson (120#)		
16 linear ft.		\$ 9,600.00
k. Flexible Linear Bulk Charge for 72" Pile/Caisson (142.5#)		
19 linear ft.		\$ 11,400.00
l. Flexible Linear Bulk Charge for 84" Pile/Caisson (165#)		
22 linear ft.		\$ 13,200.00

<u>ADVANCED CUTTING EXPLOSIVES (ACE)</u>		
j. ACE - \$2000 to open case plus \$300 per ft of what is used.		

2. EXPLOSIVE PERSONNEL

a. Explosive Consultant		\$ 1,800.00 per day
b. Senior Explosive Supervisor		\$ 1,100.00 per day
c. Assistant Explosive Technician		\$ 900.00 per day

3. MOBILIZATION/DEMobilIZATION

a. Mobilization of material to Berwick or Venice		\$ 3,200.00, per occurrence
b. Mobilization/demobilization to Sabine Pass, Texas		\$ 3,900.00, per occurrence
c. Mobilization of material to Port O'Connor		\$ 4,800.00, per occurrence
d. Mobilization of material to Aransas Pass		\$ 5,300.00, per occurrence
e. Mobilization/Demobilization of personnel		\$ 2.00, per mile

DEMEX International, Inc.
phone: 281-246-4738 fax: 281-246-4739
www.demex.us



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4. **DOCK USAGE FEES**

- | | |
|--|-----------------------------|
| a. Berry Bros. Dock, Berwick | \$ 3,450.00, per occurrence |
| b. Martin Midstream Dock, Sabine Pass, Texas | \$ 2,300.00, per occurrence |

EXTRA WORK RATES:

Composition C-4	\$ 90.00 per pound
Composition B	\$ 75.00 per pound
Detonating Cord	\$ 1.00 per foot
Detonators/Delays	\$ 15.00 each
1/4" rope	\$ 0.30 per foot
1/2" wire rope	\$ 1.50 per foot



Appendix 8: Complete Structure and Pipeline Estimates



BSEE-POCSR

Platform Salvage Option

A

COMPLETE REMOVAL

- Platform A will be removed along with Platforms B, C Henry and Hillhouse.
- Platform A is a 12-pile platform installed in 1968 in 188' of water.
- The estimated removal weight is the deck weight is 1,357 tons and the jacket weight is 1,500 tons.
- The platform has a total of 52 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 55 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and one 400' cargo barge will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 3 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and disposed of.



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Platform Salvage Option

A

-The three pipelines (oil, gas, water) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2



BSEE-POCSR

Platform Salvage Option

A

and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$36,168,975

Estimated Decommissioning Net Cost = \$36,168,975



BSEE-POCSR

Basic Information

A

General Data

Platform: A
Function: FACILITIES
Type: Steel
Water Depth: 188'
Pre 461H?: Yes
Year Installed: 1968
Year Estimate Developed: 2014
District: California
Lease Number: OCS-P 0241
Account Code: TSB - 139681-Z
Amortization: 1.00
Wells to P & A: 52
Pipelines to Abandon: 5
Estimate Complete?: Yes

Partner Data

Partner	Working Interest
1 DCOR, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$20,789,290	\$20,789,290
Well Plugging & Abandonment:	\$10,454,960	\$10,454,960
Pipeline Abandonment:	\$4,924,725	\$4,924,725
Total Decommissioning Cost:	\$36,168,975	\$36,168,975



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Platform Information

A

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	12	40"	0.5"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	112 x 134	70
Middle:	90 x 115	43
Lower:	10 x 40	28

Conductors

Number of Slots:	57
Number Installed:	55
Outside Diameter:	13.375"
Wall Thickness:	0.3"
Number Slanted:	20

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:		✓	✓
Dry:	1500.00	✓	✓
Jacket Installation Date:	9/14/68		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	1357 Tons
Number of Padeyes Required:	12
Deck Installation Date:	9/14/68
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

A

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 400 x 100	Jkt > 700T	Conductors	Conductors	

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$2,705,838.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



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Platform Decommission Task Information

A

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$799,712.00	3.85%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.06%	\$1,180,645.00	5.68%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.06%	\$4,461,149.00	21.46%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.06%	\$1,093,371.00	5.26%
Mobilize DB 2000	Mob from Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	9.05%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.42%	\$72,296.00	0.35%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.42%	\$36,600.00	0.18%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.42%	\$58,781.23	0.28%
Cut Deck/Equip/Misc	Seperate 4 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	1.51%	\$232,519.91	1.12%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	1.51%	\$232,519.91	1.12%
Remove 8 Pile Deck	Remove 12 Pile Deck, 4 modules	<input checked="" type="checkbox"/>	48.00	3.02%	\$465,039.81	2.24%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.42%	\$44,296.00	0.21%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	46.00	2.90%	\$446,583.19	2.15%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.06%	\$6,993.00	0.03%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	12.60	0.79%	\$61,992.00	0.30%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	61.68	3.88%	\$961,939.42	4.63%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	20.75	1.31%	\$303,537.80	1.46%
Demob CB 400 & Tug	Demob to Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.42%	\$22,600.00	0.11%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.42%	\$58,781.23	0.28%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	12.60	0.79%	\$61,992.00	0.30%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.06%	\$6,993.00	0.03%
Demob DB 2000	Demob to Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	9.05%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	4.53%	\$884,000.00	4.25%
Offload CB 300		<input type="checkbox"/>	672.00	42.30%	\$177,760.00	0.86%
Offload CB 400		<input type="checkbox"/>	408.00	25.68%	\$126,080.00	0.61%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$180,575.00	0.87%
Task Total			1510.53	95.09%	\$5,738,756.49	75.71%
Misc. Work Provision (15.00%)			46.79	2.95%	\$1,406,820.00	6.77%
Weather Contingency (10.00%)			31.19	1.96%	\$937,879.80	4.51%
Consumables					\$0.00	0.00%



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Platform Decommission Task Information

A

Task	Note	Weather Provision	Task Hours	Task Cost
		Waste Disposal		2,705,838.00 13.02%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			1588.51 100.00%	20,789,294.29 100.00%



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Platform Decommission Resources Breakdown

A

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$67,269 0.32%
Cargo Barge 300	\$4,920 per Day per Barge	\$137,760 0.66%
Cargo Barge 400	\$6,240 per Day per Barge	\$106,080 0.51%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$182,672 0.88%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$173,630 0.84%
CB Damage Deduct	\$20,000 per Cargo Barge	\$60,000 0.29%
Derrick Barge 2000	\$8,708 per Hour per barge	\$5,833,973 28.06%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$340,649 1.64%
Dive Boat	\$900 per Hour	\$96,867 0.47%
Manual Calculation	\$0 Independently Calculated	\$8,613,438 41.43%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$59,664 0.29%
Pipeline Survey	\$230 per Hour	\$24,755 0.12%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.13%
Rig Up CB 400	\$14,000 per Barge	\$14,000 0.07%



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Platform Decommission Cost Breakdown

A

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$799,712.00	3.85%
Manual Calculation			\$799,712	
Platform Abandonment - Manual Calculation	1.00	0.06%	\$1,180,645.00	5.68%
Manual Calculation			\$1,180,645	
Sever Conductors- Abrasive	1.00	0.06%	\$4,461,149.00	21.46%
Manual Calculation			\$4,461,149	
Platform Removal Preparation	1.00	0.06%	\$1,093,371.00	5.26%
Manual Calculation			\$1,093,371	
Mobilize DB 2000	0.00	0.00%	\$1,881,000.00	9.05%
Derrick Barge 2000			\$1,881,000	
Mobilize CB 300 & Tug	22.60	1.42%	\$72,296.00	0.35%
CB 300 & Tug			\$44,296	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	22.60	1.42%	\$36,600.00	0.18%
Rig Up CB 400			\$14,000	
CB 400 & Tug			\$22,600	
Setup Derrick Barge	6.75	0.42%	\$58,781.23	0.28%
Derrick Barge 2000			\$58,781	



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Platform Decommission Cost Breakdown

A

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		24.00	1.51%	\$232,519.91	1.12%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove Equipment		24.00	1.51%	\$232,519.91	1.12%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove 8 Pile Deck		48.00	3.02%	\$465,039.81	2.24%
Derrick Barge 2000	\$418,000				
CB 300 & Tug	\$47,040				
Demob CB 300 & Tug		22.60	1.42%	\$44,296.00	0.21%
CB 300 & Tug	\$44,296				
Jet/Airlift Pile Mud Plug		46.00	2.90%	\$446,583.19	2.15%
Derrick Barge 2000	\$400,583				
CB 400 & Tug	\$46,000				
Mobilize Abrasive Cutting Spread		1.00	0.06%	\$6,993.00	0.03%
Manual Calculation	\$917				
Manual Calculation	\$352				
Manual Calculation	\$4,000				
Manual Calculation	\$1,724				



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Platform Decommission Cost Breakdown

A

Task		Task Hours		Task Cost	
Mobilize Dive Spread		12.60	0.79%	\$61,992.00	0.30%
Dive Boat	\$11,340				
Dive Basic Spread Saturation	\$39,879				
Abrasive Cutter Spread	\$7,875				
Pipeline Survey	\$2,898				
Sever Piles- Abrasive		61.68	3.88%	\$961,939.42	4.63%
Derrick Barge 2000	\$537,130				
Dive Boat	\$55,512				
Dive Basic Spread Saturation	\$195,217				
Pipeline Survey	\$14,186				
Abrasive Cutter Spread	\$38,550				
CB 400 & Tug	\$61,680				
Pile Abrasive Cut 7 to 48 inches	\$59,664				
Remove Jacket - Meth 1		20.75	1.31%	\$303,537.80	1.46%
Derrick Barge 2000	\$180,698				
Dive Boat	\$18,675				
Dive Basic Spread Saturation	\$65,674				
Pipeline Survey	\$4,773				
Abrasive Cutter Spread	\$12,969				
CB 400 & Tug	\$20,750				
Demob CB 400 & Tug		22.60	1.42%	\$22,600.00	0.11%
CB 400 & Tug	\$22,600				



BSEE-POCSR

Platform Decommission Cost Breakdown

A

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Pick Up DB Anchors	6.75	0.42%	\$58,781.23	0.28%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	12.60	0.79%	\$61,992.00	0.30%
Dive Boat			\$11,340	
Dive Basic Spread Saturation			\$39,879	
Abrasive Cutter Spread			\$7,875	
Pipeline Survey			\$2,898	
Demob Abrasive Cutting Spread	1.00	0.06%	\$6,993.00	0.03%
Manual Calculation			\$917	
Manual Calculation			\$352	
Manual Calculation			\$4,000	
Manual Calculation			\$1,724	
Demob DB 2000	0.00	0.00%	\$1,881,000.00	9.05%
Derrick Barge 2000			\$1,881,000	
Site Clearance - with Divers	72.00	4.53%	\$884,000.00	4.25%
Manual Calculation			\$884,000	
Offload CB 300	672.00	42.30%	\$177,760.00	0.86%
Cargo Barge 300			\$137,760	
CB Damage Deduct			\$40,000	



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BSEE-POCSR

Platform Decommission Cost Breakdown

A

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Offload CB 400	408.00	25.68%	\$126,080.00	0.61%
Cargo Barge 400			\$106,080	
CB Damage Deduct			\$20,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$180,575.00	0.87%
Manual Calculation			\$180,575	
Total	1510.53	95.09%	\$15,738,756.49	75.71%



TSB OFFSHORE

BSEE-POCSR

Pipeline Information

A Segment#:1030241

General Data

Water Depth: 188'
Origin / Terminus: Origin
Opposite End Name: Rincon
Opposite End Water Depth:
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:		Length:	59200'
Depth of Burial:	3'	# Crossings:		Product:	H20
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



TSB OFFSHORE

BSEE-POCSR

Pipeline Information

A Segment#:12" OOS

General Data

Water Depth: 188'
Origin / Terminus: Terminus
Opposite End Name: Rincon
Opposite End Water Depth:
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	59200'
Depth of Burial:	3'	# Crossings:		Product:	Out of Service
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

A Segment#: N/A (12" OOS)

General Data

Water Depth:	188'
Origin / Terminus:	Terminus
Opposite End Name:	Rincon
Opposite End Water Depth:	
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	59200'
Depth of Burial:	3'	# Crossings:		Product:	Out of Service
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

A Segment#:810241

General Data

Water Depth: 188'
Origin / Terminus: Origin
Opposite End Name: Rincon
Opposite End Water Depth:
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	59200'
Depth of Burial:	3'	# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



TSB OFFSHORE

BSEE-POCSR

Pipeline Information

A Segment#:920241

General Data

Water Depth: 188'
Origin / Terminus: Origin
Opposite End Name: Rincon
Opposite End Water Depth:
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	59200'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

A Segment#:1030241

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.23%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	0.20%	\$1,036	0.10%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.18%	\$6,165	0.62%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	9.87	2.33%	\$12,170	1.23%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.47%	\$2,466	0.25%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.23%
Demob Work Boat	Demob shared with 8 pipelines	<input type="checkbox"/>	0.84	0.20%	\$1,036	0.10%
Mob P/L Removal Spread	Shared between 3 pipelines	<input type="checkbox"/>	12.60	2.98%	\$43,268	4.36%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	1.51%	\$21,909	2.21%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	6.38	1.51%	\$21,909	2.21%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	0.95%	\$13,736	1.38%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	0.95%	\$13,736	1.38%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	0.71%	\$10,302	1.04%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	1.51%	\$21,909	2.21%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	6.38	1.51%	\$21,909	2.21%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	4.20	0.99%	\$20,620	2.08%
Remove Pipeline	Remove 6.73 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	118.00	27.91%	\$470,112	47.33%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	1.01%	\$16,932	1.70%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	12.60	2.98%	\$13,860	1.40%
Demob P/L Removal Spread	Shared between 3 pipelines	<input type="checkbox"/>	4.20	0.99%	\$14,423	1.45%
Offload CB 180		<input type="checkbox"/>	168.00	39.73%	\$41,000	4.13%
Task Total			378.92	89.62%	\$773,097	77.83%
Misc. Work Provision (15.00%)			26.35	6.23%	\$94,988	9.56%
Weather Provision (10.00%)			17.56	4.15%	\$63,325	6.38%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$61,848	6.23%
Total:			422.83	100.00%	\$993,258	100.00%



BSEE-POCSR

Pipeline Decommission Task Information A

Segment#: N/A (12" OOS-Shore)

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,600	0.23%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	0.19%	\$2,071	0.11%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.16%	\$12,330	0.63%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.46%	\$4,932	0.25%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	16.50	3.83%	\$40,689	2.07%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,600	0.23%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	0.19%	\$2,071	0.11%
Mob P/L Removal Spread	Shared between 3 pipelines	<input type="checkbox"/>	4.20	0.97%	\$28,846	1.47%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	1.48%	\$43,818	2.23%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	6.38	1.48%	\$43,818	2.23%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	0.93%	\$27,472	1.40%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	0.93%	\$27,472	1.40%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	0.70%	\$20,604	1.05%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	1.48%	\$43,818	2.23%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	6.38	1.48%	\$43,818	2.23%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	12.60	2.92%	\$59,720	3.04%
Remove Pipeline	Remove 6.73 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	118.00	27.37%	\$940,224	47.83%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	0.99%	\$33,864	1.72%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	12.60	2.92%	\$27,720	1.41%
Demob P/L Removal Spread	Shared between 3 pipelines	<input type="checkbox"/>	4.20	0.97%	\$28,846	1.47%
Offload CB 180		<input type="checkbox"/>	168.00	38.97%	\$82,000	4.17%
Task Total			385.55	89.43%	\$1,523,332	77.49%
Misc. Work Provision (15.00%)			27.34	6.34%	\$192,429	9.79%
Weather Provision (10.00%)			18.23	4.23%	\$128,286	6.53%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$121,867	6.20%
Total:			431.12	100.00%	\$1,965,914	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

A Segment#:810241

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.23%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	0.19%	\$1,036	0.11%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.16%	\$6,165	0.63%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.46%	\$2,466	0.25%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	16.39	3.80%	\$20,209	2.06%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.23%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	0.19%	\$1,036	0.11%
Mob P/L Removal Spread	Shared between 3 pipelines	<input type="checkbox"/>	4.20	0.97%	\$14,423	1.47%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	1.48%	\$21,909	2.23%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	6.38	1.48%	\$21,909	2.23%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	0.93%	\$13,736	1.40%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	0.93%	\$13,736	1.40%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	0.70%	\$10,302	1.05%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	1.48%	\$21,909	2.23%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	6.38	1.48%	\$21,909	2.23%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	12.60	2.92%	\$29,860	3.04%
Remove Pipeline	Remove 6.73 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	118.00	27.38%	\$470,112	47.84%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	0.99%	\$16,932	1.72%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	12.60	2.92%	\$13,860	1.41%
Demob P/L Removal Spread	Shared between 3 pipelines	<input type="checkbox"/>	4.20	0.97%	\$14,423	1.47%
Offload CB 180		<input type="checkbox"/>	168.00	38.98%	\$41,000	4.17%
Task Total			385.44	89.43%	\$761,531	77.49%
Misc. Work Provision (15.00%)			27.32	6.34%	\$96,194	9.79%
Weather Provision (10.00%)			18.22	4.23%	\$64,129	6.53%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$60,922	6.20%
Total:			430.98	100.00%	\$982,776	100.00%



BSEE-POCSR

Pipeline Decommission Task Information A

Segment#:920241

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.23%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	0.19%	\$1,036	0.11%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.16%	\$6,165	0.63%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	16.39	3.80%	\$20,209	2.06%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.46%	\$2,466	0.25%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.23%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	0.19%	\$1,036	0.11%
Mob P/L Removal Spread	Shared between 3 pipelines	<input type="checkbox"/>	4.20	0.97%	\$14,423	1.47%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	1.48%	\$21,909	2.23%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	6.38	1.48%	\$21,909	2.23%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	0.93%	\$13,736	1.40%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	0.93%	\$13,736	1.40%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	0.70%	\$10,302	1.05%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	1.48%	\$21,909	2.23%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	6.38	1.48%	\$21,909	2.23%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	12.60	2.92%	\$29,860	3.04%
Remove Pipeline	Remove 6.73 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	118.00	27.38%	\$470,112	47.84%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	0.99%	\$16,932	1.72%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	12.60	2.92%	\$13,860	1.41%
Demob P/L Removal Spread	Shared between 3 pipelines	<input type="checkbox"/>	4.20	0.97%	\$14,423	1.47%
Offload CB 180		<input type="checkbox"/>	168.00	38.98%	\$41,000	4.17%
Task Total			385.44	89.43%	\$761,531	77.49%
Misc. Work Provision (15.00%)			27.32	6.34%	\$96,194	9.79%
Weather Provision (10.00%)			18.22	4.23%	\$64,129	6.53%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$60,922	6.20%
Total:			430.98	100.00%	\$982,776	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

A Segment#:1030241

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	2.14%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$85,718	8.73%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	2.04%
Decommissioning Crew	\$650	per Hour	\$12,058	1.23%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$219,463	22.35%
Manual Calculation	\$0	Independently Calculated	\$4,600	0.47%
Pipelay Barge	\$1,954	per Hour	\$343,064	34.93%
Pipeline Surveying	\$230	per Hour	\$40,381	4.11%
Rig Up CB 180	\$8,000	per Barge	\$16,000	1.63%
Work Boat	\$583	per Hour	\$10,815	1.10%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

A Segment#: N/A (12" OOS-Shore)

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	2.16%
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	2.16%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$94,958	9.76%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$94,958	9.76%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	2.05%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	2.05%
Decommissioning Crew	\$650	per Hour	\$16,367	1.68%
Decommissioning Crew	\$650	per Hour	\$16,367	1.68%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$208,963	21.47%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$208,963	21.47%
Manual Calculation	\$0	Independently Calculated	\$4,600	0.47%
Manual Calculation	\$0	Independently Calculated	\$4,600	0.47%
Pipelay Barge	\$1,954	per Hour	\$326,650	33.56%
Pipelay Barge	\$1,954	per Hour	\$326,650	33.56%
Pipeline Surveying	\$230	per Hour	\$38,449	3.95%
Pipeline Surveying	\$230	per Hour	\$38,449	3.95%
Rig Up CB 180	\$8,000	per Barge	\$16,000	1.64%
Rig Up CB 180	\$8,000	per Barge	\$16,000	1.64%
Work Boat	\$583	per Hour	\$14,680	1.51%
Work Boat	\$583	per Hour	\$14,680	1.51%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

A Segment#:810241

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	2.16%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$94,958	9.76%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	2.06%
Decommissioning Crew	\$650	per Hour	\$16,296	1.67%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$208,963	21.47%
Manual Calculation	\$0	Independently Calculated	\$4,600	0.47%
Pipelay Barge	\$1,954	per Hour	\$326,650	33.57%
Pipeline Surveying	\$230	per Hour	\$38,449	3.95%
Rig Up CB 180	\$8,000	per Barge	\$16,000	1.64%
Work Boat	\$583	per Hour	\$14,616	1.50%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

A Segment#:920241

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	2.16%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$94,958	9.76%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	2.06%
Decommissioning Crew	\$650	per Hour	\$16,296	1.67%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$208,963	21.47%
Manual Calculation	\$0	Independently Calculated	\$4,600	0.47%
Pipelay Barge	\$1,954	per Hour	\$326,650	33.57%
Pipeline Surveying	\$230	per Hour	\$38,449	3.95%
Rig Up CB 180	\$8,000	per Barge	\$16,000	1.64%
Work Boat	\$583	per Hour	\$14,616	1.50%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

A Segment#:1030241

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.23%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	0.20%	\$1,036	0.11%
Work Boat	\$490				
Decommissioning Crew	\$546				
Rig Up Decomm Equipment		5.00	1.18%	\$6,165	0.63%
Work Boat	\$2,915				
Decommissioning Crew	\$3,250				
Pig & Flush Pipeline		9.87	2.33%	\$12,170	1.24%
Work Boat	\$5,754				
Decommissioning Crew	\$6,416				
Derig Decomm Equipment		2.00	0.47%	\$2,466	0.25%
Work Boat	\$1,166				
Decommissioning Crew	\$1,300				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.23%
Manual Calculation	\$2,300				
Demob Work Boat		0.84	0.20%	\$1,036	0.11%
Work Boat	\$490				
Decommissioning Crew	\$546				
Mob P/L Removal Spread		12.60	2.98%	\$43,268	4.41%
Dive Basic Spread- Mixed Gas	\$15,750				
Pipeline Surveying	\$2,898				
Pipelay Barge	\$24,620				
Expose Pipeline		6.38	1.51%	\$21,909	2.23%
Pipeline Surveying	\$1,467				
Dive Basic Spread- Mixed Gas	\$7,975				
Pipelay Barge	\$12,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	1.51%	\$21,909	2.23%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Cut Pipeline Riser		4.00	0.95%	\$13,736	1.40%
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				
Remove Tube Turn		4.00	0.95%	\$13,736	1.40%
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				
Re-position P/L Remove Spread		3.00	0.71%	\$10,302	1.05%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Expose Pipeline		6.38	1.51%	\$21,909	2.23%
Pipeline Surveying	\$1,467				
Dive Basic Spread- Mixed Gas	\$7,975				
Pipelay Barge	\$12,467				
Cut & Plug Pipeline		6.38	1.51%	\$21,909	2.23%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Mobilize Vessel		4.20	0.99%	\$20,620	2.10%
CB 180 & Tug	\$4,620				
Rig Up CB 180	\$16,000				
Remove Pipeline		118.00	27.91%	\$470,112	47.87%
Pipeline Surveying	\$27,140				
Dive Basic Spread- Mixed Gas	\$147,500				
Pipelay Barge	\$230,572				
CB 180 & Tug	\$64,900				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		4.25	1.01%	\$16,932	1.72%	
Pipeline Surveying	\$978					
Dive Basic Spread- Mixed Gas	\$5,313					
Pipelay Barge	\$8,305					
CB 180 & Tug	\$2,338					
Demob Vessel		12.60	2.98%	\$13,860	1.41%	
CB 180 & Tug	\$13,860					
Demob P/L Removal Spread		4.20	0.99%	\$14,423	1.47%	
Pipeline Surveying	\$966					
Dive Basic Spread- Mixed Gas	\$5,250					
Pipelay Barge	\$8,207					
Offload CB 180		168.00	39.73%	\$41,000	4.17%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	378.92	89.62%	\$773,097.03	78.72%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

A Segment#:N/A (12" OOS-Shore)

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.24%
Manual Calculation	\$2,300				
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	0.19%	\$1,036	0.11%
Work Boat	\$490				
Decommissioning Crew	\$546				
Work Boat	\$490				
Decommissioning Crew	\$546				
Rig Up Decomm Equipment		5.00	1.16%	\$6,165	0.63%
Work Boat	\$2,915				
Decommissioning Crew	\$3,250				
Work Boat	\$2,915				
Decommissioning Crew	\$3,250				
Derig Decomm Equipment		2.00	0.46%	\$2,466	0.25%
Work Boat	\$1,166				
Decommissioning Crew	\$1,300				
Work Boat	\$1,166				
Decommissioning Crew	\$1,300				
Pig & Flush Pipeline		16.50	3.83%	\$20,345	2.09%
Work Boat	\$9,620				
Decommissioning Crew	\$10,725				
Work Boat	\$9,620				
Decommissioning Crew	\$10,725				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.24%
Manual Calculation	\$2,300				
Manual Calculation	\$2,300				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Demob Work Boat		0.84	0.19%	\$1,036	0.11%
Work Boat	\$490				
Decommissioning Crew	\$546				
Work Boat	\$490				
Decommissioning Crew	\$546				
<hr/>					
Mob P/L Removal Spread		4.20	0.97%	\$14,423	1.48%
Dive Basic Spread- Mixed Gas	\$5,250				
Pipeline Surveying	\$966				
Pipelay Barge	\$8,207				
Dive Basic Spread- Mixed Gas	\$5,250				
Pipeline Surveying	\$966				
Pipelay Barge	\$8,207				
<hr/>					
Expose Pipeline		6.38	1.48%	\$21,909	2.25%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
<hr/>					
Cut & Plug Pipeline		6.38	1.48%	\$21,909	2.25%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
<hr/>					
Cut Pipeline Riser		4.00	0.93%	\$13,736	1.41%
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Remove Tube Turn		4.00	0.93%	\$13,736	1.41%
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				
Re-position P/L Remove Spread		3.00	0.70%	\$10,302	1.06%
Dive Basic Spread- Mixed Gas	\$3,750				
Pipeline Surveying	\$690				
Pipelay Barge	\$5,862				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipeline Surveying	\$690				
Pipelay Barge	\$5,862				
Expose Pipeline		6.38	1.48%	\$21,909	2.25%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Cut & Plug Pipeline		6.38	1.48%	\$21,909	2.25%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Mobilize Vessel		12.60	2.92%	\$29,860	3.07%
CB 180 & Tug	\$13,860				
Rig Up CB 180	\$16,000				
CB 180 & Tug	\$13,860				
Rig Up CB 180	\$16,000				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Remove Pipeline		118.00	27.37%	\$470,112	48.30%
Pipeline Surveying	\$27,140				
Dive Basic Spread- Mixed Gas	\$147,500				
Pipelay Barge	\$230,572				
CB 180 & Tug	\$64,900				
Pipeline Surveying	\$27,140				
Dive Basic Spread- Mixed Gas	\$147,500				
Pipelay Barge	\$230,572				
CB 180 & Tug	\$64,900				
Bury Pipeline		4.25	0.99%	\$16,932	1.74%
Pipeline Surveying	\$978				
Dive Basic Spread- Mixed Gas	\$5,313				
Pipelay Barge	\$8,305				
CB 180 & Tug	\$2,338				
Pipeline Surveying	\$978				
Dive Basic Spread- Mixed Gas	\$5,313				
Pipelay Barge	\$8,305				
CB 180 & Tug	\$2,338				
Demob Vessel		12.60	2.92%	\$13,860	1.42%
CB 180 & Tug	\$13,860				
CB 180 & Tug	\$13,860				
Demob P/L Removal Spread		4.20	0.97%	\$14,423	1.48%
Pipeline Surveying	\$966				
Dive Basic Spread- Mixed Gas	\$5,250				
Pipelay Barge	\$8,207				
Pipeline Surveying	\$966				
Dive Basic Spread- Mixed Gas	\$5,250				
Pipelay Barge	\$8,207				
Offload CB 180		168.00	38.97%	\$41,000	4.21%
Cargo Barge 180	\$21,000				
CB Damage Deduct	\$20,000				
Cargo Barge 180	\$21,000				
CB Damage Deduct	\$20,000				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Total	771.10178.86%	\$1,523,332.44	156.51%
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BSEE-POCSR

Pipeline Decommission Cost Breakdown

A Segment#:810241

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.24%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	0.19%	\$1,036	0.11%
Work Boat	\$490				
Decommissioning Crew	\$546				
Rig Up Decomm Equipment		5.00	1.16%	\$6,165	0.63%
Work Boat	\$2,915				
Decommissioning Crew	\$3,250				
Derig Decomm Equipment		2.00	0.46%	\$2,466	0.25%
Work Boat	\$1,166				
Decommissioning Crew	\$1,300				
Pig & Flush Pipeline		16.39	3.80%	\$20,209	2.08%
Work Boat	\$9,555				
Decommissioning Crew	\$10,654				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.24%
Manual Calculation	\$2,300				
Demob Work Boat		0.84	0.19%	\$1,036	0.11%
Work Boat	\$490				
Decommissioning Crew	\$546				
Mob P/L Removal Spread		4.20	0.97%	\$14,423	1.48%
Dive Basic Spread- Mixed Gas	\$5,250				
Pipeline Surveying	\$966				
Pipelay Barge	\$8,207				
Expose Pipeline		6.38	1.48%	\$21,909	2.25%
Pipeline Surveying	\$1,467				
Dive Basic Spread- Mixed Gas	\$7,975				
Pipelay Barge	\$12,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	1.48%	\$21,909	2.25%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Cut Pipeline Riser		4.00	0.93%	\$13,736	1.41%
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				
Remove Tube Turn		4.00	0.93%	\$13,736	1.41%
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				
Re-position P/L Remove Spread		3.00	0.70%	\$10,302	1.06%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Expose Pipeline		6.38	1.48%	\$21,909	2.25%
Pipeline Surveying	\$1,467				
Dive Basic Spread- Mixed Gas	\$7,975				
Pipelay Barge	\$12,467				
Cut & Plug Pipeline		6.38	1.48%	\$21,909	2.25%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Mobilize Vessel		12.60	2.92%	\$29,860	3.07%
CB 180 & Tug	\$13,860				
Rig Up CB 180	\$16,000				
Remove Pipeline		118.00	27.38%	\$470,112	48.31%
Pipeline Surveying	\$27,140				
Dive Basic Spread- Mixed Gas	\$147,500				
Pipelay Barge	\$230,572				
CB 180 & Tug	\$64,900				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		4.25	0.99%	\$16,932	1.74%	
Pipeline Surveying	\$978					
Dive Basic Spread- Mixed Gas	\$5,313					
Pipelay Barge	\$8,305					
CB 180 & Tug	\$2,338					
Demob Vessel		12.60	2.92%	\$13,860	1.42%	
CB 180 & Tug	\$13,860					
Demob P/L Removal Spread		4.20	0.97%	\$14,423	1.48%	
Pipeline Surveying	\$966					
Dive Basic Spread- Mixed Gas	\$5,250					
Pipelay Barge	\$8,207					
Offload CB 180		168.00	38.98%	\$41,000	4.21%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	385.44	89.43%	\$761,530.59	78.25%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

A Segment#:920241

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$2,300 0.24%
Manual Calculation	\$2,300	
Mobilize Work Boat	0.84 0.19%	\$1,036 0.11%
Work Boat	\$490	
Decommissioning Crew	\$546	
Rig Up Decomm Equipment	5.00 1.16%	\$6,165 0.63%
Work Boat	\$2,915	
Decommissioning Crew	\$3,250	
Pig & Flush Pipeline	16.39 3.80%	\$20,209 2.08%
Work Boat	\$9,555	
Decommissioning Crew	\$10,654	
Derig Decomm Equipment	2.00 0.46%	\$2,466 0.25%
Work Boat	\$1,166	
Decommissioning Crew	\$1,300	
Demob Flushing Crew & Equipment	0.00 0.00%	\$2,300 0.24%
Manual Calculation	\$2,300	
Demob Work Boat	0.84 0.19%	\$1,036 0.11%
Work Boat	\$490	
Decommissioning Crew	\$546	
Mob P/L Removal Spread	4.20 0.97%	\$14,423 1.48%
Dive Basic Spread- Mixed Gas	\$5,250	
Pipeline Surveying	\$966	
Pipelay Barge	\$8,207	
Expose Pipeline	6.38 1.48%	\$21,909 2.25%
Pipeline Surveying	\$1,467	
Dive Basic Spread- Mixed Gas	\$7,975	
Pipelay Barge	\$12,467	



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	1.48%	\$21,909	2.25%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Cut Pipeline Riser		4.00	0.93%	\$13,736	1.41%
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				
Remove Tube Turn		4.00	0.93%	\$13,736	1.41%
Dive Basic Spread- Mixed Gas	\$5,000				
Pipeline Surveying	\$920				
Pipelay Barge	\$7,816				
Re-position P/L Remove Spread		3.00	0.70%	\$10,302	1.06%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Expose Pipeline		6.38	1.48%	\$21,909	2.25%
Pipeline Surveying	\$1,467				
Dive Basic Spread- Mixed Gas	\$7,975				
Pipelay Barge	\$12,467				
Cut & Plug Pipeline		6.38	1.48%	\$21,909	2.25%
Dive Basic Spread- Mixed Gas	\$7,975				
Pipeline Surveying	\$1,467				
Pipelay Barge	\$12,467				
Mobilize Vessel		12.60	2.92%	\$29,860	3.07%
CB 180 & Tug	\$13,860				
Rig Up CB 180	\$16,000				
Remove Pipeline		118.00	27.38%	\$470,112	48.31%
Pipeline Surveying	\$27,140				
Dive Basic Spread- Mixed Gas	\$147,500				
Pipelay Barge	\$230,572				
CB 180 & Tug	\$64,900				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		4.25	0.99%	\$16,932	1.74%	
Pipeline Surveying	\$978					
Dive Basic Spread- Mixed Gas	\$5,313					
Pipelay Barge	\$8,305					
CB 180 & Tug	\$2,338					
Demob Vessel		12.60	2.92%	\$13,860	1.42%	
CB 180 & Tug	\$13,860					
Demob P/L Removal Spread		4.20	0.97%	\$14,423	1.48%	
Pipeline Surveying	\$966					
Dive Basic Spread- Mixed Gas	\$5,250					
Pipelay Barge	\$8,207					
Offload CB 180		168.00	38.98%	\$41,000	4.21%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	385.44	89.43%	\$761,530.59	78.25%



BSEE-POCSR

Well Decommission Task Information

A Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$7,860,872 75.19%
		Task Total	0.00	\$7,860,872 75.19%
		Misc. Work Provision (15.00%)	0.00	\$1,179,131 11.28%
		Weather Provision (10.00%)	0.00	\$786,087 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$628,870 6.02%
		Total:	0.00 100.00%	\$10,454,960 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

A Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$7,860,872 75.19%



TSB OFFSHORE

BSEE-POCSR

Well Decommission Cost Breakdown

A Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$7,860,872	75.19%
Manual Calculation	\$7,860,872				
	Total	0.00	0.00%	\$7,860,872	75.19%



BSEE-POCSR

Platform Salvage Option

B

COMPLETE REMOVAL

- Platform B will be removed along with Platforms A, C, Henry and Hillhouse.
- Platform B is a 12-pile platform installed in 1968 in 190' of water.
- The estimated removal weight is the deck weight is 1,357 tons and the jacket weight is 1,500 tons.
- The platform has a total of 57 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 56 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and one 400' cargo barge will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 3 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and disposed of.



BSEE-POCSR

Platform Salvage Option

B

-The three pipelines (oil, gas, water) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2



BSEE-POCSR

Platform Salvage Option

B

and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$32,478,639

Estimated Decommissioning Net Cost = \$32,478,639



TSB OFFSHORE

BSEE-POCSR

Basic Information

B

General Data

Platform: B
Function: FACILITIES
Type: Steel
Water Depth: 190'
Pre 461H?: Yes
Year Installed: 1968
Year Estimate Developed: 2014
District: California
Lease Number: OCS-P 0241
Account Code: TSB - 139681-Z
Amortization: 1.00
Wells to P & A: 57
Pipelines to Abandon: 5
Estimate Complete?: Yes

Partner Data

Partner	Working Interest
1 DCOR, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$19,912,960	\$19,912,960
Well Plugging & Abandonment:	\$11,426,610	\$11,426,610
Pipeline Abandonment:	\$1,139,069	\$1,139,069
Total Decommissioning Cost:	\$32,478,639	\$32,478,639



BSEE-POCSR

Platform Information

B

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	12	40"	0.5"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	112 x 134	70
Middle:	90 x 115	43
Lower:	10 x 40	39

Conductors

Number of Slots:	63
Number Installed:	56
Outside Diameter:	13.375"
Wall Thickness:	0.3"
Number Slanted:	20

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	1500.00		
Jacket Installation Date:	11/8/68		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	1357 Tons
Number of Padeyes Required:	12
Deck Installation Date:	11/8/68
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

B

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 400 x 100	Jkt > 700T	Conductors	Conductors	0
0	0	0	0	0
0	0	0	0	0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$1,798,393.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

B

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$808,250.00	4.06%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.06%	\$1,069,808.00	5.37%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.06%	\$4,567,877.00	22.94%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.06%	\$1,093,371.00	5.49%
Mobilize DB 2000	Mob from Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	9.45%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.42%	\$72,296.00	0.36%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.42%	\$36,600.00	0.18%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.42%	\$58,781.23	0.30%
Cut Deck/Equip/Misc	Seperate 4 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	1.51%	\$232,519.91	1.17%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	1.51%	\$232,519.91	1.17%
Remove 8 Pile Deck	Remove 12 Pile Deck, 4 modules	<input checked="" type="checkbox"/>	48.00	3.02%	\$465,039.81	2.34%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.42%	\$44,296.00	0.22%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	46.00	2.90%	\$446,583.19	2.24%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.06%	\$6,993.00	0.04%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	12.60	0.79%	\$61,992.00	0.31%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	61.68	3.88%	\$961,939.42	4.83%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	20.75	1.31%	\$303,537.80	1.52%
Demob CB 400 & Tug	Demob to Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.42%	\$22,600.00	0.11%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.42%	\$58,781.23	0.30%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	12.60	0.79%	\$61,992.00	0.31%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.06%	\$6,993.00	0.04%
Demob DB 2000	Demob to Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	9.45%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	4.53%	\$884,000.00	4.44%
Offload CB 300		<input type="checkbox"/>	672.00	42.30%	\$177,760.00	0.89%
Offload CB 400		<input type="checkbox"/>	408.00	25.68%	\$126,080.00	0.63%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$180,575.00	0.91%
Task Total			1510.53	95.09%	\$5,743,185.49	79.06%
Misc. Work Provision (15.00%)			46.79	2.95%	\$1,422,829.00	7.15%
Weather Contingency (10.00%)			31.19	1.96%	\$948,552.60	4.76%
Consumables					\$0.00	0.00%



BSEE-POCSR

Platform Decommission Task Information

B

Task	Note	Weather Provision	Task Hours	Task Cost
		Waste Disposal		1,798,393.00 9.03%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			1588.51 100.00%	19,912,960.09 100.00%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Resources Breakdown

B

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$67,269 0.34%
Cargo Barge 300	\$4,920 per Day per Barge	\$137,760 0.69%
Cargo Barge 400	\$6,240 per Day per Barge	\$106,080 0.53%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$182,672 0.92%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$173,630 0.87%
CB Damage Deduct	\$20,000 per Cargo Barge	\$60,000 0.30%
Derrick Barge 2000	\$8,708 per Hour per barge	\$5,833,973 29.30%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$340,649 1.71%
Dive Boat	\$900 per Hour	\$96,867 0.49%
Manual Calculation	\$0 Independently Calculated	\$8,617,867 43.28%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$59,664 0.30%
Pipeline Survey	\$230 per Hour	\$24,755 0.12%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.14%
Rig Up CB 400	\$14,000 per Barge	\$14,000 0.07%



BSEE-POCSR

Platform Decommission Cost Breakdown

B

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$808,250.00	4.06%
Manual Calculation			\$808,250	
Platform Abandonment - Manual Calculation	1.00	0.06%	\$1,069,808.00	5.37%
Manual Calculation			\$1,069,808	
Sever Conductors- Abrasive	1.00	0.06%	\$4,567,877.00	22.94%
Manual Calculation			\$4,567,877	
Platform Removal Preparation	1.00	0.06%	\$1,093,371.00	5.49%
Manual Calculation			\$1,093,371	
Mobilize DB 2000	0.00	0.00%	\$1,881,000.00	9.45%
Derrick Barge 2000			\$1,881,000	
Mobilize CB 300 & Tug	22.60	1.42%	\$72,296.00	0.36%
CB 300 & Tug			\$44,296	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	22.60	1.42%	\$36,600.00	0.18%
Rig Up CB 400			\$14,000	
CB 400 & Tug			\$22,600	
Setup Derrick Barge	6.75	0.42%	\$58,781.23	0.30%
Derrick Barge 2000			\$58,781	



BSEE-POCSR

Platform Decommission Cost Breakdown

B

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		24.00	1.51%	\$232,519.91	1.17%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove Equipment		24.00	1.51%	\$232,519.91	1.17%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove 8 Pile Deck		48.00	3.02%	\$465,039.81	2.34%
Derrick Barge 2000	\$418,000				
CB 300 & Tug	\$47,040				
Demob CB 300 & Tug		22.60	1.42%	\$44,296.00	0.22%
CB 300 & Tug	\$44,296				
Jet/Airlift Pile Mud Plug		46.00	2.90%	\$446,583.19	2.24%
Derrick Barge 2000	\$400,583				
CB 400 & Tug	\$46,000				
Mobilize Abrasive Cutting Spread		1.00	0.06%	\$6,993.00	0.04%
Manual Calculation	\$917				
Manual Calculation	\$352				
Manual Calculation	\$4,000				
Manual Calculation	\$1,724				



BSEE-POCSR

Platform Decommission Cost Breakdown

B

Task		Task Hours		Task Cost	
Mobilize Dive Spread		12.60	0.79%	\$61,992.00	0.31%
Dive Boat	\$11,340				
Dive Basic Spread Saturation	\$39,879				
Abrasive Cutter Spread	\$7,875				
Pipeline Survey	\$2,898				
Sever Piles- Abrasive		61.68	3.88%	\$961,939.42	4.83%
Derrick Barge 2000	\$537,130				
Dive Boat	\$55,512				
Dive Basic Spread Saturation	\$195,217				
Pipeline Survey	\$14,186				
Abrasive Cutter Spread	\$38,550				
CB 400 & Tug	\$61,680				
Pile Abrasive Cut 7 to 48 inches	\$59,664				
Remove Jacket - Meth 1		20.75	1.31%	\$303,537.80	1.52%
Derrick Barge 2000	\$180,698				
Dive Boat	\$18,675				
Dive Basic Spread Saturation	\$65,674				
Pipeline Survey	\$4,773				
Abrasive Cutter Spread	\$12,969				
CB 400 & Tug	\$20,750				
Demob CB 400 & Tug		22.60	1.42%	\$22,600.00	0.11%
CB 400 & Tug	\$22,600				



BSEE-POCSR

Platform Decommission Cost Breakdown

B

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Pick Up DB Anchors	6.75	0.42%	\$58,781.23	0.30%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	12.60	0.79%	\$61,992.00	0.31%
Dive Boat			\$11,340	
Dive Basic Spread Saturation			\$39,879	
Abrasive Cutter Spread			\$7,875	
Pipeline Survey			\$2,898	
Demob Abrasive Cutting Spread	1.00	0.06%	\$6,993.00	0.04%
Manual Calculation			\$917	
Manual Calculation			\$352	
Manual Calculation			\$4,000	
Manual Calculation			\$1,724	
Demob DB 2000	0.00	0.00%	\$1,881,000.00	9.45%
Derrick Barge 2000			\$1,881,000	
Site Clearance - with Divers	72.00	4.53%	\$884,000.00	4.44%
Manual Calculation			\$884,000	
Offload CB 300	672.00	42.30%	\$177,760.00	0.89%
Cargo Barge 300			\$137,760	
CB Damage Deduct			\$40,000	



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Cost Breakdown

B

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Offload CB 400	408.00	25.68%	\$126,080.00	0.63%
Cargo Barge 400			\$106,080	
CB Damage Deduct			\$20,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$180,575.00	0.91%
Manual Calculation			\$180,575	
Total	1510.53	95.09%	\$15,743,185.49	79.06%



BSEE-POCSR

Pipeline Information

B Segment#:1110241

General Data

Water Depth: 190'
Origin / Terminus: Origin
Opposite End Name: A
Opposite End Water Depth: 188'
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:		Length:	2600'
Depth of Burial:	3'	# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

B Segment#:12" OOS

General Data

Water Depth:	190'
Origin / Terminus:	Terminus
Opposite End Name:	A
Opposite End Water Depth:	188'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	2600'
Depth of Burial:	3'	# Crossings:		Product:	Out of Service
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

B Segment#:12" OOS

General Data

Water Depth:	190'
Origin / Terminus:	Terminus
Opposite End Name:	A
Opposite End Water Depth:	188'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	2600'
Depth of Burial:	3'	# Crossings:		Product:	Out of Service
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



TSB OFFSHORE

BSEE-POCSR

Pipeline Information

B Segment#:1220241

General Data

Water Depth: 190'
Origin / Terminus: Origin
Opposite End Name: A
Opposite End Water Depth: 188'
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:		Length:	2600'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

B Segment#:1330241

General Data

Water Depth:	190'
Origin / Terminus:	Origin
Opposite End Name:	A
Opposite End Water Depth:	188'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	2600'
Depth of Burial:	3'	# Crossings:		Product:	H2O
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

B Segment#:1110241

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.01%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.08%	\$2,279	1.00%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.45%	\$13,565	5.93%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	0.56	0.72%	\$1,519	0.66%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.58%	\$5,426	2.37%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.01%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.24%	\$17,309	7.57%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.24%	\$17,309	7.57%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	5.16%	\$10,852	4.75%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	5.16%	\$10,852	4.75%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.49%	\$11,530	5.04%
Reposition Workboat	Re-locate to "A"	<input checked="" type="checkbox"/>	3.05	3.94%	\$8,275	3.62%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.24%	\$17,309	7.57%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.24%	\$17,309	7.57%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	5.16%	\$10,852	4.75%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	5.16%	\$10,852	4.75%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.49%	\$11,530	5.04%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.08%	\$2,279	1.00%
Task Total			62.31	80.43%	\$173,647	75.94%
Misc. Work Provision (15.00%)			9.09	11.74%	\$24,673	10.79%
Weather Provision (10.00%)			6.06	7.83%	\$16,449	7.19%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$13,892	6.08%
Total:			77.47	100.00%	\$228,661	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

B Segment#:12" OOS

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,600	1.01%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.08%		
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.44%	\$27,130	5.98%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	0.72	0.93%	\$3,907	0.86%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.58%	\$10,852	2.39%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,600	1.01%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.21%	\$34,618	7.63%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.21%	\$34,618	7.63%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	5.15%	\$21,704	4.79%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	5.15%	\$21,704	4.79%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.47%	\$23,061	5.08%
Reposition Workboat	Re-locate to "A"	<input checked="" type="checkbox"/>	3.05	3.93%	\$16,549	3.65%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.21%	\$34,618	7.63%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.21%	\$34,618	7.63%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	5.15%	\$21,704	4.79%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	5.15%	\$21,704	4.79%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.47%	\$23,061	5.08%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.08%	\$4,558	1.00%
Task Total			62.47	80.43%	\$343,604	75.76%
Misc. Work Provision (15.00%)			9.12	11.74%	\$49,477	10.91%
Weather Provision (10.00%)			6.08	7.83%	\$32,985	7.27%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$27,488	6.06%
Total:			77.67	100.00%	\$453,554	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

B Segment#:1220241

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.01%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.08%	\$2,279	1.00%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.45%	\$13,565	5.93%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	0.56	0.72%	\$1,519	0.66%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.58%	\$5,426	2.37%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.01%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.24%	\$17,309	7.57%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.24%	\$17,309	7.57%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	5.16%	\$10,852	4.75%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	5.16%	\$10,852	4.75%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.49%	\$11,530	5.04%
Reposition Workboat	Re-locate to "A"	<input checked="" type="checkbox"/>	3.05	3.94%	\$8,275	3.62%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.24%	\$17,309	7.57%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.24%	\$17,309	7.57%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	5.16%	\$10,852	4.75%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	5.16%	\$10,852	4.75%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.49%	\$11,530	5.04%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.08%	\$2,279	1.00%
Task Total			62.31	80.43%	\$173,647	75.94%
Misc. Work Provision (15.00%)			9.09	11.74%	\$24,673	10.79%
Weather Provision (10.00%)			6.06	7.83%	\$16,449	7.19%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$13,892	6.08%
Total:			77.47	100.00%	\$228,661	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

B Segment#:1330241

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.01%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.09%	\$2,279	1.00%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.47%	\$13,565	5.94%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	0.43	0.56%	\$1,167	0.51%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.59%	\$5,426	2.38%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.01%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.25%	\$17,309	7.59%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.25%	\$17,309	7.59%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	5.17%	\$10,852	4.76%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	5.17%	\$10,852	4.76%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.50%	\$11,530	5.05%
Reposition Workboat	Re-locate to "A"	<input checked="" type="checkbox"/>	3.05	3.95%	\$8,275	3.63%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.25%	\$17,309	7.59%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.25%	\$17,309	7.59%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.00	5.17%	\$10,852	4.76%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.00	5.17%	\$10,852	4.76%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.50%	\$11,530	5.05%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.09%	\$2,279	1.00%
Task Total			62.18	80.43%	\$173,294	75.94%
Misc. Work Provision (15.00%)			9.08	11.74%	\$24,620	10.79%
Weather Provision (10.00%)			6.05	7.83%	\$16,414	7.19%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$13,864	6.08%
Total:			77.31	100.00%	\$228,192	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

B Segment#:1110241

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$40,502	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$77,888	34.17%
Manual Calculation	\$0	Independently Calculated	\$4,600	2.02%
Pipeline Surveying	\$230	per Hour	\$14,331	6.29%
Work Boat	\$583	per Hour	\$36,327	15.94%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

B Segment#:12" OOS

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$40,060	17.71%
Decommissioning Crew	\$650	per Hour	\$40,060	17.71%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$77,038	34.05%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$77,038	34.05%
Manual Calculation	\$0	Independently Calculated	\$4,600	2.03%
Manual Calculation	\$0	Independently Calculated	\$4,600	2.03%
Pipeline Surveying	\$230	per Hour	\$14,175	6.27%
Pipeline Surveying	\$230	per Hour	\$14,175	6.27%
Work Boat	\$583	per Hour	\$35,930	15.88%
Work Boat	\$583	per Hour	\$35,930	15.88%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

B Segment#:1220241

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$40,502	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$77,888	34.17%
Manual Calculation	\$0	Independently Calculated	\$4,600	2.02%
Pipeline Surveying	\$230	per Hour	\$14,331	6.29%
Work Boat	\$583	per Hour	\$36,327	15.94%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

B Segment#:1330241

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$40,417	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$77,725	34.17%
Manual Calculation	\$0	Independently Calculated	\$4,600	2.02%
Pipeline Surveying	\$230	per Hour	\$14,301	6.29%
Work Boat	\$583	per Hour	\$36,251	15.94%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

B Segment#:1110241

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.01%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.08%	\$2,279	1.00%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.45%	\$13,565	5.95%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.56	0.72%	\$1,519	0.67%
Work Boat	\$326				
Dive Basic Spread- Mixed Gas	\$700				
Decommissioning Crew	\$364				
Pipeline Surveying	\$129				
Derig Decomm Equipment		2.00	2.58%	\$5,426	2.38%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.01%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.24%	\$17,309	7.59%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.24%	\$17,309	7.59%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.00	5.16%	\$10,852	4.76%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Remove Tube Turn		4.00	5.16%	\$10,852	4.76%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Bury Pipeline		4.25	5.49%	\$11,530	5.06%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.94%	\$8,275	3.63%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.24%	\$17,309	7.59%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.24%	\$17,309	7.59%	
Work Boat	\$3,720					
Dive Basic Spread- Mixed Gas	\$7,975					
Decommissioning Crew	\$4,147					
Pipeline Surveying	\$1,467					
Cut Pipeline Riser		4.00	5.16%	\$10,852	4.76%	
Work Boat	\$2,332					
Dive Basic Spread- Mixed Gas	\$5,000					
Decommissioning Crew	\$2,600					
Pipeline Surveying	\$920					
Remove Tube Turn		4.00	5.16%	\$10,852	4.76%	
Work Boat	\$2,332					
Dive Basic Spread- Mixed Gas	\$5,000					
Decommissioning Crew	\$2,600					
Pipeline Surveying	\$920					
Bury Pipeline		4.25	5.49%	\$11,530	5.06%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Demob Work Boat		0.84	1.08%	\$2,279	1.00%	
Work Boat	\$490					
Dive Basic Spread- Mixed Gas	\$1,050					
Decommissioning Crew	\$546					
Pipeline Surveying	\$193					
		Total	62.31	80.43%	\$173,647.03	76.18%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

B Segment#:12" OOS

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.02%
Manual Calculation	\$2,300				
Manual Calculation	\$2,300				
Rig Up Decomm Equipment		5.00	6.44%	\$13,565	6.00%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.72	0.93%	\$1,953	0.86%
Work Boat	\$420				
Dive Basic Spread- Mixed Gas	\$900				
Decommissioning Crew	\$468				
Pipeline Surveying	\$166				
Work Boat	\$420				
Dive Basic Spread- Mixed Gas	\$900				
Decommissioning Crew	\$468				
Pipeline Surveying	\$166				
Derig Decomm Equipment		2.00	2.58%	\$5,426	2.40%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.02%
Manual Calculation	\$2,300				
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.21%	\$17,309	7.65%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut & Plug Pipeline		6.38	8.21%	\$17,309	7.65%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.00	5.15%	\$10,852	4.80%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Remove Tube Turn		4.00	5.15%	\$10,852	4.80%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Bury Pipeline		4.25	5.47%	\$11,530	5.10%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.93%	\$8,275	3.66%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Expose Pipeline		6.38	8.21%	\$17,309	7.65%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut & Plug Pipeline		6.38	8.21%	\$17,309	7.65%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.00	5.15%	\$10,852	4.80%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Remove Tube Turn		4.00	5.15%	\$10,852	4.80%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Bury Pipeline		4.25	5.47%	\$11,530	5.10%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Demob Work Boat		0.84	1.08%	\$2,279	1.01%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Total		123.26	158.70%	\$343,604.38	151.88%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

B Segment#:1220241

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.01%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.08%	\$2,279	1.00%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.45%	\$13,565	5.95%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.56	0.72%	\$1,519	0.67%
Work Boat	\$326				
Dive Basic Spread- Mixed Gas	\$700				
Decommissioning Crew	\$364				
Pipeline Surveying	\$129				
Derig Decomm Equipment		2.00	2.58%	\$5,426	2.38%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.01%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.24%	\$17,309	7.59%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.24%	\$17,309	7.59%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.00	5.16%	\$10,852	4.76%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Remove Tube Turn		4.00	5.16%	\$10,852	4.76%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Bury Pipeline		4.25	5.49%	\$11,530	5.06%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.94%	\$8,275	3.63%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.24%	\$17,309	7.59%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.24%	\$17,309	7.59%	
Work Boat	\$3,720					
Dive Basic Spread- Mixed Gas	\$7,975					
Decommissioning Crew	\$4,147					
Pipeline Surveying	\$1,467					
Cut Pipeline Riser		4.00	5.16%	\$10,852	4.76%	
Work Boat	\$2,332					
Dive Basic Spread- Mixed Gas	\$5,000					
Decommissioning Crew	\$2,600					
Pipeline Surveying	\$920					
Remove Tube Turn		4.00	5.16%	\$10,852	4.76%	
Work Boat	\$2,332					
Dive Basic Spread- Mixed Gas	\$5,000					
Decommissioning Crew	\$2,600					
Pipeline Surveying	\$920					
Bury Pipeline		4.25	5.49%	\$11,530	5.06%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Demob Work Boat		0.84	1.08%	\$2,279	1.00%	
Work Boat	\$490					
Dive Basic Spread- Mixed Gas	\$1,050					
Decommissioning Crew	\$546					
Pipeline Surveying	\$193					
		Total	62.31	80.43%	\$173,647.03	76.18%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

B Segment#:1330241

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.01%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.09%	\$2,279	1.00%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.47%	\$13,565	5.96%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.43	0.56%	\$1,167	0.51%
Work Boat	\$251				
Dive Basic Spread- Mixed Gas	\$538				
Decommissioning Crew	\$280				
Pipeline Surveying	\$99				
Derig Decomm Equipment		2.00	2.59%	\$5,426	2.39%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.01%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.25%	\$17,309	7.61%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.25%	\$17,309	7.61%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.00	5.17%	\$10,852	4.77%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Remove Tube Turn		4.00	5.17%	\$10,852	4.77%
Work Boat	\$2,332				
Dive Basic Spread- Mixed Gas	\$5,000				
Decommissioning Crew	\$2,600				
Pipeline Surveying	\$920				
Bury Pipeline		4.25	5.50%	\$11,530	5.07%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.95%	\$8,275	3.64%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.25%	\$17,309	7.61%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.25%	\$17,309	7.61%	
Work Boat	\$3,720					
Dive Basic Spread- Mixed Gas	\$7,975					
Decommissioning Crew	\$4,147					
Pipeline Surveying	\$1,467					
Cut Pipeline Riser		4.00	5.17%	\$10,852	4.77%	
Work Boat	\$2,332					
Dive Basic Spread- Mixed Gas	\$5,000					
Decommissioning Crew	\$2,600					
Pipeline Surveying	\$920					
Remove Tube Turn		4.00	5.17%	\$10,852	4.77%	
Work Boat	\$2,332					
Dive Basic Spread- Mixed Gas	\$5,000					
Decommissioning Crew	\$2,600					
Pipeline Surveying	\$920					
Bury Pipeline		4.25	5.50%	\$11,530	5.07%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Demob Work Boat		0.84	1.09%	\$2,279	1.00%	
Work Boat	\$490					
Dive Basic Spread- Mixed Gas	\$1,050					
Decommissioning Crew	\$546					
Pipeline Surveying	\$193					
		Total	62.18	80.43%	\$173,294.34	76.19%



BSEE-POCSR

Well Decommission Task Information

B Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$8,591,436 75.19%
		Task Total	0.00	\$8,591,436 75.19%
		Misc. Work Provision (15.00%)	0.00	\$1,288,715 11.28%
		Weather Provision (10.00%)	0.00	\$859,144 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$687,315 6.02%
		Total:	0.00 100.00%	\$11,426,610 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

B Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$8,591,436 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

B Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$8,591,436	75.19%
Manual Calculation	\$8,591,436				
	Total	0.00	0.00%	\$8,591,436	75.19%



BSEE-POCSR

Platform Salvage Option

C

COMPLETE REMOVAL

- Platform C will be removed along with Platforms A, B, Henry and Hillhouse.
- Platform C is a 12-pile platform installed in 1977 in 192' of water.
- The estimated removal weight is the deck weight is 1,357 tons and the jacket weight is 1,500 tons.
- The platform has a total of 38 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 37 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and one 400' cargo barge will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 3 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and disposed of.



BSEE-POCSR

Platform Salvage Option

C

-The three pipelines (oil, gas, water) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2



BSEE-POCSR

Platform Salvage Option

C

and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$27,518,865

Estimated Decommissioning Net Cost = \$27,518,865



BSEE-POCSR

Basic Information

C

General Data

Platform: C
Function: FACILITIES
Type: Steel
Water Depth: 192'
Pre 461H?: Yes
Year Installed: 1977
Year Estimate Developed: 2014
District: California
Lease Number: OCS-P 0241
Account Code: TSB - 139681-Z
Amortization: 1.00
Wells to P & A: 38
Pipelines to Abandon: 3
Estimate Complete?: Yes

Partner Data

Partner	Working Interest
1 DCOR, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$19,057,200	\$19,057,200
Well Plugging & Abandonment:	\$7,766,264	\$7,766,264
Pipeline Abandonment:	\$695,401	\$695,401
Total Decommissioning Cost:	\$27,518,865	\$27,518,865



BSEE-POCSR

Platform Information

C

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	12	40"	0.5"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	112 x 134	70
Middle:	90 x 115	43
Lower:	10 x 40	39

Conductors

Number of Slots:	60
Number Installed:	37
Outside Diameter:	20"
Wall Thickness:	0.3"
Number Slanted:	10

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	1500.00		
Jacket Installation Date:	2/28/77		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	1357 Tons
Number of Padeyes Required:	12
Deck Installation Date:	2/28/77
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

C

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 400 x 100	Jkt > 700T	Conductors	Conductors	0
0	0	0	0	0
0	0	0	0	0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$1,916,888.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

C

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$760,373.00	3.99%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.06%	\$891,505.00	4.68%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.06%	\$3,127,066.00	16.41%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.06%	\$1,093,371.00	5.74%
Mobilize DB 2000	Mob from Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	9.87%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.42%	\$72,296.00	0.38%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.42%	\$36,600.00	0.19%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.42%	\$58,781.23	0.31%
Cut Deck/Equip/Misc	Seperate 4 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	1.51%	\$232,519.91	1.22%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	1.51%	\$232,519.91	1.22%
Remove 8 Pile Deck	Remove 12 Pile Deck, 4 modules	<input checked="" type="checkbox"/>	48.00	3.02%	\$465,039.81	2.44%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.42%	\$44,296.00	0.23%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	46.00	2.90%	\$446,583.19	2.34%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.06%	\$6,993.00	0.04%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	12.60	0.79%	\$61,992.00	0.33%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	61.68	3.88%	\$1,031,275.42	5.41%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	20.75	1.31%	\$303,537.80	1.59%
Demob CB 400 & Tug	Demob to Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.42%	\$22,600.00	0.12%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.42%	\$58,781.23	0.31%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	12.60	0.79%	\$61,992.00	0.33%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.06%	\$6,993.00	0.04%
Demob DB 2000	Demob to Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	9.87%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	4.53%	\$884,000.00	4.64%
Offload CB 300		<input type="checkbox"/>	672.00	42.30%	\$177,760.00	0.93%
Offload CB 400		<input type="checkbox"/>	408.00	25.68%	\$126,080.00	0.66%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$953,587.00	5.00%
Task Total			1510.53	95.09%	\$4,918,542.49	78.28%
Misc. Work Provision (15.00%)			46.79	2.95%	\$1,333,059.00	7.00%
Weather Contingency (10.00%)			31.19	1.96%	\$888,706.30	4.66%
Consumables					\$0.00	0.00%



BSEE-POCSR

Platform Decommission Task Information

C

Task	Note	Weather Provision	Task Hours	Task Cost
		Waste Disposal		1,916,888.00 10.06%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			1588.51 100.00%	19,057,195.79 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

C

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$67,269 0.35%
Cargo Barge 300	\$4,920 per Day per Barge	\$137,760 0.72%
Cargo Barge 400	\$6,240 per Day per Barge	\$106,080 0.56%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$182,672 0.96%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$173,630 0.91%
CB Damage Deduct	\$20,000 per Cargo Barge	\$60,000 0.31%
Derrick Barge 2000	\$8,708 per Hour per barge	\$5,833,973 30.61%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$340,649 1.79%
Dive Boat	\$900 per Hour	\$96,867 0.51%
Manual Calculation	\$0 Independently Calculated	\$7,723,888 40.53%
Pile Abrasive Cut 70 to 96 inches	\$5,375 per Cut	\$129,000 0.68%
Pipeline Survey	\$230 per Hour	\$24,755 0.13%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.15%
Rig Up CB 400	\$14,000 per Barge	\$14,000 0.07%



BSEE-POCSR

Platform Decommission Cost Breakdown

C

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$760,373.00	3.99%
Manual Calculation			\$760,373	
Platform Abandonment - Manual Calculation	1.00	0.06%	\$891,505.00	4.68%
Manual Calculation			\$891,505	
Sever Conductors- Abrasive	1.00	0.06%	\$3,127,066.00	16.41%
Manual Calculation			\$3,127,066	
Platform Removal Preparation	1.00	0.06%	\$1,093,371.00	5.74%
Manual Calculation			\$1,093,371	
Mobilize DB 2000	0.00	0.00%	\$1,881,000.00	9.87%
Derrick Barge 2000			\$1,881,000	
Mobilize CB 300 & Tug	22.60	1.42%	\$72,296.00	0.38%
CB 300 & Tug			\$44,296	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	22.60	1.42%	\$36,600.00	0.19%
Rig Up CB 400			\$14,000	
CB 400 & Tug			\$22,600	
Setup Derrick Barge	6.75	0.42%	\$58,781.23	0.31%
Derrick Barge 2000			\$58,781	



BSEE-POCSR

Platform Decommission Cost Breakdown

C

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		24.00	1.51%	\$232,519.91	1.22%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove Equipment		24.00	1.51%	\$232,519.91	1.22%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove 8 Pile Deck		48.00	3.02%	\$465,039.81	2.44%
Derrick Barge 2000	\$418,000				
CB 300 & Tug	\$47,040				
Demob CB 300 & Tug		22.60	1.42%	\$44,296.00	0.23%
CB 300 & Tug	\$44,296				
Jet/Airlift Pile Mud Plug		46.00	2.90%	\$446,583.19	2.34%
Derrick Barge 2000	\$400,583				
CB 400 & Tug	\$46,000				
Mobilize Abrasive Cutting Spread		1.00	0.06%	\$6,993.00	0.04%
Manual Calculation	\$917				
Manual Calculation	\$352				
Manual Calculation	\$4,000				
Manual Calculation	\$1,724				



BSEE-POCSR

Platform Decommission Cost Breakdown

C

Task		Task Hours		Task Cost	
Mobilize Dive Spread		12.60	0.79%	\$61,992.00	0.33%
Dive Boat	\$11,340				
Dive Basic Spread Saturation	\$39,879				
Abrasive Cutter Spread	\$7,875				
Pipeline Survey	\$2,898				
Sever Piles- Abrasive		61.68	3.88%	\$1,031,275.42	5.41%
Derrick Barge 2000	\$537,130				
Dive Boat	\$55,512				
Dive Basic Spread Saturation	\$195,217				
Pipeline Survey	\$14,186				
Abrasive Cutter Spread	\$38,550				
CB 400 & Tug	\$61,680				
Pile Abrasive Cut 70 to 96 inches	\$129,000				
Remove Jacket - Meth 1		20.75	1.31%	\$303,537.80	1.59%
Derrick Barge 2000	\$180,698				
Dive Boat	\$18,675				
Dive Basic Spread Saturation	\$65,674				
Pipeline Survey	\$4,773				
Abrasive Cutter Spread	\$12,969				
CB 400 & Tug	\$20,750				
Demob CB 400 & Tug		22.60	1.42%	\$22,600.00	0.12%
CB 400 & Tug	\$22,600				



BSEE-POCSR

Platform Decommission Cost Breakdown

C

Task	Task Hours		Task Cost	
	Hours	Percentage	Cost	Percentage
Pick Up DB Anchors	6.75	0.42%	\$58,781.23	0.31%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	12.60	0.79%	\$61,992.00	0.33%
Dive Boat			\$11,340	
Dive Basic Spread Saturation			\$39,879	
Abrasive Cutter Spread			\$7,875	
Pipeline Survey			\$2,898	
Demob Abrasive Cutting Spread	1.00	0.06%	\$6,993.00	0.04%
Manual Calculation			\$917	
Manual Calculation			\$352	
Manual Calculation			\$4,000	
Manual Calculation			\$1,724	
Demob DB 2000	0.00	0.00%	\$1,881,000.00	9.87%
Derrick Barge 2000			\$1,881,000	
Site Clearance - with Divers	72.00	4.53%	\$884,000.00	4.64%
Manual Calculation			\$884,000	
Offload CB 300	672.00	42.30%	\$177,760.00	0.93%
Cargo Barge 300			\$137,760	
CB Damage Deduct			\$40,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

C

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Offload CB 400	408.00	25.68%	\$126,080.00	0.66%
Cargo Barge 400			\$106,080	
CB Damage Deduct			\$20,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$953,587.00	5.00%
Manual Calculation			\$953,587	
Total	1510.53	95.09%	\$14,918,542.49	78.28%



BSEE-POCSR

Pipeline Information

C Segment#:510241

General Data

Water Depth:	192'
Origin / Terminus:	Origin
Opposite End Name:	B
Opposite End Water Depth:	190'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	2600'
Depth of Burial:	3'	# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

C Segment#:620241

General Data

Water Depth:	192'
Origin / Terminus:	Origin
Opposite End Name:	B
Opposite End Water Depth:	190'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	2600'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

C Segment#:730241

General Data

Water Depth:	192'
Origin / Terminus:	Origin
Opposite End Name:	B
Opposite End Water Depth:	190'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	2600'
Depth of Burial:	3'	# Crossings:		Product:	H2O
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

C Segment#:510241

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.36%	\$13,565	5.85%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	0.43	0.55%	\$1,167	0.50%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.55%	\$5,426	2.34%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Reposition Workboat	Re-locate to "B"	<input checked="" type="checkbox"/>	3.05	3.88%	\$8,275	3.57%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Task Total			63.18	80.43%	\$176,007	75.93%
Misc. Work Provision (15.00%)			9.23	11.74%	\$25,027	10.80%
Weather Provision (10.00%)			6.15	7.83%	\$16,685	7.20%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$14,081	6.07%
Total:			78.56	100.00%	\$231,800	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

C Segment#:620241

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.36%	\$13,565	5.85%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	0.43	0.55%	\$1,167	0.50%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.55%	\$5,426	2.34%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Reposition Workboat	Re-locate to "B"	<input checked="" type="checkbox"/>	3.05	3.88%	\$8,275	3.57%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Task Total			63.18	80.43%	\$176,007	75.93%
Misc. Work Provision (15.00%)			9.23	11.74%	\$25,027	10.80%
Weather Provision (10.00%)			6.15	7.83%	\$16,685	7.20%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$14,081	6.07%
Total:			78.56	100.00%	\$231,800	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

C Segment#:730241

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.36%	\$13,565	5.85%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	0.43	0.55%	\$1,167	0.50%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.55%	\$5,426	2.34%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Reposition Workboat	Re-locate to "B"	<input checked="" type="checkbox"/>	3.05	3.88%	\$8,275	3.57%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Task Total			63.18	80.43%	\$176,007	75.93%
Misc. Work Provision (15.00%)			9.23	11.74%	\$25,027	10.80%
Weather Provision (10.00%)			6.15	7.83%	\$16,685	7.20%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$14,081	6.07%
Total:			78.56	100.00%	\$231,800	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

C Segment#:510241

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$41,067	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$78,975	34.18%
Manual Calculation	\$0	Independently Calculated	\$4,600	1.99%
Pipeline Surveying	\$230	per Hour	\$14,531	6.29%
Work Boat	\$583	per Hour	\$36,834	15.94%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

C Segment#:620241

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$41,067	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$78,975	34.18%
Manual Calculation	\$0	Independently Calculated	\$4,600	1.99%
Pipeline Surveying	\$230	per Hour	\$14,531	6.29%
Work Boat	\$583	per Hour	\$36,834	15.94%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

C Segment#:730241

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$41,067	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$78,975	34.18%
Manual Calculation	\$0	Independently Calculated	\$4,600	1.99%
Pipeline Surveying	\$230	per Hour	\$14,531	6.29%
Work Boat	\$583	per Hour	\$36,834	15.94%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

C Segment#:510241

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.07%	\$2,279	0.99%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.36%	\$13,565	5.87%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.43	0.55%	\$1,167	0.50%
Work Boat	\$251				
Dive Basic Spread- Mixed Gas	\$538				
Decommissioning Crew	\$280				
Pipeline Surveying	\$99				
Derig Decomm Equipment		2.00	2.55%	\$5,426	2.35%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Remove Tube Turn		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Bury Pipeline		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.88%	\$8,275	3.58%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
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Bury Pipeline		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Demob Work Boat		0.84	1.07%	\$2,279	0.99%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
		Total	63.18 80.43%	\$176,007.34	76.17%



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

C Segment#:620241

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.07%	\$2,279	0.99%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.36%	\$13,565	5.87%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.43	0.55%	\$1,167	0.50%
Work Boat	\$251				
Dive Basic Spread- Mixed Gas	\$538				
Decommissioning Crew	\$280				
Pipeline Surveying	\$99				
Derig Decomm Equipment		2.00	2.55%	\$5,426	2.35%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.25	5.41%	\$11,530	4.99%
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Pipeline Surveying	\$978				
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Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.88%	\$8,275	3.58%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%	
Work Boat	\$3,720					
Dive Basic Spread- Mixed Gas	\$7,975					
Decommissioning Crew	\$4,147					
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Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Demob Work Boat		0.84	1.07%	\$2,279	0.99%	
Work Boat	\$490					
Dive Basic Spread- Mixed Gas	\$1,050					
Decommissioning Crew	\$546					
Pipeline Surveying	\$193					
		Total	63.18	80.43%	\$176,007.34	76.17%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

C Segment#:730241

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.07%	\$2,279	0.99%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.36%	\$13,565	5.87%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.43	0.55%	\$1,167	0.50%
Work Boat	\$251				
Dive Basic Spread- Mixed Gas	\$538				
Decommissioning Crew	\$280				
Pipeline Surveying	\$99				
Derig Decomm Equipment		2.00	2.55%	\$5,426	2.35%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
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Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
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Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Demob Work Boat		0.84	1.07%	\$2,279	0.99%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Total		63.18	80.43%	\$176,007.34	76.17%



BSEE-POCSR

Well Decommission Task Information

C Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$5,839,296 75.19%
		Task Total	0.00	\$5,839,296 75.19%
		Misc. Work Provision (15.00%)	0.00	\$875,894 11.28%
		Weather Provision (10.00%)	0.00	\$583,930 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$467,144 6.02%
		Total:	0.00 100.00%	\$7,766,264 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

C Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$5,839,296 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

C Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$5,839,296	75.19%
Manual Calculation	\$5,839,296				
	Total	0.00	0.00%	\$5,839,296	75.19%



BSEE-POCSR

Platform Salvage Option

Edith

COMPLETE REMOVAL

- Platform Edith will be removed along with Platforms Eureka, Ellen and Elly.
- Platform Edith is a 12-pile platform installed in 1983 in 161' of water.
- The estimated removal weight is the deck weight is 4,134 tons and the jacket weight is 3,454 tons.
- The platform has a total of 18 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 29 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and three 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 5 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los



BSEE-POCSR

Platform Salvage Option

Edith

Angeles/Long Beach where it will be cut into segments and disposed of.

-The two pipelines (oil, gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 5% of each task cost listed with a check in the contingency box under each Task Information section of this estimate.



BSEE-POCSR

Platform Salvage Option

Edith

Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$30,903,418

Estimated Decommissioning Net Cost = \$30,903,418



BSEE-POCSR

Basic Information

Edith

General Data

Platform: Edith
Function: FACILITIES
Type: Steel
Water Depth: 161'
Pre 461H?: No
Year Installed: 1983
Year Estimate Developed: 2014
District: California
Lease Number: OCS-P 0296
Account Code: TSB - 139681-Z
Amortization: 1.00
Wells to P & A: 18
Pipelines to Abandon: 2
Estimate Complete?: Yes

Partner Data

Partner	Working Interest
1 DCOR, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$26,558,510	\$26,558,510
Well Plugging & Abandonment:	\$3,925,837	\$3,925,837
Pipeline Abandonment:	\$419,071	\$419,071
Total Decommissioning Cost:	\$30,903,418	\$30,903,418



BSEE-POCSR

Platform Information

Edith

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	12	48"	1.75"	Yes	No	
Skirt/Braced	24	60"		No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	116 x 66	63
Middle:		
Lower:	170 x 194	46

Conductors

Number of Slots:	70
Number Installed:	29
Outside Diameter:	13.375"
Wall Thickness:	1.25"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	3454.00		
Jacket Installation Date:	1/12/83		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	4134 Tons
Number of Padeyes Required:	12
Deck Installation Date:	1/12/83
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Edith

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 300 x 100	Deck > 500T	Deck 100-500T	Deck 100-500T	Deck 100-500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Jkt > 700T	Deck > 500T	Deck > 500T	
CB 400 x 100	Jkt > 700T	Jkt > 700T	0	0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	50.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	5.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$3,739,794.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Edith

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$1,113,864.00	4.19%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.02%	\$564,723.00	2.13%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet. Assume Planning can accommodate DB arrival immediately following conductor removal completion, allowing Abrasive spread to remain in LA/ Long Beach.	<input checked="" type="checkbox"/>	1.00	0.02%	\$2,186,159.00	8.23%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.02%	\$1,319,700.00	4.97%
Mobilize DB 2000	Mob from Asia, 50 days divided by 4 platforms	<input type="checkbox"/>	0.00	0.00%	\$2,351,250.00	8.85%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	10.00	0.20%	\$47,600.00	0.18%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 3)	<input type="checkbox"/>	10.00	0.20%	\$72,000.00	0.27%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.13%	\$58,781.23	0.22%
Cut Deck/Equip/Misc	Seperate 12 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.48%	\$232,519.91	0.88%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.48%	\$232,519.91	0.88%
Remove 8 Pile Deck	Remove 8 Pile Deck, 12 modules	<input checked="" type="checkbox"/>	96.00	1.91%	\$930,079.69	3.50%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	10.00	0.20%	\$19,600.00	0.07%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	46.00	0.91%	\$446,583.19	1.68%
Mobilize Abrasive Cutting Spread	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input type="checkbox"/>	1.00	0.02%	\$10,488.00	0.04%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	4.20	0.08%	\$12,621.00	0.05%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	230.26	4.58%	\$3,287,371.30	12.38%
Cut Jacket	16 Hours per section, times 3 section(s), per MMS	<input checked="" type="checkbox"/>	48.00	0.95%	\$789,231.81	2.97%
Remove Jacket - Meth 1	24 Hours per section, times 3 section(s), per MMS	<input checked="" type="checkbox"/>	72.00	1.43%	\$915,359.81	3.45%
Demob CB 400 & Tug	Demob to Port of LA (Qty 3)	<input type="checkbox"/>	10.00	0.20%	\$30,000.00	0.11%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.13%	\$58,781.23	0.22%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	4.20	0.08%	\$12,621.00	0.05%
Demob DB 2000	Mob from Asia, 50 days divided by 4 platforms	<input type="checkbox"/>	0.00	0.00%	\$2,351,250.00	8.85%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	1.43%	\$884,000.00	3.33%
Offload CB 300		<input type="checkbox"/>	1128.00	22.43%	\$271,240.00	1.02%
Offload CB 400		<input type="checkbox"/>	3096.00	61.57%	\$864,960.00	3.26%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.02%	\$10,488.00	0.04%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$1,230,590.00	4.63%
Task Total			4903.16	97.50%	\$20,304,382.07	76.45%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Edith

Task	Note	Weather Provision	Task Hours		Task Cost	
Misc. Work Provision (15.00%)			94.16	1.87%	\$1,885,752.00	7.10%
Weather Contingency (5.00%)			31.39	0.62%	\$628,583.90	2.37%
Consumables					\$0.00	0.00%
Waste Disposal					\$3,739,794.00	14.08%
Structure & Equipment Disposal					\$0.00	0.00%
Offloading					\$0.00	0.00%
Storage / Scrapping					\$0.00	0.00%
Reef Donation					\$0.00	0.00%
Cost of Engineering (0.00%)					\$0.00	0.00%
Total:			5028.71	100.00%	\$6,558,511.97	100.00%



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BSEE-POCSR

Platform Decommission Resources Breakdown

Edith

Resource Used	Unit Cost	Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$224,163	0.84%
Cargo Barge 300	\$4,920 per Day per Barge	\$231,240	0.87%
Cargo Barge 400	\$6,240 per Day per Barge	\$804,960	3.03%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$180,320	0.68%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$456,260	1.72%
CB Damage Deduct	\$20,000 per Cargo Barge	\$100,000	0.38%
Derrick Barge 2000	\$8,708 per Hour per barge	\$9,524,825	35.86%
Dive Basic Spread- Mixed Gas	\$1,250 Per Hour	\$448,325	1.69%
Dive Boat	\$900 per Hour	\$322,794	1.22%
Manual Calculation	\$0 Independently Calculated	\$7,320,012	27.56%
Pile Abrasive Cut 49 to 69 inches	\$5,000 per Cut	\$360,000	1.36%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$178,992	0.67%
Pipeline Survey	\$230 per Hour	\$82,492	0.31%
Rig Up CB 300	\$14,000 per Barge	\$28,000	0.11%
Rig Up CB 400	\$14,000 per Barge	\$42,000	0.16%



BSEE-POCSR

Platform Decommission Cost Breakdown

Edith

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$1,113,864.00	4.19%
Manual Calculation			\$1,113,864	
Platform Abandonment - Manual Calculation	1.00	0.02%	\$564,723.00	2.13%
Manual Calculation			\$564,723	
Sever Conductors- Abrasive	1.00	0.02%	\$2,186,159.00	8.23%
Manual Calculation			\$2,186,159	
Platform Removal Preparation	1.00	0.02%	\$1,319,700.00	4.97%
Manual Calculation			\$1,319,700	
Mobilize DB 2000	0.00	0.00%	\$2,351,250.00	8.85%
Derrick Barge 2000			\$2,351,250	
Mobilize CB 300 & Tug	10.00	0.20%	\$47,600.00	0.18%
CB 300 & Tug			\$19,600	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	10.00	0.20%	\$72,000.00	0.27%
Rig Up CB 400			\$42,000	
CB 400 & Tug			\$30,000	
Setup Derrick Barge	6.75	0.13%	\$58,781.23	0.22%
Derrick Barge 2000			\$58,781	



BSEE-POCSR

Platform Decommission Cost Breakdown

Edith

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		24.00	0.48%	\$232,519.91	0.88%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove Equipment		24.00	0.48%	\$232,519.91	0.88%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove 8 Pile Deck		96.00	1.91%	\$930,079.69	3.50%
Derrick Barge 2000	\$836,000				
CB 300 & Tug	\$94,080				
Demob CB 300 & Tug		10.00	0.20%	\$19,600.00	0.07%
CB 300 & Tug	\$19,600				
Jet/Airlift Pile Mud Plug		46.00	0.91%	\$446,583.19	1.68%
Derrick Barge 2000	\$400,583				
CB 400 & Tug	\$46,000				
Mobilize Abrasive Cutting Spread		1.00	0.02%	\$10,488.00	0.04%
Manual Calculation	\$1,375				
Manual Calculation	\$527				
Manual Calculation	\$6,000				
Manual Calculation	\$2,586				



BSEE-POCSR

Platform Decommission Cost Breakdown

Edith

Task	Task Hours		Task Cost	
	Hours	Percentage	Cost	Percentage
Mobilize Dive Spread	4.20	0.08%	\$12,621.00	0.05%
Dive Boat			\$3,780	
Dive Basic Spread- Mixed Gas			\$5,250	
Abrasive Cutter Spread			\$2,625	
Pipeline Survey			\$966	
Sever Piles- Abrasive	230.26	4.58%	\$3,287,371.30	12.38%
Derrick Barge 2000			\$2,005,180	
Dive Boat			\$207,234	
Dive Basic Spread- Mixed Gas			\$287,825	
Pipeline Survey			\$52,960	
Abrasive Cutter Spread			\$143,913	
CB 400 & Tug			\$230,260	
Pile Abrasive Cut 49 to 69 inches			\$360,000	
Cut Jacket	48.00	0.95%	\$789,231.81	2.97%
Derrick Barge 2000			\$418,000	
Dive Boat			\$43,200	
Dive Basic Spread- Mixed Gas			\$60,000	
Pipeline Survey			\$11,040	
Abrasive Cutter Spread			\$30,000	
CB 400 & Tug			\$48,000	
Pile Abrasive Cut 7 to 48 inches			\$178,992	



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BSEE-POCSR

Platform Decommission Cost Breakdown

Edith

Task	Task Hours		Task Cost	
	Hours	Percentage	Cost	Percentage
Remove Jacket - Meth 1	72.00	1.43%	\$915,359.81	3.45%
Derrick Barge 2000			\$627,000	
Dive Boat			\$64,800	
Dive Basic Spread- Mixed Gas			\$90,000	
Pipeline Survey			\$16,560	
Abrasive Cutter Spread			\$45,000	
CB 400 & Tug			\$72,000	
Demob CB 400 & Tug	10.00	0.20%	\$30,000.00	0.11%
CB 400 & Tug			\$30,000	
Pick Up DB Anchors	6.75	0.13%	\$58,781.23	0.22%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	4.20	0.08%	\$12,621.00	0.05%
Dive Boat			\$3,780	
Dive Basic Spread- Mixed Gas			\$5,250	
Abrasive Cutter Spread			\$2,625	
Pipeline Survey			\$966	
Demob DB 2000	0.00	0.00%	\$2,351,250.00	8.85%
Derrick Barge 2000			\$2,351,250	
Site Clearance - with Divers	72.00	1.43%	\$884,000.00	3.33%
Manual Calculation			\$884,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Edith

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Offload CB 300	1128.00	22.43%	\$271,240.00	1.02%
Cargo Barge 300			\$231,240	
CB Damage Deduct			\$40,000	
Offload CB 400	3096.00	61.57%	\$864,960.00	3.26%
Cargo Barge 400			\$804,960	
CB Damage Deduct			\$60,000	
Demob Abrasive Cutting Spread	1.00	0.02%	\$10,488.00	0.04%
Manual Calculation			\$1,375	
Manual Calculation			\$527	
Manual Calculation			\$6,000	
Manual Calculation			\$2,586	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$1,230,590.00	4.63%
Manual Calculation			\$1,230,590	
Total	4903.16	97.50%	\$20,304,382.07	76.45%



BSEE-POCSR

Pipeline Information

Edith Segment#:3610296

General Data

Water Depth:	161'
Origin / Terminus:	Origin
Opposite End Name:	Elly
Opposite End Water Depth:	257'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	5.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	6000'
Depth of Burial:	3'	# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Edith Segment#:3720296

General Data

Water Depth: 161'
Origin / Terminus: Origin
Opposite End Name: Eva (State Platform)
Opposite End Water Depth: 60'
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 5.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	35000'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Edith Segment#:3610296

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.14%
Mobilize Work Boat	Mob shared with 4 pipelines (Excludes Eureka P/L's)	<input type="checkbox"/>	1.10	1.66%	\$2,984	1.48%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	7.55%	\$13,565	6.74%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	1.00	1.51%	\$2,713	1.35%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	3.02%	\$5,426	2.70%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.14%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.86%	\$14,135	7.03%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	5.21	7.86%	\$14,135	7.03%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.25%	\$9,441	4.69%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.25%	\$9,441	4.69%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.25%	\$9,441	4.69%
Reposition Vessel	Re-locate to Ellen/Elly	<input checked="" type="checkbox"/>	3.66	5.52%	\$9,930	4.94%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.86%	\$14,135	7.03%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.86%	\$14,135	7.03%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.25%	\$9,441	4.69%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.25%	\$9,441	4.69%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.25%	\$9,441	4.69%
Demob Work Boat	Demob shared with 4 pipelines (Excludes Eureka P/L's)	<input type="checkbox"/>	1.10	1.66%	\$2,984	1.48%
Task Total			55.58	83.89%	\$159,415	79.26%
Misc. Work Provision (15.00%)			8.01	12.08%	\$21,723	10.80%
Weather Provision (5.00%)			2.67	4.03%	\$7,241	3.60%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$12,753	6.34%
Total:			66.26	100.00%	\$201,132	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Edith Segment#:3720296

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.98%
Mobilize Work Boat	Mob shared with 4 pipelines (Excludes Eureka P/L's)	<input type="checkbox"/>	1.10	1.53%	\$2,984	1.37%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.94%	\$13,565	6.22%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	5.84	8.10%	\$15,844	7.27%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.78%	\$5,426	2.49%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.98%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.23%	\$14,135	6.49%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	5.21	7.23%	\$14,135	6.49%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	4.83%	\$9,441	4.33%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	4.83%	\$9,441	4.33%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	4.83%	\$9,441	4.33%
Reposition Vessel	Re-locate to Eva	<input checked="" type="checkbox"/>	3.66	5.08%	\$9,930	4.56%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.23%	\$14,135	6.49%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.23%	\$14,135	6.49%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	4.83%	\$9,441	4.33%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	4.83%	\$9,441	4.33%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	4.83%	\$9,441	4.33%
Demob Work Boat	Demob shared with 4 pipelines (Excludes Eureka P/L's)	<input type="checkbox"/>	1.10	1.53%	\$2,984	1.37%
Task Total			60.42	83.84%	\$172,545	79.17%
Misc. Work Provision (15.00%)			8.73	12.12%	\$23,693	10.87%
Weather Provision (5.00%)			2.91	4.04%	\$7,898	3.62%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$13,804	6.33%
Total:			72.06	100.00%	\$217,939	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Edith Segment#:3610296

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$36,127	18.07%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$69,475	34.74%
Manual Calculation	\$0	Independently Calculated	\$8,626	4.31%
Pipeline Surveying	\$230	per Hour	\$12,783	6.39%
Work Boat	\$583	per Hour	\$32,403	16.20%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Edith Segment#:3720296

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$39,273	18.12%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$75,525	34.84%
Manual Calculation	\$0	Independently Calculated	\$8,626	3.98%
Pipeline Surveying	\$230	per Hour	\$13,897	6.41%
Work Boat	\$583	per Hour	\$35,225	16.25%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Edith Segment#:3610296

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.16%
Manual Calculation	\$4,313				
Mobilize Work Boat		1.10	1.66%	\$2,984	1.49%
Work Boat	\$641				
Dive Basic Spread- Mixed Gas	\$1,375				
Decommissioning Crew	\$715				
Pipeline Surveying	\$253				
Rig Up Decomm Equipment		5.00	7.55%	\$13,565	6.78%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		1.00	1.51%	\$2,713	1.36%
Work Boat	\$583				
Dive Basic Spread- Mixed Gas	\$1,250				
Decommissioning Crew	\$650				
Pipeline Surveying	\$230				
Derig Decomm Equipment		2.00	3.02%	\$5,426	2.71%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.16%
Manual Calculation	\$4,313				
Expose Pipeline		5.21	7.86%	\$14,135	7.07%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.86%	\$14,135	7.07%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.25%	\$9,441	4.72%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.25%	\$9,441	4.72%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.25%	\$9,441	4.72%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Reposition Vessel		3.66	5.52%	\$9,930	4.97%
Work Boat	\$2,134				
Dive Basic Spread- Mixed Gas	\$4,575				
Decommissioning Crew	\$2,379				
Pipeline Surveying	\$842				
Expose Pipeline		5.21	7.86%	\$14,135	7.07%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



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BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.86%	\$14,135	7.07%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.25%	\$9,441	4.72%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.25%	\$9,441	4.72%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.25%	\$9,441	4.72%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Demob Work Boat		1.10	1.66%	\$2,984	1.49%
Work Boat	\$641				
Dive Basic Spread- Mixed Gas	\$1,375				
Decommissioning Crew	\$715				
Pipeline Surveying	\$253				
Total		55.58	83.89%	\$159,414.54	79.72%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Edith Segment#:3720296

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	1.99%
Manual Calculation	\$4,313				
Mobilize Work Boat		1.10	1.53%	\$2,984	1.38%
Work Boat	\$641				
Dive Basic Spread- Mixed Gas	\$1,375				
Decommissioning Crew	\$715				
Pipeline Surveying	\$253				
Rig Up Decomm Equipment		5.00	6.94%	\$13,565	6.26%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		5.84	8.10%	\$15,844	7.31%
Work Boat	\$3,405				
Dive Basic Spread- Mixed Gas	\$7,300				
Decommissioning Crew	\$3,796				
Pipeline Surveying	\$1,343				
Derig Decomm Equipment		2.00	2.78%	\$5,426	2.50%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	1.99%
Manual Calculation	\$4,313				
Expose Pipeline		5.21	7.23%	\$14,135	6.52%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.23%	\$14,135	6.52%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	4.83%	\$9,441	4.36%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	4.83%	\$9,441	4.36%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	4.83%	\$9,441	4.36%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Reposition Vessel		3.66	5.08%	\$9,930	4.58%
Work Boat	\$2,134				
Dive Basic Spread- Mixed Gas	\$4,575				
Decommissioning Crew	\$2,379				
Pipeline Surveying	\$842				
Expose Pipeline		5.21	7.23%	\$14,135	6.52%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



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BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.23%	\$14,135	6.52%	
Work Boat	\$3,037					
Dive Basic Spread- Mixed Gas	\$6,513					
Decommissioning Crew	\$3,387					
Pipeline Surveying	\$1,198					
Cut Pipeline Riser		3.48	4.83%	\$9,441	4.36%	
Work Boat	\$2,029					
Dive Basic Spread- Mixed Gas	\$4,350					
Decommissioning Crew	\$2,262					
Pipeline Surveying	\$800					
Remove Tube Turn		3.48	4.83%	\$9,441	4.36%	
Work Boat	\$2,029					
Dive Basic Spread- Mixed Gas	\$4,350					
Decommissioning Crew	\$2,262					
Pipeline Surveying	\$800					
Bury Pipeline		3.48	4.83%	\$9,441	4.36%	
Work Boat	\$2,029					
Dive Basic Spread- Mixed Gas	\$4,350					
Decommissioning Crew	\$2,262					
Pipeline Surveying	\$800					
Demob Work Boat		1.10	1.53%	\$2,984	1.38%	
Work Boat	\$641					
Dive Basic Spread- Mixed Gas	\$1,375					
Decommissioning Crew	\$715					
Pipeline Surveying	\$253					
		Total	60.42	83.84%	\$172,545.46	79.60%



BSEE-POCSR

Well Decommission Task Information

Edith Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$3,067,060 78.12%
		Task Total	0.00	\$3,067,060 78.12%
		Misc. Work Provision (15.00%)	0.00	\$460,059 11.72%
		Weather Provision (5.00%)	0.00	\$153,353 3.91%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$245,365 6.25%
		Total:	0.00 100.00%	\$3,925,837 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Edith Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$3,067,060 78.12%



TSB OFFSHORE

BSEE-POCSR

Well Decommission Cost Breakdown

Edith Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$3,067,060	78.12%
Manual Calculation	\$3,067,060				
	Total	0.00	0.00%	\$3,067,060	78.12%



BSEE-POCSR

Platform Salvage Option

Ellen

COMPLETE REMOVAL

- Platform Ellen will be removed along with Platforms Eureka, Edith and Elly.
- Platform Ellen is an 8-pile platform installed in 1980 in 265' of water.
- The estimated removal weight is the deck weight is 5,300 tons and the jacket weight is 3,200 tons.
- The platform has a total of 63 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 64 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and three 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 5 cargo barge trips will be required.
- Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los



BSEE-POCSR

Platform Salvage Option

Ellen

Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 5% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and



BSEE-POCSR

Platform Salvage Option

Ellen

Regulatory Compliance: Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$41,997,398

Estimated Decommissioning Net Cost = \$41,997,398



BSEE-POCSR

Basic Information

Ellen

General Data

Platform: Ellen
Function: FACILITIES
Type: Steel
Water Depth: 265'
Pre 461H?: Yes
Year Installed: 1980
Year Estimate Developed: 2014
District: California
Lease Number: OCS-P 0300
Account Code: TSB - 139681-Z
Amortization: 1.00
Wells to P & A: 63
Pipelines to Abandon: 0
Estimate Complete?: Yes

Partner Data

Partner	Working Interest
1 Beta Operating Company, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$28,365,060	\$28,365,060
Well Plugging & Abandonment:	\$13,632,338	\$13,632,338
Pipeline Abandonment:	\$0	\$0
Total Decommissioning Cost:	\$41,997,398	\$41,997,398



BSEE-POCSR

Platform Information

Ellen

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	60"	2.25"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	155 x 132	64
Middle:	0	0
Lower:	175 x 108	46

Conductors

Number of Slots:	80
Number Installed:	64
Outside Diameter:	13.375"
Wall Thickness:	0.625"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	3200.00		
Jacket Installation Date:	1/1/80		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	5300 Tons
Number of Padeyes Required:	16
Deck Installation Date:	1/1/80
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Ellen

Equipment Lift Weights

Members to be Cut Data

Top Members		Underwater Members	
Size	Qty	Size	Qty
36.00	16.00	0.00	0.00
54.00	4.00		
72.00	4.00		

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Equipment	Equipment
CB 300 x 100	Deck 100-500T	Deck 100-500T	Deck 100-500T	Deck 100-500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck 100-500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck 100-500T
CB 400 x 100	Jkt > 700T	Jkt > 700T		0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	5.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$4,625,468.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Ellen

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$1,154,022.00	4.07%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.02%	\$830,961.00	2.93%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.02%	\$6,378,165.00	22.49%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.02%	\$1,389,820.00	4.90%
Mobilize DB 2000	Mob from Asia, 50 days divided by 4 platforms	<input type="checkbox"/>	0.00	0.00%	\$2,351,250.00	8.29%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	10.00	0.23%	\$47,600.00	0.17%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 3)	<input type="checkbox"/>	10.00	0.23%	\$72,000.00	0.25%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.16%	\$58,781.23	0.21%
Cut Deck/Equip/Misc	Seperate 12 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.56%	\$232,519.91	0.82%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.56%	\$232,519.91	0.82%
Remove 8 Pile Deck	Remove 12 Pile Deck, 12 modules	<input checked="" type="checkbox"/>	96.00	2.24%	\$930,079.69	3.28%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	10.00	0.23%	\$19,600.00	0.07%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	31.00	0.72%	\$300,958.19	1.06%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	4.40	0.10%	\$32,208.00	0.11%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.02%	\$10,488.00	0.04%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	53.68	1.25%	\$994,080.79	3.50%
Cut Jacket	24 Hours per section, times 2 section(s), per MMS	<input checked="" type="checkbox"/>	48.00	1.12%	\$857,135.81	3.02%
Remove Jacket - Meth 1	24 Hours per section, times 2 section(s), per MMS	<input checked="" type="checkbox"/>	48.00	1.12%	\$817,359.81	2.88%
Demob CB 400 & Tug	Demob to Port of LA (Qty 3)	<input type="checkbox"/>	10.00	0.23%	\$30,000.00	0.11%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.16%	\$58,781.23	0.21%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	4.40	0.10%	\$32,208.00	0.11%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.02%	\$10,488.00	0.04%
Demob DB 2000	Mob from Asia, 50 days divided by 4 platforms	<input type="checkbox"/>	0.00	0.00%	\$2,351,250.00	8.29%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	1.68%	\$884,000.00	3.12%
Offload CB 300		<input type="checkbox"/>	672.00	15.66%	\$177,760.00	0.63%
Offload CB 400		<input type="checkbox"/>	3072.00	71.60%	\$858,720.00	3.03%
Task Total			4207.98	98.08%	\$1,112,756.56	74.43%
Misc. Work Provision (15.00%)			61.83	1.44%	\$1,970,130.00	6.95%
Weather Contingency (5.00%)			20.61	0.48%	\$656,710.10	2.32%
Consumables					\$0.00	0.00%



BSEE-POCSR

Platform Decommission Task Information

Ellen

Task	Note	Weather Provision	Task Hours	Task Cost
		Waste Disposal		4,625,468.00 16.31%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			4290.42 100.00%	28,365,064.66 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Ellen

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$99,050 0.35%
Cargo Barge 300	\$4,920 per Day per Barge	\$137,760 0.49%
Cargo Barge 400	\$6,240 per Day per Barge	\$798,720 2.82%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$180,320 0.64%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$240,680 0.85%
CB Damage Deduct	\$20,000 per Cargo Barge	\$100,000 0.35%
Derrick Barge 2000	\$8,708 per Hour per barge	\$7,647,483 26.96%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$501,589 1.77%
DP Dive Boat	\$3,300 Per Hour	\$522,984 1.84%
Manual Calculation	\$0 Independently Calculated	\$10,657,944 37.57%
Pile Abrasive Cut 49 to 69 inches	\$5,000 per Cut	\$80,000 0.28%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$39,776 0.14%
Pipeline Survey	\$230 per Hour	\$36,450 0.13%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.10%
Rig Up CB 400	\$14,000 per Barge	\$42,000 0.15%



BSEE-POCSR

Platform Decommission Cost Breakdown

Ellen

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$1,154,022.00	4.07%
Manual Calculation			\$1,154,022	
Platform Abandonment - Manual Calculation	1.00	0.02%	\$830,961.00	2.93%
Manual Calculation			\$830,961	
Sever Conductors- Abrasive	1.00	0.02%	\$6,378,165.00	22.49%
Manual Calculation			\$6,378,165	
Platform Removal Preparation	1.00	0.02%	\$1,389,820.00	4.90%
Manual Calculation			\$1,389,820	
Mobilize DB 2000	0.00	0.00%	\$2,351,250.00	8.29%
Derrick Barge 2000			\$2,351,250	
Mobilize CB 300 & Tug	10.00	0.23%	\$47,600.00	0.17%
CB 300 & Tug			\$19,600	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	10.00	0.23%	\$72,000.00	0.25%
Rig Up CB 400			\$42,000	
CB 400 & Tug			\$30,000	
Setup Derrick Barge	6.75	0.16%	\$58,781.23	0.21%
Derrick Barge 2000			\$58,781	



BSEE-POCSR
Platform Decommission Cost Breakdown
Ellen

Task			Task Hours		Task Cost	
Cut Deck/Equip/Misc			24.00	0.56%	\$232,519.91	0.82%
Derrick Barge 2000	\$209,000					
CB 300 & Tug	\$23,520					
Remove Equipment			24.00	0.56%	\$232,519.91	0.82%
Derrick Barge 2000	\$209,000					
CB 300 & Tug	\$23,520					
Remove 8 Pile Deck			96.00	2.24%	\$930,079.69	3.28%
Derrick Barge 2000	\$836,000					
CB 300 & Tug	\$94,080					
Demob CB 300 & Tug			10.00	0.23%	\$19,600.00	0.07%
CB 300 & Tug	\$19,600					
Jet/Airlift Pile Mud Plug			31.00	0.72%	\$300,958.19	1.06%
Derrick Barge 2000	\$269,958					
CB 400 & Tug	\$31,000					
Mobilize Dive Spread			4.40	0.10%	\$32,208.00	0.11%
DP Dive Boat	\$14,520					
Dive Basic Spread Saturation	\$13,926					
Abrasive Cutter Spread	\$2,750					
Pipeline Survey	\$1,012					



BSEE-POCSR

Platform Decommission Cost Breakdown

Ellen

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Mobilize Abrasive Cutting Spread	1.00	0.02%	\$10,488.00	0.04%
Manual Calculation			\$1,375	
Manual Calculation			\$527	
Manual Calculation			\$6,000	
Manual Calculation			\$2,586	
Sever Piles- Abrasive	53.68	1.25%	\$994,080.79	3.50%
Derrick Barge 2000			\$467,463	
DP Dive Boat			\$177,144	
Dive Basic Spread Saturation			\$169,897	
Pipeline Survey			\$12,346	
Abrasive Cutter Spread			\$33,550	
CB 400 & Tug			\$53,680	
Pile Abrasive Cut 49 to 69 inches			\$80,000	
Cut Jacket	48.00	1.12%	\$857,135.81	3.02%
Derrick Barge 2000			\$418,000	
DP Dive Boat			\$158,400	
Dive Basic Spread Saturation			\$151,920	
Pipeline Survey			\$11,040	
Abrasive Cutter Spread			\$30,000	
CB 400 & Tug			\$48,000	
Pile Abrasive Cut 7 to 48 inches			\$39,776	



BSEE-POCSR

Platform Decommission Cost Breakdown

Ellen

Task	Task Hours		Task Cost	
	Hours	Percentage	Cost	Percentage
Remove Jacket - Meth 1	48.00	1.12%	\$817,359.81	2.88%
Derrick Barge 2000			\$418,000	
DP Dive Boat			\$158,400	
Dive Basic Spread Saturation			\$151,920	
Pipeline Survey			\$11,040	
Abrasive Cutter Spread			\$30,000	
CB 400 & Tug			\$48,000	
Demob CB 400 & Tug	10.00	0.23%	\$30,000.00	0.11%
CB 400 & Tug			\$30,000	
Pick Up DB Anchors	6.75	0.16%	\$58,781.23	0.21%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	4.40	0.10%	\$32,208.00	0.11%
DP Dive Boat			\$14,520	
Dive Basic Spread Saturation			\$13,926	
Abrasive Cutter Spread			\$2,750	
Pipeline Survey			\$1,012	
Demob Abrasive Cutting Spread	1.00	0.02%	\$10,488.00	0.04%
Manual Calculation			\$1,375	
Manual Calculation			\$527	
Manual Calculation			\$6,000	
Manual Calculation			\$2,586	



BSEE-POCSR

Platform Decommission Cost Breakdown

Ellen

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Demob DB 2000	0.00	0.00%	\$2,351,250.00	8.29%
Derrick Barge 2000			\$2,351,250	
Site Clearance - with Divers	72.00	1.68%	\$884,000.00	3.12%
Manual Calculation			\$884,000	
Offload CB 300	672.00	15.66%	\$177,760.00	0.63%
Cargo Barge 300			\$137,760	
CB Damage Deduct			\$40,000	
Offload CB 400	3072.00	71.60%	\$858,720.00	3.03%
Cargo Barge 400			\$798,720	
CB Damage Deduct			\$60,000	
Total	4207.98	98.08%	\$21,112,756.56	74.43%



BSEE-POCSR

Well Decommission Task Information

Ellen Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$10,650,264 78.12%
Task Total			0.00	\$10,650,264 78.12%
Misc. Work Provision (15.00%)			0.00	\$1,597,540 11.72%
Weather Provision (5.00%)			0.00	\$532,513 3.91%
Consumables				\$0 0.00%
Waste Disposal				\$0 0.00%
Structure & Equipment Disposal				\$0 0.00%
Offloading				\$0 0.00%
Storage / Scrapping				\$0 0.00%
Reef Donation				\$0 0.00%
Cost of Engineering (8.00%)				\$852,021 6.25%
Total:			0.00 100.00%	\$13,632,338 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Ellen Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$10,650,264 78.12%



BSEE-POCSR

Well Decommission Cost Breakdown

Ellen Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$10,650,264	78.12%
Manual Calculation	\$10,650,264				
	Total	0.00	0.00%	\$10,650,264	78.12%



BSEE-POCSR

Platform Salvage Option

Elly

COMPLETE REMOVAL

- Platform Elly will be removed along with Platforms Edith, Ellen and Eureka.
- Platform Elly is a 12-pile platform installed in 1980 in 255' of water.
- The estimated removal weight is the deck weight is 4,700 tons and the jacket weight is 3,300 tons.
- The platform has a total of 0 wells that will be plugged and abandoned.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and three 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 5 cargo barge trips will be required.
- The one pipeline (oil) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater that 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.
- A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.
- Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los



BSEE-POCSR

Platform Salvage Option

Elly

Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 5% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and



BSEE-POCSR

Platform Salvage Option

Elly

Regulatory Compliance: Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$24,636,507

Estimated Decommissioning Net Cost = \$24,636,507



BSEE-POCSR

Basic Information

Elly

General Data

Platform:	Elly
Function:	SELF CONTAINED
Type:	Steel
Water Depth:	257'
Pre 461H?:	Yes
Year Installed:	1980
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0300
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	1
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Beta Operating Company, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$21,829,730	\$21,829,730
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$2,806,777	\$2,806,777
Total Decommissioning Cost:	\$24,636,507	\$24,636,507



BSEE-POCSR

Platform Information

Elly

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	12	48"	2"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:	250 x 200	43

Conductors

Number of Slots:	0
Number Installed:	0
Outside Diameter:	
Wall Thickness:	
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	3300.00		
Jacket Installation Date:	1/1/80		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	4700 Tons
Number of Padeyes Required:	10
Deck Installation Date:	1/1/80
Deck Contractor:	Unknown



TSB OFFSHORE

BSEE-POCSR

Platform Information

Elly

Equipment Lift Weights

Members to be Cut Data

Top Members	
Size	Qty
36.00	6.00
54.00	12.00

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Equipment	Equipment
CB 300 x 100	Deck 100-500T	Deck 100-500T	Deck 100-500T	Deck 100-500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Deck > 500T	Deck > 500T	Jkt > 700T	0
CB 400 x 100	Jkt > 700T	Jkt > 700T		0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	5.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$4,347,786.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Elly

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$784,804.00	3.60%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.02%	\$482,045.00	2.21%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.02%	\$2,151,880.00	9.86%
Mobilize DB 2000	Mob from Asia, 50 days divided by 4 platforms	<input type="checkbox"/>	0.00	0.00%	\$2,351,250.00	10.77%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	10.00	0.23%	\$47,600.00	0.22%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 3)	<input type="checkbox"/>	10.00	0.23%	\$72,000.00	0.33%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.15%	\$58,781.23	0.27%
Cut Deck/Equip/Misc	Seperate 10 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.55%	\$232,519.91	1.07%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.55%	\$232,519.91	1.07%
Remove 8 Pile Deck	Remove 12 Pile Deck, 10 modules	<input checked="" type="checkbox"/>	72.00	1.64%	\$697,559.81	3.20%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	10.00	0.23%	\$19,600.00	0.09%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	46.00	1.05%	\$446,583.19	2.05%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	4.40	0.10%	\$32,208.00	0.15%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.02%	\$10,488.00	0.05%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	69.22	1.58%	\$1,238,365.02	5.67%
Cut Jacket	24 Hours per section, times 3 section(s), per MMS	<input checked="" type="checkbox"/>	72.00	1.64%	\$1,285,703.81	5.89%
Remove Jacket - Meth 1	24 Hours per section, times 3 section(s), per MMS	<input checked="" type="checkbox"/>	72.00	1.64%	\$1,226,039.81	5.62%
Demob CB 400 & Tug	Demob to Port of LA (Qty 3)	<input type="checkbox"/>	10.00	0.23%	\$30,000.00	0.14%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.15%	\$58,781.23	0.27%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	4.40	0.10%	\$32,208.00	0.15%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.02%	\$10,488.00	0.05%
Demob DB 2000	Mob from Asia, 50 days divided by 4 platforms	<input type="checkbox"/>	0.00	0.00%	\$2,351,250.00	10.77%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	1.64%	\$884,000.00	4.05%
Offload CB 300		<input type="checkbox"/>	672.00	15.35%	\$177,760.00	0.81%
Offload CB 400		<input type="checkbox"/>	3096.00	70.71%	\$864,960.00	3.96%
Task Total			4285.52	97.87%	\$5,779,394.92	72.28%
Misc. Work Provision (15.00%)			69.86	1.60%	\$1,276,910.00	5.85%
Weather Contingency (5.00%)			23.29	0.53%	\$425,636.70	1.95%
Consumables					\$0.00	0.00%
Waste Disposal					\$4,347,786.00	19.92%
Structure & Equipment Disposal					\$0.00	0.00%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Elly

Task	Note	Weather Provision	Task Hours	Task Cost
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			4378.67 100.00%	21,829,727.62 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Elly

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$138,763 0.64%
Cargo Barge 300	\$4,920 per Day per Barge	\$137,760 0.63%
Cargo Barge 400	\$6,240 per Day per Barge	\$804,960 3.69%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$156,800 0.72%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$319,220 1.46%
CB Damage Deduct	\$20,000 per Cargo Barge	\$100,000 0.46%
Derrick Barge 2000	\$8,708 per Hour per barge	\$8,122,436 37.21%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$702,693 3.22%
DP Dive Boat	\$3,300 Per Hour	\$732,666 3.36%
Manual Calculation	\$0 Independently Calculated	\$4,323,705 19.81%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$119,328 0.55%
Pipeline Survey	\$230 per Hour	\$51,065 0.23%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.13%
Rig Up CB 400	\$14,000 per Barge	\$42,000 0.19%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Cost Breakdown

Elly

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$784,804.00	3.60%
Manual Calculation			\$784,804	
Platform Abandonment - Manual Calculation	1.00	0.02%	\$482,045.00	2.21%
Manual Calculation			\$482,045	
Platform Removal Preparation	1.00	0.02%	\$2,151,880.00	9.86%
Manual Calculation			\$2,151,880	
Mobilize DB 2000	0.00	0.00%	\$2,351,250.00	10.77%
Derrick Barge 2000			\$2,351,250	
Mobilize CB 300 & Tug	10.00	0.23%	\$47,600.00	0.22%
CB 300 & Tug			\$19,600	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	10.00	0.23%	\$72,000.00	0.33%
Rig Up CB 400			\$42,000	
CB 400 & Tug			\$30,000	
Setup Derrick Barge	6.75	0.15%	\$58,781.23	0.27%
Derrick Barge 2000			\$58,781	
Cut Deck/Equip/Misc	24.00	0.55%	\$232,519.91	1.07%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	



BSEE-POCSR

Platform Decommission Cost Breakdown

Elly

Task		Task Hours		Task Cost	
Remove Equipment		24.00	0.55%	\$232,519.91	1.07%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove 8 Pile Deck		72.00	1.64%	\$697,559.81	3.20%
Derrick Barge 2000	\$627,000				
CB 300 & Tug	\$70,560				
Demob CB 300 & Tug		10.00	0.23%	\$19,600.00	0.09%
CB 300 & Tug	\$19,600				
Jet/Airlift Pile Mud Plug		46.00	1.05%	\$446,583.19	2.05%
Derrick Barge 2000	\$400,583				
CB 400 & Tug	\$46,000				
Mobilize Dive Spread		4.40	0.10%	\$32,208.00	0.15%
DP Dive Boat	\$14,520				
Dive Basic Spread Saturation	\$13,926				
Abrasive Cutter Spread	\$2,750				
Pipeline Survey	\$1,012				
Mobilize Abrasive Cutting Spread		1.00	0.02%	\$10,488.00	0.05%
Manual Calculation	\$1,375				
Manual Calculation	\$527				
Manual Calculation	\$6,000				
Manual Calculation	\$2,586				



BSEE-POCSR

Platform Decommission Cost Breakdown

Elly

Task	Task Hours	Task Cost
Sever Piles- Abrasive	69.22	1.58%
	\$1,238,365.02	5.67%
Derrick Barge 2000	\$602,791	
DP Dive Boat	\$228,426	
Dive Basic Spread Saturation	\$219,081	
Pipeline Survey	\$15,921	
Abrasive Cutter Spread	\$43,263	
CB 400 & Tug	\$69,220	
Pile Abrasive Cut 7 to 48 inches	\$59,664	
Cut Jacket	72.00	1.64%
	\$1,285,703.81	5.89%
Derrick Barge 2000	\$627,000	
DP Dive Boat	\$237,600	
Dive Basic Spread Saturation	\$227,880	
Pipeline Survey	\$16,560	
Abrasive Cutter Spread	\$45,000	
CB 400 & Tug	\$72,000	
Pile Abrasive Cut 7 to 48 inches	\$59,664	
Remove Jacket - Meth 1	72.00	1.64%
	\$1,226,039.81	5.62%
Derrick Barge 2000	\$627,000	
DP Dive Boat	\$237,600	
Dive Basic Spread Saturation	\$227,880	
Pipeline Survey	\$16,560	
Abrasive Cutter Spread	\$45,000	
CB 400 & Tug	\$72,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Elly

Task		Task Hours		Task Cost	
Demob CB 400 & Tug		10.00	0.23%	\$30,000.00	0.14%
CB 400 & Tug	\$30,000				
Pick Up DB Anchors		6.75	0.15%	\$58,781.23	0.27%
Derrick Barge 2000	\$58,781				
Demob Dive Spread		4.40	0.10%	\$32,208.00	0.15%
DP Dive Boat	\$14,520				
Dive Basic Spread Saturation	\$13,926				
Abrasive Cutter Spread	\$2,750				
Pipeline Survey	\$1,012				
Demob Abrasive Cutting Spread		1.00	0.02%	\$10,488.00	0.05%
Manual Calculation	\$1,375				
Manual Calculation	\$527				
Manual Calculation	\$6,000				
Manual Calculation	\$2,586				
Demob DB 2000		0.00	0.00%	\$2,351,250.00	10.77%
Derrick Barge 2000	\$2,351,250				
Site Clearance - with Divers		72.00	1.64%	\$884,000.00	4.05%
Manual Calculation	\$884,000				



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Cost Breakdown

Elly

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Offload CB 300	672.00	15.35%	\$177,760.00	0.81%
Cargo Barge 300			\$137,760	
CB Damage Deduct			\$40,000	
Offload CB 400	3096.00	70.71%	\$864,960.00	3.96%
Cargo Barge 400			\$804,960	
CB Damage Deduct			\$60,000	
Total	4285.52	97.87%	\$15,779,394.92	72.28%



BSEE-POCSR

Pipeline Information

Elly Segment#:2610300-Shore

General Data

Water Depth: 255'
Origin / Terminus: Origin
Opposite End Name: San Pedro
Opposite End Water Depth:
Pipeline Operator: Beta Operating Company, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 5.00%

Pipeline Data

Outside Diameter: 16"	Wall Thickness:	Length: 80200'
Depth of Burial:	# Crossings:	Product: Oil
Installation Date:	Weight Coating: No	J Tube: No
Riser?: Yes	Riser Guard?: No	



BSEE-POCSR

Pipeline Decommission Task Information

Elly Segment#:2610300-Shore

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.15%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	0.41%	\$583,334	20.78%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.80%	\$22,035	0.79%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.33%	\$36,725	1.31%
Pig & Flush Pipeline	Pumping at 600 gpm	<input checked="" type="checkbox"/>	20.45	5.46%	\$150,205	5.35%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.53%	\$14,690	0.52%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.15%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	9.10	2.43%	\$60,925	2.17%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	6.07	1.62%	\$40,639	1.45%
Remove Tube Turn		<input checked="" type="checkbox"/>	6.07	1.62%	\$45,197	1.61%
Mob P/L Removal Spread	Shared w/ 6 P/L's	<input type="checkbox"/>	4.40	1.17%	\$29,630	1.06%
Expose Pipeline		<input checked="" type="checkbox"/>	9.10	2.43%	\$61,279	2.18%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	9.10	2.43%	\$61,279	2.18%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	4.40	1.17%	\$20,840	0.74%
Remove Pipeline	Remove 4.5 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	79.00	21.09%	\$575,436	20.50%
Bury Pipeline		<input checked="" type="checkbox"/>	6.07	1.62%	\$44,214	1.58%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	4.40	1.17%	\$4,840	0.17%
Demob P/L Removal Spread		<input type="checkbox"/>	4.40	1.17%	\$8,598	0.31%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	0.41%	\$583,334	20.78%
Offload CB 180		<input type="checkbox"/>	168.00	44.85%	\$41,000	1.46%
Task Total			343.62	91.73%	\$2,392,826	85.25%
Misc. Work Provision (15.00%)			23.24	6.20%	\$166,894	5.95%
Weather Provision (5.00%)			7.75	2.07%	\$55,631	1.98%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$191,426	6.82%
Total:			374.61	100.00%	\$2,806,776	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Elly Segment#:2610300-Shore

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	0.78%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$56,469	2.09%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	0.74%
Decommissioning Crew	\$650	per Hour	\$19,793	0.73%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$134,588	4.98%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$163,599	6.05%
DP Dive Boat	\$3,300	per Hour	\$525,888	19.45%
Manual Calculation	\$0	Independently Calculated	\$1,175,294	43.46%
Pipelay Barge	\$1,954	per Hour	\$218,985	8.10%
Pipeline Surveying	\$230	per Hour	\$36,653	1.36%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.59%
Saturation Decompression	\$751	per Hour	\$4,559	0.17%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Elly Segment#:2610300-Shore

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	0.16%
Manual Calculation	\$4,313				
Mobilize Dive Boat		1.53	0.41%	\$583,334	21.57%
Manual Calculation	\$583,334				
Set Up Dive Boat		3.00	0.80%	\$22,035	0.81%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Decommissioning Crew	\$1,950				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	1.33%	\$36,725	1.36%
DP Dive Boat	\$16,500				
Dive Basic Spread Saturation	\$15,825				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		20.45	5.46%	\$150,205	5.55%
DP Dive Boat	\$67,485				
Dive Basic Spread Saturation	\$64,724				
Decommissioning Crew	\$13,293				
Pipeline Surveying	\$4,704				
Derig Decomm Equipment		2.00	0.53%	\$14,690	0.54%
DP Dive Boat	\$6,600				
Dive Basic Spread Saturation	\$6,330				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	0.16%
Manual Calculation	\$4,313				
Cut & Plug Pipeline		9.10	2.43%	\$60,925	2.25%
DP Dive Boat	\$30,030				
Dive Basic Spread Saturation	\$28,802				
Pipeline Surveying	\$2,093				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		6.07	1.62%	\$40,639	1.50%
DP Dive Boat	\$20,031				
Dive Basic Spread Saturation	\$19,212				
Pipeline Surveying	\$1,396				
Remove Tube Turn		6.07	1.62%	\$45,197	1.67%
DP Dive Boat	\$20,031				
Dive Basic Spread Saturation	\$19,212				
Pipeline Surveying	\$1,396				
Saturation Decompression	\$4,559				
Mob P/L Removal Spread		4.40	1.17%	\$29,630	1.10%
DP Dive Boat	\$14,520				
Dive Basic Spread- Mixed Gas	\$5,500				
Pipeline Surveying	\$1,012				
Pipelay Barge	\$8,598				
Expose Pipeline		9.10	2.43%	\$61,279	2.27%
DP Dive Boat	\$30,030				
Dive Basic Spread- Mixed Gas	\$11,375				
Pipeline Surveying	\$2,093				
Pipelay Barge	\$17,781				
Cut & Plug Pipeline		9.10	2.43%	\$61,279	2.27%
DP Dive Boat	\$30,030				
Dive Basic Spread- Mixed Gas	\$11,375				
Pipeline Surveying	\$2,093				
Pipelay Barge	\$17,781				
Mobilize Vessel		4.40	1.17%	\$20,840	0.77%
CB 180 & Tug	\$4,840				
Rig Up CB 180	\$16,000				
Remove Pipeline		79.00	21.09%	\$575,436	21.28%
DP Dive Boat	\$260,700				
Dive Basic Spread- Mixed Gas	\$98,750				
Pipeline Surveying	\$18,170				
Pipelay Barge	\$154,366				
CB 180 & Tug	\$43,450				



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BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		6.07	1.62%	\$44,214	1.63%	
DP Dive Boat	\$20,031					
Dive Basic Spread- Mixed Gas	\$7,588					
Pipeline Surveying	\$1,396					
Pipelay Barge	\$11,861					
CB 180 & Tug	\$3,339					
Demob Vessel		4.40	1.17%	\$4,840	0.18%	
CB 180 & Tug	\$4,840					
Demob P/L Removal Spread		4.40	1.17%	\$8,598	0.32%	
Pipelay Barge	\$8,598					
Demob Dive Boat		1.53	0.41%	\$583,334	21.57%	
Manual Calculation	\$583,334					
Offload CB 180		168.00	44.85%	\$41,000	1.52%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	343.62	91.73%	\$2,392,825.50	88.48%



BSEE-POCSR

Platform Salvage Option

Eureka

COMPLETE REMOVAL

- Platform Eureka will be removed along with Platforms Edith, Ellen and Elly.
- Platform Eureka is an 8-leg platform (24 Skirt Pile) installed in 1984 in 700' of water.
- The estimated removal weight is the deck weight is 8,000 tons and the jacket weight is 19,000 tons.
- The platform has a total of 50 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 60 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- A lifting barge will be outfitted and utilized to lift pieces from the jacket structure. The loads will then be transferred midwater to the DB2000 to complete the lift and place on cargo barge.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Four 300' cargo barges will transport the deck modules to shore and six 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 10 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A



BSEE-POCSR

Platform Salvage Option

Eureka

workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.

-The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and disposed of.

-The three pipelines (2 oil, 1 gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline



BSEE-POCSR

Platform Salvage Option

Eureka

Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 5% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance: Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$123,975,235

Estimated Decommissioning Net Cost = \$123,975,235



BSEE-POCSR

Basic Information

Eureka

General Data

Platform:	Eureka
Function:	SELF CONTAINED
Type:	Steel
Water Depth:	700'
Pre 461H?:	No
Year Installed:	1985
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0301
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	50
# Pipelines to Abandon:	5
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Beta Operating Company, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$102,387,296	\$102,387,296
Well Plugging & Abandonment:	\$11,400,719	\$11,400,719
Pipeline Abandonment:	\$10,187,220	\$10,187,220
Total Decommissioning Cost:	\$123,975,235	\$123,975,235



BSEE-POCSR

Platform Information

Eureka

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	0			Yes	No	
Skirt/Braced	24	60"	2.75"	No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	165 x 160	71
Middle:		
Lower:	175 x 180	45

Conductors

Number of Slots:	60
Number Installed:	60
Outside Diameter:	13.375"
Wall Thickness:	0.75"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	19000.00		
Jacket Installation Date:	1/1/85		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	8000 Tons
Number of Padeyes Required:	8
Deck Installation Date:	1/1/85
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Eureka

Equipment Lift Weights

Members to be Cut Data

Top Members	
Size	Qty
42.00	16.00
72.00	8.00

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Jkt 300-700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt 300-700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt 300-700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	5.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$13,668,746.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Eureka

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$5,268,663.00	5.15%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.01%	\$2,713,271.00	2.65%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.01%	\$2,622,709.00	12.33%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.01%	\$2,969,203.00	2.90%
Platform Abandonment - Manual Calculation	Lifting barge costs	<input type="checkbox"/>	0.00	0.00%	\$2,023,600.00	11.74%
Mobilize DB 2000	Mob from Asia, 50 days divided by 4 platforms	<input type="checkbox"/>	0.00	0.00%	\$2,351,250.00	2.30%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 4)	<input type="checkbox"/>	10.00	0.08%	\$95,200.00	0.09%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 6) + 1 lifting barge	<input type="checkbox"/>	10.00	0.08%	\$154,000.00	0.15%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.06%	\$58,781.23	0.06%
Cut Deck/Equip/Misc	Seperate 10 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.20%	\$232,519.91	0.23%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.20%	\$232,519.91	0.23%
Remove 8 Pile Deck	Remove 8 Pile Deck, 10 modules	<input checked="" type="checkbox"/>	72.00	0.61%	\$697,559.81	0.68%
Demob CB 300 & Tug	Demob to Port of LA (Qty 4)	<input type="checkbox"/>	10.00	0.08%	\$39,200.00	0.04%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	35.00	0.30%	\$339,791.59	0.33%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.01%	\$10,488.00	0.01%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	4.00	0.03%	\$35,680.00	0.03%
Sever Piles- Abrasive	Manual calc resource is cost per pile cut @ \$10,000 per skirt pile	<input checked="" type="checkbox"/>	161.04	1.37%	\$3,239,905.79	3.16%
Cut Jacket	38 Hours per section, times 19 section(s), per MMS. Man Calc Resource is cost per jkt leg cut @ \$4972 per leg cut x qty 48 cuts.	<input checked="" type="checkbox"/>	722.00	6.12%	\$4,410,301.00	14.07%
Remove Jacket - Meth 1	38 Hours per section, times 19 section(s), per MMS	<input checked="" type="checkbox"/>	722.00	6.12%	\$4,171,655.00	13.84%
Demob CB 400 & Tug	Demob to Port of LA (Qty 6)	<input type="checkbox"/>	10.00	0.08%	\$70,000.00	0.07%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.06%	\$58,781.23	0.06%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	4.60	0.04%	\$41,032.00	0.04%
Demob DB 2000	Mob from Asia, 50 days divided by 4 platforms	<input type="checkbox"/>	0.00	0.00%	\$2,351,250.00	2.30%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	0.61%	\$1,472,000.00	1.44%
Offload CB 300	10 deck modules	<input type="checkbox"/>	3600.00	30.52%	\$818,000.00	0.80%
Offload CB 400	19 jacket sections	<input type="checkbox"/>	5928.00	50.25%	\$1,681,280.00	1.64%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.01%	\$10,488.00	0.01%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Eureka

Task	Note	Weather Provision	Task Hours	Task Cost
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00 0.00%	\$373,589.00 0.36%
		Task Total	11427.14 96.87%	78,542,718.47 76.71%
		Misc. Work Provision (15.00%)	277.13 2.35%	7,631,898.00 7.45%
		Weather Contingency (5.00%)	92.38 0.78%	2,543,966.00 2.48%
		Consumables		\$0.00 0.00%
		Waste Disposal		13,668,750.00 13.35%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
		Total:	11796.65 100.00%	2,387,332.47 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Eureka

Resource Used	Unit Cost	Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$1,008,525	0.99%
Cargo Barge 300	\$4,920 per Day per Barge	\$738,000	0.72%
Cargo Barge 400	\$6,240 per Day per Barge	\$1,541,280	1.51%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$196,000	0.19%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$3,224,040	3.15%
CB Damage Deduct	\$20,000 per Cargo Barge	\$220,000	0.21%
Derrick Barge 2000	\$8,708 per Hour per barge	\$20,147,073	19.68%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$5,107,171	4.99%
DP Dive Boat	\$3,300 Per Hour	\$5,325,012	5.20%
Manual Calculation	\$0 Independently Calculated	\$37,942,657	37.06%
Pipeline Survey	\$230 per Hour	\$371,137	0.36%
Rem. Operated Vehicle	\$800 per Hour	\$2,581,824	2.52%
Rig Up CB 300	\$14,000 per Barge	\$56,000	0.05%
Rig Up CB 400	\$14,000 per Barge	\$84,000	0.08%



BSEE-POCSR

Platform Decommission Cost Breakdown

Eureka

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$5,268,663.00	5.15%
Manual Calculation			\$5,268,663	
Platform Abandonment - Manual Calculation	1.00	0.01%	\$2,713,271.00	2.65%
Manual Calculation			\$2,713,271	
Sever Conductors- Abrasive	1.00	0.01%	\$12,622,709.00	12.33%
Manual Calculation			\$12,622,709	
Platform Removal Preparation	1.00	0.01%	\$2,969,203.00	2.90%
Manual Calculation			\$2,969,203	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$12,023,600.00	11.74%
Manual Calculation			\$12,023,600	
Mobilize DB 2000	0.00	0.00%	\$2,351,250.00	2.30%
Derrick Barge 2000			\$2,351,250	
Mobilize CB 300 & Tug	10.00	0.08%	\$95,200.00	0.09%
CB 300 & Tug			\$39,200	
Rig Up CB 300			\$56,000	
Mobilize CB 400 & Tug	10.00	0.08%	\$154,000.00	0.15%
Rig Up CB 400			\$84,000	
CB 400 & Tug			\$70,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Eureka

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Setup Derrick Barge	6.75	0.06%	\$58,781.23	0.06%
Derrick Barge 2000			\$58,781	
Cut Deck/Equip/Misc	24.00	0.20%	\$232,519.91	0.23%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove Equipment	24.00	0.20%	\$232,519.91	0.23%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove 8 Pile Deck	72.00	0.61%	\$697,559.81	0.68%
Derrick Barge 2000			\$627,000	
CB 300 & Tug			\$70,560	
Demob CB 300 & Tug	10.00	0.08%	\$39,200.00	0.04%
CB 300 & Tug			\$39,200	
Jet/Airlift Pile Mud Plug	35.00	0.30%	\$339,791.59	0.33%
Derrick Barge 2000			\$304,792	
CB 400 & Tug			\$35,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Eureka

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Mobilize Abrasive Cutting Spread	1.00	0.01%	\$10,488.00	0.01%
Manual Calculation			\$1,375	
Manual Calculation			\$527	
Manual Calculation			\$6,000	
Manual Calculation			\$2,586	
Mobilize Dive Spread	4.00	0.03%	\$35,680.00	0.03%
DP Dive Boat			\$13,200	
Dive Basic Spread Saturation			\$12,660	
Abrasive Cutter Spread			\$2,500	
Pipeline Survey			\$920	
Rem. Operated Vehicle			\$6,400	
Sever Piles- Abrasive	161.04	1.37%	\$3,239,905.79	3.16%
Derrick Barge 2000			\$1,402,389	
DP Dive Boat			\$531,432	
Dive Basic Spread Saturation			\$509,692	
Pipeline Survey			\$37,039	
Abrasive Cutter Spread			\$100,650	
CB 400 & Tug			\$161,040	
Manual Calculation			\$240,000	
Rem. Operated Vehicle			\$257,664	



BSEE-POCSR
Platform Decommission Cost Breakdown
Eureka

Task	Task Hours		Task Cost	
Cut Jacket	722.00	6.12%	\$14,410,301.00	14.07%
Derrick Barge 2000			\$6,287,415	
DP Dive Boat			\$2,382,600	
Dive Basic Spread Saturation			\$2,285,130	
Pipeline Survey			\$166,060	
Abrasive Cutter Spread			\$451,250	
CB 400 & Tug			\$1,444,000	
Manual Calculation			\$238,646	
Rem. Operated Vehicle			\$1,155,200	
Remove Jacket - Meth 1	722.00	6.12%	\$14,171,655.00	13.84%
Derrick Barge 2000			\$6,287,415	
DP Dive Boat			\$2,382,600	
Dive Basic Spread Saturation			\$2,285,130	
Pipeline Survey			\$166,060	
Abrasive Cutter Spread			\$451,250	
CB 400 & Tug			\$1,444,000	
Rem. Operated Vehicle			\$1,155,200	
Demob CB 400 & Tug	10.00	0.08%	\$70,000.00	0.07%
CB 400 & Tug			\$70,000	
Pick Up DB Anchors	6.75	0.06%	\$58,781.23	0.06%
Derrick Barge 2000			\$58,781	



BSEE-POCSR

Platform Decommission Cost Breakdown

Eureka

Task		Task Hours		Task Cost	
Demob Dive Spread		4.60	0.04%	\$41,032.00	0.04%
DP Dive Boat	\$15,180				
Dive Basic Spread Saturation	\$14,559				
Abrasive Cutter Spread	\$2,875				
Pipeline Survey	\$1,058				
Rem. Operated Vehicle	\$7,360				
Demob DB 2000		0.00	0.00%	\$2,351,250.00	2.30%
Derrick Barge 2000	\$2,351,250				
Site Clearance - with Divers		72.00	0.61%	\$1,472,000.00	1.44%
Manual Calculation	\$1,472,000				
Offload CB 300		3600.00	30.52%	\$818,000.00	0.80%
Cargo Barge 300	\$738,000				
CB Damage Deduct	\$80,000				
Offload CB 400		5928.00	50.25%	\$1,681,280.00	1.64%
Cargo Barge 400	\$1,541,280				
CB Damage Deduct	\$140,000				
Demob Abrasive Cutting Spread		1.00	0.01%	\$10,488.00	0.01%
Manual Calculation	\$1,375				
Manual Calculation	\$527				
Manual Calculation	\$6,000				
Manual Calculation	\$2,586				



BSEE-POCSR

Platform Decommission Cost Breakdown

Eureka

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$373,589.00	0.36%
Manual Calculation			\$373,589	
Total	11427.14	96.87%	\$78,542,718.47	76.71%



BSEE-POCSR

Pipeline Information

Eureka Segment#:10" OOS

General Data

Water Depth:	700'
Origin / Terminus:	Terminus
Opposite End Name:	Elly
Opposite End Water Depth:	255'
Pipeline Operator:	Beta Operating Company, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	5.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:		Length:	8400'
Depth of Burial:		# Crossings:		Product:	Out of Service
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Eureka Segment#:12" OOS

General Data

Water Depth:	700'
Origin / Terminus:	Terminus
Opposite End Name:	Elly
Opposite End Water Depth:	225'
Pipeline Operator:	Beta Operating Company, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	5.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	8400'
Depth of Burial:		# Crossings:		Product:	Out of Service
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Eureka Segment#:3910301

General Data

Water Depth:	700'
Origin / Terminus:	Origin
Opposite End Name:	Elly
Opposite End Water Depth:	255'
Pipeline Operator:	Beta Operating Company, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	5.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:		Length:	8350'
Depth of Burial:		# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Eureka Segment#:4020301

General Data

Water Depth:	700'
Origin / Terminus:	Origin
Opposite End Name:	Elly
Opposite End Water Depth:	255'
Pipeline Operator:	Beta Operating Company, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	5.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:		Length:	8500'
Depth of Burial:		# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Eureka Segment#:4130301

General Data

Water Depth:	700'
Origin / Terminus:	Origin
Opposite End Name:	Elly
Opposite End Water Depth:	255'
Pipeline Operator:	Beta Operating Company, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	5.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:		Length:	8400'
Depth of Burial:		# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Eureka Segment#:10" OOS

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.41%	\$583,334	28.67%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.77%	\$22,035	1.08%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.61%	\$36,725	1.80%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	2.30	2.12%	\$16,894	0.83%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.85%	\$14,690	0.72%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Cut & Plug Pipeline	Cut & plug P/L at Eureka	<input checked="" type="checkbox"/>	11.55	10.66%	\$77,327	3.80%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.53%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.53%
Bury Pipeline	Bury P/L at Eureka	<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.53%
Reposition Vessel	Re-locate to Elly	<input checked="" type="checkbox"/>	3.16	2.92%	\$23,529	1.16%
Set Up Dive Boat	Set up at Elly	<input checked="" type="checkbox"/>	3.00	2.77%	\$20,085	0.99%
Cut & Plug Pipeline	Cut & plug P/L at Elly	<input checked="" type="checkbox"/>	11.55	10.66%	\$77,327	3.80%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.53%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.53%
Bury Pipeline	Burry P/L at Elly	<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.53%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.41%	\$583,334	28.67%
Task Total			90.82	83.80%	\$1,773,215	87.15%
Misc. Work Provision (15.00%)			13.16	12.15%	\$89,688	4.41%
Weather Provision (5.00%)			4.39	4.05%	\$29,896	1.47%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$141,857	6.97%
Total:			108.37	100.00%	\$2,034,657	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Eureka Segment#:12" OOS

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.41%	\$583,334	28.67%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.77%	\$22,035	1.08%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.61%	\$36,725	1.80%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	2.33	2.15%	\$17,114	0.84%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.84%	\$14,690	0.72%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Cut & Plug Pipeline	Cut & plug P/L at Eureka	<input checked="" type="checkbox"/>	11.55	10.65%	\$77,327	3.80%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.10%	\$51,552	2.53%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.10%	\$51,552	2.53%
Bury Pipeline	Bury P/L at Eureka	<input checked="" type="checkbox"/>	7.70	7.10%	\$51,552	2.53%
Reposition Vessel	Re-locate to Elly	<input checked="" type="checkbox"/>	3.16	2.91%	\$23,529	1.16%
Set Up Dive Boat	Set up at Elly	<input checked="" type="checkbox"/>	3.00	2.77%	\$20,085	0.99%
Cut & Plug Pipeline	Cut & plug P/L at Elly	<input checked="" type="checkbox"/>	11.55	10.65%	\$77,327	3.80%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.10%	\$51,552	2.53%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.10%	\$51,552	2.53%
Bury Pipeline	Burry P/L at Elly	<input checked="" type="checkbox"/>	7.70	7.10%	\$51,552	2.53%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.41%	\$583,334	28.67%
Task Total			90.85	83.80%	\$1,773,436	87.15%
Misc. Work Provision (15.00%)			13.17	12.15%	\$89,721	4.41%
Weather Provision (5.00%)			4.39	4.05%	\$29,907	1.47%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$141,875	6.97%
Total:			108.41	100.00%	\$2,034,939	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Eureka Segment#:3910301

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.41%	\$583,334	28.57%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.77%	\$22,035	1.08%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.61%	\$36,725	1.80%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	2.28	2.10%	\$16,747	0.82%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.85%	\$14,690	0.72%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Cut & Plug Pipeline	Cut & plug P/L at Eureka	<input checked="" type="checkbox"/>	11.55	10.66%	\$77,327	3.79%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Bury Pipeline	Bury P/L at Eureka	<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Reposition Vessel	Re-locate to Elly	<input checked="" type="checkbox"/>	3.16	2.92%	\$23,529	1.15%
Set Up Dive Boat	Set up at Elly	<input checked="" type="checkbox"/>	3.00	2.77%	\$20,085	0.98%
Cut & Plug Pipeline	Cut & plug P/L at Elly	<input checked="" type="checkbox"/>	11.55	10.66%	\$77,327	3.79%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Bury Pipeline	Burry P/L at Elly	<input checked="" type="checkbox"/>	7.70	7.11%	\$57,334	2.81%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.41%	\$583,334	28.57%
Task Total			90.80	83.80%	\$1,778,851	87.12%
Misc. Work Provision (15.00%)			13.16	12.15%	\$90,534	4.43%
Weather Provision (5.00%)			4.39	4.05%	\$30,178	1.48%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$142,308	6.97%
Total:			108.35	100.00%	\$2,041,871	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Eureka Segment#:4020301

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.43%	\$583,334	28.68%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.80%	\$22,035	1.08%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.66%	\$36,725	1.81%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	1.42	1.32%	\$10,430	0.51%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.86%	\$14,690	0.72%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Cut & Plug Pipeline	Cut & plug P/L at Eureka	<input checked="" type="checkbox"/>	11.55	10.76%	\$77,327	3.80%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.18%	\$51,552	2.53%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.18%	\$51,552	2.53%
Bury Pipeline	Bury P/L at Eureka	<input checked="" type="checkbox"/>	7.70	7.18%	\$51,552	2.53%
Reposition Vessel	Re-locate to Elly	<input checked="" type="checkbox"/>	3.16	2.94%	\$23,529	1.16%
Set Up Dive Boat	Set up at Elly	<input checked="" type="checkbox"/>	3.00	2.80%	\$20,085	0.99%
Cut & Plug Pipeline	Cut & plug P/L at Elly	<input checked="" type="checkbox"/>	11.55	10.76%	\$77,327	3.80%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.18%	\$51,552	2.53%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.18%	\$51,552	2.53%
Bury Pipeline	Burry P/L at Elly	<input checked="" type="checkbox"/>	7.70	7.18%	\$57,334	2.82%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.43%	\$583,334	28.68%
Task Total			89.94	83.81%	\$1,772,534	87.15%
Misc. Work Provision (15.00%)			13.03	12.14%	\$89,586	4.40%
Weather Provision (5.00%)			4.34	4.05%	\$29,862	1.47%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$141,803	6.97%
Total:			107.32	100.00%	\$2,033,785	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Eureka Segment#:4130301

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.41%	\$583,334	28.57%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.77%	\$22,035	1.08%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.61%	\$36,725	1.80%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	2.29	2.11%	\$16,820	0.82%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.85%	\$14,690	0.72%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	0.21%
Cut & Plug Pipeline	Cut & plug P/L at Eureka	<input checked="" type="checkbox"/>	11.55	10.66%	\$77,327	3.79%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Bury Pipeline	Bury P/L at Eureka	<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Reposition Vessel	Re-locate to Elly	<input checked="" type="checkbox"/>	3.16	2.92%	\$23,529	1.15%
Set Up Dive Boat	Set up at Elly	<input checked="" type="checkbox"/>	3.00	2.77%	\$20,085	0.98%
Cut & Plug Pipeline	Cut & plug P/L at Elly	<input checked="" type="checkbox"/>	11.55	10.66%	\$77,327	3.79%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.11%	\$51,552	2.52%
Bury Pipeline	Burry P/L at Elly	<input checked="" type="checkbox"/>	7.70	7.11%	\$57,334	2.81%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	1.41%	\$583,334	28.57%
Task Total			90.81	83.80%	\$1,778,925	87.12%
Misc. Work Provision (15.00%)			13.16	12.15%	\$90,545	4.43%
Weather Provision (5.00%)			4.39	4.05%	\$30,182	1.48%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$142,314	6.97%
Total:			108.36	100.00%	\$2,041,965	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Eureka Segment#:10" OOS

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$7,995	0.41%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$277,760	14.31%
DP Dive Boat	\$3,300	per Hour	\$289,608	14.92%
Manual Calculation	\$0	Independently Calculated	\$1,175,294	60.56%
Pipeline Surveying	\$230	per Hour	\$20,185	1.04%
Saturation Decompression	\$751	per Hour	\$2,373	0.12%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Eureka Segment#:12" OOS

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$8,015	0.41%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$277,855	14.32%
DP Dive Boat	\$3,300	per Hour	\$289,707	14.93%
Manual Calculation	\$0	Independently Calculated	\$1,175,294	60.55%
Pipeline Surveying	\$230	per Hour	\$20,192	1.04%
Saturation Decompression	\$751	per Hour	\$2,373	0.12%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Eureka Segment#:3910301

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$7,982	0.41%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$277,697	14.26%
DP Dive Boat	\$3,300	per Hour	\$289,542	14.86%
Manual Calculation	\$0	Independently Calculated	\$1,175,294	60.34%
Pipeline Surveying	\$230	per Hour	\$20,180	1.04%
Saturation Decompression	\$751	per Hour	\$8,156	0.42%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Eureka Segment#:4020301

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$7,423	0.38%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$274,975	14.18%
DP Dive Boat	\$3,300	per Hour	\$286,704	14.78%
Manual Calculation	\$0	Independently Calculated	\$1,175,294	60.59%
Pipeline Surveying	\$230	per Hour	\$19,982	1.03%
Saturation Decompression	\$751	per Hour	\$8,156	0.42%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Eureka Segment#:4130301

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$7,989	0.41%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$277,729	14.26%
DP Dive Boat	\$3,300	per Hour	\$289,575	14.87%
Manual Calculation	\$0	Independently Calculated	\$1,175,294	60.34%
Pipeline Surveying	\$230	per Hour	\$20,183	1.04%
Saturation Decompression	\$751	per Hour	\$8,156	0.42%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Eureka Segment#:10" OOS

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation		\$4,313
Mobilize Dive Boat	1.53 1.41%	\$583,334 30.06%
Manual Calculation		\$583,334
Set Up Dive Boat	3.00 2.77%	\$22,035 1.14%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 4.61%	\$36,725 1.89%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	2.30 2.12%	\$16,894 0.87%
DP Dive Boat		\$7,590
Dive Basic Spread Saturation		\$7,280
Decommissioning Crew		\$1,495
Pipeline Surveying		\$529
Derig Decomm Equipment	2.00 1.85%	\$14,690 0.76%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation		\$4,313
Cut & Plug Pipeline	11.55 10.66%	\$77,327 3.98%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



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BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	7.11%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.11%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	7.11%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.16	2.92%	\$23,529	1.21%
DP Dive Boat	\$10,428				
Dive Basic Spread Saturation	\$10,001				
Pipeline Surveying	\$727				
Saturation Decompression	\$2,373				
Set Up Dive Boat		3.00	2.77%	\$20,085	1.03%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	10.66%	\$77,327	3.98%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	7.11%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.11%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	7.11%	\$51,552	2.66%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Demob Dive Boat		1.53	1.41%	\$583,334	30.06%	
Manual Calculation	\$583,334					
		Total	90.82	83.80%	\$1,773,215.36	91.37%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Eureka Segment#:12" OOS

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation		\$4,313
Mobilize Dive Boat	1.53 1.41%	\$583,334 30.05%
Manual Calculation		\$583,334
Set Up Dive Boat	3.00 2.77%	\$22,035 1.14%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 4.61%	\$36,725 1.89%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	2.33 2.15%	\$17,114 0.88%
DP Dive Boat		\$7,689
Dive Basic Spread Saturation		\$7,374
Decommissioning Crew		\$1,515
Pipeline Surveying		\$536
Derig Decomm Equipment	2.00 1.84%	\$14,690 0.76%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation		\$4,313
Cut & Plug Pipeline	11.55 10.65%	\$77,327 3.98%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	7.10%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.10%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	7.10%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.16	2.91%	\$23,529	1.21%
DP Dive Boat	\$10,428				
Dive Basic Spread Saturation	\$10,001				
Pipeline Surveying	\$727				
Saturation Decompression	\$2,373				
Set Up Dive Boat		3.00	2.77%	\$20,085	1.03%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	10.65%	\$77,327	3.98%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	7.10%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.10%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



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BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	7.10%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
<hr/>					
Demob Dive Boat		1.53	1.41%	\$583,334	30.05%
Manual Calculation	\$583,334				
<hr/>					
		Total	90.85	83.80%	\$1,773,435.71
					91.37%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Eureka Segment#:3910301

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation		\$4,313
Mobilize Dive Boat	1.53 1.41%	\$583,334 29.95%
Manual Calculation		\$583,334
Set Up Dive Boat	3.00 2.77%	\$22,035 1.13%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 4.61%	\$36,725 1.89%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	2.28 2.10%	\$16,747 0.86%
DP Dive Boat		\$7,524
Dive Basic Spread Saturation		\$7,216
Decommissioning Crew		\$1,482
Pipeline Surveying		\$524
Derig Decomm Equipment	2.00 1.85%	\$14,690 0.75%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation		\$4,313
Cut & Plug Pipeline	11.55 10.66%	\$77,327 3.97%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.16	2.92%	\$23,529	1.21%
DP Dive Boat	\$10,428				
Dive Basic Spread Saturation	\$10,001				
Pipeline Surveying	\$727				
Saturation Decompression	\$2,373				
Set Up Dive Boat		3.00	2.77%	\$20,085	1.03%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	10.66%	\$77,327	3.97%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	7.11%	\$57,334	2.94%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Saturation Decompression	\$5,783					
Demob Dive Boat		1.53	1.41%	\$583,334	29.95%	
Manual Calculation	\$583,334					
		Total	90.80	83.80%	\$1,778,851.16	91.32%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Eureka Segment#:4020301

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation	\$4,313	
Mobilize Dive Boat	1.53 1.43%	\$583,334 30.07%
Manual Calculation	\$583,334	
Set Up Dive Boat	3.00 2.80%	\$22,035 1.14%
DP Dive Boat	\$9,900	
Dive Basic Spread Saturation	\$9,495	
Decommissioning Crew	\$1,950	
Pipeline Surveying	\$690	
Rig Up Decomm Equipment	5.00 4.66%	\$36,725 1.89%
DP Dive Boat	\$16,500	
Dive Basic Spread Saturation	\$15,825	
Decommissioning Crew	\$3,250	
Pipeline Surveying	\$1,150	
Pig & Flush Pipeline	1.42 1.32%	\$10,430 0.54%
DP Dive Boat	\$4,686	
Dive Basic Spread Saturation	\$4,494	
Decommissioning Crew	\$923	
Pipeline Surveying	\$327	
Derig Decomm Equipment	2.00 1.86%	\$14,690 0.76%
DP Dive Boat	\$6,600	
Dive Basic Spread Saturation	\$6,330	
Decommissioning Crew	\$1,300	
Pipeline Surveying	\$460	
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation	\$4,313	
Cut & Plug Pipeline	11.55 10.76%	\$77,327 3.99%
DP Dive Boat	\$38,115	
Dive Basic Spread Saturation	\$36,556	
Pipeline Surveying	\$2,657	



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	7.18%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.18%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	7.18%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.16	2.94%	\$23,529	1.21%
DP Dive Boat	\$10,428				
Dive Basic Spread Saturation	\$10,001				
Pipeline Surveying	\$727				
Saturation Decompression	\$2,373				
Set Up Dive Boat		3.00	2.80%	\$20,085	1.04%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	10.76%	\$77,327	3.99%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	7.18%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.18%	\$51,552	2.66%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	7.18%	\$57,334	2.96%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Saturation Decompression	\$5,783					
<hr/>						
Demob Dive Boat		1.53	1.43%	\$583,334	30.07%	
Manual Calculation	\$583,334					
<hr/>						
		Total	89.94	83.81%	\$1,772,534.46	91.38%
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BSEE-POCSR

Pipeline Decommission Cost Breakdown

Eureka Segment#:4130301

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation		\$4,313
Mobilize Dive Boat	1.53 1.41%	\$583,334 29.95%
Manual Calculation		\$583,334
Set Up Dive Boat	3.00 2.77%	\$22,035 1.13%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 4.61%	\$36,725 1.89%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	2.29 2.11%	\$16,820 0.86%
DP Dive Boat		\$7,557
Dive Basic Spread Saturation		\$7,248
Decommissioning Crew		\$1,489
Pipeline Surveying		\$527
Derig Decomm Equipment	2.00 1.85%	\$14,690 0.75%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,313 0.22%
Manual Calculation		\$4,313
Cut & Plug Pipeline	11.55 10.66%	\$77,327 3.97%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.16	2.92%	\$23,529	1.21%
DP Dive Boat	\$10,428				
Dive Basic Spread Saturation	\$10,001				
Pipeline Surveying	\$727				
Saturation Decompression	\$2,373				
Set Up Dive Boat		3.00	2.77%	\$20,085	1.03%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	10.66%	\$77,327	3.97%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.11%	\$51,552	2.65%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	7.11%	\$57,334	2.94%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Saturation Decompression	\$5,783					
Demob Dive Boat		1.53	1.41%	\$583,334	29.95%	
Manual Calculation	\$583,334					
		Total	90.81	83.80%	\$1,778,924.61	91.32%



BSEE-POCSR

Well Decommission Task Information

Eureka Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$8,906,812 78.12%
Task Total			0.00	\$8,906,812 78.12%
Misc. Work Provision (15.00%)			0.00	\$1,336,022 11.72%
Weather Provision (5.00%)			0.00	\$445,341 3.91%
Consumables				\$0 0.00%
Waste Disposal				\$0 0.00%
Structure & Equipment Disposal				\$0 0.00%
Offloading				\$0 0.00%
Storage / Scrapping				\$0 0.00%
Reef Donation				\$0 0.00%
Cost of Engineering (8.00%)				\$712,545 6.25%
Total:			0.00 100.00%	\$11,400,719 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Eureka Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$8,906,812 78.12%



TSB OFFSHORE

BSEE-POCSR

Well Decommission Cost Breakdown

Eureka Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$8,906,812	78.12%
Manual Calculation	\$8,906,812				
	Total	0.00	0.00%	\$8,906,812	78.12%



BSEE-POCSR

Platform Salvage Option

Gail

COMPLETE REMOVAL

-Platform Gail will be removed along with Platforms Grace, Harvest, Hermosa, Hidalgo and Irene.

-Platform Gail is an 8-pile platform installed in 1987 in 739' of water.

-The estimated removal weight is the deck weight is 7,693 tons and the jacket weight is 18,300 tons.

-The platform has a total of 27 wells that will be plugged and abandoned.

-The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.

-Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.

-A total of 29 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.

-A lifting barge will be outfitted and utilized to lift pieces from the jacket structure. The loads will then be transferred midwater to the DB2000 to complete the lift and place on cargo barge.

-The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.

-The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.

-Four 300' cargo barges will transport the deck modules to shore and six 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 10 cargo barge trips will be required.



BSEE-POCSR

Platform Salvage Option

Gail

-The three pipelines (1 oil, 2 gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and



BSEE-POCSR

Platform Salvage Option

Gail

Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$103,834,843

Estimated Decommissioning Net Cost = \$103,834,843



TSB OFFSHORE

BSEE-POCSR

Basic Information

Gail

General Data

Platform:	Gail
Function:	SELF CONTAINED
Type:	Steel
Water Depth:	739'
Pre 461H?:	No
Year Installed:	1987
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0205
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	27
# Pipelines to Abandon:	3
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Venoco, Inc.	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$92,338,880	\$92,338,880
Well Plugging & Abandonment:	\$7,298,247	\$7,298,247
Pipeline Abandonment:	\$4,197,716	\$4,197,716
Total Decommissioning Cost:	\$103,834,843	\$103,834,843



BSEE-POCSR

Platform Information

Gail

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	60"		Yes	No	
Skirt/Braced	12	72"		No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	36
Number Installed:	29
Outside Diameter:	24"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	18300.00		
Jacket Installation Date:	1/1/1987		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	7693 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1987
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Gail

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Deck > 500T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$14,650,776.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Gail

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$4,486,798.00	4.86%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.01%	\$1,190,846.00	1.29%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.01%	\$6,566,624.00	7.11%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.01%	\$3,669,809.00	3.97%
Platform Abandonment - Manual Calculation	Lifting barge costs	<input type="checkbox"/>	0.00	0.00%	\$2,404,720.00	2.60%
Mobilize DB 2000	Mob from Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	1.70%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 4)	<input type="checkbox"/>	17.00	0.19%	\$122,640.00	0.13%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 6) + 1 lifting barge	<input type="checkbox"/>	17.00	0.19%	\$217,000.00	0.24%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.07%	\$58,781.23	0.06%
Cut Deck/Equip/Misc	Seperate 7 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.26%	\$232,519.91	0.25%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.26%	\$232,519.91	0.25%
Remove 8 Pile Deck	Remove 8 Pile Deck, 7 modules	<input checked="" type="checkbox"/>	48.00	0.53%	\$465,039.81	0.50%
Demob CB 300 & Tug	Demob to Port of LA (Qty 4)	<input type="checkbox"/>	17.00	0.19%	\$66,640.00	0.07%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	35.00	0.39%	\$339,791.59	0.37%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.01%	\$8,391.00	0.01%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	10.80	0.12%	\$96,336.00	0.10%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	145.50	1.60%	\$2,910,422.00	3.15%
Cut Jacket	41 Hours per section, times 19 section(s), per MMS	<input checked="" type="checkbox"/>	779.00	8.59%	\$5,389,909.00	16.67%
Remove Jacket - Meth 1	53 Hours per section, times 19 section(s), per MMS	<input checked="" type="checkbox"/>	1007.00	11.10%	\$9,765,728.00	21.41%
Demob CB 400 & Tug	Demob to Port of LA (Qty 6) + 1 lifting barge	<input type="checkbox"/>	17.00	0.19%	\$119,000.00	0.13%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.07%	\$58,781.23	0.06%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	10.80	0.12%	\$96,336.00	0.10%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.01%	\$8,391.00	0.01%
Demob DB 2000	Demob to Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	1.70%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	0.79%	\$1,472,000.00	1.59%
Offload CB 300		<input type="checkbox"/>	1296.00	14.29%	\$345,680.00	0.37%
Offload CB 400		<input type="checkbox"/>	4992.00	55.05%	\$1,437,920.00	1.56%
Task Total			8530.60	94.07%	\$4,897,623.68	70.28%
Misc. Work Provision (15.00%)			322.5	3.56%	\$7,674,289.00	8.31%
Weather Contingency (10.00%)			215	2.37%	\$5,116,193.00	5.54%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Gail

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal	14,650,780.00	15.87%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			9068.10 100.00%	2,338,885.68 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Gail

Resource Used	Unit Cost	Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$1,220,688	1.32%
Cargo Barge 300	\$4,920 per Day per Barge	\$265,680	0.29%
Cargo Barge 400	\$6,240 per Day per Barge	\$1,297,920	1.41%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$227,360	0.25%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$3,990,500	4.32%
CB Damage Deduct	\$20,000 per Cargo Barge	\$220,000	0.24%
Derrick Barge 2000	\$8,708 per Hour per barge	\$21,213,493	22.97%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$6,181,562	6.69%
DP Dive Boat	\$3,300 Per Hour	\$6,445,230	6.98%
Manual Calculation	\$0 Independently Calculated	\$19,807,579	21.45%
Pile Abrasive Cut 49 to 69 inches	\$5,000 per Cut	\$200,000	0.22%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$99,440	0.11%
Pipeline Survey	\$230 per Hour	\$449,213	0.49%
Rem. Operated Vehicle	\$800 per Hour	\$3,124,960	3.38%
Rig Up CB 300	\$14,000 per Barge	\$56,000	0.06%
Rig Up CB 400	\$14,000 per Barge	\$98,000	0.11%



BSEE-POCSR

Platform Decommission Cost Breakdown

Gail

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$4,486,798.00	4.86%
Manual Calculation			\$4,486,798	
Platform Abandonment - Manual Calculation	1.00	0.01%	\$1,190,846.00	1.29%
Manual Calculation			\$1,190,846	
Sever Conductors- Abrasive	1.00	0.01%	\$6,566,624.00	7.11%
Manual Calculation			\$6,566,624	
Platform Removal Preparation	1.00	0.01%	\$3,669,809.00	3.97%
Manual Calculation			\$3,669,809	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$2,404,720.00	2.60%
Manual Calculation			\$2,404,720	
Mobilize DB 2000	0.00	0.00%	\$1,567,500.00	1.70%
Derrick Barge 2000			\$1,567,500	
Mobilize CB 300 & Tug	17.00	0.19%	\$122,640.00	0.13%
CB 300 & Tug			\$66,640	
Rig Up CB 300			\$56,000	
Mobilize CB 400 & Tug	17.00	0.19%	\$217,000.00	0.24%
Rig Up CB 400			\$98,000	
CB 400 & Tug			\$119,000	



BSEE-POCSR
Platform Decommission Cost Breakdown
Gail

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Setup Derrick Barge	6.75	0.07%	\$58,781.23	0.06%
Derrick Barge 2000			\$58,781	
Cut Deck/Equip/Misc	24.00	0.26%	\$232,519.91	0.25%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove Equipment	24.00	0.26%	\$232,519.91	0.25%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove 8 Pile Deck	48.00	0.53%	\$465,039.81	0.50%
Derrick Barge 2000			\$418,000	
CB 300 & Tug			\$47,040	
Demob CB 300 & Tug	17.00	0.19%	\$66,640.00	0.07%
CB 300 & Tug			\$66,640	
Jet/Airlift Pile Mud Plug	35.00	0.39%	\$339,791.59	0.37%
Derrick Barge 2000			\$304,792	
CB 400 & Tug			\$35,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Gail

Task		Task Hours		Task Cost	
Mobilize Abrasive Cutting Spread		1.00	0.01%	\$8,391.00	0.01%
Manual Calculation	\$1,100				
Manual Calculation	\$422				
Manual Calculation	\$4,800				
Manual Calculation	\$2,069				
Mobilize Dive Spread		10.80	0.12%	\$96,336.00	0.10%
DP Dive Boat	\$35,640				
Dive Basic Spread Saturation	\$34,182				
Abrasive Cutter Spread	\$6,750				
Pipeline Survey	\$2,484				
Rem. Operated Vehicle	\$17,280				
Sever Piles- Abrasive		145.50	1.60%	\$2,910,422.00	3.15%
Derrick Barge 2000	\$1,267,062				
DP Dive Boat	\$480,150				
Dive Basic Spread Saturation	\$460,508				
Pipeline Survey	\$33,465				
Abrasive Cutter Spread	\$90,938				
CB 400 & Tug	\$145,500				
Pile Abrasive Cut 49 to 69 inches	\$200,000				
Rem. Operated Vehicle	\$232,800				



BSEE-POCSR

Platform Decommission Cost Breakdown

Gail

Task		Task Hours		Task Cost	
Cut Jacket		779.00	8.59%	\$15,389,909.00	16.67%
Derrick Barge 2000	\$6,783,789				
DP Dive Boat	\$2,570,700				
Dive Basic Spread Saturation	\$2,465,535				
Pipeline Survey	\$179,170				
Abrasive Cutter Spread	\$486,875				
CB 400 & Tug	\$1,558,000				
Pile Abrasive Cut 7 to 48 inches	\$99,440				
Rem. Operated Vehicle	\$1,246,400				
Remove Jacket - Meth 1		1007.00	11.10%	\$19,765,728.00	21.41%
Derrick Barge 2000	\$8,769,288				
DP Dive Boat	\$3,323,100				
Dive Basic Spread Saturation	\$3,187,155				
Pipeline Survey	\$231,610				
Abrasive Cutter Spread	\$629,375				
CB 400 & Tug	\$2,014,000				
Rem. Operated Vehicle	\$1,611,200				
Demob CB 400 & Tug		17.00	0.19%	\$119,000.00	0.13%
CB 400 & Tug	\$119,000				
Pick Up DB Anchors		6.75	0.07%	\$58,781.23	0.06%
Derrick Barge 2000	\$58,781				



BSEE-POCSR

Platform Decommission Cost Breakdown

Gail

Task		Task Hours		Task Cost	
Demob Dive Spread		10.80	0.12%	\$96,336.00	0.10%
DP Dive Boat	\$35,640				
Dive Basic Spread Saturation	\$34,182				
Abrasive Cutter Spread	\$6,750				
Pipeline Survey	\$2,484				
Rem. Operated Vehicle	\$17,280				
Demob Abrasive Cutting Spread		1.00	0.01%	\$8,391.00	0.01%
Manual Calculation	\$1,100				
Manual Calculation	\$422				
Manual Calculation	\$4,800				
Manual Calculation	\$2,069				
Demob DB 2000		0.00	0.00%	\$1,567,500.00	1.70%
Derrick Barge 2000	\$1,567,500				
Site Clearance - with Divers		72.00	0.79%	\$1,472,000.00	1.59%
Manual Calculation	\$1,472,000				
Offload CB 300		1296.00	14.29%	\$345,680.00	0.37%
Cargo Barge 300	\$265,680				
CB Damage Deduct	\$80,000				
Offload CB 400		4992.00	55.05%	\$1,437,920.00	1.56%
Cargo Barge 400	\$1,297,920				
CB Damage Deduct	\$140,000				
Total		8530.60	94.07%	\$64,897,623.68	70.28%



BSEE-POCSR

Pipeline Information

Gail (Ver1) Segment#:5110205

General Data

Water Depth:	739'
Origin / Terminus:	Origin
Opposite End Name:	Grace
Opposite End Water Depth:	318'
Pipeline Operator:	Venoco, Inc.
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:		Length:	32500'
Depth of Burial:		# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



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BSEE-POCSR

Pipeline Information

Gail (Ver1) Segment#:5220205

General Data

Water Depth:	739'
Origin / Terminus:	Origin
Opposite End Name:	Grace
Opposite End Water Depth:	318'
Pipeline Operator:	Venoco, Inc.
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:		Length:	32000'
Depth of Burial:		# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



TSB OFFSHORE

BSEE-POCSR

Pipeline Information

Gail (Ver1) Segment#:5300205

General Data

Water Depth:	739'
Origin / Terminus:	Origin
Opposite End Name:	Grace
Opposite End Water Depth:	318'
Pipeline Operator:	Venoco, Inc.
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:		Length:	33200'
Depth of Burial:		# Crossings:		Product:	H2S
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Gail Segment#:5110205

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	0.77	0.65%	\$250,000	17.87%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.55%	\$22,035	1.57%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.25%	\$36,725	2.62%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	7.04	5.98%	\$51,709	3.70%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.70%	\$14,690	1.05%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Cut & Plug Pipeline	Cut & plug P/L at Gail	<input checked="" type="checkbox"/>	11.55	9.81%	\$77,327	5.53%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.54%	\$51,552	3.68%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.54%	\$51,552	3.68%
Bury Pipeline	Burry P/L at Gail	<input checked="" type="checkbox"/>	7.70	6.54%	\$51,552	3.68%
Reposition Vessel	Re-locate to Grace	<input checked="" type="checkbox"/>	3.62	3.07%	\$26,955	1.93%
Set Up Dive Boat	Set up at Grace	<input checked="" type="checkbox"/>	3.00	2.55%	\$20,085	1.44%
Cut & Plug Pipeline	Cut & plug P/L at Grace	<input checked="" type="checkbox"/>	11.55	9.81%	\$77,327	5.53%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.54%	\$51,552	3.68%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.54%	\$51,552	3.68%
Bury Pipeline	Burry P/L at Grace	<input checked="" type="checkbox"/>	7.70	6.54%	\$57,334	4.10%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	0.77	0.65%	\$250,000	17.87%
Task Total			94.50	80.26%	\$1,146,873	81.97%
Misc. Work Provision (15.00%)			13.94	11.84%	\$96,292	6.88%
Weather Provision (10.00%)			9.30	7.90%	\$64,194	4.59%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$91,750	6.56%
Total:			117.74	100.00%	\$1,399,108	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Gail Segment#:5220205

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	0.77	0.65%	\$250,000	17.88%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.55%	\$22,035	1.58%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.25%	\$36,725	2.63%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	6.93	5.89%	\$50,901	3.64%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.70%	\$14,690	1.05%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Cut & Plug Pipeline	Cut & plug P/L at Gail	<input checked="" type="checkbox"/>	11.55	9.82%	\$77,327	5.53%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.55%	\$51,552	3.69%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.55%	\$51,552	3.69%
Bury Pipeline	Burry P/L at Gail	<input checked="" type="checkbox"/>	7.70	6.55%	\$51,552	3.69%
Reposition Vessel	Re-locate to Grace	<input checked="" type="checkbox"/>	3.62	3.08%	\$26,955	1.93%
Set Up Dive Boat	Set up at Grace	<input checked="" type="checkbox"/>	3.00	2.55%	\$20,085	1.44%
Cut & Plug Pipeline	Cut & plug P/L at Grace	<input checked="" type="checkbox"/>	11.55	9.82%	\$77,327	5.53%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.55%	\$51,552	3.69%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.55%	\$51,552	3.69%
Bury Pipeline	Burry P/L at Grace	<input checked="" type="checkbox"/>	7.70	6.55%	\$57,334	4.10%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	0.77	0.65%	\$250,000	17.88%
Task Total			94.39	80.26%	\$1,146,065	81.98%
Misc. Work Provision (15.00%)			13.93	11.84%	\$96,170	6.88%
Weather Provision (10.00%)			9.29	7.90%	\$64,114	4.59%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$91,685	6.56%
Total:			117.60	100.00%	\$1,398,034	100.00%



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Pipeline Decommission Task Information

Gail Segment#:5300205

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	0.77	0.65%	\$250,000	17.85%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.54%	\$22,035	1.57%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.24%	\$36,725	2.62%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	7.19	6.10%	\$52,811	3.77%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.70%	\$14,690	1.05%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Cut & Plug Pipeline	Cut & plug P/L at Gail	<input checked="" type="checkbox"/>	11.55	9.79%	\$77,327	5.52%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.53%	\$51,552	3.68%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.53%	\$51,552	3.68%
Bury Pipeline	Burry P/L at Gail	<input checked="" type="checkbox"/>	7.70	6.53%	\$51,552	3.68%
Reposition Vessel	Re-locate to Grace	<input checked="" type="checkbox"/>	3.62	3.07%	\$26,955	1.92%
Set Up Dive Boat	Set up at Grace	<input checked="" type="checkbox"/>	3.00	2.54%	\$20,085	1.43%
Cut & Plug Pipeline	Cut & plug P/L at Grace	<input checked="" type="checkbox"/>	11.55	9.79%	\$77,327	5.52%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.53%	\$51,552	3.68%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.53%	\$51,552	3.68%
Bury Pipeline	Burry P/L at Grace	<input checked="" type="checkbox"/>	7.70	6.53%	\$57,334	4.09%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	0.77	0.65%	\$250,000	17.85%
Task Total			94.65	80.26%	\$1,147,974	81.96%
Misc. Work Provision (15.00%)			13.97	11.84%	\$96,457	6.89%
Weather Provision (10.00%)			9.31	7.90%	\$64,305	4.59%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$91,838	6.56%
Total:			117.93	100.00%	\$1,400,574	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Gail Segment#:5110205

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$11,076	0.82%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$294,218	21.65%
DP Dive Boat	\$3,300	per Hour	\$306,768	22.58%
Manual Calculation	\$0	Independently Calculated	\$504,928	37.16%
Pipeline Surveying	\$230	per Hour	\$21,381	1.57%
Saturation Decompression	\$751	per Hour	\$8,501	0.63%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Gail Segment#:5220205

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$11,005	0.81%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$293,870	21.65%
DP Dive Boat	\$3,300	per Hour	\$306,405	22.57%
Manual Calculation	\$0	Independently Calculated	\$504,928	37.19%
Pipeline Surveying	\$230	per Hour	\$21,356	1.57%
Saturation Decompression	\$751	per Hour	\$8,501	0.63%



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BSEE-POCSR

Pipeline Decommission Resources Breakdown

Gail Segment#:5300205

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$11,174	0.82%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$294,693	21.67%
DP Dive Boat	\$3,300	per Hour	\$307,263	22.59%
Manual Calculation	\$0	Independently Calculated	\$504,928	37.12%
Pipeline Surveying	\$230	per Hour	\$21,415	1.57%
Saturation Decompression	\$751	per Hour	\$8,501	0.63%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Gail Segment#:5110205

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.18%
Manual Calculation		\$2,464
Mobilize Dive Boat	0.77 0.65%	\$250,000 18.40%
Manual Calculation		\$250,000
Set Up Dive Boat	3.00 2.55%	\$22,035 1.62%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 4.25%	\$36,725 2.70%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	7.04 5.98%	\$51,709 3.81%
DP Dive Boat		\$23,232
Dive Basic Spread Saturation		\$22,282
Decommissioning Crew		\$4,576
Pipeline Surveying		\$1,619
Derig Decomm Equipment	2.00 1.70%	\$14,690 1.08%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.18%
Manual Calculation		\$2,464
Cut & Plug Pipeline	11.55 9.81%	\$77,327 5.69%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	6.54%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.54%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	6.54%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.62	3.07%	\$26,955	1.98%
DP Dive Boat	\$11,946				
Dive Basic Spread Saturation	\$11,457				
Pipeline Surveying	\$833				
Saturation Decompression	\$2,719				
Set Up Dive Boat		3.00	2.55%	\$20,085	1.48%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	9.81%	\$77,327	5.69%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	6.54%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.54%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



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Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	6.54%	\$57,334	4.22%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Saturation Decompression	\$5,783					
<hr/>						
Demob Dive Boat		0.77	0.65%	\$250,000	18.40%	
Manual Calculation	\$250,000					
<hr/>						
		Total	94.50	80.26%	\$1,146,872.52	84.41%
<hr/> <hr/>						



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Gail Segment#:5220205

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.18%
Manual Calculation	\$2,464				
Mobilize Dive Boat		0.77	0.65%	\$250,000	18.41%
Manual Calculation	\$250,000				
Set Up Dive Boat		3.00	2.55%	\$22,035	1.62%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Decommissioning Crew	\$1,950				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	4.25%	\$36,725	2.71%
DP Dive Boat	\$16,500				
Dive Basic Spread Saturation	\$15,825				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		6.93	5.89%	\$50,901	3.75%
DP Dive Boat	\$22,869				
Dive Basic Spread Saturation	\$21,933				
Decommissioning Crew	\$4,505				
Pipeline Surveying	\$1,594				
Derig Decomm Equipment		2.00	1.70%	\$14,690	1.08%
DP Dive Boat	\$6,600				
Dive Basic Spread Saturation	\$6,330				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.18%
Manual Calculation	\$2,464				
Cut & Plug Pipeline		11.55	9.82%	\$77,327	5.70%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				



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Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	6.55%	\$51,552	3.80%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.55%	\$51,552	3.80%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	6.55%	\$51,552	3.80%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.62	3.08%	\$26,955	1.99%
DP Dive Boat	\$11,946				
Dive Basic Spread Saturation	\$11,457				
Pipeline Surveying	\$833				
Saturation Decompression	\$2,719				
Set Up Dive Boat		3.00	2.55%	\$20,085	1.48%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	9.82%	\$77,327	5.70%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	6.55%	\$51,552	3.80%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.55%	\$51,552	3.80%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	6.55%	\$57,334	4.22%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Saturation Decompression	\$5,783					
Demob Dive Boat		0.77	0.65%	\$250,000	18.41%	
Manual Calculation	\$250,000					
		Total	94.39	80.26%	\$1,146,064.57	84.42%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Gail Segment#:5300205

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.18%
Manual Calculation	\$2,464				
Mobilize Dive Boat		0.77	0.65%	\$250,000	18.38%
Manual Calculation	\$250,000				
Set Up Dive Boat		3.00	2.54%	\$22,035	1.62%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Decommissioning Crew	\$1,950				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	4.24%	\$36,725	2.70%
DP Dive Boat	\$16,500				
Dive Basic Spread Saturation	\$15,825				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		7.19	6.10%	\$52,811	3.88%
DP Dive Boat	\$23,727				
Dive Basic Spread Saturation	\$22,756				
Decommissioning Crew	\$4,674				
Pipeline Surveying	\$1,654				
Derig Decomm Equipment		2.00	1.70%	\$14,690	1.08%
DP Dive Boat	\$6,600				
Dive Basic Spread Saturation	\$6,330				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.18%
Manual Calculation	\$2,464				
Cut & Plug Pipeline		11.55	9.79%	\$77,327	5.69%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	6.53%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.53%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	6.53%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.62	3.07%	\$26,955	1.98%
DP Dive Boat	\$11,946				
Dive Basic Spread Saturation	\$11,457				
Pipeline Surveying	\$833				
Saturation Decompression	\$2,719				
Set Up Dive Boat		3.00	2.54%	\$20,085	1.48%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	9.79%	\$77,327	5.69%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	6.53%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.53%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	6.53%	\$57,334	4.22%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Saturation Decompression	\$5,783					
Demob Dive Boat		0.77	0.65%	\$250,000	18.38%	
Manual Calculation	\$250,000					
		Total	94.65	80.26%	\$1,147,974.27	84.40%



BSEE-POCSR

Well Decommission Task Information

Gail Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$5,487,404 75.19%
		Task Total	0.00	\$5,487,404 75.19%
		Misc. Work Provision (15.00%)	0.00	\$823,111 11.28%
		Weather Provision (10.00%)	0.00	\$548,740 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$438,992 6.02%
		Total:	0.00 100.00%	\$7,298,247 100.00%



TSB OFFSHORE

BSEE-POCSR

Well Decommission Resources Breakdown

Gail Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$5,487,404 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Gail Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$5,487,404	75.19%
Manual Calculation	\$5,487,404				
	Total	0.00	0.00%	\$5,487,404	75.19%



BSEE-POCSR

Platform Salvage Option

Gilda

COMPLETE REMOVAL

- Platform Gilda will be removed along with Platforms Gina and Habitat.
- Platform Gilda is a 12-pile platform installed in 1981 in 205' of water.
- The estimated removal weight is the deck weight is 3,792 tons and the jacket weight is 3,220 tons.
- The platform has a total of 63 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 62 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and three 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 5 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los



BSEE-POCSR

Platform Salvage Option

Gilda

Angeles/Long Beach where it will be cut into segments and disposed of.

-The three pipelines (oil, gas and water) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate.



BSEE-POCSR

Platform Salvage Option

Gilda

Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$59,168,224

Estimated Decommissioning Net Cost = \$59,168,224



TSB OFFSHORE

BSEE-POCSR

Basic Information

Gilda

General Data

Platform:	Gilda
Function:	DRILL/PROD
Type:	Steel
Water Depth:	205'
Pre 461H?:	Yes
Year Installed:	1981
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0216
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	63
# Pipelines to Abandon:	3
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 DCOR, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$33,481,530	\$33,481,530
Well Plugging & Abandonment:	\$14,990,074	\$14,990,074
Pipeline Abandonment:	\$10,696,620	\$10,696,620
Total Decommissioning Cost:	\$59,168,224	\$59,168,224



BSEE-POCSR

Platform Information

Gilda

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	12	48"	2"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	155 x 132	75
Middle:	155 x 132	48
Lower:		

Conductors

Number of Slots:	96
Number Installed:	62
Outside Diameter:	20"
Wall Thickness:	0.5"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	3220.00		
Jacket Installation Date:	1/6/81		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	3792 Tons
Number of Padeyes Required:	12
Deck Installation Date:	1/6/81
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Gilda

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Deck 100-500T	Equipment	Equipment	
CB 300 x 100	Deck > 500T	Deck > 500T	0	0
CB 400 x 100	Deck > 500T	Deck > 500T	Equipment	0
CB 400 x 100	Deck 100-500T	Jkt > 700T	0	0
CB 400 x 100	Jkt > 700T	Jkt > 700T	0	0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$4,489,009.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Gilda

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$1,230,343.00	3.67%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.03%	\$2,565,674.00	7.66%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.03%	\$5,338,098.00	15.94%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.03%	\$2,096,094.00	6.26%
Mobilize DB 2000	Mob from Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	9.36%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	17.60	0.53%	\$62,496.00	0.19%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 3)	<input type="checkbox"/>	17.60	0.53%	\$94,800.00	0.28%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.20%	\$58,781.23	0.18%
Cut Deck/Equip/Misc	Seperate 6 Modules, per MMS	<input checked="" type="checkbox"/>	12.00	0.36%	\$116,260.00	0.35%
Remove Equipment		<input checked="" type="checkbox"/>	12.00	0.36%	\$116,260.00	0.35%
Remove 8 Pile Deck	Remove 12 Pile Deck, 6 modules	<input checked="" type="checkbox"/>	48.00	1.44%	\$465,039.81	1.39%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	17.60	0.53%	\$34,496.00	0.10%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	46.00	1.38%	\$446,583.19	1.33%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.03%	\$13,984.00	0.04%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	10.70	0.32%	\$78,324.00	0.23%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	69.22	2.08%	\$1,238,365.02	3.70%
Cut Jacket	20 Hours per section, times 3 section(s), per MMS	<input checked="" type="checkbox"/>	60.00	1.80%	\$1,081,363.81	3.23%
Remove Jacket - Meth 1	20 Hours per section, times 3 section(s), per MMS	<input checked="" type="checkbox"/>	60.00	1.80%	\$1,021,699.81	3.05%
Demob CB 400 & Tug	Demob to Port of LA (Qty 3)	<input type="checkbox"/>	17.60	0.53%	\$52,800.00	0.16%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.20%	\$58,781.23	0.18%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	10.70	0.32%	\$78,324.00	0.23%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.03%	\$13,984.00	0.04%
Demob DB 2000	Demob to Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	9.36%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	2.17%	\$884,000.00	2.64%
Offload CB 300		<input type="checkbox"/>	912.00	27.44%	\$226,960.00	0.68%
Offload CB 400		<input type="checkbox"/>	1824.00	54.87%	\$534,240.00	1.60%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$1,267,549.00	3.79%
Task Total			3225.52	97.03%	\$5,445,300.11	76.00%
Misc. Work Provision (15.00%)			59.21	1.78%	\$2,128,331.00	6.36%
Weather Contingency (10.00%)			39.47	1.19%	\$1,418,888.00	4.24%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Gilda

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal	33,489,009.00	13.41%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			3324.20 100.00%	33,481,528.11 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Gilda

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$131,638 0.39%
Cargo Barge 300	\$4,920 per Day per Barge	\$186,960 0.56%
Cargo Barge 400	\$6,240 per Day per Barge	\$474,240 1.42%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$139,552 0.42%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$340,820 1.02%
CB Damage Deduct	\$20,000 per Cargo Barge	\$100,000 0.30%
Derrick Barge 2000	\$8,708 per Hour per barge	\$9,062,936 27.07%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$666,612 1.99%
DP Dive Boat	\$3,300 Per Hour	\$695,046 2.08%
Manual Calculation	\$0 Independently Calculated	\$13,409,726 40.05%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$119,328 0.36%
Pipeline Survey	\$230 per Hour	\$48,443 0.14%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.08%
Rig Up CB 400	\$14,000 per Barge	\$42,000 0.13%



BSEE-POCSR

Platform Decommission Cost Breakdown

Gilda

Task		Task Hours		Task Cost	
Platform Abandonment - Manual Calculation		0.00	0.00%	\$1,230,343.00	3.67%
Manual Calculation	\$1,230,343				
Platform Abandonment - Manual Calculation		1.00	0.03%	\$2,565,674.00	7.66%
Manual Calculation	\$2,565,674				
Sever Conductors- Abrasive		1.00	0.03%	\$5,338,098.00	15.94%
Manual Calculation	\$5,338,098				
Platform Removal Preparation		1.00	0.03%	\$2,096,094.00	6.26%
Manual Calculation	\$2,096,094				
Mobilize DB 2000		0.00	0.00%	\$3,135,000.00	9.36%
Derrick Barge 2000	\$3,135,000				
Mobilize CB 300 & Tug		17.60	0.53%	\$62,496.00	0.19%
CB 300 & Tug	\$34,496				
Rig Up CB 300	\$28,000				
Mobilize CB 400 & Tug		17.60	0.53%	\$94,800.00	0.28%
Rig Up CB 400	\$42,000				
CB 400 & Tug	\$52,800				
Setup Derrick Barge		6.75	0.20%	\$58,781.23	0.18%
Derrick Barge 2000	\$58,781				



BSEE-POCSR

Platform Decommission Cost Breakdown

Gilda

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		12.00	0.36%	\$116,260.00	0.35%
Derrick Barge 2000	\$104,500				
CB 300 & Tug	\$11,760				
Remove Equipment		12.00	0.36%	\$116,260.00	0.35%
Derrick Barge 2000	\$104,500				
CB 300 & Tug	\$11,760				
Remove 8 Pile Deck		48.00	1.44%	\$465,039.81	1.39%
Derrick Barge 2000	\$418,000				
CB 300 & Tug	\$47,040				
Demob CB 300 & Tug		17.60	0.53%	\$34,496.00	0.10%
CB 300 & Tug	\$34,496				
Jet/Airlift Pile Mud Plug		46.00	1.38%	\$446,583.19	1.33%
Derrick Barge 2000	\$400,583				
CB 400 & Tug	\$46,000				
Mobilize Abrasive Cutting Spread		1.00	0.03%	\$13,984.00	0.04%
Manual Calculation	\$1,833				
Manual Calculation	\$703				
Manual Calculation	\$8,000				
Manual Calculation	\$3,448				



BSEE-POCSR

Platform Decommission Cost Breakdown

Gilda

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Mobilize Dive Spread	10.70	0.32%	\$78,324.00	0.23%
DP Dive Boat			\$35,310	
Dive Basic Spread Saturation			\$33,866	
Abrasive Cutter Spread			\$6,688	
Pipeline Survey			\$2,461	
Sever Piles- Abrasive	69.22	2.08%	\$1,238,365.02	3.70%
Derrick Barge 2000			\$602,791	
DP Dive Boat			\$228,426	
Dive Basic Spread Saturation			\$219,081	
Pipeline Survey			\$15,921	
Abrasive Cutter Spread			\$43,263	
CB 400 & Tug			\$69,220	
Pile Abrasive Cut 7 to 48 inches			\$59,664	
Cut Jacket	60.00	1.80%	\$1,081,363.81	3.23%
Derrick Barge 2000			\$522,500	
DP Dive Boat			\$198,000	
Dive Basic Spread Saturation			\$189,900	
Pipeline Survey			\$13,800	
Abrasive Cutter Spread			\$37,500	
CB 400 & Tug			\$60,000	
Pile Abrasive Cut 7 to 48 inches			\$59,664	



BSEE-POCSR

Platform Decommission Cost Breakdown

Gilda

Task		Task Hours		Task Cost	
Remove Jacket - Meth 1		60.00	1.80%	\$1,021,699.81	3.05%
Derrick Barge 2000	\$522,500				
DP Dive Boat	\$198,000				
Dive Basic Spread Saturation	\$189,900				
Pipeline Survey	\$13,800				
Abrasive Cutter Spread	\$37,500				
CB 400 & Tug	\$60,000				
Demob CB 400 & Tug		17.60	0.53%	\$52,800.00	0.16%
CB 400 & Tug	\$52,800				
Pick Up DB Anchors		6.75	0.20%	\$58,781.23	0.18%
Derrick Barge 2000	\$58,781				
Demob Dive Spread		10.70	0.32%	\$78,324.00	0.23%
DP Dive Boat	\$35,310				
Dive Basic Spread Saturation	\$33,866				
Abrasive Cutter Spread	\$6,688				
Pipeline Survey	\$2,461				
Demob Abrasive Cutting Spread		1.00	0.03%	\$13,984.00	0.04%
Manual Calculation	\$1,833				
Manual Calculation	\$703				
Manual Calculation	\$8,000				
Manual Calculation	\$3,448				



BSEE-POCSR

Platform Decommission Cost Breakdown

Gilda

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Demob DB 2000	0.00	0.00%	\$3,135,000.00	9.36%
Derrick Barge 2000			\$3,135,000	
Site Clearance - with Divers	72.00	2.17%	\$884,000.00	2.64%
Manual Calculation			\$884,000	
Offload CB 300	912.00	27.44%	\$226,960.00	0.68%
Cargo Barge 300			\$186,960	
CB Damage Deduct			\$40,000	
Offload CB 400	1824.00	54.87%	\$534,240.00	1.60%
Cargo Barge 400			\$474,240	
CB Damage Deduct			\$60,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$1,267,549.00	3.79%
Manual Calculation			\$1,267,549	
Total	3225.52	97.03%	\$25,445,300.11	76.00%



BSEE-POCSR

Pipeline Information

Gilda (Ver1) Segment#:3210216-Shore

General Data

Water Depth: 205'
Origin / Terminus: Origin
Opposite End Name: Mandalay
Opposite End Water Depth:
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:	0.668"	Length:	52000'
Depth of Burial:	3'	# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Gilda (Ver1) Segment#:3320216-Shore

General Data

Water Depth: 205'
Origin / Terminus: Origin
Opposite End Name: Mandalay
Opposite End Water Depth:
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:	0.365"	Length:	52000'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Gilda (Ver1) Segment#:6" Water-Shore

General Data

Water Depth:	205'
Origin / Terminus:	Origin
Opposite End Name:	Mandalay
Opposite End Water Depth:	
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.0432"	Length:	52000'
Depth of Burial:	3'	# Crossings:		Product:	H2O
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Gilda Segment#:3210216-Shore

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	0.16%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.38%	\$875,000	24.41%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.75%	\$22,035	0.61%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.25%	\$36,725	1.02%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	14.40	3.60%	\$105,768	2.95%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.50%	\$14,690	0.41%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	0.16%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	6.64	1.66%	\$44,455	1.24%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.43	1.11%	\$29,659	0.83%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.43	1.11%	\$32,986	0.92%
Mob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.44%	\$11,987	0.33%
Expose Pipeline		<input checked="" type="checkbox"/>	6.64	1.66%	\$44,714	1.25%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	6.64	1.66%	\$44,714	1.25%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	10.70	2.67%	\$27,770	0.77%
Remove Pipeline	Remove 6 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	106.00	26.46%	\$772,104	21.54%
Bury Pipeline		<input checked="" type="checkbox"/>	4.43	1.11%	\$32,268	0.90%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	10.70	2.67%	\$11,770	0.33%
Demob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.44%	\$11,987	0.33%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.38%	\$875,000	24.41%
Offload CB 180		<input type="checkbox"/>	168.00	41.94%	\$41,000	1.14%
Task Total			359.63	89.79%	\$3,046,130	84.97%
Misc. Work Provision (15.00%)			24.54	6.13%	\$177,018	4.94%
Weather Provision (10.00%)			16.36	4.08%	\$118,012	3.29%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$243,690	6.80%
Total:			400.53	100.00%	\$3,584,850	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Gilda Segment#:3320216-Shore

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	0.16%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.38%	\$875,000	24.42%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.75%	\$22,035	0.62%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.25%	\$36,725	1.03%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	14.20	3.55%	\$104,299	2.91%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.50%	\$14,690	0.41%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	0.16%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	6.64	1.66%	\$44,455	1.24%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.43	1.11%	\$29,659	0.83%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.43	1.11%	\$32,986	0.92%
Mob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.44%	\$11,987	0.33%
Expose Pipeline		<input checked="" type="checkbox"/>	6.64	1.66%	\$44,714	1.25%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	6.64	1.66%	\$44,714	1.25%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	10.70	2.67%	\$27,770	0.78%
Remove Pipeline	Remove 6 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	106.00	26.48%	\$772,104	21.55%
Bury Pipeline		<input checked="" type="checkbox"/>	4.43	1.11%	\$32,268	0.90%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	10.70	2.67%	\$11,770	0.33%
Demob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.44%	\$11,987	0.33%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.38%	\$875,000	24.42%
Offload CB 180		<input type="checkbox"/>	168.00	41.97%	\$41,000	1.14%
Task Total			359.43	89.79%	\$3,044,661	84.98%
Misc. Work Provision (15.00%)			24.51	6.12%	\$176,797	4.93%
Weather Provision (10.00%)			16.34	4.08%	\$117,865	3.29%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$243,573	6.80%
Total:			400.28	100.00%	\$3,582,896	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Gilda Segment#:6" Water-Shore

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	0.16%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.39%	\$875,000	24.80%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.76%	\$22,035	0.62%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.27%	\$36,725	1.04%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	8.67	2.20%	\$63,681	1.80%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.51%	\$14,690	0.42%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	0.16%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	6.64	1.69%	\$44,455	1.26%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.43	1.13%	\$29,659	0.84%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.43	1.13%	\$32,986	0.93%
Mob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.45%	\$11,987	0.34%
Expose Pipeline		<input checked="" type="checkbox"/>	6.64	1.69%	\$44,714	1.27%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	6.64	1.69%	\$44,714	1.27%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	10.70	2.72%	\$27,770	0.79%
Remove Pipeline	Remove 6 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	106.00	26.95%	\$772,104	21.88%
Bury Pipeline		<input checked="" type="checkbox"/>	4.43	1.13%	\$32,268	0.91%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	10.70	2.72%	\$11,770	0.33%
Demob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.45%	\$11,987	0.34%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.39%	\$875,000	24.80%
Offload CB 180		<input type="checkbox"/>	168.00	42.71%	\$41,000	1.16%
Task Total			353.90	89.97%	\$3,004,043	85.13%
Misc. Work Provision (15.00%)			23.68	6.02%	\$170,705	4.84%
Weather Provision (10.00%)			15.79	4.01%	\$113,803	3.22%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$240,323	6.81%
Total:			393.37	100.00%	\$3,528,874	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Gilda Segment#:3210216-Shor

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	0.61%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$84,277	2.45%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	0.58%
Decommissioning Crew	\$650	per Hour	\$15,860	0.46%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$159,088	4.63%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$126,284	3.68%
DP Dive Boat	\$3,300	per Hour	\$551,661	16.06%
Manual Calculation	\$0	Independently Calculated	\$1,761,500	51.27%
Pipelay Barge	\$1,954	per Hour	\$248,686	7.24%
Pipeline Surveying	\$230	per Hour	\$38,449	1.12%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.47%
Saturation Decompression	\$751	per Hour	\$3,327	0.10%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Gilda Segment#:3320216-Shor

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	0.61%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$84,277	2.45%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	0.58%
Decommissioning Crew	\$650	per Hour	\$15,730	0.46%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$159,088	4.63%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$125,651	3.66%
DP Dive Boat	\$3,300	per Hour	\$551,001	16.05%
Manual Calculation	\$0	Independently Calculated	\$1,761,500	51.30%
Pipelay Barge	\$1,954	per Hour	\$248,686	7.24%
Pipeline Surveying	\$230	per Hour	\$38,403	1.12%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.47%
Saturation Decompression	\$751	per Hour	\$3,327	0.10%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Gilda Segment#:6" Water-Shore

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	0.62%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$84,277	2.49%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	0.59%
Decommissioning Crew	\$650	per Hour	\$12,136	0.36%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$159,088	4.71%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$108,148	3.20%
DP Dive Boat	\$3,300	per Hour	\$532,752	15.76%
Manual Calculation	\$0	Independently Calculated	\$1,761,500	52.12%
Pipelay Barge	\$1,954	per Hour	\$248,686	7.36%
Pipeline Surveying	\$230	per Hour	\$37,131	1.10%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.47%
Saturation Decompression	\$751	per Hour	\$3,327	0.10%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Gilda Segment#:3210216

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$5,750 0.17%
Manual Calculation	\$5,750	
Mobilize Dive Boat	1.53 0.38%	\$875,000 25.47%
Manual Calculation	\$875,000	
Set Up Dive Boat	3.00 0.75%	\$22,035 0.64%
DP Dive Boat	\$9,900	
Dive Basic Spread Saturation	\$9,495	
Decommissioning Crew	\$1,950	
Pipeline Surveying	\$690	
Rig Up Decomm Equipment	5.00 1.25%	\$36,725 1.07%
DP Dive Boat	\$16,500	
Dive Basic Spread Saturation	\$15,825	
Decommissioning Crew	\$3,250	
Pipeline Surveying	\$1,150	
Pig & Flush Pipeline	14.40 3.60%	\$105,768 3.08%
DP Dive Boat	\$47,520	
Dive Basic Spread Saturation	\$45,576	
Decommissioning Crew	\$9,360	
Pipeline Surveying	\$3,312	
Derig Decomm Equipment	2.00 0.50%	\$14,690 0.43%
DP Dive Boat	\$6,600	
Dive Basic Spread Saturation	\$6,330	
Decommissioning Crew	\$1,300	
Pipeline Surveying	\$460	
Demob Flushing Crew & Equipment	0.00 0.00%	\$5,750 0.17%
Manual Calculation	\$5,750	
Cut & Plug Pipeline	6.64 1.66%	\$44,455 1.29%
DP Dive Boat	\$21,912	
Dive Basic Spread Saturation	\$21,016	
Pipeline Surveying	\$1,527	



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		4.43	1.11%	\$29,659	0.86%
DP Dive Boat	\$14,619				
Dive Basic Spread Saturation	\$14,021				
Pipeline Surveying	\$1,019				
Remove Tube Turn		4.43	1.11%	\$32,986	0.96%
DP Dive Boat	\$14,619				
Dive Basic Spread Saturation	\$14,021				
Pipeline Surveying	\$1,019				
Saturation Decompression	\$3,327				
Mob P/L Removal Spread		1.78	0.44%	\$11,987	0.35%
DP Dive Boat	\$5,874				
Dive Basic Spread- Mixed Gas	\$2,225				
Pipeline Surveying	\$409				
Pipelay Barge	\$3,478				
Expose Pipeline		6.64	1.66%	\$44,714	1.30%
Pipeline Surveying	\$1,527				
DP Dive Boat	\$21,912				
Dive Basic Spread- Mixed Gas	\$8,300				
Pipelay Barge	\$12,975				
Cut & Plug Pipeline		6.64	1.66%	\$44,714	1.30%
DP Dive Boat	\$21,912				
Dive Basic Spread- Mixed Gas	\$8,300				
Pipeline Surveying	\$1,527				
Pipelay Barge	\$12,975				
Mobilize Vessel		10.70	2.67%	\$27,770	0.81%
CB 180 & Tug	\$11,770				
Rig Up CB 180	\$16,000				
Remove Pipeline		106.00	26.46%	\$772,104	22.47%
Pipeline Surveying	\$24,380				
DP Dive Boat	\$349,800				
Dive Basic Spread- Mixed Gas	\$132,500				
Pipelay Barge	\$207,124				
CB 180 & Tug	\$58,300				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		4.43	1.11%	\$32,268	0.94%	
Pipeline Surveying	\$1,019					
DP Dive Boat	\$14,619					
Dive Basic Spread- Mixed Gas	\$5,538					
Pipelay Barge	\$8,656					
CB 180 & Tug	\$2,437					
Demob Vessel		10.70	2.67%	\$11,770	0.34%	
CB 180 & Tug	\$11,770					
Demob P/L Removal Spread		1.78	0.44%	\$11,987	0.35%	
Pipeline Surveying	\$409					
DP Dive Boat	\$5,874					
Dive Basic Spread- Mixed Gas	\$2,225					
Pipelay Barge	\$3,478					
Demob Dive Boat		1.53	0.38%	\$875,000	25.47%	
Manual Calculation	\$875,000					
Offload CB 180		168.00	41.94%	\$41,000	1.19%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	359.63	89.79%	\$3,046,130.11	88.66%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Gilda Segment#:3320216

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$5,750 0.17%
Manual Calculation	\$5,750	
Mobilize Dive Boat	1.53 0.38%	\$875,000 25.48%
Manual Calculation	\$875,000	
Set Up Dive Boat	3.00 0.75%	\$22,035 0.64%
DP Dive Boat	\$9,900	
Dive Basic Spread Saturation	\$9,495	
Decommissioning Crew	\$1,950	
Pipeline Surveying	\$690	
Rig Up Decomm Equipment	5.00 1.25%	\$36,725 1.07%
DP Dive Boat	\$16,500	
Dive Basic Spread Saturation	\$15,825	
Decommissioning Crew	\$3,250	
Pipeline Surveying	\$1,150	
Pig & Flush Pipeline	14.20 3.55%	\$104,299 3.04%
DP Dive Boat	\$46,860	
Dive Basic Spread Saturation	\$44,943	
Decommissioning Crew	\$9,230	
Pipeline Surveying	\$3,266	
Derig Decomm Equipment	2.00 0.50%	\$14,690 0.43%
DP Dive Boat	\$6,600	
Dive Basic Spread Saturation	\$6,330	
Decommissioning Crew	\$1,300	
Pipeline Surveying	\$460	
Demob Flushing Crew & Equipment	0.00 0.00%	\$5,750 0.17%
Manual Calculation	\$5,750	
Cut & Plug Pipeline	6.64 1.66%	\$44,455 1.29%
DP Dive Boat	\$21,912	
Dive Basic Spread Saturation	\$21,016	
Pipeline Surveying	\$1,527	



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		4.43	1.11%	\$29,659	0.86%
DP Dive Boat	\$14,619				
Dive Basic Spread Saturation	\$14,021				
Pipeline Surveying	\$1,019				
Remove Tube Turn		4.43	1.11%	\$32,986	0.96%
DP Dive Boat	\$14,619				
Dive Basic Spread Saturation	\$14,021				
Pipeline Surveying	\$1,019				
Saturation Decompression	\$3,327				
Mob P/L Removal Spread		1.78	0.44%	\$11,987	0.35%
DP Dive Boat	\$5,874				
Dive Basic Spread- Mixed Gas	\$2,225				
Pipeline Surveying	\$409				
Pipelay Barge	\$3,478				
Expose Pipeline		6.64	1.66%	\$44,714	1.30%
Pipeline Surveying	\$1,527				
DP Dive Boat	\$21,912				
Dive Basic Spread- Mixed Gas	\$8,300				
Pipelay Barge	\$12,975				
Cut & Plug Pipeline		6.64	1.66%	\$44,714	1.30%
DP Dive Boat	\$21,912				
Dive Basic Spread- Mixed Gas	\$8,300				
Pipeline Surveying	\$1,527				
Pipelay Barge	\$12,975				
Mobilize Vessel		10.70	2.67%	\$27,770	0.81%
CB 180 & Tug	\$11,770				
Rig Up CB 180	\$16,000				
Remove Pipeline		106.00	26.48%	\$772,104	22.49%
Pipeline Surveying	\$24,380				
DP Dive Boat	\$349,800				
Dive Basic Spread- Mixed Gas	\$132,500				
Pipelay Barge	\$207,124				
CB 180 & Tug	\$58,300				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		4.43	1.11%	\$32,268	0.94%	
Pipeline Surveying	\$1,019					
DP Dive Boat	\$14,619					
Dive Basic Spread- Mixed Gas	\$5,538					
Pipelay Barge	\$8,656					
CB 180 & Tug	\$2,437					
Demob Vessel		10.70	2.67%	\$11,770	0.34%	
CB 180 & Tug	\$11,770					
Demob P/L Removal Spread		1.78	0.44%	\$11,987	0.35%	
Pipeline Surveying	\$409					
DP Dive Boat	\$5,874					
Dive Basic Spread- Mixed Gas	\$2,225					
Pipelay Barge	\$3,478					
Demob Dive Boat		1.53	0.38%	\$875,000	25.48%	
Manual Calculation	\$875,000					
Offload CB 180		168.00	41.97%	\$41,000	1.19%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	359.43	89.79%	\$3,044,661.11	88.67%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Gilda Segment#:6" Water-Shore

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$5,750	0.17%
Manual Calculation	\$5,750				
Mobilize Dive Boat		1.53	0.39%	\$875,000	25.89%
Manual Calculation	\$875,000				
Set Up Dive Boat		3.00	0.76%	\$22,035	0.65%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Decommissioning Crew	\$1,950				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	1.27%	\$36,725	1.09%
DP Dive Boat	\$16,500				
Dive Basic Spread Saturation	\$15,825				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		8.67	2.20%	\$63,681	1.88%
DP Dive Boat	\$28,611				
Dive Basic Spread Saturation	\$27,441				
Decommissioning Crew	\$5,636				
Pipeline Surveying	\$1,994				
Derig Decomm Equipment		2.00	0.51%	\$14,690	0.43%
DP Dive Boat	\$6,600				
Dive Basic Spread Saturation	\$6,330				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$5,750	0.17%
Manual Calculation	\$5,750				
Cut & Plug Pipeline		6.64	1.69%	\$44,455	1.32%
DP Dive Boat	\$21,912				
Dive Basic Spread Saturation	\$21,016				
Pipeline Surveying	\$1,527				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		4.43	1.13%	\$29,659	0.88%
DP Dive Boat	\$14,619				
Dive Basic Spread Saturation	\$14,021				
Pipeline Surveying	\$1,019				
Remove Tube Turn		4.43	1.13%	\$32,986	0.98%
DP Dive Boat	\$14,619				
Dive Basic Spread Saturation	\$14,021				
Pipeline Surveying	\$1,019				
Saturation Decompression	\$3,327				
Mob P/L Removal Spread		1.78	0.45%	\$11,987	0.35%
DP Dive Boat	\$5,874				
Dive Basic Spread- Mixed Gas	\$2,225				
Pipeline Surveying	\$409				
Pipelay Barge	\$3,478				
Expose Pipeline		6.64	1.69%	\$44,714	1.32%
Pipeline Surveying	\$1,527				
DP Dive Boat	\$21,912				
Dive Basic Spread- Mixed Gas	\$8,300				
Pipelay Barge	\$12,975				
Cut & Plug Pipeline		6.64	1.69%	\$44,714	1.32%
DP Dive Boat	\$21,912				
Dive Basic Spread- Mixed Gas	\$8,300				
Pipeline Surveying	\$1,527				
Pipelay Barge	\$12,975				
Mobilize Vessel		10.70	2.72%	\$27,770	0.82%
CB 180 & Tug	\$11,770				
Rig Up CB 180	\$16,000				
Remove Pipeline		106.00	26.95%	\$772,104	22.85%
Pipeline Surveying	\$24,380				
DP Dive Boat	\$349,800				
Dive Basic Spread- Mixed Gas	\$132,500				
Pipelay Barge	\$207,124				
CB 180 & Tug	\$58,300				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		4.43	1.13%	\$32,268	0.95%	
Pipeline Surveying	\$1,019					
DP Dive Boat	\$14,619					
Dive Basic Spread- Mixed Gas	\$5,538					
Pipelay Barge	\$8,656					
CB 180 & Tug	\$2,437					
Demob Vessel		10.70	2.72%	\$11,770	0.35%	
CB 180 & Tug	\$11,770					
Demob P/L Removal Spread		1.78	0.45%	\$11,987	0.35%	
Pipeline Surveying	\$409					
DP Dive Boat	\$5,874					
Dive Basic Spread- Mixed Gas	\$2,225					
Pipelay Barge	\$3,478					
Demob Dive Boat		1.53	0.39%	\$875,000	25.89%	
Manual Calculation	\$875,000					
Offload CB 180		168.00	42.71%	\$41,000	1.21%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	353.90	89.97%	\$3,004,043.26	88.89%



TSB OFFSHORE

BSEE-POCSR

Well Decommission Task Information

Gilda Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$11,270,732 75.19%
		Task Total	0.00	\$11,270,732 75.19%
		Misc. Work Provision (15.00%)	0.00	\$1,690,610 11.28%
		Weather Provision (10.00%)	0.00	\$1,127,073 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$901,659 6.02%
		Total:	0.00 100.00%	\$14,990,074 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Gilda Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$11,270,732 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Gilda Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$11,270,732	75.19%
Manual Calculation	\$11,270,732				
	Total	0.00	0.00%	\$11,270,732	75.19%



BSEE-POCSR

Platform Salvage Option

Gina

COMPLETE REMOVAL

- Platform Gina will be removed along with Platforms Gilda and Habitat.
- Platform Gina is a 6-pile platform installed in 1980 in 95' of water.
- The estimated removal weight is the deck weight is 447 tons and the jacket weight is 434 tons.
- The platform has a total of 12 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 12 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- One 240' cargo barge will transport the deck modules to shore and one 180' cargo barge will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 2 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and disposed of.



BSEE-POCSR

Platform Salvage Option

Gina

-The two pipelines (gas, water) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2



BSEE-POCSR

Platform Salvage Option

Gina

and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$16,710,952

Estimated Decommissioning Net Cost = \$16,710,952



TSB OFFSHORE

BSEE-POCSR

Basic Information

Gina

General Data

Platform:	Gina
Function:	FACILITIES
Type:	Steel
Water Depth:	95'
Pre 461H?:	Yes
Year Installed:	1980
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0202
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	12
# Pipelines to Abandon:	2
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 DCOR, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$13,197,770	\$13,197,770
Well Plugging & Abandonment:	\$2,921,191	\$2,921,191
Pipeline Abandonment:	\$591,991	\$591,991
Total Decommissioning Cost:	\$16,710,952	\$16,710,952



BSEE-POCSR

Platform Information

Gina

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	6	48"	2"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	80 x 120	63
Middle:	40 x 103	43
Lower:	40 x 40	27

Conductors

Number of Slots:	15
Number Installed:	12
Outside Diameter:	20"
Wall Thickness:	1.25"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	434.00		
Jacket Installation Date:	12/11/80		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	447 Tons
Number of Padeyes Required:	4
Deck Installation Date:	12/11/80
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Gina

Equipment Lift Weights

Members to be Cut Data

Underwater Members	
Size	Qty
10.00	8.00
18.00	4.00
22.00	4.00

Cargo Descriptions

Cargo Barge Size	Cargo Description		
CB 240 x 72	Deck 100-500T	Deck 100-500T	Equipment
CB 180 x 54	Jkt 300-700T	Conductors	
0			
0			
0			

Miscellaneous Data

Derrick Barge Anchors:	4
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$527,913.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Gina

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$358,850.00	2.72%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.10%	\$509,672.00	3.86%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.10%	\$819,314.00	6.21%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.10%	\$864,100.00	6.55%
Mobilize DB 2000	Mob from Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	23.75%
Mobilize CB 240 & Tug	Mob From Port of LA (Qty 1)	<input type="checkbox"/>	17.60	1.82%	\$25,616.00	0.19%
Mobilize CB 180 & Tug	Mob From Port of LA (Qty 1)	<input type="checkbox"/>	17.60	1.82%	\$17,680.00	0.13%
Setup Derrick Barge		<input checked="" type="checkbox"/>	3.75	0.39%	\$32,656.24	0.25%
Cut Deck/Equip/Misc	Seperate 2 Modules, per MMS	<input checked="" type="checkbox"/>	12.00	1.24%	\$112,420.00	0.85%
Remove Equipment		<input checked="" type="checkbox"/>	12.00	1.24%	\$112,420.00	0.85%
Remove 6 Pile Deck	Remove 6 Pile Deck, 2 modules	<input checked="" type="checkbox"/>	24.00	2.48%	\$224,839.91	1.70%
Demob CB 240 & Tug	Demob to Port of LA (Qty 1)	<input type="checkbox"/>	17.60	1.82%	\$11,616.00	0.09%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	16.00	1.65%	\$148,133.30	1.12%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.10%	\$6,993.00	0.05%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	10.00	1.03%	\$49,200.00	0.37%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	34.61	3.57%	\$454,265.86	3.44%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	20.75	2.14%	\$254,464.05	1.93%
Demob CB 180 & Tug	Demob to Port of LA (Qty 1)	<input type="checkbox"/>	17.60	1.82%	\$9,680.00	0.07%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	3.75	0.39%	\$32,656.24	0.25%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	10.00	1.03%	\$49,200.00	0.37%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.10%	\$6,993.00	0.05%
Demob DB 2000	Demob to Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	23.75%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	7.43%	\$884,000.00	6.70%
Offload CB 240		<input type="checkbox"/>	312.00	32.22%	\$66,800.00	0.51%
Offload CB 180		<input type="checkbox"/>	312.00	32.22%	\$59,000.00	0.45%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$243,574.00	1.85%
Task Total			918.26	94.81%	\$1,624,143.59	88.08%
Misc. Work Provision (15.00%)			30.13	3.11%	\$627,426.60	4.75%
Weather Contingency (10.00%)			20.09	2.07%	\$418,284.40	3.17%
Consumables					\$0.00	0.00%



BSEE-POCSR

Platform Decommission Task Information

Gina

Task	Note	Weather Provision	Task Hours	Task Cost
		Waste Disposal		\$527,913.00 4.00%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			968.48 100.00%	13,197,767.59 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Gina

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$47,100 0.36%
Cargo Barge 180	\$3,000 per Day per Barge	\$39,000 0.30%
Cargo Barge 240	\$3,600 per Day per Barge	\$46,800 0.35%
CB 180 & Tug	\$550 per Hour per Barge/Tug	\$58,608 0.44%
CB 240 & Tug	\$660 per Hour per Barge/Tug	\$54,912 0.42%
CB Damage Deduct	\$20,000 per Cargo Barge	\$40,000 0.30%
Derrick Barge 2000	\$8,708 per Hour per barge	\$7,374,739 55.88%
Dive Basic Spread- Mixed Gas	\$1,250 Per Hour	\$69,200 0.52%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$63,300 0.48%
Dive Boat	\$900 per Hour	\$67,824 0.51%
Manual Calculation	\$0 Independently Calculated	\$3,693,496 27.99%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$29,832 0.23%
Pipeline Survey	\$230 per Hour	\$17,333 0.13%
Rig Up CB 180	\$8,000 per Barge	\$8,000 0.06%
Rig Up CB 240	\$14,000 per Barge	\$14,000 0.11%



BSEE-POCSR

Platform Decommission Cost Breakdown

Gina

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$358,850.00	2.72%
Manual Calculation			\$358,850	
Platform Abandonment - Manual Calculation	1.00	0.10%	\$509,672.00	3.86%
Manual Calculation			\$509,672	
Sever Conductors- Abrasive	1.00	0.10%	\$819,314.00	6.21%
Manual Calculation			\$819,314	
Platform Removal Preparation	1.00	0.10%	\$864,100.00	6.55%
Manual Calculation			\$864,100	
Mobilize DB 2000	0.00	0.00%	\$3,135,000.00	23.75%
Derrick Barge 2000			\$3,135,000	
Mobilize CB 240 & Tug	17.60	1.82%	\$25,616.00	0.19%
CB 240 & Tug			\$11,616	
Rig Up CB 240			\$14,000	
Mobilize CB 180 & Tug	17.60	1.82%	\$17,680.00	0.13%
Rig Up CB 180			\$8,000	
CB 180 & Tug			\$9,680	
Setup Derrick Barge	3.75	0.39%	\$32,656.24	0.25%
Derrick Barge 2000			\$32,656	



BSEE-POCSR

Platform Decommission Cost Breakdown

Gina

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		12.00	1.24%	\$112,420.00	0.85%
Derrick Barge 2000	\$104,500				
CB 240 & Tug	\$7,920				
Remove Equipment		12.00	1.24%	\$112,420.00	0.85%
Derrick Barge 2000	\$104,500				
CB 240 & Tug	\$7,920				
Remove 6 Pile Deck		24.00	2.48%	\$224,839.91	1.70%
Derrick Barge 2000	\$209,000				
CB 240 & Tug	\$15,840				
Demob CB 240 & Tug		17.60	1.82%	\$11,616.00	0.09%
CB 240 & Tug	\$11,616				
Jet/Airlift Pile Mud Plug		16.00	1.65%	\$148,133.30	1.12%
Derrick Barge 2000	\$139,333				
CB 180 & Tug	\$8,800				
Mobilize Abrasive Cutting Spread		1.00	0.10%	\$6,993.00	0.05%
Manual Calculation	\$917				
Manual Calculation	\$352				
Manual Calculation	\$4,000				
Manual Calculation	\$1,724				



BSEE-POCSR

Platform Decommission Cost Breakdown

Gina

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Mobilize Dive Spread	10.00	1.03%	\$49,200.00	0.37%
Dive Boat			\$9,000	
Dive Basic Spread Saturation			\$31,650	
Abrasive Cutter Spread			\$6,250	
Pipeline Survey			\$2,300	
Sever Piles- Abrasive	34.61	3.57%	\$454,265.86	3.44%
Derrick Barge 2000			\$301,395	
Dive Boat			\$31,149	
Dive Basic Spread- Mixed Gas			\$43,263	
Pipeline Survey			\$7,960	
Abrasive Cutter Spread			\$21,631	
CB 180 & Tug			\$19,036	
Pile Abrasive Cut 7 to 48 inches			\$29,832	
Remove Jacket - Meth 1	20.75	2.14%	\$254,464.05	1.93%
Derrick Barge 2000			\$180,698	
Dive Boat			\$18,675	
Dive Basic Spread- Mixed Gas			\$25,938	
Pipeline Survey			\$4,773	
Abrasive Cutter Spread			\$12,969	
CB 180 & Tug			\$11,413	
Demob CB 180 & Tug	17.60	1.82%	\$9,680.00	0.07%
CB 180 & Tug			\$9,680	



BSEE-POCSR

Platform Decommission Cost Breakdown

Gina

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Pick Up DB Anchors	3.75	0.39%	\$32,656.24	0.25%
Derrick Barge 2000			\$32,656	
Demob Dive Spread	10.00	1.03%	\$49,200.00	0.37%
Dive Boat			\$9,000	
Dive Basic Spread Saturation			\$31,650	
Abrasive Cutter Spread			\$6,250	
Pipeline Survey			\$2,300	
Demob Abrasive Cutting Spread	1.00	0.10%	\$6,993.00	0.05%
Manual Calculation			\$917	
Manual Calculation			\$352	
Manual Calculation			\$4,000	
Manual Calculation			\$1,724	
Demob DB 2000	0.00	0.00%	\$3,135,000.00	23.75%
Derrick Barge 2000			\$3,135,000	
Site Clearance - with Divers	72.00	7.43%	\$884,000.00	6.70%
Manual Calculation			\$884,000	
Offload CB 240	312.00	32.22%	\$66,800.00	0.51%
Cargo Barge 240			\$46,800	
CB Damage Deduct			\$20,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Gina

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Offload CB 180	312.00	32.22%	\$59,000.00	0.45%
Cargo Barge 180			\$39,000	
CB Damage Deduct			\$20,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$243,574.00	1.85%
Manual Calculation			\$243,574	
Total	918.26	94.81%	\$11,624,143.59	88.08%



BSEE-POCSR

Pipeline Information

Gina (Ver1) Segment#:3010202-Shore

General Data

Water Depth:	95'
Origin / Terminus:	Origin
Opposite End Name:	Mandalay
Opposite End Water Depth:	
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:	0.365"	Length:	31690'
Depth of Burial:	3'	# Crossings:		Product:	Oil/Water
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



TSB OFFSHORE

BSEE-POCSR

Pipeline Information

Gina (Ver1) Segment#:3130202-Shore

General Data

Water Depth: 95'
Origin / Terminus: Origin
Opposite End Name: Mandalay
Opposite End Water Depth:
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	31690'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Gina Segment#:3010202-Shore

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	1.92%
Mobilize Work Boat	Mob shared with 6 pipelines	<input type="checkbox"/>	1.78	0.71%	\$2,195	0.73%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	2.00%	\$6,165	2.06%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	8.65	3.46%	\$10,665	3.57%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.80%	\$2,466	0.83%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	1.92%
Mob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.71%	\$7,150	2.39%
Expose Pipeline		<input checked="" type="checkbox"/>	3.23	1.29%	\$12,975	4.34%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	3.23	1.29%	\$12,975	4.34%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	2.15	0.86%	\$8,637	2.89%
Remove Tube Turn		<input checked="" type="checkbox"/>	2.15	0.86%	\$8,637	2.89%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	1.20%	\$12,051	4.03%
Expose Pipeline		<input checked="" type="checkbox"/>	3.23	1.29%	\$12,975	4.34%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	3.23	1.29%	\$12,975	4.34%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	10.00	4.00%	\$27,000	9.04%
Remove Pipeline	Remove 0.3 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	6.00	2.40%	\$27,402	9.17%
Bury Pipeline		<input checked="" type="checkbox"/>	2.15	0.86%	\$9,819	3.29%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	10.00	4.00%	\$11,000	3.68%
Demob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.71%	\$6,113	2.05%
Offload CB 180		<input type="checkbox"/>	168.00	67.16%	\$41,000	13.72%
Demob Work Boat	Demob shared with 6 pipelines	<input type="checkbox"/>	1.78	0.71%	\$1,038	0.35%
Task Total			239.14	95.60%	\$244,737	81.92%
Misc. Work Provision (15.00%)			6.60	2.64%	\$20,661	6.92%
Weather Provision (10.00%)			4.40	1.76%	\$13,774	4.61%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$19,579	6.55%
Total:			250.15	100.00%	\$298,751	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Gina Segment#:3130202-Shore

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	1.96%
Mobilize Work Boat	Mob shared with 6 pipelines	<input type="checkbox"/>	1.78	0.72%	\$2,195	0.75%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	2.03%	\$6,165	2.10%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	5.29	2.15%	\$6,523	2.22%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.81%	\$2,466	0.84%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	1.96%
Mob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.72%	\$7,150	2.44%
Expose Pipeline		<input checked="" type="checkbox"/>	3.23	1.31%	\$12,975	4.42%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	3.23	1.31%	\$12,975	4.42%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	2.15	0.87%	\$8,637	2.95%
Remove Tube Turn		<input checked="" type="checkbox"/>	2.15	0.87%	\$8,637	2.95%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	1.22%	\$12,051	4.11%
Expose Pipeline		<input checked="" type="checkbox"/>	3.23	1.31%	\$12,975	4.42%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	3.23	1.31%	\$12,975	4.42%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	10.00	4.07%	\$27,000	9.21%
Remove Pipeline	Remove 0.3 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	6.00	2.44%	\$27,402	9.34%
Bury Pipeline		<input checked="" type="checkbox"/>	2.15	0.87%	\$9,819	3.35%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	10.00	4.07%	\$11,000	3.75%
Demob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.72%	\$6,113	2.08%
Offload CB 180		<input type="checkbox"/>	168.00	68.31%	\$41,000	13.98%
Demob Work Boat	Demob shared with 6 pipelines	<input type="checkbox"/>	1.78	0.72%	\$1,038	0.35%
Task Total			235.78	95.87%	\$240,594	82.05%
Misc. Work Provision (15.00%)			6.10	2.48%	\$20,040	6.83%
Weather Provision (10.00%)			4.07	1.65%	\$13,360	4.56%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$19,247	6.56%
Total:			245.95	100.00%	\$293,241	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Gina Segment#:3010202-Shor

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	7.24%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$26,483	9.13%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	6.89%
Decommissioning Crew	\$650	per Hour	\$11,330	3.90%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$39,913	13.75%
Manual Calculation	\$0	Independently Calculated	\$11,500	3.96%
Pipelay Barge	\$1,954	per Hour	\$62,391	21.50%
Pipeline Surveying	\$230	per Hour	\$7,344	2.53%
Rig Up CB 180	\$8,000	per Barge	\$16,000	5.51%
Work Boat	\$583	per Hour	\$28,777	9.92%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Gina Segment#:3130202-Shor

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	7.38%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$26,483	9.30%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	7.03%
Decommissioning Crew	\$650	per Hour	\$9,146	3.21%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$39,913	14.02%
Manual Calculation	\$0	Independently Calculated	\$11,500	4.04%
Pipelay Barge	\$1,954	per Hour	\$62,391	21.92%
Pipeline Surveying	\$230	per Hour	\$7,344	2.58%
Rig Up CB 180	\$8,000	per Barge	\$16,000	5.62%
Work Boat	\$583	per Hour	\$26,818	9.42%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Gina Segment#:3010202-Shore

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$5,750	1.98%
Manual Calculation	\$5,750				
Mobilize Work Boat		1.78	0.71%	\$2,195	0.76%
Work Boat	\$1,038				
Decommissioning Crew	\$1,157				
Rig Up Decomm Equipment		5.00	2.00%	\$6,165	2.12%
Work Boat	\$2,915				
Decommissioning Crew	\$3,250				
Pig & Flush Pipeline		8.65	3.46%	\$10,665	3.68%
Work Boat	\$5,043				
Decommissioning Crew	\$5,623				
Derig Decomm Equipment		2.00	0.80%	\$2,466	0.85%
Work Boat	\$1,166				
Decommissioning Crew	\$1,300				
Demob Flushing Crew & Equipment		0.00	0.00%	\$5,750	1.98%
Manual Calculation	\$5,750				
Mob P/L Removal Spread		1.78	0.71%	\$7,150	2.46%
Dive Basic Spread- Mixed Gas	\$2,225				
Pipeline Surveying	\$409				
Pipelay Barge	\$3,478				
Work Boat	\$1,038				
Expose Pipeline		3.23	1.29%	\$12,975	4.47%
Dive Basic Spread- Mixed Gas	\$4,038				
Pipeline Surveying	\$743				
Pipelay Barge	\$6,311				
Work Boat	\$1,883				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		3.23	1.29%	\$12,975	4.47%
Dive Basic Spread- Mixed Gas	\$4,038				
Pipeline Surveying	\$743				
Pipelay Barge	\$6,311				
Work Boat	\$1,883				
Cut Pipeline Riser		2.15	0.86%	\$8,637	2.98%
Dive Basic Spread- Mixed Gas	\$2,688				
Pipeline Surveying	\$495				
Pipelay Barge	\$4,201				
Work Boat	\$1,253				
Remove Tube Turn		2.15	0.86%	\$8,637	2.98%
Dive Basic Spread- Mixed Gas	\$2,688				
Pipeline Surveying	\$495				
Pipelay Barge	\$4,201				
Work Boat	\$1,253				
Re-position P/L Remove Spread		3.00	1.20%	\$12,051	4.15%
Dive Basic Spread- Mixed Gas	\$3,750				
Pipeline Surveying	\$690				
Pipelay Barge	\$5,862				
Work Boat	\$1,749				
Expose Pipeline		3.23	1.29%	\$12,975	4.47%
Dive Basic Spread- Mixed Gas	\$4,038				
Pipeline Surveying	\$743				
Pipelay Barge	\$6,311				
Work Boat	\$1,883				
Cut & Plug Pipeline		3.23	1.29%	\$12,975	4.47%
Dive Basic Spread- Mixed Gas	\$4,038				
Pipeline Surveying	\$743				
Pipelay Barge	\$6,311				
Work Boat	\$1,883				
Mobilize Vessel		10.00	4.00%	\$27,000	9.30%
CB 180 & Tug	\$11,000				
Rig Up CB 180	\$16,000				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Remove Pipeline		6.00	2.40%	\$27,402	9.44%	
Pipeline Surveying	\$1,380					
Dive Basic Spread- Mixed Gas	\$7,500					
Pipelay Barge	\$11,724					
CB 180 & Tug	\$3,300					
Work Boat	\$3,498					
Bury Pipeline		2.15	0.86%	\$9,819	3.38%	
Pipeline Surveying	\$495					
Dive Basic Spread- Mixed Gas	\$2,688					
Pipelay Barge	\$4,201					
CB 180 & Tug	\$1,183					
Work Boat	\$1,253					
Demob Vessel		10.00	4.00%	\$11,000	3.79%	
CB 180 & Tug	\$11,000					
Demob P/L Removal Spread		1.78	0.71%	\$6,113	2.11%	
Pipeline Surveying	\$409					
Dive Basic Spread- Mixed Gas	\$2,225					
Pipelay Barge	\$3,478					
Offload CB 180		168.00	67.16%	\$41,000	14.13%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
Demob Work Boat		1.78	0.71%	\$1,038	0.36%	
Work Boat	\$1,038					
		Total	239.14	95.60%	\$244,736.50	84.34%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Gina Segment#:3130202-Shore

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$5,750	2.02%
Manual Calculation	\$5,750				
Mobilize Work Boat		1.78	0.72%	\$2,195	0.77%
Work Boat	\$1,038				
Decommissioning Crew	\$1,157				
Rig Up Decomm Equipment		5.00	2.03%	\$6,165	2.17%
Work Boat	\$2,915				
Decommissioning Crew	\$3,250				
Pig & Flush Pipeline		5.29	2.15%	\$6,523	2.29%
Work Boat	\$3,084				
Decommissioning Crew	\$3,439				
Derig Decomm Equipment		2.00	0.81%	\$2,466	0.87%
Work Boat	\$1,166				
Decommissioning Crew	\$1,300				
Demob Flushing Crew & Equipment		0.00	0.00%	\$5,750	2.02%
Manual Calculation	\$5,750				
Mob P/L Removal Spread		1.78	0.72%	\$7,150	2.51%
Dive Basic Spread- Mixed Gas	\$2,225				
Pipeline Surveying	\$409				
Pipelay Barge	\$3,478				
Work Boat	\$1,038				
Expose Pipeline		3.23	1.31%	\$12,975	4.56%
Dive Basic Spread- Mixed Gas	\$4,038				
Pipeline Surveying	\$743				
Pipelay Barge	\$6,311				
Work Boat	\$1,883				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		3.23	1.31%	\$12,975	4.56%
Dive Basic Spread- Mixed Gas	\$4,038				
Pipeline Surveying	\$743				
Pipelay Barge	\$6,311				
Work Boat	\$1,883				
Cut Pipeline Riser		2.15	0.87%	\$8,637	3.03%
Dive Basic Spread- Mixed Gas	\$2,688				
Pipeline Surveying	\$495				
Pipelay Barge	\$4,201				
Work Boat	\$1,253				
Remove Tube Turn		2.15	0.87%	\$8,637	3.03%
Dive Basic Spread- Mixed Gas	\$2,688				
Pipeline Surveying	\$495				
Pipelay Barge	\$4,201				
Work Boat	\$1,253				
Re-position P/L Remove Spread		3.00	1.22%	\$12,051	4.23%
Dive Basic Spread- Mixed Gas	\$3,750				
Pipeline Surveying	\$690				
Pipelay Barge	\$5,862				
Work Boat	\$1,749				
Expose Pipeline		3.23	1.31%	\$12,975	4.56%
Dive Basic Spread- Mixed Gas	\$4,038				
Pipeline Surveying	\$743				
Pipelay Barge	\$6,311				
Work Boat	\$1,883				
Cut & Plug Pipeline		3.23	1.31%	\$12,975	4.56%
Dive Basic Spread- Mixed Gas	\$4,038				
Pipeline Surveying	\$743				
Pipelay Barge	\$6,311				
Work Boat	\$1,883				
Mobilize Vessel		10.00	4.07%	\$27,000	9.48%
CB 180 & Tug	\$11,000				
Rig Up CB 180	\$16,000				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Remove Pipeline		6.00	2.44%	\$27,402	9.63%	
Pipeline Surveying	\$1,380					
Dive Basic Spread- Mixed Gas	\$7,500					
Pipelay Barge	\$11,724					
CB 180 & Tug	\$3,300					
Work Boat	\$3,498					
Bury Pipeline		2.15	0.87%	\$9,819	3.45%	
Pipeline Surveying	\$495					
Dive Basic Spread- Mixed Gas	\$2,688					
Pipelay Barge	\$4,201					
CB 180 & Tug	\$1,183					
Work Boat	\$1,253					
Demob Vessel		10.00	4.07%	\$11,000	3.86%	
CB 180 & Tug	\$11,000					
Demob P/L Removal Spread		1.78	0.72%	\$6,113	2.15%	
Pipeline Surveying	\$409					
Dive Basic Spread- Mixed Gas	\$2,225					
Pipelay Barge	\$3,478					
Offload CB 180		168.00	68.31%	\$41,000	14.40%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
Demob Work Boat		1.78	0.72%	\$1,038	0.36%	
Work Boat	\$1,038					
		Total	235.78	95.87%	\$240,593.62	84.51%



TSB OFFSHORE

BSEE-POCSR

Well Decommission Task Information

Gina Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$2,196,384 75.19%
		Task Total	0.00	\$2,196,384 75.19%
		Misc. Work Provision (15.00%)	0.00	\$329,458 11.28%
		Weather Provision (10.00%)	0.00	\$219,638 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$175,711 6.02%
		Total:	0.00 100.00%	\$2,921,191 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Gina Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$2,196,384 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Gina Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$2,196,384	75.19%
Manual Calculation	\$2,196,384				
	Total	0.00	0.00%	\$2,196,384	75.19%



BSEE-POCSR

Platform Salvage Option

Grace

COMPLETE REMOVAL

-Platform Grace will be removed along with Platforms Gail, Harvest, Hermosa, Hidalgo and Irene.

-Platform Grace is a 12-pile platform installed in 1979 in 318' of water.

-The estimated removal weight is the deck weight is 3,800 tons and the jacket weight is 3,090 tons.

-The platform has a total of 28 wells that will be plugged and abandoned.

-The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.

-Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.

-A total of 38 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.

-A lifting barge will be outfitted and utilized to lift pieces from the jacket structure. The loads will then be transferred midwater to the DB2000 to complete the lift and place on cargo barge.

-The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.

-The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.

-Two 300' cargo barges will transport the deck modules to shore and three 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 5 cargo barge trips will be required.



BSEE-POCSR

Platform Salvage Option

Grace

-The two pipelines (oil and gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and



BSEE-POCSR

Platform Salvage Option

Grace

Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$43,219,188

Estimated Decommissioning Net Cost = \$43,219,188



BSEE-POCSR

Basic Information

Grace

General Data

Platform:	Grace
Function:	DRILL/PROD
Type:	Steel
Water Depth:	318'
Pre 461H?:	Yes
Year Installed:	1979
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0217
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	28
# Pipelines to Abandon:	2
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Venoco, Inc.	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$31,524,010	\$31,524,010
Well Plugging & Abandonment:	\$7,893,194	\$7,893,194
Pipeline Abandonment:	\$3,801,984	\$3,801,984
Total Decommissioning Cost:	\$43,219,188	\$43,219,188



BSEE-POCSR

Platform Information

Grace

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	12	42"		Yes	No	
Skirt/Braced	8	48"		No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	48
Number Installed:	38
Outside Diameter:	24"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	3090.00		
Jacket Installation Date:	1/1/1979		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	3800 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1979
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Grace

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Deck > 500T	Equipment	Equipment	0
CB 300 x 100	Deck > 500T	Deck > 500T	0	0
CB 400 x 100	Deck > 500T	Deck > 500T	Equipment	0
CB 400 x 100	Jkt > 700T	Deck > 500T	0	0
CB 400 x 100	Jkt > 700T	Jkt > 700T	0	0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$4,734,088.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Grace

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$1,450,202.00	4.60%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.03%	\$494,498.00	1.57%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.03%	\$4,466,019.00	14.17%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.03%	\$1,826,637.00	5.79%
Platform Abandonment - Manual Calculation	Lifting barge costs	<input type="checkbox"/>	0.00	0.00%	\$2,404,720.00	7.63%
Mobilize DB 2000	Mob from Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	4.97%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	17.60	0.46%	\$62,496.00	0.20%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 3) + Lifting Barge = 4	<input type="checkbox"/>	17.60	0.46%	\$126,400.00	0.40%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.18%	\$58,781.23	0.19%
Cut Deck/Equip/Misc	Seperate 6 Modules, per MMS	<input checked="" type="checkbox"/>	12.00	0.31%	\$116,260.00	0.37%
Remove Equipment		<input checked="" type="checkbox"/>	12.00	0.31%	\$116,260.00	0.37%
Remove 8 Pile Deck	Remove 12 Pile Deck, 6 modules	<input checked="" type="checkbox"/>	48.00	1.25%	\$465,039.81	1.48%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	17.60	0.46%	\$34,496.00	0.11%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	46.00	1.19%	\$446,583.19	1.42%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.03%	\$8,391.00	0.03%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	11.20	0.29%	\$99,904.00	0.32%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	109.70	2.85%	\$2,142,967.81	6.80%
Cut Jacket	20 Hours per section, times 3 section(s), per MMS	<input checked="" type="checkbox"/>	60.00	1.56%	\$1,277,139.81	4.05%
Remove Jacket - Meth 1	32 Hours per section, times 3 section(s), per MMS	<input checked="" type="checkbox"/>	96.00	2.49%	\$1,884,319.69	5.98%
Demob CB 400 & Tug	Demob to Port of LA (Qty 3) + 1 Lifting Barge = 4	<input type="checkbox"/>	17.60	0.46%	\$70,400.00	0.22%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.18%	\$58,781.23	0.19%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	11.20	0.29%	\$99,904.00	0.32%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.03%	\$8,391.00	0.03%
Demob DB 2000	Demob to Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	4.97%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	1.87%	\$1,472,000.00	4.67%
Offload CB 300		<input type="checkbox"/>	1128.00	29.28%	\$271,240.00	0.86%
Offload CB 400		<input type="checkbox"/>	2040.00	52.95%	\$610,400.00	1.94%
Task Total			3735.00	96.94%	\$3,207,230.77	73.62%
Misc. Work Provision (15.00%)			70.68	1.83%	\$2,149,619.00	6.82%
Weather Contingency (10.00%)			47.12	1.22%	\$1,433,079.00	4.55%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Grace

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal	3,734,088.00	\$4,734,088.00 15.02%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			3852.80 100.00%	\$1,524,016.77 100.00%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Resources Breakdown

Grace

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$180,063 0.57%
Cargo Barge 300	\$4,920 per Day per Barge	\$231,240 0.73%
Cargo Barge 400	\$6,240 per Day per Barge	\$530,400 1.68%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$139,552 0.44%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$608,500 1.93%
CB Damage Deduct	\$20,000 per Cargo Barge	\$120,000 0.38%
Derrick Barge 2000	\$8,708 per Hour per barge	\$6,593,949 20.92%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$911,837 2.89%
DP Dive Boat	\$3,300 Per Hour	\$950,730 3.02%
Manual Calculation	\$0 Independently Calculated	\$12,130,858 38.48%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$198,880 0.63%
Pipeline Survey	\$230 per Hour	\$66,263 0.21%
Rem. Operated Vehicle	\$800 per Hour	\$460,960 1.46%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.09%
Rig Up CB 400	\$14,000 per Barge	\$56,000 0.18%



BSEE-POCSR

Platform Decommission Cost Breakdown

Grace

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$1,450,202.00	4.60%
Manual Calculation			\$1,450,202	
Platform Abandonment - Manual Calculation	1.00	0.03%	\$494,498.00	1.57%
Manual Calculation			\$494,498	
Sever Conductors- Abrasive	1.00	0.03%	\$4,466,019.00	14.17%
Manual Calculation			\$4,466,019	
Platform Removal Preparation	1.00	0.03%	\$1,826,637.00	5.79%
Manual Calculation			\$1,826,637	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$2,404,720.00	7.63%
Manual Calculation			\$2,404,720	
Mobilize DB 2000	0.00	0.00%	\$1,567,500.00	4.97%
Derrick Barge 2000			\$1,567,500	
Mobilize CB 300 & Tug	17.60	0.46%	\$62,496.00	0.20%
CB 300 & Tug			\$34,496	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	17.60	0.46%	\$126,400.00	0.40%
Rig Up CB 400			\$56,000	
CB 400 & Tug			\$70,400	



BSEE-POCSR

Platform Decommission Cost Breakdown

Grace

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Setup Derrick Barge	6.75	0.18%	\$58,781.23	0.19%
Derrick Barge 2000			\$58,781	
Cut Deck/Equip/Misc	12.00	0.31%	\$116,260.00	0.37%
Derrick Barge 2000			\$104,500	
CB 300 & Tug			\$11,760	
Remove Equipment	12.00	0.31%	\$116,260.00	0.37%
Derrick Barge 2000			\$104,500	
CB 300 & Tug			\$11,760	
Remove 8 Pile Deck	48.00	1.25%	\$465,039.81	1.48%
Derrick Barge 2000			\$418,000	
CB 300 & Tug			\$47,040	
Demob CB 300 & Tug	17.60	0.46%	\$34,496.00	0.11%
CB 300 & Tug			\$34,496	
Jet/Airlift Pile Mud Plug	46.00	1.19%	\$446,583.19	1.42%
Derrick Barge 2000			\$400,583	
CB 400 & Tug			\$46,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Grace

Task	Task Hours	Task Cost
Mobilize Abrasive Cutting Spread	1.00	0.03%
		\$8,391.00
		0.03%
Manual Calculation	\$1,100	
Manual Calculation	\$422	
Manual Calculation	\$4,800	
Manual Calculation	\$2,069	
Mobilize Dive Spread	11.20	0.29%
		\$99,904.00
		0.32%
DP Dive Boat	\$36,960	
Dive Basic Spread Saturation	\$35,448	
Abrasive Cutter Spread	\$7,000	
Pipeline Survey	\$2,576	
Rem. Operated Vehicle	\$17,920	
Sever Piles- Abrasive	109.70	2.85%
		\$2,142,967.81
		6.80%
Derrick Barge 2000	\$955,304	
DP Dive Boat	\$362,010	
Dive Basic Spread Saturation	\$347,201	
Pipeline Survey	\$25,231	
Abrasive Cutter Spread	\$68,563	
CB 400 & Tug	\$109,700	
Pile Abrasive Cut 7 to 48 inches	\$99,440	
Rem. Operated Vehicle	\$175,520	



BSEE-POCSR
Platform Decommission Cost Breakdown
Grace

Task	Task Hours		Task Cost	
Cut Jacket	60.00	1.56%	\$1,277,139.81	4.05%
Derrick Barge 2000			\$522,500	
DP Dive Boat			\$198,000	
Dive Basic Spread Saturation			\$189,900	
Pipeline Survey			\$13,800	
Abrasive Cutter Spread			\$37,500	
CB 400 & Tug			\$120,000	
Pile Abrasive Cut 7 to 48 inches			\$99,440	
Rem. Operated Vehicle			\$96,000	
Remove Jacket - Meth 1	96.00	2.49%	\$1,884,319.69	5.98%
Derrick Barge 2000			\$836,000	
DP Dive Boat			\$316,800	
Dive Basic Spread Saturation			\$303,840	
Pipeline Survey			\$22,080	
Abrasive Cutter Spread			\$60,000	
CB 400 & Tug			\$192,000	
Rem. Operated Vehicle			\$153,600	
Demob CB 400 & Tug	17.60	0.46%	\$70,400.00	0.22%
CB 400 & Tug			\$70,400	
Pick Up DB Anchors	6.75	0.18%	\$58,781.23	0.19%
Derrick Barge 2000			\$58,781	



BSEE-POCSR

Platform Decommission Cost Breakdown

Grace

Task		Task Hours		Task Cost	
Demob Dive Spread		11.20	0.29%	\$99,904.00	0.32%
DP Dive Boat	\$36,960				
Dive Basic Spread Saturation	\$35,448				
Abrasive Cutter Spread	\$7,000				
Pipeline Survey	\$2,576				
Rem. Operated Vehicle	\$17,920				
Demob Abrasive Cutting Spread		1.00	0.03%	\$8,391.00	0.03%
Manual Calculation	\$1,100				
Manual Calculation	\$422				
Manual Calculation	\$4,800				
Manual Calculation	\$2,069				
Demob DB 2000		0.00	0.00%	\$1,567,500.00	4.97%
Derrick Barge 2000	\$1,567,500				
Site Clearance - with Divers		72.00	1.87%	\$1,472,000.00	4.67%
Manual Calculation	\$1,472,000				
Offload CB 300		1128.00	29.28%	\$271,240.00	0.86%
Cargo Barge 300	\$231,240				
CB Damage Deduct	\$40,000				
Offload CB 400		2040.00	52.95%	\$610,400.00	1.94%
Cargo Barge 400	\$530,400				
CB Damage Deduct	\$80,000				
Total		3735.00	96.94%	\$23,207,230.77	73.62%



BSEE-POCSR

Pipeline Information

Grace (Ver1) Segment#:2120217

General Data

Water Depth: 320'
Origin / Terminus: Origin
Opposite End Name: Carpinteria
Opposite End Water Depth:
Pipeline Operator: Venoco, Inc.
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:		Length:	80600'
Depth of Burial:		# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Grace (Ver1) Segment#:2220217

General Data

Water Depth: 320'
Origin / Terminus: Origin
Opposite End Name: Carpinteria
Opposite End Water Depth:
Pipeline Operator: Venoco, Inc.
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	80600'
Depth of Burial:		# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Grace Segment#:2120217

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.13%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.53	0.42%	\$250,000	13.16%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.83%	\$22,035	1.16%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.39%	\$36,725	1.93%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	22.01	6.10%	\$161,663	8.51%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.55%	\$14,690	0.77%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.13%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	11.55	3.20%	\$77,327	4.07%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.40	2.05%	\$49,543	2.61%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.40	2.05%	\$55,100	2.90%
Mob P/L Removal Spread	Shared between 5 pipelines	<input type="checkbox"/>	2.24	0.62%	\$15,084	0.79%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	3.20%	\$77,778	4.09%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	11.55	3.20%	\$77,778	4.09%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	11.20	3.11%	\$28,320	1.49%
Remove Pipeline	Remove 2.3 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	41.00	11.37%	\$298,644	15.72%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	2.14%	\$56,087	2.95%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	11.20	3.11%	\$12,320	0.65%
Demob P/L Removal Spread	Shared b/w 5 P/L's	<input type="checkbox"/>	2.24	0.62%	\$15,084	0.79%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.42%	\$250,000	13.16%
Offload CB 180		<input type="checkbox"/>	168.00	46.58%	\$41,000	2.16%
Task Total			328.10	90.98%	\$1,544,107	81.29%
Misc. Work Provision (15.00%)			19.52	5.41%	\$139,106	7.32%
Weather Provision (10.00%)			13.02	3.61%	\$92,737	4.88%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$123,529	6.50%
Total:			360.64	100.00%	\$1,899,478	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Grace Segment#:2220217

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.13%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.53	0.42%	\$250,000	13.14%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.83%	\$22,035	1.16%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.38%	\$36,725	1.93%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	22.32	6.18%	\$163,940	8.62%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.55%	\$14,690	0.77%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.13%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	11.55	3.20%	\$77,327	4.06%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.40	2.05%	\$49,543	2.60%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.40	2.05%	\$55,100	2.90%
Mob P/L Removal Spread	Shared between 5 pipelines	<input type="checkbox"/>	2.24	0.62%	\$15,084	0.79%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	3.20%	\$77,778	4.09%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	11.55	3.20%	\$77,778	4.09%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	11.20	3.10%	\$28,320	1.49%
Remove Pipeline	Remove 2.3 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	41.00	11.36%	\$298,644	15.70%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	2.13%	\$56,087	2.95%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	11.20	3.10%	\$12,320	0.65%
Demob P/L Removal Spread	Shared b/w 5 P/L's	<input type="checkbox"/>	2.24	0.62%	\$15,084	0.79%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.42%	\$250,000	13.14%
Offload CB 180		<input type="checkbox"/>	168.00	46.53%	\$41,000	2.16%
Task Total			328.41	90.97%	\$1,546,384	81.28%
Misc. Work Provision (15.00%)			19.57	5.42%	\$139,447	7.33%
Weather Provision (10.00%)			13.05	3.61%	\$92,965	4.89%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$123,711	6.50%
Total:			361.03	100.00%	\$1,902,506	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Grace Segment#:2120217

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	1.14%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$51,425	2.78%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	1.08%
Decommissioning Crew	\$650	per Hour	\$20,807	1.12%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$95,350	5.15%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$184,709	9.98%
DP Dive Boat	\$3,300	per Hour	\$444,312	24.02%
Manual Calculation	\$0	Independently Calculated	\$504,928	27.29%
Pipelay Barge	\$1,954	per Hour	\$149,051	8.06%
Pipeline Surveying	\$230	per Hour	\$30,967	1.67%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.86%
Saturation Decompression	\$751	per Hour	\$5,557	0.30%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Grace Segment#:2220217

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	1.13%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$51,425	2.77%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	1.08%
Decommissioning Crew	\$650	per Hour	\$21,008	1.13%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$95,350	5.15%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$185,691	10.02%
DP Dive Boat	\$3,300	per Hour	\$445,335	24.03%
Manual Calculation	\$0	Independently Calculated	\$504,928	27.25%
Pipelay Barge	\$1,954	per Hour	\$149,051	8.04%
Pipeline Surveying	\$230	per Hour	\$31,039	1.67%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.86%
Saturation Decompression	\$751	per Hour	\$5,557	0.30%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Grace Segment#:2120217

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.13%
Manual Calculation		\$2,464
Mobilize Dive Boat	1.53 0.42%	\$250,000 13.51%
Manual Calculation		\$250,000
Set Up Dive Boat	3.00 0.83%	\$22,035 1.19%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 1.39%	\$36,725 1.98%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	22.01 6.10%	\$161,663 8.74%
DP Dive Boat		\$72,633
Dive Basic Spread Saturation		\$69,662
Decommissioning Crew		\$14,307
Pipeline Surveying		\$5,062
Derig Decomm Equipment	2.00 0.55%	\$14,690 0.79%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.13%
Manual Calculation		\$2,464
Cut & Plug Pipeline	11.55 3.20%	\$77,327 4.18%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.40	2.05%	\$49,543	2.68%
DP Dive Boat	\$24,420				
Dive Basic Spread Saturation	\$23,421				
Pipeline Surveying	\$1,702				
Remove Tube Turn		7.40	2.05%	\$55,100	2.98%
DP Dive Boat	\$24,420				
Dive Basic Spread Saturation	\$23,421				
Pipeline Surveying	\$1,702				
Saturation Decompression	\$5,557				
Mob P/L Removal Spread		2.24	0.62%	\$15,084	0.82%
Pipeline Surveying	\$515				
DP Dive Boat	\$7,392				
Dive Basic Spread- Mixed Gas	\$2,800				
Pipelay Barge	\$4,377				
Expose Pipeline		11.55	3.20%	\$77,778	4.20%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Cut & Plug Pipeline		11.55	3.20%	\$77,778	4.20%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Mobilize Vessel		11.20	3.11%	\$28,320	1.53%
CB 180 & Tug	\$12,320				
Rig Up CB 180	\$16,000				
Remove Pipeline		41.00	11.37%	\$298,644	16.14%
Pipeline Surveying	\$9,430				
DP Dive Boat	\$135,300				
Dive Basic Spread- Mixed Gas	\$51,250				
Pipelay Barge	\$80,114				
CB 180 & Tug	\$22,550				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	2.14%	\$56,087	3.03%	
Pipeline Surveying	\$1,771					
DP Dive Boat	\$25,410					
Dive Basic Spread- Mixed Gas	\$9,625					
Pipelay Barge	\$15,046					
CB 180 & Tug	\$4,235					
Demob Vessel		11.20	3.11%	\$12,320	0.67%	
CB 180 & Tug	\$12,320					
Demob P/L Removal Spread		2.24	0.62%	\$15,084	0.82%	
Pipeline Surveying	\$515					
DP Dive Boat	\$7,392					
Dive Basic Spread- Mixed Gas	\$2,800					
Pipelay Barge	\$4,377					
Demob Dive Boat		1.53	0.42%	\$250,000	13.51%	
Manual Calculation	\$250,000					
Offload CB 180		168.00	46.58%	\$41,000	2.22%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	328.10	90.98%	\$1,544,106.62	83.46%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Grace Segment#:2220217

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.13%
Manual Calculation		\$2,464
Mobilize Dive Boat	1.53 0.42%	\$250,000 13.49%
Manual Calculation		\$250,000
Set Up Dive Boat	3.00 0.83%	\$22,035 1.19%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 1.38%	\$36,725 1.98%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	22.32 6.18%	\$163,940 8.85%
DP Dive Boat		\$73,656
Dive Basic Spread Saturation		\$70,643
Decommissioning Crew		\$14,508
Pipeline Surveying		\$5,134
Derig Decomm Equipment	2.00 0.55%	\$14,690 0.79%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.13%
Manual Calculation		\$2,464
Cut & Plug Pipeline	11.55 3.20%	\$77,327 4.17%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.40	2.05%	\$49,543	2.67%
DP Dive Boat	\$24,420				
Dive Basic Spread Saturation	\$23,421				
Pipeline Surveying	\$1,702				
Remove Tube Turn		7.40	2.05%	\$55,100	2.97%
DP Dive Boat	\$24,420				
Dive Basic Spread Saturation	\$23,421				
Pipeline Surveying	\$1,702				
Saturation Decompression	\$5,557				
Mob P/L Removal Spread		2.24	0.62%	\$15,084	0.81%
Pipeline Surveying	\$515				
DP Dive Boat	\$7,392				
Dive Basic Spread- Mixed Gas	\$2,800				
Pipelay Barge	\$4,377				
Expose Pipeline		11.55	3.20%	\$77,778	4.20%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Cut & Plug Pipeline		11.55	3.20%	\$77,778	4.20%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Mobilize Vessel		11.20	3.10%	\$28,320	1.53%
CB 180 & Tug	\$12,320				
Rig Up CB 180	\$16,000				
Remove Pipeline		41.00	11.36%	\$298,644	16.12%
Pipeline Surveying	\$9,430				
DP Dive Boat	\$135,300				
Dive Basic Spread- Mixed Gas	\$51,250				
Pipelay Barge	\$80,114				
CB 180 & Tug	\$22,550				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	2.13%	\$56,087	3.03%	
Pipeline Surveying	\$1,771					
DP Dive Boat	\$25,410					
Dive Basic Spread- Mixed Gas	\$9,625					
Pipelay Barge	\$15,046					
CB 180 & Tug	\$4,235					
Demob Vessel		11.20	3.10%	\$12,320	0.66%	
CB 180 & Tug	\$12,320					
Demob P/L Removal Spread		2.24	0.62%	\$15,084	0.81%	
Pipeline Surveying	\$515					
DP Dive Boat	\$7,392					
Dive Basic Spread- Mixed Gas	\$2,800					
Pipelay Barge	\$4,377					
Demob Dive Boat		1.53	0.42%	\$250,000	13.49%	
Manual Calculation	\$250,000					
Offload CB 180		168.00	46.53%	\$41,000	2.21%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	328.41	90.97%	\$1,546,383.57	83.45%



TSB OFFSHORE

BSEE-POCSR

Well Decommission Task Information

Grace Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$5,934,732 75.19%
		Task Total	0.00	\$5,934,732 75.19%
		Misc. Work Provision (15.00%)	0.00	\$890,210 11.28%
		Weather Provision (10.00%)	0.00	\$593,473 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$474,779 6.02%
		Total:	0.00 100.00%	\$7,893,194 100.00%



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Well Decommission Resources Breakdown

Grace Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$5,934,732 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Grace Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$5,934,732	75.19%
Manual Calculation	\$5,934,732				
Total		0.00	0.00%	\$5,934,732	75.19%



BSEE-POCSR

Platform Salvage Option

Habitat

COMPLETE REMOVAL

- Platform Habitat will be removed along with Platforms Gilda and Gina.
- Platform Habitat is an 8-pile platform installed in 1981 in 290' of water.
- The estimated removal weight is the deck weight is 3,514 tons and the jacket weight is 2,550 tons.
- The platform has a total of 20 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 21 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and three 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 5 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los



BSEE-POCSR

Platform Salvage Option

Habitat

Angeles/Long Beach where it will be cut into segments and disposed of.

-The one pipeline (gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate.



BSEE-POCSR

Platform Salvage Option

Habitat

Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$34,533,694

Estimated Decommissioning Net Cost = \$34,533,694



BSEE-POCSR

Basic Information

Habitat

General Data

Platform:	Habitat
Function:	DRILL/PROD
Type:	Steel
Water Depth:	290'
Pre 461H?:	Yes
Year Installed:	1981
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0234
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	20
# Pipelines to Abandon:	1
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 DCOR, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$26,625,510	\$26,625,510
Well Plugging & Abandonment:	\$5,042,482	\$5,042,482
Pipeline Abandonment:	\$2,865,702	\$2,865,702
Total Decommissioning Cost:	\$34,533,694	\$34,533,694



BSEE-POCSR

Platform Information

Habitat

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	54"	1.5"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	75 x 165	57
Middle:		
Lower:	85 x 165	40

Conductors

Number of Slots:	23
Number Installed:	21
Outside Diameter:	24"
Wall Thickness:	0.5"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	2550.00		
Jacket Installation Date:	10/8/81		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	3514 Tons
Number of Padeyes Required:	8
Deck Installation Date:	10/8/81
Deck Contractor:	Unknown



TSB OFFSHORE

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Platform Information

Habitat

Equipment Lift Weights

Members to be Cut Data

Top Members		Underwater Members	
Size	Qty	Size	Qty
36.00	16.00	36.00	6.00
54.00	8.00	54.00	8.00

Cargo Descriptions

Cargo Barge Size	Cargo Description		
CB 300 x 100	Deck > 500T	Equipment	Equipment
CB 300 x 100	Deck > 500T	Equipment	
CB 400 x 100	Deck > 500T	Deck > 500T	
CB 400 x 100	Deck > 500T	Deck > 500T	
CB 400 x 100	Jkt > 700T	Jkt > 700T	

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$3,793,458.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Habitat

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$939,225.00	3.53%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.03%	\$1,280,654.00	4.81%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.03%	\$2,403,884.00	9.03%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.03%	\$1,949,544.00	7.32%
Mobilize DB 2000	Mob from Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	11.77%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	22.00	0.64%	\$71,120.00	0.27%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 3)	<input type="checkbox"/>	22.00	0.64%	\$108,000.00	0.41%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.20%	\$58,781.23	0.22%
Cut Deck/Equip/Misc	Seperate 6 Modules, per MMS	<input checked="" type="checkbox"/>	12.00	0.35%	\$116,260.00	0.44%
Remove Equipment		<input checked="" type="checkbox"/>	12.00	0.35%	\$116,260.00	0.44%
Remove 8 Pile Deck	Remove 8 Pile Deck, 6 modules	<input checked="" type="checkbox"/>	48.00	1.40%	\$465,039.81	1.75%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	22.00	0.64%	\$43,120.00	0.16%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	31.00	0.91%	\$300,958.19	1.13%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.03%	\$13,984.00	0.05%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	12.20	0.36%	\$108,824.00	0.41%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	49.91	1.46%	\$1,009,740.07	3.79%
Cut Jacket	30 Hours per section, times 2 section(s), per MMS	<input checked="" type="checkbox"/>	60.00	1.75%	\$1,157,475.81	4.35%
Remove Jacket - Meth 1	30 Hours per section, times 2 section(s), per MMS	<input checked="" type="checkbox"/>	60.00	1.75%	\$1,117,699.81	4.20%
Demob CB 400 & Tug	Demob to Port of LA (Qty 3)	<input type="checkbox"/>	22.00	0.64%	\$66,000.00	0.25%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.20%	\$58,781.23	0.22%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	12.20	0.36%	\$108,824.00	0.41%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.03%	\$13,984.00	0.05%
Demob DB 2000	Demob to Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	11.77%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	2.10%	\$884,000.00	3.32%
Offload CB 300		<input type="checkbox"/>	792.00	23.14%	\$202,360.00	0.76%
Offload CB 400		<input type="checkbox"/>	2064.00	60.32%	\$596,640.00	2.24%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$769,029.00	2.89%
Task Total			3331.81	97.37%	20,230,188.15	75.98%
Misc. Work Provision (15.00%)			54.06	1.58%	\$1,561,118.00	5.86%
Weather Contingency (10.00%)			36.04	1.05%	\$1,040,745.00	3.91%



TSB OFFSHORE

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Platform Decommission Task Information

Habitat

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal	3,793,458.00	14.25%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			3421.91 100.00%	26,625,509.15 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Habitat

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$121,444 0.46%
Cargo Barge 300	\$4,920 per Day per Barge	\$162,360 0.61%
Cargo Barge 400	\$6,240 per Day per Barge	\$536,640 2.02%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$156,800 0.59%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$332,910 1.25%
CB Damage Deduct	\$20,000 per Cargo Barge	\$100,000 0.38%
Derrick Barge 2000	\$8,708 per Hour per barge	\$8,764,153 32.92%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$614,991 2.31%
DP Dive Boat	\$3,300 Per Hour	\$641,223 2.41%
Manual Calculation	\$0 Independently Calculated	\$8,254,304 31.00%
Pile Abrasive Cut 49 to 69 inches	\$5,000 per Cut	\$80,000 0.30%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$39,776 0.15%
Pipeline Survey	\$230 per Hour	\$44,691 0.17%
Rem. Operated Vehicle	\$800 per Hour	\$310,896 1.17%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.11%
Rig Up CB 400	\$14,000 per Barge	\$42,000 0.16%



BSEE-POCSR

Platform Decommission Cost Breakdown

Habitat

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$939,225.00	3.53%
Manual Calculation			\$939,225	
Platform Abandonment - Manual Calculation	1.00	0.03%	\$1,280,654.00	4.81%
Manual Calculation			\$1,280,654	
Sever Conductors- Abrasive	1.00	0.03%	\$2,403,884.00	9.03%
Manual Calculation			\$2,403,884	
Platform Removal Preparation	1.00	0.03%	\$1,949,544.00	7.32%
Manual Calculation			\$1,949,544	
Mobilize DB 2000	0.00	0.00%	\$3,135,000.00	11.77%
Derrick Barge 2000			\$3,135,000	
Mobilize CB 300 & Tug	22.00	0.64%	\$71,120.00	0.27%
CB 300 & Tug			\$43,120	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	22.00	0.64%	\$108,000.00	0.41%
Rig Up CB 400			\$42,000	
CB 400 & Tug			\$66,000	
Setup Derrick Barge	6.75	0.20%	\$58,781.23	0.22%
Derrick Barge 2000			\$58,781	



BSEE-POCSR

Platform Decommission Cost Breakdown

Habitat

Task	Task Hours		Task Cost	
	Hours	Percentage	Cost	Percentage
Cut Deck/Equip/Misc	12.00	0.35%	\$116,260.00	0.44%
Derrick Barge 2000			\$104,500	
CB 300 & Tug			\$11,760	
Remove Equipment	12.00	0.35%	\$116,260.00	0.44%
Derrick Barge 2000			\$104,500	
CB 300 & Tug			\$11,760	
Remove 8 Pile Deck	48.00	1.40%	\$465,039.81	1.75%
Derrick Barge 2000			\$418,000	
CB 300 & Tug			\$47,040	
Demob CB 300 & Tug	22.00	0.64%	\$43,120.00	0.16%
CB 300 & Tug			\$43,120	
Jet/Airlift Pile Mud Plug	31.00	0.91%	\$300,958.19	1.13%
Derrick Barge 2000			\$269,958	
CB 400 & Tug			\$31,000	
Mobilize Abrasive Cutting Spread	1.00	0.03%	\$13,984.00	0.05%
Manual Calculation			\$1,833	
Manual Calculation			\$703	
Manual Calculation			\$8,000	
Manual Calculation			\$3,448	



BSEE-POCSR

Platform Decommission Cost Breakdown

Habitat

Task	Task Hours		Task Cost	
Mobilize Dive Spread	12.20	0.36%	\$108,824.00	0.41%
DP Dive Boat			\$40,260	
Dive Basic Spread Saturation			\$38,613	
Abrasive Cutter Spread			\$7,625	
Pipeline Survey			\$2,806	
Rem. Operated Vehicle			\$19,520	
Sever Piles- Abrasive	49.91	1.46%	\$1,009,740.07	3.79%
Derrick Barge 2000			\$434,633	
DP Dive Boat			\$164,703	
Dive Basic Spread Saturation			\$157,965	
Pipeline Survey			\$11,479	
Abrasive Cutter Spread			\$31,194	
CB 400 & Tug			\$49,910	
Pile Abrasive Cut 49 to 69 inches			\$80,000	
Rem. Operated Vehicle			\$79,856	
Cut Jacket	60.00	1.75%	\$1,157,475.81	4.35%
Derrick Barge 2000			\$522,500	
DP Dive Boat			\$198,000	
Dive Basic Spread Saturation			\$189,900	
Pipeline Survey			\$13,800	
Abrasive Cutter Spread			\$37,500	
CB 400 & Tug			\$60,000	
Pile Abrasive Cut 7 to 48 inches			\$39,776	
Rem. Operated Vehicle			\$96,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Habitat

Task	Task Hours		Task Cost	
	Hours	Percentage	Cost	Percentage
Remove Jacket - Meth 1	60.00	1.75%	\$1,117,699.81	4.20%
Derrick Barge 2000			\$522,500	
DP Dive Boat			\$198,000	
Dive Basic Spread Saturation			\$189,900	
Pipeline Survey			\$13,800	
Abrasive Cutter Spread			\$37,500	
CB 400 & Tug			\$60,000	
Rem. Operated Vehicle			\$96,000	
Demob CB 400 & Tug	22.00	0.64%	\$66,000.00	0.25%
CB 400 & Tug			\$66,000	
Pick Up DB Anchors	6.75	0.20%	\$58,781.23	0.22%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	12.20	0.36%	\$108,824.00	0.41%
DP Dive Boat			\$40,260	
Dive Basic Spread Saturation			\$38,613	
Abrasive Cutter Spread			\$7,625	
Pipeline Survey			\$2,806	
Rem. Operated Vehicle			\$19,520	
Demob Abrasive Cutting Spread	1.00	0.03%	\$13,984.00	0.05%
Manual Calculation			\$1,833	
Manual Calculation			\$703	
Manual Calculation			\$8,000	
Manual Calculation			\$3,448	



BSEE-POCSR

Platform Decommission Cost Breakdown

Habitat

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Demob DB 2000	0.00	0.00%	\$3,135,000.00	11.77%
Derrick Barge 2000			\$3,135,000	
Site Clearance - with Divers	72.00	2.10%	\$884,000.00	3.32%
Manual Calculation			\$884,000	
Offload CB 300	792.00	23.14%	\$202,360.00	0.76%
Cargo Barge 300			\$162,360	
CB Damage Deduct			\$40,000	
Offload CB 400	2064.00	60.32%	\$596,640.00	2.24%
Cargo Barge 400			\$536,640	
CB Damage Deduct			\$60,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$769,029.00	2.89%
Manual Calculation			\$769,029	
Total	3331.81	97.37%	\$20,230,188.15	75.98%



BSEE-POCSR

Pipeline Information

Habitat Segment#:3820454

General Data

Water Depth: 290'
Origin / Terminus: Origin
Opposite End Name: Carpinteria
Opposite End Water Depth:
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:	0.406"	Length:	43980'
Depth of Burial:		# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Habitat Segment#:3820454

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	0.20%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.49%	\$875,000	30.53%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.96%	\$22,035	0.77%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.60%	\$36,725	1.28%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	12.18	3.91%	\$89,462	3.12%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.64%	\$14,690	0.51%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 6 pipelines	<input type="checkbox"/>	0.00	0.00%	\$5,750	0.20%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	10.50	3.37%	\$70,298	2.45%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	6.77	2.17%	\$45,325	1.58%
Remove Tube Turn		<input checked="" type="checkbox"/>	6.77	2.17%	\$50,409	1.76%
Mob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.57%	\$11,987	0.42%
Expose Pipeline		<input checked="" type="checkbox"/>	10.50	3.37%	\$70,707	2.47%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	10.50	3.37%	\$70,707	2.47%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	12.20	3.92%	\$29,420	1.03%
Remove Pipeline	Remove 0.9 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	15.84	5.08%	\$115,379	4.03%
Bury Pipeline		<input checked="" type="checkbox"/>	7.00	2.25%	\$50,988	1.78%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	12.20	3.92%	\$13,420	0.47%
Demob P/L Removal Spread	Shared between 6 pipelines	<input type="checkbox"/>	1.78	0.57%	\$11,987	0.42%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 4 P/L's	<input type="checkbox"/>	1.53	0.49%	\$875,000	30.53%
Offload CB 180		<input type="checkbox"/>	168.00	53.92%	\$41,000	1.43%
Task Total			289.08	92.77%	\$2,506,038	87.45%
Misc. Work Provision (15.00%)			13.51	4.34%	\$95,509	3.33%
Weather Provision (10.00%)			9.01	2.89%	\$63,672	2.22%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$200,483	7.00%
Total:			311.60	100.00%	\$2,865,702	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Habitat Segment#:3820454

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	0.77%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$39,402	1.45%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	0.74%
Decommissioning Crew	\$650	per Hour	\$14,417	0.53%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$59,250	2.18%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$146,286	5.39%
DP Dive Boat	\$3,300	per Hour	\$308,946	11.37%
Manual Calculation	\$0	Independently Calculated	\$1,761,500	64.85%
Pipelay Barge	\$1,954	per Hour	\$92,620	3.41%
Pipeline Surveying	\$230	per Hour	\$21,533	0.79%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.59%
Saturation Decompression	\$751	per Hour	\$5,084	0.19%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Habitat Segment#:3820454

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$5,750 0.21%
Manual Calculation	\$5,750	
Mobilize Dive Boat	1.53 0.49%	\$875,000 32.21%
Manual Calculation	\$875,000	
Set Up Dive Boat	3.00 0.96%	\$22,035 0.81%
DP Dive Boat	\$9,900	
Dive Basic Spread Saturation	\$9,495	
Decommissioning Crew	\$1,950	
Pipeline Surveying	\$690	
Rig Up Decomm Equipment	5.00 1.60%	\$36,725 1.35%
DP Dive Boat	\$16,500	
Dive Basic Spread Saturation	\$15,825	
Decommissioning Crew	\$3,250	
Pipeline Surveying	\$1,150	
Pig & Flush Pipeline	12.18 3.91%	\$89,462 3.29%
DP Dive Boat	\$40,194	
Dive Basic Spread Saturation	\$38,550	
Decommissioning Crew	\$7,917	
Pipeline Surveying	\$2,801	
Derig Decomm Equipment	2.00 0.64%	\$14,690 0.54%
DP Dive Boat	\$6,600	
Dive Basic Spread Saturation	\$6,330	
Decommissioning Crew	\$1,300	
Pipeline Surveying	\$460	
Demob Flushing Crew & Equipment	0.00 0.00%	\$5,750 0.21%
Manual Calculation	\$5,750	
Cut & Plug Pipeline	10.50 3.37%	\$70,298 2.59%
DP Dive Boat	\$34,650	
Dive Basic Spread Saturation	\$33,233	
Pipeline Surveying	\$2,415	



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		6.77	2.17%	\$45,325	1.67%
DP Dive Boat	\$22,341				
Dive Basic Spread Saturation	\$21,427				
Pipeline Surveying	\$1,557				
Remove Tube Turn		6.77	2.17%	\$50,409	1.86%
DP Dive Boat	\$22,341				
Dive Basic Spread Saturation	\$21,427				
Pipeline Surveying	\$1,557				
Saturation Decompression	\$5,084				
Mob P/L Removal Spread		1.78	0.57%	\$11,987	0.44%
DP Dive Boat	\$5,874				
Dive Basic Spread- Mixed Gas	\$2,225				
Pipeline Surveying	\$409				
Pipelay Barge	\$3,478				
Expose Pipeline		10.50	3.37%	\$70,707	2.60%
Pipeline Surveying	\$2,415				
DP Dive Boat	\$34,650				
Dive Basic Spread- Mixed Gas	\$13,125				
Pipelay Barge	\$20,517				
Cut & Plug Pipeline		10.50	3.37%	\$70,707	2.60%
Pipeline Surveying	\$2,415				
DP Dive Boat	\$34,650				
Dive Basic Spread- Mixed Gas	\$13,125				
Pipelay Barge	\$20,517				
Mobilize Vessel		12.20	3.92%	\$29,420	1.08%
CB 180 & Tug	\$13,420				
Rig Up CB 180	\$16,000				
Remove Pipeline		15.84	5.08%	\$115,379	4.25%
Pipeline Surveying	\$3,643				
DP Dive Boat	\$52,272				
Dive Basic Spread- Mixed Gas	\$19,800				
Pipelay Barge	\$30,951				
CB 180 & Tug	\$8,712				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.00	2.25%	\$50,988	1.88%	
Pipeline Surveying	\$1,610					
DP Dive Boat	\$23,100					
Dive Basic Spread- Mixed Gas	\$8,750					
Pipelay Barge	\$13,678					
CB 180 & Tug	\$3,850					
Demob Vessel		12.20	3.92%	\$13,420	0.49%	
CB 180 & Tug	\$13,420					
Demob P/L Removal Spread		1.78	0.57%	\$11,987	0.44%	
Pipeline Surveying	\$409					
DP Dive Boat	\$5,874					
Dive Basic Spread- Mixed Gas	\$2,225					
Pipelay Barge	\$3,478					
Demob Dive Boat		1.53	0.49%	\$875,000	32.21%	
Manual Calculation	\$875,000					
Offload CB 180		168.00	53.92%	\$41,000	1.51%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	289.08	92.77%	\$2,506,037.77	92.26%



BSEE-POCSR

Well Decommission Task Information

Habitat Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$3,791,340 75.19%
		Task Total	0.00	\$3,791,340 75.19%
		Misc. Work Provision (15.00%)	0.00	\$568,701 11.28%
		Weather Provision (10.00%)	0.00	\$379,134 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$303,307 6.02%
		Total:	0.00 100.00%	\$5,042,482 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Habitat Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$3,791,340 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Habitat Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$3,791,340	75.19%
Manual Calculation	\$3,791,340				
	Total	0.00	0.00%	\$3,791,340	75.19%



BSEE-POCSR

Platform Salvage Option

Harmony

COMPLETE REMOVAL

- Platform Harmony will be removed along with Platforms Heritage and Hondo.
- Platform Harmony is an 8-pile platform installed in 1989 in 1,198' of water.
- The estimated removal weight is the deck weight is 9,839 tons and the jacket weight is 42,900 tons.
- The platform has a total of 34 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 54 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- A lifting barge will be outfitted and utilized to lift pieces from the jacket structure. The loads will then be transferred midwater to the DB2000 to complete the lift and place on cargo barge.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Fourteen 400' cargo barges will transport the deck modules and jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 14 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports.



BSEE-POCSR

Platform Salvage Option

Harmony

The mob/demob time will be 2 days round trip.

-The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and disposed of.

-The three pipelines (oil, gas, water) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;



BSEE-POCSR

Platform Salvage Option

Harmony

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$185,740,945

Estimated Decommissioning Net Cost = \$185,740,945



BSEE-POCSR

Basic Information

Harmony

General Data

Platform:	Harmony
Function:	SELF CONTAINED
Type:	Steel
Water Depth:	1198'
Pre 461H?:	No
Year Installed:	1989
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0190
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	34
# Pipelines to Abandon:	3
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 ExxonMobil Corporation	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$167,523,600	\$167,523,600
Well Plugging & Abandonment:	\$12,281,816	\$12,281,816
Pipeline Abandonment:	\$5,935,529	\$5,935,529
Total Decommissioning Cost:	\$185,740,945	\$185,740,945



BSEE-POCSR

Platform Information

Harmony

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	72"		Yes	No	
Skirt/Braced	20	84"		No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	60
Number Installed:	54
Outside Diameter:	24"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	42900.00		
Jacket Installation Date:	1/1/1989		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	9839 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1989
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Harmony

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Deck > 500T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$32,949,946.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Harmony

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$7,724,799.00	4.61%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.01%	\$1,720,616.00	1.03%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.01%	\$8,874,784.00	11.27%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.01%	\$5,517,050.00	3.29%
Platform Abandonment - Manual Calculation	Lifting barge costs	<input type="checkbox"/>	0.00	0.00%	\$4,007,867.00	2.39%
Mobilize DB 2000	Mob from Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	1.87%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 14) + 1 lifting barge	<input type="checkbox"/>	25.40	0.23%	\$591,000.00	0.35%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.06%	\$58,781.23	0.04%
Cut Deck/Equip/Misc	Separate 13 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.22%	\$232,519.91	0.14%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.22%	\$232,519.91	0.14%
Remove 8 Pile Deck	Remove 8 Pile Deck, 13 modules	<input checked="" type="checkbox"/>	120.00	1.08%	\$1,162,600.00	0.69%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.01%	\$13,984.00	0.01%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	15.40	0.14%	\$137,368.00	0.08%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	233.10	2.10%	\$4,643,264.00	2.77%
Cut Jacket	27 Hours per section, times 43 section(s), per MMS	<input checked="" type="checkbox"/>	1161.00	10.45%	\$2,927,706.00	13.69%
Remove Jacket - Meth 1	39 Hours per section, times 43 section(s), per MMS	<input checked="" type="checkbox"/>	1677.00	15.10%	\$2,916,710.00	19.65%
Demob CB 400 & Tug	Demob to Port of LA (Qty 14) + 1 lifting barge	<input type="checkbox"/>	25.40	0.23%	\$381,000.00	0.23%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.06%	\$58,781.23	0.04%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	15.40	0.14%	\$137,368.00	0.08%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.01%	\$13,984.00	0.01%
Demob DB 2000	Demob to Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	1.87%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	0.65%	\$1,472,000.00	0.88%
Offload CB 400		<input type="checkbox"/>	6864.00	61.80%	\$2,084,640.00	1.24%
Platform Abandonment - Manual Calculation	Removal of Power Cable Using Work Boat Method	<input checked="" type="checkbox"/>	0.00	0.00%	\$1,096,054.00	0.65%
Task Total			10275.20	92.51%	\$2,275,396.27	67.02%
Misc. Work Provision (15.00%)			498.99	4.49%	\$3,378,920.00	7.99%
Weather Contingency (10.00%)			332.66	3.00%	\$8,919,277.00	5.32%
Consumables					\$0.00	0.00%



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BSEE-POCSR

Platform Decommission Task Information

Harmony

Task	Note	Weather Provision	Task Hours	Task Cost
		Waste Disposal		32,949,950.00 19.67%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			11106.85 100.00%	37,523,543.27 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Harmony

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$1,938,688 1.16%
Cargo Barge 400	\$6,240 per Day per Barge	\$1,784,640 1.07%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$164,640 0.10%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$6,671,100 3.98%
CB Damage Deduct	\$20,000 per Cargo Barge	\$300,000 0.18%
Derrick Barge 2000	\$8,708 per Hour per barge	\$34,594,714 20.65%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$9,817,514 5.86%
DP Dive Boat	\$3,300 Per Hour	\$10,236,270 6.11%
Manual Calculation	\$0 Independently Calculated	\$40,441,138 24.14%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$139,216 0.08%
Pile Abrasive Cut 70 to 96 inches	\$5,375 per Cut	\$301,000 0.18%
Pipeline Survey	\$230 per Hour	\$713,437 0.43%
Rem. Operated Vehicle	\$800 per Hour	\$4,963,040 2.96%
Rig Up CB 400	\$14,000 per Barge	\$210,000 0.13%



BSEE-POCSR

Platform Decommission Cost Breakdown

Harmony

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$7,724,799.00	4.61%
Manual Calculation			\$7,724,799	
Platform Abandonment - Manual Calculation	1.00	0.01%	\$1,720,616.00	1.03%
Manual Calculation			\$1,720,616	
Sever Conductors- Abrasive	1.00	0.01%	\$18,874,784.00	11.27%
Manual Calculation			\$18,874,784	
Platform Removal Preparation	1.00	0.01%	\$5,517,050.00	3.29%
Manual Calculation			\$5,517,050	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$4,007,867.00	2.39%
Manual Calculation			\$4,007,867	
Mobilize DB 2000	0.00	0.00%	\$3,135,000.00	1.87%
Derrick Barge 2000			\$3,135,000	
Mobilize CB 400 & Tug	25.40	0.23%	\$591,000.00	0.35%
Rig Up CB 400			\$210,000	
CB 400 & Tug			\$381,000	
Setup Derrick Barge	6.75	0.06%	\$58,781.23	0.04%
Derrick Barge 2000			\$58,781	



BSEE-POCSR

Platform Decommission Cost Breakdown

Harmony

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		24.00	0.22%	\$232,519.91	0.14%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove Equipment		24.00	0.22%	\$232,519.91	0.14%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove 8 Pile Deck		120.00	1.08%	\$1,162,600.00	0.69%
Derrick Barge 2000	\$1,045,000				
CB 300 & Tug	\$117,600				
Jet/Airlift Pile Mud Plug		0.00	0.00%	\$0.00	0.00%
Derrick Barge 2000	\$0				
CB 400 & Tug	\$0				
Mobilize Abrasive Cutting Spread		1.00	0.01%	\$13,984.00	0.01%
Manual Calculation	\$1,833				
Manual Calculation	\$703				
Manual Calculation	\$8,000				
Manual Calculation	\$3,448				



BSEE-POCSR

Platform Decommission Cost Breakdown

Harmony

Task		Task Hours		Task Cost	
Mobilize Dive Spread		15.40	0.14%	\$137,368.00	0.08%
DP Dive Boat	\$50,820				
Dive Basic Spread Saturation	\$48,741				
Abrasive Cutter Spread	\$9,625				
Pipeline Survey	\$3,542				
Rem. Operated Vehicle	\$24,640				
Sever Piles- Abrasive		233.10	2.10%	\$4,643,264.00	2.77%
Derrick Barge 2000	\$2,029,912				
DP Dive Boat	\$769,230				
Dive Basic Spread Saturation	\$737,762				
Pipeline Survey	\$53,613				
Abrasive Cutter Spread	\$145,688				
CB 400 & Tug	\$233,100				
Pile Abrasive Cut 70 to 96 inches	\$301,000				
Rem. Operated Vehicle	\$372,960				
Cut Jacket		1161.00	10.45%	\$22,927,706.00	13.69%
Derrick Barge 2000	\$10,110,370				
DP Dive Boat	\$3,831,300				
Dive Basic Spread Saturation	\$3,674,565				
Pipeline Survey	\$267,030				
Abrasive Cutter Spread	\$725,625				
CB 400 & Tug	\$2,322,000				
Pile Abrasive Cut 7 to 48 inches	\$139,216				
Rem. Operated Vehicle	\$1,857,600				



BSEE-POCSR

Platform Decommission Cost Breakdown

Harmony

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Remove Jacket - Meth 1	1677.00	15.10%	\$32,916,710.00	19.65%
Derrick Barge 2000			\$14,603,870	
DP Dive Boat			\$5,534,100	
Dive Basic Spread Saturation			\$5,307,705	
Pipeline Survey			\$385,710	
Abrasive Cutter Spread			\$1,048,125	
CB 400 & Tug			\$3,354,000	
Rem. Operated Vehicle			\$2,683,200	
Demob CB 400 & Tug	25.40	0.23%	\$381,000.00	0.23%
CB 400 & Tug			\$381,000	
Pick Up DB Anchors	6.75	0.06%	\$58,781.23	0.04%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	15.40	0.14%	\$137,368.00	0.08%
DP Dive Boat			\$50,820	
Dive Basic Spread Saturation			\$48,741	
Abrasive Cutter Spread			\$9,625	
Pipeline Survey			\$3,542	
Rem. Operated Vehicle			\$24,640	
Demob Abrasive Cutting Spread	1.00	0.01%	\$13,984.00	0.01%
Manual Calculation			\$1,833	
Manual Calculation			\$703	
Manual Calculation			\$8,000	
Manual Calculation			\$3,448	



BSEE-POCSR

Platform Decommission Cost Breakdown

Harmony

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Demob DB 2000	0.00	0.00%	\$3,135,000.00	1.87%
Derrick Barge 2000			\$3,135,000	
Site Clearance - with Divers	72.00	0.65%	\$1,472,000.00	0.88%
Manual Calculation			\$1,472,000	
Offload CB 400	6864.00	61.80%	\$2,084,640.00	1.24%
Cargo Barge 400			\$1,784,640	
CB Damage Deduct			\$300,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$1,096,054.00	0.65%
Manual Calculation			\$1,096,054	
Total	10275.20	92.51%	\$112,275,396.27	67.02%



BSEE-POCSR

Pipeline Information

Harmony Segment#:5510190

General Data

Water Depth: 1198'
Origin / Terminus: Origin
Opposite End Name: Las Flores Canyon
Opposite End Water Depth:
Pipeline Operator: ExxonMobil Corporation
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter: 20"	Wall Thickness:	Length: 50950'
Depth of Burial:	# Crossings:	Product: Oil
Installation Date:	Weight Coating: No	J Tube: No
Riser?: Yes	Riser Guard?: No	



BSEE-POCSR

Pipeline Information

Harmony Segment#:5630190

General Data

Water Depth: 1198'
Origin / Terminus: Origin
Opposite End Name: Las Flores Canyon
Opposite End Water Depth:
Pipeline Operator: ExxonMobil Corporation
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	51000'
Depth of Burial:		# Crossings:		Product:	H2O
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Harmony Segment#:5720190

General Data

Water Depth:	1198'
Origin / Terminus:	Origin
Opposite End Name:	Hondo
Opposite End Water Depth:	842'
Pipeline Operator:	ExxonMobil Corporation
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	15350'
Depth of Burial:		# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Harmony Segment#:5510190

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.22%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.20	0.65%	\$500,000	22.73%
Set Up Dive Boat	Set up at Harmony	<input checked="" type="checkbox"/>	3.00	0.88%	\$26,650	1.21%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.47%	\$28,900	1.31%
Pig & Flush Pipeline	Pumping at 600 gpm	<input checked="" type="checkbox"/>	21.40	6.31%	\$123,692	5.62%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.59%	\$11,560	0.53%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.22%
Cut & Plug Pipeline	Cut PL from Riser	<input checked="" type="checkbox"/>	11.85	3.49%	\$60,791	2.76%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.83	2.31%	\$40,168	1.83%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.83	2.31%	\$40,168	1.83%
Mob P/L Removal Spread	Shared b/w 3 P/L's	<input type="checkbox"/>	5.13	1.51%	\$34,545	1.57%
Expose Pipeline		<input checked="" type="checkbox"/>	11.85	3.49%	\$79,798	3.63%
Cut & Plug Pipeline	Plug the upstream end going To Harmony	<input checked="" type="checkbox"/>	11.85	3.49%	\$79,798	3.63%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	15.40	4.54%	\$32,940	1.50%
Remove Pipeline		<input checked="" type="checkbox"/>	9.70	2.86%	\$70,655	3.21%
Bury Pipeline	Bury the end going to shore	<input checked="" type="checkbox"/>	7.90	2.33%	\$57,544	2.62%
Demob P/L Removal Spread	Shared b/w 3 P/L's	<input type="checkbox"/>	5.13	1.51%	\$37,367	1.70%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input checked="" type="checkbox"/>	2.20	0.65%	\$500,000	22.73%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	15.40	4.54%	\$1,925	0.09%
Offload CB 180		<input type="checkbox"/>	168.00	49.52%	\$41,000	1.86%
Task Total			313.67	92.45%	\$1,777,358	80.81%
Misc. Work Provision (15.00%)			15.36	4.53%	\$167,958	7.64%
Weather Provision (10.00%)			10.24	3.02%	\$111,972	5.09%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$142,189	6.46%
Total:			339.27	100.00%	\$2,199,477	100.00%



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Pipeline Decommission Task Information

Harmony Segment#:5630190

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shard b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.23%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.20	0.64%	\$500,000	23.60%
Set Up Dive Boat	Set up at Harmony	<input checked="" type="checkbox"/>	3.00	0.88%	\$26,650	1.26%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.46%	\$28,900	1.36%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	14.12	4.12%	\$81,614	3.85%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.58%	\$11,560	0.55%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shard b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.23%
Cut & Plug Pipeline	Cut PL from Riser	<input checked="" type="checkbox"/>	11.85	3.46%	\$60,791	2.87%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.83	2.29%	\$40,168	1.90%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.83	2.29%	\$40,168	1.90%
Mob P/L Removal Spread	Shared b/w 3 P/L's	<input type="checkbox"/>	5.13	1.50%	\$34,545	1.63%
Expose Pipeline		<input checked="" type="checkbox"/>	11.85	3.46%	\$79,798	3.77%
Cut & Plug Pipeline	Plug the upstream end going To Harmony	<input checked="" type="checkbox"/>	11.85	3.46%	\$79,798	3.77%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	15.40	4.50%	\$32,940	1.56%
Remove Pipeline		<input checked="" type="checkbox"/>	20.00	5.84%	\$145,680	6.88%
Bury Pipeline	Bury the end going to shore	<input checked="" type="checkbox"/>	7.90	2.31%	\$57,544	2.72%
Demob P/L Removal Spread	Shared b/w 3 P/L's	<input type="checkbox"/>	5.13	1.50%	\$37,367	1.76%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.20	0.64%	\$500,000	23.60%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	15.40	4.50%	\$1,925	0.09%
Offload CB 180		<input type="checkbox"/>	168.00	49.05%	\$41,000	1.94%
Task Total			316.69	92.46%	\$1,810,305	85.46%
Misc. Work Provision (15.00%)			15.48	4.52%	\$97,900	4.62%
Weather Provision (10.00%)			10.32	3.01%	\$65,267	3.08%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$144,824	6.84%
Total:			342.50	100.00%	\$2,118,296	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Harmony Segment#:5720190

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shard b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.30%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.20	2.21%	\$500,000	30.91%
Set Up Dive Boat	Set up at Harmony	<input checked="" type="checkbox"/>	3.00	3.01%	\$17,340	1.07%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	5.02%	\$24,900	1.54%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	4.25	4.26%	\$24,565	1.52%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.01%	\$11,560	0.71%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.30%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	11.85	11.89%	\$60,791	3.76%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.83	7.85%	\$40,168	2.48%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.83	7.85%	\$40,168	2.48%
Reposition Vessel	Re-locate to Hondo	<input checked="" type="checkbox"/>	3.96	3.97%	\$20,315	1.26%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	3.01%	\$15,390	0.95%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	11.85	11.89%	\$60,791	3.76%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.83	7.85%	\$40,168	2.48%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.83	7.85%	\$40,168	2.48%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.20	2.21%	\$500,000	30.91%
Task Total			80.63	80.88%	\$1,406,180	86.92%
Misc. Work Provision (15.00%)			11.43	11.47%	\$59,448	3.67%
Weather Provision (10.00%)			7.62	7.65%	\$39,632	2.45%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$112,494	6.95%
Total:			99.69	100.00%	\$1,617,755	100.00%



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Pipeline Decommission Resources Breakdown

Harmony Segment#:5510190

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$22,925	1.07%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$29,442	1.37%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	0.93%
Decommissioning Crew	\$650	per Hour	\$20,410	0.95%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$64,450	3.00%
DP Dive Boat	\$3,300	per Hour	\$364,551	16.98%
Manual Calculation	\$0	Independently Calculated	\$1,009,858	47.04%
Pipelay Barge	\$1,954	per Hour	\$100,748	4.69%
Pipeline Surveying	\$230	per Hour	\$34,718	1.62%
Rem. Operated Vehicle	\$800	per Hour	\$94,256	4.39%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.75%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Harmony Segment#:5630190

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$22,925	1.13%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$35,107	1.73%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	0.99%
Decommissioning Crew	\$650	per Hour	\$15,678	0.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$77,325	3.82%
DP Dive Boat	\$3,300	per Hour	\$374,517	18.49%
Manual Calculation	\$0	Independently Calculated	\$1,009,858	49.85%
Pipelay Barge	\$1,954	per Hour	\$120,874	5.97%
Pipeline Surveying	\$230	per Hour	\$35,413	1.75%
Rem. Operated Vehicle	\$800	per Hour	\$82,608	4.08%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.79%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Harmony Segment#:5720190

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$9,263	0.60%
DP Dive Boat	\$3,300	per Hour	\$251,559	16.37%
Manual Calculation	\$0	Independently Calculated	\$1,009,858	65.70%
Pipeline Surveying	\$230	per Hour	\$17,533	1.14%
Rem. Operated Vehicle	\$800	per Hour	\$117,968	7.68%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Harmony Segment#:5510190

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,929 0.23%
Manual Calculation		\$4,929
Mobilize Dive Boat	2.20 0.65%	\$500,000 23.29%
Manual Calculation		\$500,000
Set Up Dive Boat	3.00 0.88%	\$26,650 1.24%
DP Dive Boat		\$9,900
Decommissioning Crew		\$1,950
Rem. Operated Vehicle		\$4,800
Pipeline Surveying		\$10,000
Rig Up Decomm Equipment	5.00 1.47%	\$28,900 1.35%
DP Dive Boat		\$16,500
Rem. Operated Vehicle		\$8,000
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	21.40 6.31%	\$123,692 5.76%
DP Dive Boat		\$70,620
Rem. Operated Vehicle		\$34,240
Decommissioning Crew		\$13,910
Pipeline Surveying		\$4,922
Derig Decomm Equipment	2.00 0.59%	\$11,560 0.54%
DP Dive Boat		\$6,600
Rem. Operated Vehicle		\$3,200
Pipeline Surveying		\$460
Decommissioning Crew		\$1,300
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,929 0.23%
Manual Calculation		\$4,929
Cut & Plug Pipeline	11.85 3.49%	\$60,791 2.83%
DP Dive Boat		\$39,105
Rem. Operated Vehicle		\$18,960
Pipeline Surveying		\$2,726



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.83	2.31%	\$40,168	1.87%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Remove Tube Turn		7.83	2.31%	\$40,168	1.87%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Mob P/L Removal Spread		5.13	1.51%	\$34,545	1.61%
Pipeline Surveying	\$1,180				
DP Dive Boat	\$16,929				
Dive Basic Spread- Mixed Gas	\$6,413				
Pipelay Barge	\$10,024				
Expose Pipeline		11.85	3.49%	\$79,798	3.72%
Pipeline Surveying	\$2,726				
DP Dive Boat	\$39,105				
Dive Basic Spread- Mixed Gas	\$14,813				
Pipelay Barge	\$23,155				
Cut & Plug Pipeline		11.85	3.49%	\$79,798	3.72%
Pipeline Surveying	\$2,726				
DP Dive Boat	\$39,105				
Dive Basic Spread- Mixed Gas	\$14,813				
Pipelay Barge	\$23,155				
Mobilize Vessel		15.40	4.54%	\$32,940	1.53%
CB 180 & Tug	\$16,940				
Rig Up CB 180	\$16,000				
Remove Pipeline		9.70	2.86%	\$70,655	3.29%
Pipeline Surveying	\$2,231				
DP Dive Boat	\$32,010				
Dive Basic Spread- Mixed Gas	\$12,125				
Pipelay Barge	\$18,954				
CB 180 & Tug	\$5,335				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.90	2.33%	\$57,544	2.68%	
Pipeline Surveying	\$1,817					
DP Dive Boat	\$26,070					
Dive Basic Spread- Mixed Gas	\$9,875					
Pipelay Barge	\$15,437					
CB 180 & Tug	\$4,345					
Demob P/L Removal Spread		5.13	1.51%	\$37,367	1.74%	
Pipeline Surveying	\$1,180					
DP Dive Boat	\$16,929					
Dive Basic Spread- Mixed Gas	\$6,413					
Pipelay Barge	\$10,024					
CB 180 & Tug	\$2,822					
Demob Dive Boat		2.20	0.65%	\$500,000	23.29%	
Manual Calculation	\$500,000					
Demob Vessel		15.40	4.54%	\$1,925	0.09%	
Cargo Barge 180	\$1,925					
Offload CB 180		168.00	49.52%	\$41,000	1.91%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	313.67	92.45%	\$1,777,357.84	82.79%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Harmony Segment#:5630190

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,929	0.24%
Manual Calculation	\$4,929				
Mobilize Dive Boat		2.20	0.64%	\$500,000	24.68%
Manual Calculation	\$500,000				
Set Up Dive Boat		3.00	0.88%	\$26,650	1.32%
DP Dive Boat	\$9,900				
Decommissioning Crew	\$1,950				
Rem. Operated Vehicle	\$4,800				
Pipeline Surveying	\$10,000				
Rig Up Decomm Equipment		5.00	1.46%	\$28,900	1.43%
DP Dive Boat	\$16,500				
Rem. Operated Vehicle	\$8,000				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		14.12	4.12%	\$81,614	4.03%
DP Dive Boat	\$46,596				
Rem. Operated Vehicle	\$22,592				
Decommissioning Crew	\$9,178				
Pipeline Surveying	\$3,248				
Derig Decomm Equipment		2.00	0.58%	\$11,560	0.57%
DP Dive Boat	\$6,600				
Rem. Operated Vehicle	\$3,200				
Pipeline Surveying	\$460				
Decommissioning Crew	\$1,300				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,929	0.24%
Manual Calculation	\$4,929				
Cut & Plug Pipeline		11.85	3.46%	\$60,791	3.00%
DP Dive Boat	\$39,105				
Rem. Operated Vehicle	\$18,960				
Pipeline Surveying	\$2,726				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.83	2.29%	\$40,168	1.98%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Remove Tube Turn		7.83	2.29%	\$40,168	1.98%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Mob P/L Removal Spread		5.13	1.50%	\$34,545	1.71%
Pipeline Surveying	\$1,180				
DP Dive Boat	\$16,929				
Dive Basic Spread- Mixed Gas	\$6,413				
Pipelay Barge	\$10,024				
Expose Pipeline		11.85	3.46%	\$79,798	3.94%
Pipeline Surveying	\$2,726				
DP Dive Boat	\$39,105				
Dive Basic Spread- Mixed Gas	\$14,813				
Pipelay Barge	\$23,155				
Cut & Plug Pipeline		11.85	3.46%	\$79,798	3.94%
Pipeline Surveying	\$2,726				
DP Dive Boat	\$39,105				
Dive Basic Spread- Mixed Gas	\$14,813				
Pipelay Barge	\$23,155				
Mobilize Vessel		15.40	4.50%	\$32,940	1.63%
CB 180 & Tug	\$16,940				
Rig Up CB 180	\$16,000				
Remove Pipeline		20.00	5.84%	\$145,680	7.19%
Pipeline Surveying	\$4,600				
DP Dive Boat	\$66,000				
Dive Basic Spread- Mixed Gas	\$25,000				
Pipelay Barge	\$39,080				
CB 180 & Tug	\$11,000				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.90	2.31%	\$57,544	2.84%	
Pipeline Surveying	\$1,817					
DP Dive Boat	\$26,070					
Dive Basic Spread- Mixed Gas	\$9,875					
Pipelay Barge	\$15,437					
CB 180 & Tug	\$4,345					
Demob P/L Removal Spread		5.13	1.50%	\$37,367	1.84%	
Pipeline Surveying	\$1,180					
DP Dive Boat	\$16,929					
Dive Basic Spread- Mixed Gas	\$6,413					
Pipelay Barge	\$10,024					
CB 180 & Tug	\$2,822					
Demob Dive Boat		2.20	0.64%	\$500,000	24.68%	
Manual Calculation	\$500,000					
Demob Vessel		15.40	4.50%	\$1,925	0.10%	
Cargo Barge 180	\$1,925					
Offload CB 180		168.00	49.05%	\$41,000	2.02%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	316.69	92.46%	\$1,810,304.64	89.37%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Harmony Segment#:5720190

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,929 0.32%
Manual Calculation		\$4,929
Mobilize Dive Boat	2.20 2.21%	\$500,000 32.53%
Manual Calculation		\$500,000
Set Up Dive Boat	3.00 3.01%	\$17,340 1.13%
DP Dive Boat		\$9,900
Decommissioning Crew		\$1,950
Rem. Operated Vehicle		\$4,800
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 5.02%	\$24,900 1.62%
DP Dive Boat		\$16,500
Pipeline Surveying		\$1,150
Rem. Operated Vehicle		\$4,000
Decommissioning Crew		\$3,250
Pig & Flush Pipeline	4.25 4.26%	\$24,565 1.60%
DP Dive Boat		\$14,025
Pipeline Surveying		\$978
Rem. Operated Vehicle		\$6,800
Decommissioning Crew		\$2,763
Derig Decomm Equipment	2.00 2.01%	\$11,560 0.75%
DP Dive Boat		\$6,600
Rem. Operated Vehicle		\$3,200
Pipeline Surveying		\$460
Decommissioning Crew		\$1,300
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,929 0.32%
Manual Calculation		\$4,929
Cut & Plug Pipeline	11.85 11.89%	\$60,791 3.96%
DP Dive Boat		\$39,105
Pipeline Surveying		\$2,726
Rem. Operated Vehicle		\$18,960



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.83	7.85%	\$40,168	2.61%
DP Dive Boat	\$25,839				
Pipeline Surveying	\$1,801				
Rem. Operated Vehicle	\$12,528				
Remove Tube Turn		7.83	7.85%	\$40,168	2.61%
DP Dive Boat	\$25,839				
Pipeline Surveying	\$1,801				
Rem. Operated Vehicle	\$12,528				
Reposition Vessel		3.96	3.97%	\$20,315	1.32%
DP Dive Boat	\$13,068				
Rem. Operated Vehicle	\$6,336				
Pipeline Surveying	\$911				
Set Up Dive Boat		3.00	3.01%	\$15,390	1.00%
DP Dive Boat	\$9,900				
Pipeline Surveying	\$690				
Rem. Operated Vehicle	\$4,800				
Cut & Plug Pipeline		11.85	11.89%	\$60,791	3.96%
DP Dive Boat	\$39,105				
Rem. Operated Vehicle	\$18,960				
Pipeline Surveying	\$2,726				
Cut Pipeline Riser		7.83	7.85%	\$40,168	2.61%
DP Dive Boat	\$25,839				
Pipeline Surveying	\$1,801				
Rem. Operated Vehicle	\$12,528				
Remove Tube Turn		7.83	7.85%	\$40,168	2.61%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Demob Dive Boat		2.20	2.21%	\$500,000	32.53%
Manual Calculation	\$500,000				
		Total	80.63 80.88%	\$1,406,180.40	91.49%



BSEE-POCSR

Well Decommission Task Information

Harmony Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$9,234,448 75.19%
		Task Total	0.00	\$9,234,448 75.19%
		Misc. Work Provision (15.00%)	0.00	\$1,385,167 11.28%
		Weather Provision (10.00%)	0.00	\$923,445 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$738,756 6.02%
		Total:	0.00 100.00%	\$12,281,816 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Harmony Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$9,234,448 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Harmony Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$9,234,448	75.19%
Manual Calculation	\$9,234,448				
	Total	0.00	0.00%	\$9,234,448	75.19%



BSEE-POCSR

Platform Salvage Option

Harvest

COMPLETE REMOVAL

-Platform Harvest will be removed along with Platforms Gail, Grace, Hermosa, Hidalgo and Irene.

-Platform Harvest is an 8-pile platform installed in 1985 in 675' of water.

-The estimated removal weight is the deck weight is 9,024 tons and the jacket weight is 16,633 tons.

-The platform has a total of 19 wells that will be plugged and abandoned.

-The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.

-Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.

-A total of 25 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.

-A lifting barge will be outfitted and utilized to lift pieces from the jacket structure. The loads will then be transferred midwater to the DB2000 to complete the lift and place on cargo barge.

-The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.

-The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.

-Four 300' cargo barges will transport the deck modules to shore and six 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 10 cargo barge trips will be required.



BSEE-POCSR

Platform Salvage Option

Harvest

-The two pipelines (oil, gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 15% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and



BSEE-POCSR

Platform Salvage Option

Harvest

Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$99,674,642

Estimated Decommissioning Net Cost = \$99,674,642



BSEE-POCSR

Basic Information

Harvest

General Data

Platform:	Harvest
Function:	SELF CONTAINED
Type:	Steel
Water Depth:	675'
Pre 461H?:	No
Year Installed:	1985
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0315
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	19
# Pipelines to Abandon:	2
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Freeport-McMoRan Oil & Gas	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$90,077,744	\$90,077,744
Well Plugging & Abandonment:	\$6,807,457	\$6,807,457
Pipeline Abandonment:	\$2,789,441	\$2,789,441
Total Decommissioning Cost:	\$99,674,642	\$99,674,642



BSEE-POCSR

Platform Information

Harvest

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	60"		Yes	No	
Skirt/Braced	20	72"		No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	50
Number Installed:	25
Outside Diameter:	24"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	16663.00		
Jacket Installation Date:	1/1/1985		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	9024 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1985
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Harvest

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	15.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$13,968,013.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Harvest

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$4,261,277.00	4.73%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.01%	\$1,115,156.00	1.24%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.01%	\$5,319,490.00	5.91%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.01%	\$4,373,249.00	4.85%
Platform Abandonment - Manual Calculation	Lifting barge costs	<input type="checkbox"/>	0.00	0.00%	\$2,404,720.00	2.67%
Mobilize DB 2000	Mob from Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	1.74%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 4)	<input type="checkbox"/>	36.00	0.39%	\$197,120.00	0.22%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 6) + 1 lifting barge	<input type="checkbox"/>	36.00	0.39%	\$350,000.00	0.39%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.07%	\$58,781.23	0.07%
Cut Deck/Equip/Misc	Seperate 9 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.26%	\$232,519.91	0.26%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.26%	\$232,519.91	0.26%
Remove 8 Pile Deck	Remove 8 Pile Deck, 9 modules	<input checked="" type="checkbox"/>	72.00	0.78%	\$697,559.81	0.77%
Demob CB 300 & Tug	Demob to Port of LA (Qty 4)	<input type="checkbox"/>	36.00	0.39%	\$141,120.00	0.16%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	35.00	0.38%	\$339,791.59	0.38%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.01%	\$8,391.00	0.01%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	18.30	0.20%	\$163,236.00	0.18%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	206.72	2.25%	\$4,151,848.41	4.61%
Cut Jacket	40 Hours per section, times 17 section(s), per MMS	<input checked="" type="checkbox"/>	680.00	7.40%	\$3,486,481.00	14.97%
Remove Jacket - Meth 1	52 Hours per section, times 17 section(s), per MMS	<input checked="" type="checkbox"/>	884.00	9.62%	\$7,351,444.00	19.26%
Demob CB 400 & Tug	Demob to Port of LA (Qty 6) + 1 lifting barge	<input type="checkbox"/>	36.00	0.39%	\$252,000.00	0.28%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.07%	\$58,781.23	0.07%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	18.30	0.20%	\$163,236.00	0.18%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.01%	\$8,391.00	0.01%
Demob DB 2000	Demob to Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	1.74%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	0.78%	\$1,472,000.00	1.63%
Offload CB 300		<input type="checkbox"/>	1392.00	15.16%	\$365,360.00	0.41%
Offload CB 400		<input type="checkbox"/>	4992.00	54.35%	\$1,437,920.00	1.60%
Task Total			8580.82	93.42%	\$1,777,393.09	68.58%
Misc. Work Provision (15.00%)			301.98	3.29%	\$7,166,170.00	7.96%
Weather Contingency (15.00%)			301.98	3.29%	\$7,166,170.00	7.96%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Harvest

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal	13,968,010.00	15.51%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			9184.78 100.00%	30,077,743.09 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Harvest

Resource Used	Unit Cost	Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$1,129,575	1.25%
Cargo Barge 300	\$4,920 per Day per Barge	\$285,360	0.32%
Cargo Barge 400	\$6,240 per Day per Barge	\$1,297,920	1.44%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$399,840	0.44%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$3,873,720	4.30%
CB Damage Deduct	\$20,000 per Cargo Barge	\$220,000	0.24%
Derrick Barge 2000	\$8,708 per Hour per barge	\$20,022,369	22.23%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$5,720,168	6.35%
DP Dive Boat	\$3,300 Per Hour	\$5,964,156	6.62%
Manual Calculation	\$0 Independently Calculated	\$18,962,674	21.05%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$139,216	0.15%
Pile Abrasive Cut 70 to 96 inches	\$5,375 per Cut	\$301,000	0.33%
Pipeline Survey	\$230 per Hour	\$415,684	0.46%
Rem. Operated Vehicle	\$800 per Hour	\$2,891,712	3.21%
Rig Up CB 300	\$14,000 per Barge	\$56,000	0.06%
Rig Up CB 400	\$14,000 per Barge	\$98,000	0.11%



BSEE-POCSR

Platform Decommission Cost Breakdown

Harvest

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$4,261,277.00	4.73%
Manual Calculation			\$4,261,277	
Platform Abandonment - Manual Calculation	1.00	0.01%	\$1,115,156.00	1.24%
Manual Calculation			\$1,115,156	
Sever Conductors- Abrasive	1.00	0.01%	\$5,319,490.00	5.91%
Manual Calculation			\$5,319,490	
Platform Removal Preparation	1.00	0.01%	\$4,373,249.00	4.85%
Manual Calculation			\$4,373,249	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$2,404,720.00	2.67%
Manual Calculation			\$2,404,720	
Mobilize DB 2000	0.00	0.00%	\$1,567,500.00	1.74%
Derrick Barge 2000			\$1,567,500	
Mobilize CB 300 & Tug	36.00	0.39%	\$197,120.00	0.22%
CB 300 & Tug			\$141,120	
Rig Up CB 300			\$56,000	
Mobilize CB 400 & Tug	36.00	0.39%	\$350,000.00	0.39%
Rig Up CB 400			\$98,000	
CB 400 & Tug			\$252,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Harvest

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Setup Derrick Barge	6.75	0.07%	\$58,781.23	0.07%
Derrick Barge 2000			\$58,781	
Cut Deck/Equip/Misc	24.00	0.26%	\$232,519.91	0.26%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove Equipment	24.00	0.26%	\$232,519.91	0.26%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove 8 Pile Deck	72.00	0.78%	\$697,559.81	0.77%
Derrick Barge 2000			\$627,000	
CB 300 & Tug			\$70,560	
Demob CB 300 & Tug	36.00	0.39%	\$141,120.00	0.16%
CB 300 & Tug			\$141,120	
Jet/Airlift Pile Mud Plug	35.00	0.38%	\$339,791.59	0.38%
Derrick Barge 2000			\$304,792	
CB 400 & Tug			\$35,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Harvest

Task	Task Hours		Task Cost	
Mobilize Abrasive Cutting Spread	1.00	0.01%	\$8,391.00	0.01%
Manual Calculation			\$1,100	
Manual Calculation			\$422	
Manual Calculation			\$4,800	
Manual Calculation			\$2,069	
Mobilize Dive Spread	18.30	0.20%	\$163,236.00	0.18%
DP Dive Boat			\$60,390	
Dive Basic Spread Saturation			\$57,920	
Abrasive Cutter Spread			\$11,438	
Pipeline Survey			\$4,209	
Rem. Operated Vehicle			\$29,280	
Sever Piles- Abrasive	206.72	2.25%	\$4,151,848.41	4.61%
Derrick Barge 2000			\$1,800,186	
DP Dive Boat			\$682,176	
Dive Basic Spread Saturation			\$654,269	
Pipeline Survey			\$47,546	
Abrasive Cutter Spread			\$129,200	
CB 400 & Tug			\$206,720	
Pile Abrasive Cut 70 to 96 inches			\$301,000	
Rem. Operated Vehicle			\$330,752	



BSEE-POCSR

Platform Decommission Cost Breakdown

Harvest

Task		Task Hours		Task Cost	
Cut Jacket		680.00	7.40%	\$13,486,481.00	14.97%
Derrick Barge 2000	\$5,921,665				
DP Dive Boat	\$2,244,000				
Dive Basic Spread Saturation	\$2,152,200				
Pipeline Survey	\$156,400				
Abrasive Cutter Spread	\$425,000				
CB 400 & Tug	\$1,360,000				
Pile Abrasive Cut 7 to 48 inches	\$139,216				
Rem. Operated Vehicle	\$1,088,000				
Remove Jacket - Meth 1		884.00	9.62%	\$17,351,444.00	19.26%
Derrick Barge 2000	\$7,698,164				
DP Dive Boat	\$2,917,200				
Dive Basic Spread Saturation	\$2,797,860				
Pipeline Survey	\$203,320				
Abrasive Cutter Spread	\$552,500				
CB 400 & Tug	\$1,768,000				
Rem. Operated Vehicle	\$1,414,400				
Demob CB 400 & Tug		36.00	0.39%	\$252,000.00	0.28%
CB 400 & Tug	\$252,000				
Pick Up DB Anchors		6.75	0.07%	\$58,781.23	0.07%
Derrick Barge 2000	\$58,781				



BSEE-POCSR

Platform Decommission Cost Breakdown

Harvest

Task		Task Hours		Task Cost	
Demob Dive Spread		18.30	0.20%	\$163,236.00	0.18%
DP Dive Boat	\$60,390				
Dive Basic Spread Saturation	\$57,920				
Abrasive Cutter Spread	\$11,438				
Pipeline Survey	\$4,209				
Rem. Operated Vehicle	\$29,280				
Demob Abrasive Cutting Spread		1.00	0.01%	\$8,391.00	0.01%
Manual Calculation	\$1,100				
Manual Calculation	\$422				
Manual Calculation	\$4,800				
Manual Calculation	\$2,069				
Demob DB 2000		0.00	0.00%	\$1,567,500.00	1.74%
Derrick Barge 2000	\$1,567,500				
Site Clearance - with Divers		72.00	0.78%	\$1,472,000.00	1.63%
Manual Calculation	\$1,472,000				
Offload CB 300		1392.00	15.16%	\$365,360.00	0.41%
Cargo Barge 300	\$285,360				
CB Damage Deduct	\$80,000				
Offload CB 400		4992.00	54.35%	\$1,437,920.00	1.60%
Cargo Barge 400	\$1,297,920				
CB Damage Deduct	\$140,000				
Total		8580.82	93.42%	\$61,777,393.09	68.58%



BSEE-POCSR

Pipeline Information

Harvest Segment#:4210315

General Data

Water Depth:	675'
Origin / Terminus:	Origin
Opposite End Name:	Hermosa
Opposite End Water Depth:	603'
Pipeline Operator:	Freeport-McMoRan Oil & Gas
Provision for Misc. Work%:	15.00%
Weather Contingency %:	15.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	15500'
Depth of Burial:		# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Harvest Segment#:4320315

General Data

Water Depth:	675'
Origin / Terminus:	Origin
Opposite End Name:	Hermosa
Opposite End Water Depth:	603'
Pipeline Operator:	Freeport-McMoRan Oil & Gas
Provision for Misc. Work%:	15.00%
Weather Contingency %:	15.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:		Length:	15050'
Depth of Burial:		# Crossings:		Product:	H2S
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Harvest Segment#:4210315

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.30	1.09%	\$250,000	17.86%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.51%	\$22,035	1.57%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.19%	\$36,725	2.62%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	4.29	3.59%	\$31,510	2.25%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.67%	\$14,690	1.05%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Cut & Plug Pipeline	Cut & plug P/L at Harvest	<input checked="" type="checkbox"/>	11.55	9.67%	\$77,327	5.52%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.45%	\$51,552	3.68%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.45%	\$51,552	3.68%
Bury Pipeline	Burry P/L at Harvest	<input checked="" type="checkbox"/>	7.70	6.45%	\$51,552	3.68%
Reposition Vessel	Re-locate to Hermosa	<input checked="" type="checkbox"/>	3.29	2.75%	\$24,497	1.75%
Set Up Dive Boat	Set up at Hermosa	<input checked="" type="checkbox"/>	3.00	2.51%	\$20,085	1.43%
Cut & Plug Pipeline	Cut & plug P/L at Hermosa	<input checked="" type="checkbox"/>	11.55	9.67%	\$77,327	5.52%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.45%	\$51,552	3.68%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.45%	\$51,552	3.68%
Bury Pipeline	Burry P/L at Hermosa	<input checked="" type="checkbox"/>	7.70	6.45%	\$57,334	4.10%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.30	1.09%	\$250,000	17.86%
Task Total			92.48	77.43%	\$1,124,217	80.30%
Misc. Work Provision (15.00%)			13.48	11.29%	\$92,893	6.64%
Weather Provision (15.00%)			13.48	11.29%	\$92,893	6.64%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$89,937	6.42%
Total:			119.44	100.00%	\$1,399,940	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Harvest Segment#:4320315

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	80.00	40.65%	\$250,000	17.99%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.52%	\$22,035	1.59%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	2.54%	\$36,725	2.64%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	3.26	1.66%	\$23,945	1.72%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.02%	\$14,690	1.06%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.18%
Cut & Plug Pipeline	Cut & plug P/L at Harvest	<input checked="" type="checkbox"/>	11.55	5.87%	\$77,327	5.57%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	3.91%	\$51,552	3.71%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	3.91%	\$51,552	3.71%
Bury Pipeline	Burry P/L at Harvest	<input checked="" type="checkbox"/>	7.70	3.91%	\$51,552	3.71%
Reposition Vessel	Re-locate to Hermosa	<input checked="" type="checkbox"/>	3.29	1.67%	\$24,497	1.76%
Set Up Dive Boat	Set up at Hermosa	<input checked="" type="checkbox"/>	3.00	1.52%	\$20,085	1.45%
Cut & Plug Pipeline	Cut & plug P/L at Hermosa	<input checked="" type="checkbox"/>	11.55	5.87%	\$77,327	5.57%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	3.91%	\$51,552	3.71%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	3.91%	\$51,552	3.71%
Bury Pipeline	Burry P/L at Hermosa	<input checked="" type="checkbox"/>	7.70	3.91%	\$57,334	4.13%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.30	0.66%	\$250,000	17.99%
Task Total			170.15	86.46%	\$1,116,651	80.36%
Misc. Work Provision (15.00%)			13.33	6.77%	\$91,758	6.60%
Weather Provision (15.00%)			13.33	6.77%	\$91,758	6.60%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$89,332	6.43%
Total:			196.80	100.00%	\$1,389,500	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Harvest Segment#:4210315

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$9,289	0.68%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$284,470	20.92%
DP Dive Boat	\$3,300	per Hour	\$296,604	21.82%
Manual Calculation	\$0	Independently Calculated	\$504,928	37.14%
Pipeline Surveying	\$230	per Hour	\$20,672	1.52%
Saturation Decompression	\$751	per Hour	\$8,253	0.61%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Harvest Segment#:4320315

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$8,619	0.64%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$281,210	20.84%
DP Dive Boat	\$3,300	per Hour	\$293,205	21.73%
Manual Calculation	\$0	Independently Calculated	\$504,928	37.43%
Pipeline Surveying	\$230	per Hour	\$20,436	1.51%
Saturation Decompression	\$751	per Hour	\$8,253	0.61%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Harvest Segment#:4210315

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.18%
Manual Calculation	\$2,464	
Mobilize Dive Boat	1.30 1.09%	\$250,000 18.39%
Manual Calculation	\$250,000	
Set Up Dive Boat	3.00 2.51%	\$22,035 1.62%
DP Dive Boat	\$9,900	
Dive Basic Spread Saturation	\$9,495	
Decommissioning Crew	\$1,950	
Pipeline Surveying	\$690	
Rig Up Decomm Equipment	5.00 4.19%	\$36,725 2.70%
DP Dive Boat	\$16,500	
Dive Basic Spread Saturation	\$15,825	
Decommissioning Crew	\$3,250	
Pipeline Surveying	\$1,150	
Pig & Flush Pipeline	4.29 3.59%	\$31,510 2.32%
DP Dive Boat	\$14,157	
Dive Basic Spread Saturation	\$13,578	
Decommissioning Crew	\$2,789	
Pipeline Surveying	\$987	
Derig Decomm Equipment	2.00 1.67%	\$14,690 1.08%
DP Dive Boat	\$6,600	
Dive Basic Spread Saturation	\$6,330	
Decommissioning Crew	\$1,300	
Pipeline Surveying	\$460	
Demob Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.18%
Manual Calculation	\$2,464	
Cut & Plug Pipeline	11.55 9.67%	\$77,327 5.69%
DP Dive Boat	\$38,115	
Dive Basic Spread Saturation	\$36,556	
Pipeline Surveying	\$2,657	



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	6.45%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.45%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	6.45%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.29	2.75%	\$24,497	1.80%
DP Dive Boat	\$10,857				
Dive Basic Spread Saturation	\$10,413				
Pipeline Surveying	\$757				
Saturation Decompression	\$2,471				
Set Up Dive Boat		3.00	2.51%	\$20,085	1.48%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	9.67%	\$77,327	5.69%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	6.45%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.45%	\$51,552	3.79%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	6.45%	\$57,334	4.22%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Saturation Decompression	\$5,783					
Demob Dive Boat		1.30	1.09%	\$250,000	18.39%	
Manual Calculation	\$250,000					
		Total	92.48	77.43%	\$1,124,216.59	82.69%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Harvest Segment#:4320315

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.18%
Manual Calculation	\$2,464				
Mobilize Dive Boat		80.00	40.65%	\$250,000	18.53%
Manual Calculation	\$250,000				
Set Up Dive Boat		3.00	1.52%	\$22,035	1.63%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Decommissioning Crew	\$1,950				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	2.54%	\$36,725	2.72%
DP Dive Boat	\$16,500				
Dive Basic Spread Saturation	\$15,825				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		3.26	1.66%	\$23,945	1.77%
DP Dive Boat	\$10,758				
Dive Basic Spread Saturation	\$10,318				
Decommissioning Crew	\$2,119				
Pipeline Surveying	\$750				
Derig Decomm Equipment		2.00	1.02%	\$14,690	1.09%
DP Dive Boat	\$6,600				
Dive Basic Spread Saturation	\$6,330				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.18%
Manual Calculation	\$2,464				
Cut & Plug Pipeline		11.55	5.87%	\$77,327	5.73%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	3.91%	\$51,552	3.82%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	3.91%	\$51,552	3.82%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	3.91%	\$51,552	3.82%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.29	1.67%	\$24,497	1.82%
DP Dive Boat	\$10,857				
Dive Basic Spread Saturation	\$10,413				
Pipeline Surveying	\$757				
Saturation Decompression	\$2,471				
Set Up Dive Boat		3.00	1.52%	\$20,085	1.49%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	5.87%	\$77,327	5.73%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	3.91%	\$51,552	3.82%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	3.91%	\$51,552	3.82%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	3.91%	\$57,334	4.25%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Saturation Decompression	\$5,783				
Demob Dive Boat		1.30	0.66%	\$250,000	18.53%
Manual Calculation	\$250,000				
		Total	170.15	86.46%	\$1,116,651.24
					82.77%



BSEE-POCSR

Well Decommission Task Information

Harvest Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$4,932,940 72.46%
Task Total			0.00	\$4,932,940 72.46%
Misc. Work Provision (15.00%)			0.00	\$739,941 10.87%
Weather Provision (15.00%)			0.00	\$739,941 10.87%
Consumables				\$0 0.00%
Waste Disposal				\$0 0.00%
Structure & Equipment Disposal				\$0 0.00%
Offloading				\$0 0.00%
Storage / Scrapping				\$0 0.00%
Reef Donation				\$0 0.00%
Cost of Engineering (8.00%)				\$394,635 5.80%
Total:			0.00 100.00%	\$6,807,457 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Harvest Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$4,932,940 72.46%



BSEE-POCSR

Well Decommission Cost Breakdown

Harvest Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$4,932,940	72.46%
Manual Calculation	\$4,932,940				
	Total	0.00	0.00%	\$4,932,940	72.46%



BSEE-POCSR

Platform Salvage Option

Henry

COMPLETE REMOVAL

- Platform Henry will be removed along with Platforms A, B, C and Hillhouse.
- Platform Henry is an 8-pile platform installed in 1979 in 173' of water.
- The estimated removal weight is the deck weight is 1,371 tons and the jacket weight is 1,311 tons.
- The platform has a total of 23 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 24 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and one 400' cargo barge will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 2 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and disposed of.



BSEE-POCSR

Platform Salvage Option

Henry

-The three pipelines (oil, gas, water) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2



BSEE-POCSR

Platform Salvage Option

Henry

and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$21,641,543

Estimated Decommissioning Net Cost = \$21,641,543



BSEE-POCSR

Basic Information

Henry

General Data

Platform: Henry
Function: FACILITIES
Type: Steel
Water Depth: 173'
Pre 461H?: Yes
Year Installed: 1979
Year Estimate Developed: 2014
District: California
Lease Number: OCS-P 0240
Account Code: TSB - 139681-Z
Amortization: 1.00
Wells to P & A: 23
Pipelines to Abandon: 3
Estimate Complete?: Yes

Partner Data

Partner	Working Interest
1 DCOR, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$16,097,610	\$16,097,610
Well Plugging & Abandonment:	\$4,891,219	\$4,891,219
Pipeline Abandonment:	\$652,715	\$652,715
Total Decommissioning Cost:	\$21,641,543	\$21,641,543



BSEE-POCSR

Platform Information

Henry

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	42"	0.5"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	24
Number Installed:	24
Outside Diameter:	20"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	1311.00		
Jacket Installation Date:	8/31/79		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	1371 Tons
Number of Padeyes Required:	12
Deck Installation Date:	8/31/79
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Henry

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 400 x 100	Jkt > 700T	Conductors	0	0
0	0	0	0	0
0	0	0	0	0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$1,483,738.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Henry

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$622,653.00	3.87%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.07%	\$650,555.00	4.04%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.07%	\$1,965,108.00	12.21%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.07%	\$1,445,091.00	8.98%
Mobilize DB 2000	Mob from Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	11.68%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.51%	\$72,296.00	0.45%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.51%	\$36,600.00	0.23%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.45%	\$58,781.23	0.37%
Cut Deck/Equip/Misc	Seperate 4 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	1.60%	\$232,519.91	1.44%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	1.60%	\$232,519.91	1.44%
Remove 8 Pile Deck	Remove 12 Pile Deck, 4 modules	<input checked="" type="checkbox"/>	48.00	3.21%	\$465,039.81	2.89%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.51%	\$44,296.00	0.28%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	31.00	2.07%	\$300,958.19	1.87%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.07%	\$6,993.00	0.04%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	12.20	0.82%	\$60,024.00	0.37%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	42.38	2.83%	\$659,724.60	4.10%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	20.75	1.39%	\$303,537.80	1.89%
Demob CB 400 & Tug	Demob to Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.51%	\$22,600.00	0.14%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.45%	\$58,781.23	0.37%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	12.20	0.82%	\$60,024.00	0.37%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.07%	\$6,993.00	0.04%
Demob DB 2000	Demob to Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	11.68%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	4.81%	\$884,000.00	5.49%
Offload CB 300		<input type="checkbox"/>	672.00	44.89%	\$177,760.00	1.10%
Offload CB 400		<input type="checkbox"/>	360.00	24.05%	\$113,600.00	0.71%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$575,920.00	3.58%
Task Total			1427.43	95.36%	\$2,818,375.67	79.63%
Misc. Work Provision (15.00%)			41.64	2.78%	\$1,077,297.00	6.69%
Weather Contingency (10.00%)			27.76	1.85%	\$718,198.20	4.46%
Consumables					\$0.00	0.00%



BSEE-POCSR

Platform Decommission Task Information

Henry

Task	Note	Weather Provision	Task Hours	Task Cost
		Waste Disposal		1,483,738.00 9.22%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			1496.83 100.00%	16,097,608.87 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Henry

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$54,706 0.34%
Cargo Barge 300	\$4,920 per Day per Barge	\$137,760 0.86%
Cargo Barge 400	\$6,240 per Day per Barge	\$93,600 0.58%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$182,672 1.13%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$139,330 0.87%
CB Damage Deduct	\$20,000 per Cargo Barge	\$60,000 0.37%
Derrick Barge 2000	\$8,708 per Hour per barge	\$5,535,277 34.39%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$277,032 1.72%
Dive Boat	\$900 per Hour	\$78,777 0.49%
Manual Calculation	\$0 Independently Calculated	\$6,157,313 38.25%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$39,776 0.25%
Pipeline Survey	\$230 per Hour	\$20,132 0.13%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.17%
Rig Up CB 400	\$14,000 per Barge	\$14,000 0.09%



BSEE-POCSR

Platform Decommission Cost Breakdown

Henry

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$622,653.00	3.87%
Manual Calculation			\$622,653	
Platform Abandonment - Manual Calculation	1.00	0.07%	\$650,555.00	4.04%
Manual Calculation			\$650,555	
Sever Conductors- Abrasive	1.00	0.07%	\$1,965,108.00	12.21%
Manual Calculation			\$1,965,108	
Platform Removal Preparation	1.00	0.07%	\$1,445,091.00	8.98%
Manual Calculation			\$1,445,091	
Mobilize DB 2000	0.00	0.00%	\$1,881,000.00	11.68%
Derrick Barge 2000			\$1,881,000	
Mobilize CB 300 & Tug	22.60	1.51%	\$72,296.00	0.45%
CB 300 & Tug			\$44,296	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	22.60	1.51%	\$36,600.00	0.23%
Rig Up CB 400			\$14,000	
CB 400 & Tug			\$22,600	
Setup Derrick Barge	6.75	0.45%	\$58,781.23	0.37%
Derrick Barge 2000			\$58,781	



BSEE-POCSR
Platform Decommission Cost Breakdown
Henry

Task			Task Hours		Task Cost	
Cut Deck/Equip/Misc			24.00	1.60%	\$232,519.91	1.44%
Derrick Barge 2000	\$209,000					
CB 300 & Tug	\$23,520					
Remove Equipment			24.00	1.60%	\$232,519.91	1.44%
Derrick Barge 2000	\$209,000					
CB 300 & Tug	\$23,520					
Remove 8 Pile Deck			48.00	3.21%	\$465,039.81	2.89%
Derrick Barge 2000	\$418,000					
CB 300 & Tug	\$47,040					
Demob CB 300 & Tug			22.60	1.51%	\$44,296.00	0.28%
CB 300 & Tug	\$44,296					
Jet/Airlift Pile Mud Plug			31.00	2.07%	\$300,958.19	1.87%
Derrick Barge 2000	\$269,958					
CB 400 & Tug	\$31,000					
Mobilize Abrasive Cutting Spread			1.00	0.07%	\$6,993.00	0.04%
Manual Calculation	\$917					
Manual Calculation	\$352					
Manual Calculation	\$4,000					
Manual Calculation	\$1,724					



BSEE-POCSR

Platform Decommission Cost Breakdown

Henry

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Mobilize Dive Spread	12.20	0.82%	\$60,024.00	0.37%
Dive Boat			\$10,980	
Dive Basic Spread Saturation			\$38,613	
Abrasive Cutter Spread			\$7,625	
Pipeline Survey			\$2,806	
Sever Piles- Abrasive	42.38	2.83%	\$659,724.60	4.10%
Derrick Barge 2000			\$369,059	
Dive Boat			\$38,142	
Dive Basic Spread Saturation			\$134,133	
Pipeline Survey			\$9,747	
Abrasive Cutter Spread			\$26,488	
CB 400 & Tug			\$42,380	
Pile Abrasive Cut 7 to 48 inches			\$39,776	
Remove Jacket - Meth 1	20.75	1.39%	\$303,537.80	1.89%
Derrick Barge 2000			\$180,698	
Dive Boat			\$18,675	
Dive Basic Spread Saturation			\$65,674	
Pipeline Survey			\$4,773	
Abrasive Cutter Spread			\$12,969	
CB 400 & Tug			\$20,750	
Demob CB 400 & Tug	22.60	1.51%	\$22,600.00	0.14%
CB 400 & Tug			\$22,600	



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Cost Breakdown

Henry

Task	Task Hours		Task Cost	
	Hours	Percentage	Cost	Percentage
Pick Up DB Anchors	6.75	0.45%	\$58,781.23	0.37%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	12.20	0.82%	\$60,024.00	0.37%
Dive Boat			\$10,980	
Dive Basic Spread Saturation			\$38,613	
Abrasive Cutter Spread			\$7,625	
Pipeline Survey			\$2,806	
Demob Abrasive Cutting Spread	1.00	0.07%	\$6,993.00	0.04%
Manual Calculation			\$917	
Manual Calculation			\$352	
Manual Calculation			\$4,000	
Manual Calculation			\$1,724	
Demob DB 2000	0.00	0.00%	\$1,881,000.00	11.68%
Derrick Barge 2000			\$1,881,000	
Site Clearance - with Divers	72.00	4.81%	\$884,000.00	5.49%
Manual Calculation			\$884,000	
Offload CB 300	672.00	44.89%	\$177,760.00	1.10%
Cargo Barge 300			\$137,760	
CB Damage Deduct			\$40,000	



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Cost Breakdown

Henry

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Offload CB 400	360.00	24.05%	\$113,600.00	0.71%
Cargo Barge 400			\$93,600	
CB Damage Deduct			\$20,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$575,920.00	3.58%
Manual Calculation			\$575,920	
Total	1427.43	95.36%	\$12,818,375.67	79.63%



BSEE-POCSR

Pipeline Information

Henry Segment#:2320240

General Data

Water Depth:	173'
Origin / Terminus:	Origin
Opposite End Name:	Hillhouse
Opposite End Water Depth:	190'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	12900'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Henry Segment#:2410240

General Data

Water Depth:	173'
Origin / Terminus:	Origin
Opposite End Name:	Hillhouse
Opposite End Water Depth:	190'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:	0.5"	Length:	12900'
Depth of Burial:	3'	# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Henry Segment#:2530240

General Data

Water Depth:	173'
Origin / Terminus:	Origin
Opposite End Name:	Hillhouse
Opposite End Water Depth:	190'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:	0.5"	Length:	12900'
Depth of Burial:	3'	# Crossings:		Product:	H20
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Henry Segment#:2320240

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.06%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.15%	\$2,279	1.05%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.84%	\$13,565	6.28%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	2.15	2.94%	\$5,833	2.70%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.74%	\$5,426	2.51%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.06%
Expose Pipeline		<input checked="" type="checkbox"/>	5.59	7.65%	\$15,166	7.02%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	5.59	7.65%	\$15,166	7.02%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.73	5.10%	\$10,119	4.68%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.73	5.10%	\$10,119	4.68%
Bury Pipeline		<input checked="" type="checkbox"/>	3.73	5.10%	\$10,119	4.68%
Reposition Workboat	Re-locate to Hillhouse	<input checked="" type="checkbox"/>	3.24	4.43%	\$8,790	4.07%
Expose Pipeline		<input checked="" type="checkbox"/>	5.59	7.65%	\$15,166	7.02%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	5.59	7.65%	\$15,166	7.02%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.73	5.10%	\$10,119	4.68%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.73	5.10%	\$10,119	4.68%
Bury Pipeline		<input checked="" type="checkbox"/>	3.73	5.10%	\$10,119	4.68%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.15%	\$2,279	1.05%
Task Total			58.81	80.46%	\$164,152	75.98%
Misc. Work Provision (15.00%)			8.57	11.72%	\$23,249	10.76%
Weather Provision (10.00%)			5.71	7.82%	\$15,499	7.17%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$13,132	6.08%
Total:			73.09	100.00%	\$216,032	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Henry Segment#:2410240

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.05%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.14%	\$2,279	1.04%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.77%	\$13,565	6.21%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	2.79	3.78%	\$7,569	3.47%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.71%	\$5,426	2.49%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.05%
Expose Pipeline		<input checked="" type="checkbox"/>	5.59	7.57%	\$15,166	6.95%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	5.59	7.57%	\$15,166	6.95%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Bury Pipeline		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Reposition Workboat	Re-locate to Hillhouse	<input checked="" type="checkbox"/>	3.24	4.38%	\$8,790	4.03%
Expose Pipeline		<input checked="" type="checkbox"/>	5.59	7.57%	\$15,166	6.95%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	5.59	7.57%	\$15,166	6.95%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Bury Pipeline		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.14%	\$2,279	1.04%
Task Total			59.45	80.45%	\$165,888	75.98%
Misc. Work Provision (15.00%)			8.67	11.73%	\$23,510	10.77%
Weather Provision (10.00%)			5.78	7.82%	\$15,673	7.18%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$13,271	6.08%
Total:			73.89	100.00%	\$218,341	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Henry Segment#:2530240

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.05%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.14%	\$2,279	1.04%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.77%	\$13,565	6.21%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	2.79	3.78%	\$7,569	3.47%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.71%	\$5,426	2.49%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	1.05%
Expose Pipeline		<input checked="" type="checkbox"/>	5.59	7.57%	\$15,166	6.95%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	5.59	7.57%	\$15,166	6.95%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Bury Pipeline		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Reposition Workboat	Re-locate to Hillhouse	<input checked="" type="checkbox"/>	3.24	4.38%	\$8,790	4.03%
Expose Pipeline		<input checked="" type="checkbox"/>	5.59	7.57%	\$15,166	6.95%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	5.59	7.57%	\$15,166	6.95%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Bury Pipeline		<input checked="" type="checkbox"/>	3.73	5.05%	\$10,119	4.63%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.14%	\$2,279	1.04%
Task Total			59.45	80.45%	\$165,888	75.98%
Misc. Work Provision (15.00%)			8.67	11.73%	\$23,510	10.77%
Weather Provision (10.00%)			5.78	7.82%	\$15,673	7.18%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$13,271	6.08%
Total:			73.89	100.00%	\$218,341	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Henry Segment#:2320240

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$38,227	17.76%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$73,513	34.14%
Manual Calculation	\$0	Independently Calculated	\$4,600	2.14%
Pipeline Surveying	\$230	per Hour	\$13,526	6.28%
Work Boat	\$583	per Hour	\$34,286	15.92%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Henry Segment#:2410240

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$38,643	17.76%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$74,313	34.15%
Manual Calculation	\$0	Independently Calculated	\$4,600	2.11%
Pipeline Surveying	\$230	per Hour	\$13,673	6.28%
Work Boat	\$583	per Hour	\$34,659	15.93%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Henry Segment#:2530240

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$38,643	17.76%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$74,313	34.15%
Manual Calculation	\$0	Independently Calculated	\$4,600	2.11%
Pipeline Surveying	\$230	per Hour	\$13,673	6.28%
Work Boat	\$583	per Hour	\$34,659	15.93%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Henry Segment#:2320240

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.07%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.15%	\$2,279	1.06%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.84%	\$13,565	6.30%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		2.15	2.94%	\$5,833	2.71%
Work Boat	\$1,253				
Dive Basic Spread- Mixed Gas	\$2,688				
Decommissioning Crew	\$1,398				
Pipeline Surveying	\$495				
Derig Decomm Equipment		2.00	2.74%	\$5,426	2.52%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.07%
Manual Calculation	\$2,300				
Expose Pipeline		5.59	7.65%	\$15,166	7.04%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.59	7.65%	\$15,166	7.04%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				
Cut Pipeline Riser		3.73	5.10%	\$10,119	4.70%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Remove Tube Turn		3.73	5.10%	\$10,119	4.70%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Bury Pipeline		3.73	5.10%	\$10,119	4.70%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Reposition Workboat		3.24	4.43%	\$8,790	4.08%
Work Boat	\$1,889				
Dive Basic Spread- Mixed Gas	\$4,050				
Decommissioning Crew	\$2,106				
Pipeline Surveying	\$745				
Expose Pipeline		5.59	7.65%	\$15,166	7.04%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.59	7.65%	\$15,166	7.04%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				
Cut Pipeline Riser		3.73	5.10%	\$10,119	4.70%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Remove Tube Turn		3.73	5.10%	\$10,119	4.70%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Bury Pipeline		3.73	5.10%	\$10,119	4.70%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Demob Work Boat		0.84	1.15%	\$2,279	1.06%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
		Total	58.81 80.46%	\$164,151.53	76.24%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Henry Segment#:2410240

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.06%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.14%	\$2,279	1.05%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.77%	\$13,565	6.23%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		2.79	3.78%	\$7,569	3.48%
Work Boat	\$1,627				
Dive Basic Spread- Mixed Gas	\$3,488				
Decommissioning Crew	\$1,814				
Pipeline Surveying	\$642				
Derig Decomm Equipment		2.00	2.71%	\$5,426	2.49%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.06%
Manual Calculation	\$2,300				
Expose Pipeline		5.59	7.57%	\$15,166	6.97%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.59	7.57%	\$15,166	6.97%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				
Cut Pipeline Riser		3.73	5.05%	\$10,119	4.65%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Remove Tube Turn		3.73	5.05%	\$10,119	4.65%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Bury Pipeline		3.73	5.05%	\$10,119	4.65%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Reposition Workboat		3.24	4.38%	\$8,790	4.04%
Work Boat	\$1,889				
Dive Basic Spread- Mixed Gas	\$4,050				
Decommissioning Crew	\$2,106				
Pipeline Surveying	\$745				
Expose Pipeline		5.59	7.57%	\$15,166	6.97%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.59	7.57%	\$15,166	6.97%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				
Cut Pipeline Riser		3.73	5.05%	\$10,119	4.65%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Remove Tube Turn		3.73	5.05%	\$10,119	4.65%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Bury Pipeline		3.73	5.05%	\$10,119	4.65%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Demob Work Boat		0.84	1.14%	\$2,279	1.05%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Total		59.45	80.45%	\$165,887.85	76.23%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Henry Segment#:2530240

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.06%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.14%	\$2,279	1.05%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.77%	\$13,565	6.23%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		2.79	3.78%	\$7,569	3.48%
Work Boat	\$1,627				
Dive Basic Spread- Mixed Gas	\$3,488				
Decommissioning Crew	\$1,814				
Pipeline Surveying	\$642				
Derig Decomm Equipment		2.00	2.71%	\$5,426	2.49%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.06%
Manual Calculation	\$2,300				
Expose Pipeline		5.59	7.57%	\$15,166	6.97%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.59	7.57%	\$15,166	6.97%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				
Cut Pipeline Riser		3.73	5.05%	\$10,119	4.65%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Remove Tube Turn		3.73	5.05%	\$10,119	4.65%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Bury Pipeline		3.73	5.05%	\$10,119	4.65%
Work Boat	\$2,175				
Dive Basic Spread- Mixed Gas	\$4,663				
Decommissioning Crew	\$2,425				
Pipeline Surveying	\$858				
Reposition Workboat		3.24	4.38%	\$8,790	4.04%
Work Boat	\$1,889				
Dive Basic Spread- Mixed Gas	\$4,050				
Decommissioning Crew	\$2,106				
Pipeline Surveying	\$745				
Expose Pipeline		5.59	7.57%	\$15,166	6.97%
Work Boat	\$3,259				
Dive Basic Spread- Mixed Gas	\$6,988				
Decommissioning Crew	\$3,634				
Pipeline Surveying	\$1,286				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.59	7.57%	\$15,166	6.97%	
Work Boat	\$3,259					
Dive Basic Spread- Mixed Gas	\$6,988					
Decommissioning Crew	\$3,634					
Pipeline Surveying	\$1,286					
Cut Pipeline Riser		3.73	5.05%	\$10,119	4.65%	
Work Boat	\$2,175					
Dive Basic Spread- Mixed Gas	\$4,663					
Decommissioning Crew	\$2,425					
Pipeline Surveying	\$858					
Remove Tube Turn		3.73	5.05%	\$10,119	4.65%	
Work Boat	\$2,175					
Dive Basic Spread- Mixed Gas	\$4,663					
Decommissioning Crew	\$2,425					
Pipeline Surveying	\$858					
Bury Pipeline		3.73	5.05%	\$10,119	4.65%	
Work Boat	\$2,175					
Dive Basic Spread- Mixed Gas	\$4,663					
Decommissioning Crew	\$2,425					
Pipeline Surveying	\$858					
Demob Work Boat		0.84	1.14%	\$2,279	1.05%	
Work Boat	\$490					
Dive Basic Spread- Mixed Gas	\$1,050					
Decommissioning Crew	\$546					
Pipeline Surveying	\$193					
		Total	59.45	80.45%	\$165,887.85	76.23%



TSB OFFSHORE

BSEE-POCSR

Well Decommission Task Information

Henry Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$3,677,608 75.19%
		Task Total	0.00	\$3,677,608 75.19%
		Misc. Work Provision (15.00%)	0.00	\$551,641 11.28%
		Weather Provision (10.00%)	0.00	\$367,761 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$294,209 6.02%
		Total:	0.00 100.00%	\$4,891,219 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Henry Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$3,677,608 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Henry Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$3,677,608	75.19%
Manual Calculation	\$3,677,608				
	Total	0.00	0.00%	\$3,677,608	75.19%



BSEE-POCSR

Platform Salvage Option

Heritage

COMPLETE REMOVAL

- Platform Heritage will be removed along with Platforms Harmony and Hondo.
- Platform Heritage is an 8-pile platform installed in 1989 in 1,075' of water.
- The estimated removal weight is the deck weight is 9,826 tons and the jacket weight is 32,420 tons.
- The platform has a total of 48 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 49 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- A lifting barge will be outfitted and utilized to lift pieces from the jacket structure. The loads will then be transferred midwater to the DB2000 to complete the lift and place on cargo barge.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Fourteen 400' cargo barges will transport the deck modules and jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 14 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports.



BSEE-POCSR

Platform Salvage Option

Heritage

The mob/demob time will be 2 days round trip.

-The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and disposed of.

-The two pipelines (oil, gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;



BSEE-POCSR

Platform Salvage Option

Heritage

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommissioning Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$173,603,974

Estimated Decommissioning Net Cost = \$173,603,974



BSEE-POCSR

Basic Information

Heritage

General Data

Platform:	Heritage
Function:	SELF CONTAINED
Type:	Steel
Water Depth:	1075'
Pre 461H?:	No
Year Installed:	1989
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0182
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	48
# Pipelines to Abandon:	2
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 ExxonMobil Corporation	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$152,534,096	\$152,534,096
Well Plugging & Abandonment:	\$17,704,742	\$17,704,742
Pipeline Abandonment:	\$3,365,136	\$3,365,136
Total Decommissioning Cost:	\$173,603,974	\$173,603,974



BSEE-POCSR

Platform Information

Heritage

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	72"		Yes	No	
Skirt/Braced	26	84"		No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	60
Number Installed:	49
Outside Diameter:	20"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	32420.00		
Jacket Installation Date:	1/1/1989		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	9826 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1989
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Heritage

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Deck > 500T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$27,453,468.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Heritage

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$7,149,371.00	4.69%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.01%	\$1,650,938.00	1.08%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.01%	\$5,542,468.00	10.19%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.01%	\$4,879,143.00	3.20%
Platform Abandonment - Manual Calculation	Lifting barge costs	<input type="checkbox"/>	0.00	0.00%	\$4,007,867.00	2.63%
Mobilize DB 2000	Mob from Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	2.06%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 14) + 1 lifting barge	<input checked="" type="checkbox"/>	25.60	0.24%	\$594,000.00	0.39%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.06%	\$58,781.23	0.04%
Cut Deck/Equip/Misc	Seperate 13 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.22%	\$232,519.91	0.15%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.22%	\$232,519.91	0.15%
Remove 8 Pile Deck	Remove 8 Pile Deck, 13 modules	<input checked="" type="checkbox"/>	120.00	1.12%	\$1,162,600.00	0.76%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.01%	\$13,984.00	0.01%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	15.80	0.15%	\$140,936.00	0.09%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	284.66	2.66%	\$5,668,240.18	3.72%
Cut Jacket	31 Hours per section, times 33 section(s), per MMS	<input checked="" type="checkbox"/>	1023.00	9.58%	\$20,248,830.00	13.27%
Remove Jacket - Meth 1	43 Hours per section, times 33 section(s), per MMS	<input checked="" type="checkbox"/>	1419.00	13.28%	\$27,852,600.00	18.26%
Demob CB 400 & Tug	Demob to Port of LA (Qty 14) + 1 lifting barge	<input type="checkbox"/>	25.60	0.24%	\$384,000.00	0.25%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.06%	\$58,781.23	0.04%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	15.80	0.15%	\$148,836.00	0.10%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.01%	\$13,984.00	0.01%
Demob DB 2000	Demob to Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	2.06%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	0.67%	\$1,472,000.00	0.97%
Offload CB 400		<input type="checkbox"/>	6864.00	64.25%	\$2,084,640.00	1.37%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$4,570,411.00	3.00%
Task Total			9931.96	92.96%	\$4,437,450.45	68.47%
Misc. Work Provision (15.00%)			451.16	4.22%	\$2,385,940.00	8.12%
Weather Contingency (10.00%)			300.78	2.82%	\$8,257,290.00	5.41%
Consumables					\$0.00	0.00%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Heritage

Task	Note	Weather Provision	Task Hours	Task Cost
		Waste Disposal	27,453,470.00	18.00%
		Structure & Equipment Disposal	\$0.00	0.00%
		Offloading	\$0.00	0.00%
		Storage / Scrapping	\$0.00	0.00%
		Reef Donation	\$0.00	0.00%
		Cost of Engineering (0.00%)	\$0.00	0.00%
Total:			10683.90	100.00%
			52,534,150.45	100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Heritage

Resource Used	Unit Cost	Cost	
Abrasive Cutter Spread	\$625 per Hour	\$1,723,913	1.13%
Cargo Barge 400	\$6,240 per Day per Barge	\$1,784,640	1.17%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$164,640	0.11%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$5,936,660	3.89%
CB Damage Deduct	\$20,000 per Cargo Barge	\$300,000	0.20%
Derrick Barge 2000	\$8,708 per Hour per barge	\$31,595,217	20.71%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$8,729,893	5.72%
DP Dive Boat	\$3,300 Per Hour	\$9,102,258	5.97%
Manual Calculation	\$0 Independently Calculated	\$39,300,166	25.76%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$169,048	0.11%
Pile Abrasive Cut 70 to 96 inches	\$5,375 per Cut	\$365,500	0.24%
Pipeline Survey	\$230 per Hour	\$634,400	0.42%
Rem. Operated Vehicle	\$800 per Hour	\$4,413,216	2.89%
Rig Up CB 400	\$14,000 per Barge	\$210,000	0.14%
Work Boat	\$500 per Hour	\$7,900	0.01%



BSEE-POCSR

Platform Decommission Cost Breakdown

Heritage

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$7,149,371.00	4.69%
Manual Calculation			\$7,149,371	
Platform Abandonment - Manual Calculation	1.00	0.01%	\$1,650,938.00	1.08%
Manual Calculation			\$1,650,938	
Sever Conductors- Abrasive	1.00	0.01%	\$15,542,468.00	10.19%
Manual Calculation			\$15,542,468	
Platform Removal Preparation	1.00	0.01%	\$4,879,143.00	3.20%
Manual Calculation			\$4,879,143	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$4,007,867.00	2.63%
Manual Calculation			\$4,007,867	
Mobilize DB 2000	0.00	0.00%	\$3,135,000.00	2.06%
Derrick Barge 2000			\$3,135,000	
Mobilize CB 400 & Tug	25.60	0.24%	\$594,000.00	0.39%
Rig Up CB 400			\$210,000	
CB 400 & Tug			\$384,000	
Setup Derrick Barge	6.75	0.06%	\$58,781.23	0.04%
Derrick Barge 2000			\$58,781	



BSEE-POCSR

Platform Decommission Cost Breakdown

Heritage

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		24.00	0.22%	\$232,519.91	0.15%
	Derrick Barge 2000			\$209,000	
	CB 300 & Tug			\$23,520	
Remove Equipment		24.00	0.22%	\$232,519.91	0.15%
	Derrick Barge 2000			\$209,000	
	CB 300 & Tug			\$23,520	
Remove 8 Pile Deck		120.00	1.12%	\$1,162,600.00	0.76%
	Derrick Barge 2000			\$1,045,000	
	CB 300 & Tug			\$117,600	
Jet/Airlift Pile Mud Plug		0.00	0.00%	\$0.00	0.00%
	Derrick Barge 2000			\$0	
	CB 400 & Tug			\$0	
Mobilize Abrasive Cutting Spread		1.00	0.01%	\$13,984.00	0.01%
	Manual Calculation			\$1,833	
	Manual Calculation			\$703	
	Manual Calculation			\$8,000	
	Manual Calculation			\$3,448	



BSEE-POCSR

Platform Decommission Cost Breakdown

Heritage

Task	Task Hours	Task Cost
Mobilize Dive Spread	15.80	0.15%
		\$140,936.00
		0.09%
DP Dive Boat		\$52,140
Dive Basic Spread Saturation		\$50,007
Abrasive Cutter Spread		\$9,875
Pipeline Survey		\$3,634
Rem. Operated Vehicle		\$25,280
Sever Piles- Abrasive	284.66	2.66%
		\$5,668,240.18
		3.72%
Derrick Barge 2000		\$2,478,913
DP Dive Boat		\$939,378
Dive Basic Spread Saturation		\$900,949
Pipeline Survey		\$65,472
Abrasive Cutter Spread		\$177,913
CB 400 & Tug		\$284,660
Pile Abrasive Cut 70 to 96 inches		\$365,500
Rem. Operated Vehicle		\$455,456
Cut Jacket	1023.00	9.58%
		\$20,248,830.00
		13.27%
Derrick Barge 2000		\$8,908,622
DP Dive Boat		\$3,375,900
Dive Basic Spread Saturation		\$3,237,795
Pipeline Survey		\$235,290
Abrasive Cutter Spread		\$639,375
CB 400 & Tug		\$2,046,000
Pile Abrasive Cut 7 to 48 inches		\$169,048
Rem. Operated Vehicle		\$1,636,800



BSEE-POCSR

Platform Decommission Cost Breakdown

Heritage

Task	Task Hours		Task Cost	
	Hours	Percentage	Cost	Percentage
Remove Jacket - Meth 1	1419.00	13.28%	\$27,852,600.00	18.26%
Derrick Barge 2000			\$12,357,120	
DP Dive Boat			\$4,682,700	
Dive Basic Spread Saturation			\$4,491,135	
Pipeline Survey			\$326,370	
Abrasive Cutter Spread			\$886,875	
CB 400 & Tug			\$2,838,000	
Rem. Operated Vehicle			\$2,270,400	
Demob CB 400 & Tug	25.60	0.24%	\$384,000.00	0.25%
CB 400 & Tug			\$384,000	
Pick Up DB Anchors	6.75	0.06%	\$58,781.23	0.04%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	15.80	0.15%	\$148,836.00	0.10%
Work Boat			\$7,900	
DP Dive Boat			\$52,140	
Dive Basic Spread Saturation			\$50,007	
Abrasive Cutter Spread			\$9,875	
Pipeline Survey			\$3,634	
Rem. Operated Vehicle			\$25,280	



BSEE-POCSR

Platform Decommission Cost Breakdown

Heritage

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Demob Abrasive Cutting Spread	1.00	0.01%	\$13,984.00	0.01%
Manual Calculation			\$1,833	
Manual Calculation			\$703	
Manual Calculation			\$8,000	
Manual Calculation			\$3,448	
Demob DB 2000	0.00	0.00%	\$3,135,000.00	2.06%
Derrick Barge 2000			\$3,135,000	
Site Clearance - with Divers	72.00	0.67%	\$1,472,000.00	0.97%
Manual Calculation			\$1,472,000	
Offload CB 400	6864.00	64.25%	\$2,084,640.00	1.37%
Cargo Barge 400			\$1,784,640	
CB Damage Deduct			\$300,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$4,570,411.00	3.00%
Manual Calculation			\$4,570,411	
Total	9931.96	92.96%	\$104,437,450.45	68.47%



TSB OFFSHORE

BSEE-POCSR

Pipeline Information

Heritage Segment#:5810182

General Data

Water Depth:	1075'
Origin / Terminus:	Origin
Opposite End Name:	Harmony
Opposite End Water Depth:	1198'
Pipeline Operator:	ExxonMobil Corporation
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	20"	Wall Thickness:		Length:	35800'
Depth of Burial:		# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Heritage Segment#:5920182

General Data

Water Depth:	1075'
Origin / Terminus:	Origin
Opposite End Name:	Harmony
Opposite End Water Depth:	1198'
Pipeline Operator:	ExxonMobil Corporation
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	35350'
Depth of Burial:		# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Heritage Segment#:5810182

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.29%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.25	2.00%	\$500,000	29.36%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.66%	\$17,340	1.02%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.44%	\$28,900	1.70%
Pig & Flush Pipeline	Pumping at 600 gpm	<input checked="" type="checkbox"/>	15.04	13.35%	\$86,931	5.11%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.78%	\$11,560	0.68%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.29%
Cut & Plug Pipeline	Cut & plug P/L at Heritage	<input checked="" type="checkbox"/>	11.75	10.43%	\$60,278	3.54%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.83	6.95%	\$40,168	2.36%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.83	6.95%	\$40,168	2.36%
Reposition Vessel	Re-locate to Harmony	<input checked="" type="checkbox"/>	3.68	3.27%	\$18,878	1.11%
Set Up Dive Boat	Set up at Harmony	<input checked="" type="checkbox"/>	3.00	2.66%	\$15,390	0.90%
Cut & Plug Pipeline	Cut & plug P/L at Harmony	<input checked="" type="checkbox"/>	11.75	10.43%	\$60,278	3.54%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.83	6.95%	\$40,168	2.36%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.83	6.95%	\$40,168	2.36%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.25	2.00%	\$500,000	29.36%
Task Total			91.04	80.80%	\$1,470,084	86.34%
Misc. Work Provision (15.00%)			12.98	11.52%	\$69,034	4.05%
Weather Provision (10.00%)			8.65	7.68%	\$46,023	2.70%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$117,607	6.91%
Total:			112.68	100.00%	\$1,702,747	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Heritage Segment#:5920182

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.30%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.25	2.12%	\$500,000	30.08%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.83%	\$17,340	1.04%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.71%	\$28,900	1.74%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	9.79	9.23%	\$56,586	3.40%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.88%	\$11,560	0.70%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.30%
Cut & Plug Pipeline	Cut & plug P/L at Heritage	<input checked="" type="checkbox"/>	11.75	11.07%	\$60,278	3.63%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.83	7.38%	\$40,168	2.42%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.83	7.38%	\$40,168	2.42%
Reposition Vessel	Re-locate to Harmony	<input checked="" type="checkbox"/>	3.68	3.47%	\$18,878	1.14%
Set Up Dive Boat	Set up at Harmony	<input checked="" type="checkbox"/>	3.00	2.83%	\$15,390	0.93%
Cut & Plug Pipeline	Cut & plug P/L at Harmony	<input checked="" type="checkbox"/>	11.75	11.07%	\$60,278	3.63%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.83	7.38%	\$40,168	2.42%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.83	7.38%	\$40,168	2.42%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.25	2.12%	\$500,000	30.08%
Task Total			85.79	80.85%	\$1,439,739	86.61%
Misc. Work Provision (15.00%)			12.19	11.49%	\$64,482	3.88%
Weather Provision (10.00%)			8.13	7.66%	\$42,988	2.59%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$115,179	6.93%
Total:			106.11	100.00%	\$1,662,389	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Heritage Segment#:5810182

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$16,276	1.00%
DP Dive Boat	\$3,300	per Hour	\$285,582	17.61%
Manual Calculation	\$0	Independently Calculated	\$1,009,858	62.26%
Pipeline Surveying	\$230	per Hour	\$19,904	1.23%
Rem. Operated Vehicle	\$800	per Hour	\$138,464	8.54%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Heritage Segment#:5920182

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$12,864	0.81%
DP Dive Boat	\$3,300	per Hour	\$268,257	16.96%
Manual Calculation	\$0	Independently Calculated	\$1,009,858	63.85%
Pipeline Surveying	\$230	per Hour	\$18,697	1.18%
Rem. Operated Vehicle	\$800	per Hour	\$130,064	8.22%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Heritage Segment#:5810182

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,929	0.30%
Manual Calculation	\$4,929				
Mobilize Dive Boat		2.25	2.00%	\$500,000	30.83%
Manual Calculation	\$500,000				
Set Up Dive Boat		3.00	2.66%	\$17,340	1.07%
DP Dive Boat	\$9,900				
Decommissioning Crew	\$1,950				
Rem. Operated Vehicle	\$4,800				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	4.44%	\$28,900	1.78%
DP Dive Boat	\$16,500				
Decommissioning Crew	\$3,250				
Rem. Operated Vehicle	\$8,000				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		15.04	13.35%	\$86,931	5.36%
DP Dive Boat	\$49,632				
Decommissioning Crew	\$9,776				
Rem. Operated Vehicle	\$24,064				
Pipeline Surveying	\$3,459				
Derig Decomm Equipment		2.00	1.78%	\$11,560	0.71%
DP Dive Boat	\$6,600				
Decommissioning Crew	\$1,300				
Rem. Operated Vehicle	\$3,200				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,929	0.30%
Manual Calculation	\$4,929				
Cut & Plug Pipeline		11.75	10.43%	\$60,278	3.72%
DP Dive Boat	\$38,775				
Rem. Operated Vehicle	\$18,800				
Pipeline Surveying	\$2,703				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.83	6.95%	\$40,168	2.48%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Remove Tube Turn		7.83	6.95%	\$40,168	2.48%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Reposition Vessel		3.68	3.27%	\$18,878	1.16%
DP Dive Boat	\$12,144				
Rem. Operated Vehicle	\$5,888				
Pipeline Surveying	\$846				
Set Up Dive Boat		3.00	2.66%	\$15,390	0.95%
DP Dive Boat	\$9,900				
Rem. Operated Vehicle	\$4,800				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.75	10.43%	\$60,278	3.72%
DP Dive Boat	\$38,775				
Rem. Operated Vehicle	\$18,800				
Pipeline Surveying	\$2,703				
Cut Pipeline Riser		7.83	6.95%	\$40,168	2.48%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Remove Tube Turn		7.83	6.95%	\$40,168	2.48%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Demob Dive Boat		2.25	2.00%	\$500,000	30.83%
Manual Calculation	\$500,000				
		Total	91.04 80.80%	\$1,470,084.20	90.64%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Heritage Segment#:5920182

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,929 0.31%
Manual Calculation		\$4,929
Mobilize Dive Boat	2.25 2.12%	\$500,000 31.61%
Manual Calculation		\$500,000
Set Up Dive Boat	3.00 2.83%	\$17,340 1.10%
DP Dive Boat		\$9,900
Decommissioning Crew		\$1,950
Rem. Operated Vehicle		\$4,800
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 4.71%	\$28,900 1.83%
DP Dive Boat		\$16,500
Decommissioning Crew		\$3,250
Rem. Operated Vehicle		\$8,000
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	9.79 9.23%	\$56,586 3.58%
DP Dive Boat		\$32,307
Decommissioning Crew		\$6,364
Rem. Operated Vehicle		\$15,664
Pipeline Surveying		\$2,252
Derig Decomm Equipment	2.00 1.88%	\$11,560 0.73%
DP Dive Boat		\$6,600
Decommissioning Crew		\$1,300
Rem. Operated Vehicle		\$3,200
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,929 0.31%
Manual Calculation		\$4,929
Cut & Plug Pipeline	11.75 11.07%	\$60,278 3.81%
DP Dive Boat		\$38,775
Rem. Operated Vehicle		\$18,800
Pipeline Surveying		\$2,703



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.83	7.38%	\$40,168	2.54%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Remove Tube Turn		7.83	7.38%	\$40,168	2.54%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Reposition Vessel		3.68	3.47%	\$18,878	1.19%
DP Dive Boat	\$12,144				
Rem. Operated Vehicle	\$5,888				
Pipeline Surveying	\$846				
Set Up Dive Boat		3.00	2.83%	\$15,390	0.97%
DP Dive Boat	\$9,900				
Rem. Operated Vehicle	\$4,800				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.75	11.07%	\$60,278	3.81%
DP Dive Boat	\$38,775				
Rem. Operated Vehicle	\$18,800				
Pipeline Surveying	\$2,703				
Cut Pipeline Riser		7.83	7.38%	\$40,168	2.54%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Remove Tube Turn		7.83	7.38%	\$40,168	2.54%
DP Dive Boat	\$25,839				
Rem. Operated Vehicle	\$12,528				
Pipeline Surveying	\$1,801				
Demob Dive Boat		2.25	2.12%	\$500,000	31.61%
Manual Calculation	\$500,000				
		Total	85.79 80.85%	\$1,439,739.20	91.03%



BSEE-POCSR

Well Decommission Task Information

Heritage Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$13,311,836 75.19%
		Task Total	0.00	\$13,311,836 75.19%
		Misc. Work Provision (15.00%)	0.00	\$1,996,775 11.28%
		Weather Provision (10.00%)	0.00	\$1,331,184 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$1,064,947 6.02%
		Total:	0.00 100.00%	\$17,704,742 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Heritage Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$13,311,836 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Heritage Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$13,311,836	75.19%
Manual Calculation	\$13,311,836				
	Total	0.00	0.00%	\$13,311,836	75.19%



BSEE-POCSR

Platform Salvage Option

Hermosa

COMPLETE REMOVAL

-Platform Hermosa will be removed along with Platforms Gail, Grace, Harvest, Hidalgo and Irene.

-Platform Hermosa is an 8-pile platform installed in 1985 in 603' of water.

-The estimated removal weight is the deck weight is 7,830 tons and the jacket weight is 17,000 tons.

-The platform has a total of 13 wells that will be plugged and abandoned.

-The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.

-Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.

-A total of 29 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.

-A lifting barge will be outfitted and utilized to lift pieces from the jacket structure. The loads will then be transferred midwater to the DB2000 to complete the lift and place on cargo barge.

-The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.

-The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.

-Four 300' cargo barges will transport the deck modules to shore and six 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 10 cargo barge trips will be required.



BSEE-POCSR

Platform Salvage Option

Hermosa

-The two pipelines (oil, gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 15% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and



BSEE-POCSR

Platform Salvage Option

Hermosa

Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$93,960,717

Estimated Decommissioning Net Cost = \$93,960,717



BSEE-POCSR

Basic Information

Hermosa

General Data

Platform:	Hermosa
Function:	SELF CONTAINED
Type:	Steel
Water Depth:	603'
Pre 461H?:	No
Year Installed:	1985
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0316
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	13
# Pipelines to Abandon:	2
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Freeport-McMoRan Oil & Gas	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$85,862,768	\$85,862,768
Well Plugging & Abandonment:	\$4,663,567	\$4,663,567
Pipeline Abandonment:	\$3,434,382	\$3,434,382
Total Decommissioning Cost:	\$93,960,717	\$93,960,717



BSEE-POCSR

Platform Information

Hermosa

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	60"		Yes	No	
Skirt/Braced	8	72"		No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	48
Number Installed:	29
Outside Diameter:	24"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	17000.00		
Jacket Installation Date:	1/1/1985		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	7830 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1985
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Hermosa

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	15.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$13,337,540.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Hermosa

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$4,059,819.00	4.73%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.01%	\$1,004,204.00	1.17%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.01%	\$5,605,618.00	6.53%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.01%	\$4,373,249.00	5.09%
Platform Abandonment - Manual Calculation	Lifting barge costs	<input type="checkbox"/>	0.00	0.00%	\$2,404,720.00	2.80%
Mobilize DB 2000	Mob from Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	1.83%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 4)	<input type="checkbox"/>	36.00	0.40%	\$197,120.00	0.23%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 6) + 1 lifting barge = 7	<input type="checkbox"/>	36.00	0.40%	\$350,000.00	0.41%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.08%	\$58,781.23	0.07%
Cut Deck/Equip/Misc	Seperate 8 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.27%	\$232,519.91	0.27%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.27%	\$232,519.91	0.27%
Remove 8 Pile Deck	Remove 8 Pile Deck, 8 modules	<input checked="" type="checkbox"/>	48.00	0.53%	\$465,039.81	0.54%
Demob CB 300 & Tug	Demob to Port of LA (Qty 4)	<input type="checkbox"/>	36.00	0.40%	\$141,120.00	0.16%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	35.00	0.39%	\$339,791.59	0.40%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.01%	\$8,391.00	0.01%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	18.00	0.20%	\$160,560.00	0.19%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	114.90	1.28%	\$2,312,395.00	2.69%
Cut Jacket	39 Hours per section, times 17 section(s), per MMS	<input checked="" type="checkbox"/>	663.00	7.38%	\$3,093,135.00	15.25%
Remove Jacket - Meth 1	51 Hours per section, times 17 section(s), per MMS	<input checked="" type="checkbox"/>	867.00	9.64%	\$7,017,762.00	19.82%
Demob CB 400 & Tug	Demob to Port of LA (Qty 6) + 1 lifting barge	<input type="checkbox"/>	36.00	0.40%	\$252,000.00	0.29%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.08%	\$58,781.23	0.07%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	18.00	0.20%	\$160,560.00	0.19%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.01%	\$8,391.00	0.01%
Demob DB 2000	Demob to Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	1.83%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	0.80%	\$1,472,000.00	1.71%
Offload CB 300		<input type="checkbox"/>	1392.00	15.48%	\$365,360.00	0.43%
Offload CB 400		<input type="checkbox"/>	4992.00	55.53%	\$1,437,920.00	1.67%
Task Total			8430.40	93.78%	\$8,946,757.68	68.65%
Misc. Work Provision (15.00%)			279.51	3.11%	\$6,789,239.00	7.91%
Weather Contingency (15.00%)			279.51	3.11%	\$6,789,239.00	7.91%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Hermosa

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal	13,337,540.00	15.53%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			8989.42 100.00%	35,862,775.68 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Hermosa

Resource Used	Unit Cost	Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$1,050,563	1.22%
Cargo Barge 300	\$4,920 per Day per Barge	\$285,360	0.33%
Cargo Barge 400	\$6,240 per Day per Barge	\$1,297,920	1.51%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$376,320	0.44%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$3,713,900	4.33%
CB Damage Deduct	\$20,000 per Cargo Barge	\$220,000	0.26%
Derrick Barge 2000	\$8,708 per Hour per barge	\$18,717,686	21.80%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$5,320,049	6.20%
DP Dive Boat	\$3,300 Per Hour	\$5,546,970	6.46%
Manual Calculation	\$0 Independently Calculated	\$18,936,392	22.05%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$79,552	0.09%
Pile Abrasive Cut 70 to 96 inches	\$5,375 per Cut	\$172,000	0.20%
Pipeline Survey	\$230 per Hour	\$386,607	0.45%
Rem. Operated Vehicle	\$800 per Hour	\$2,689,440	3.13%
Rig Up CB 300	\$14,000 per Barge	\$56,000	0.07%
Rig Up CB 400	\$14,000 per Barge	\$98,000	0.11%



BSEE-POCSR

Platform Decommission Cost Breakdown

Hermosa

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$4,059,819.00	4.73%
Manual Calculation			\$4,059,819	
Platform Abandonment - Manual Calculation	1.00	0.01%	\$1,004,204.00	1.17%
Manual Calculation			\$1,004,204	
Sever Conductors- Abrasive	1.00	0.01%	\$5,605,618.00	6.53%
Manual Calculation			\$5,605,618	
Platform Removal Preparation	1.00	0.01%	\$4,373,249.00	5.09%
Manual Calculation			\$4,373,249	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$2,404,720.00	2.80%
Manual Calculation			\$2,404,720	
Mobilize DB 2000	0.00	0.00%	\$1,567,500.00	1.83%
Derrick Barge 2000			\$1,567,500	
Mobilize CB 300 & Tug	36.00	0.40%	\$197,120.00	0.23%
CB 300 & Tug			\$141,120	
Rig Up CB 300			\$56,000	
Mobilize CB 400 & Tug	36.00	0.40%	\$350,000.00	0.41%
Rig Up CB 400			\$98,000	
CB 400 & Tug			\$252,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Hermosa

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Setup Derrick Barge	6.75	0.08%	\$58,781.23	0.07%
Derrick Barge 2000			\$58,781	
Cut Deck/Equip/Misc	24.00	0.27%	\$232,519.91	0.27%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove Equipment	24.00	0.27%	\$232,519.91	0.27%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove 8 Pile Deck	48.00	0.53%	\$465,039.81	0.54%
Derrick Barge 2000			\$418,000	
CB 300 & Tug			\$47,040	
Demob CB 300 & Tug	36.00	0.40%	\$141,120.00	0.16%
CB 300 & Tug			\$141,120	
Jet/Airlift Pile Mud Plug	35.00	0.39%	\$339,791.59	0.40%
Derrick Barge 2000			\$304,792	
CB 400 & Tug			\$35,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Hermosa

Task	Task Hours		Task Cost	
Mobilize Abrasive Cutting Spread	1.00	0.01%	\$8,391.00	0.01%
Manual Calculation			\$1,100	
Manual Calculation			\$422	
Manual Calculation			\$4,800	
Manual Calculation			\$2,069	
Mobilize Dive Spread	18.00	0.20%	\$160,560.00	0.19%
DP Dive Boat			\$59,400	
Dive Basic Spread Saturation			\$56,970	
Abrasive Cutter Spread			\$11,250	
Pipeline Survey			\$4,140	
Rem. Operated Vehicle			\$28,800	
Sever Piles- Abrasive	114.90	1.28%	\$2,312,395.00	2.69%
Derrick Barge 2000			\$1,000,587	
DP Dive Boat			\$379,170	
Dive Basic Spread Saturation			\$363,659	
Pipeline Survey			\$26,427	
Abrasive Cutter Spread			\$71,813	
CB 400 & Tug			\$114,900	
Pile Abrasive Cut 70 to 96 inches			\$172,000	
Rem. Operated Vehicle			\$183,840	



BSEE-POCSR

Platform Decommission Cost Breakdown

Hermosa

Task		Task Hours		Task Cost	
Cut Jacket		663.00	7.38%	\$13,093,135.00	15.25%
Derrick Barge 2000	\$5,773,623				
DP Dive Boat	\$2,187,900				
Dive Basic Spread Saturation	\$2,098,395				
Pipeline Survey	\$152,490				
Abrasive Cutter Spread	\$414,375				
CB 400 & Tug	\$1,326,000				
Pile Abrasive Cut 7 to 48 inches	\$79,552				
Rem. Operated Vehicle	\$1,060,800				
Remove Jacket - Meth 1		867.00	9.64%	\$17,017,762.00	19.82%
Derrick Barge 2000	\$7,550,122				
DP Dive Boat	\$2,861,100				
Dive Basic Spread Saturation	\$2,744,055				
Pipeline Survey	\$199,410				
Abrasive Cutter Spread	\$541,875				
CB 400 & Tug	\$1,734,000				
Rem. Operated Vehicle	\$1,387,200				
Demob CB 400 & Tug		36.00	0.40%	\$252,000.00	0.29%
CB 400 & Tug	\$252,000				
Pick Up DB Anchors		6.75	0.08%	\$58,781.23	0.07%
Derrick Barge 2000	\$58,781				



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Cost Breakdown

Hermosa

Task		Task Hours		Task Cost	
Demob Dive Spread		18.00	0.20%	\$160,560.00	0.19%
DP Dive Boat	\$59,400				
Dive Basic Spread Saturation	\$56,970				
Abrasive Cutter Spread	\$11,250				
Pipeline Survey	\$4,140				
Rem. Operated Vehicle	\$28,800				
Demob Abrasive Cutting Spread		1.00	0.01%	\$8,391.00	0.01%
Manual Calculation	\$1,100				
Manual Calculation	\$422				
Manual Calculation	\$4,800				
Manual Calculation	\$2,069				
Demob DB 2000		0.00	0.00%	\$1,567,500.00	1.83%
Derrick Barge 2000	\$1,567,500				
Site Clearance - with Divers		72.00	0.80%	\$1,472,000.00	1.71%
Manual Calculation	\$1,472,000				
Offload CB 300		1392.00	15.48%	\$365,360.00	0.43%
Cargo Barge 300	\$285,360				
CB Damage Deduct	\$80,000				
Offload CB 400		4992.00	55.53%	\$1,437,920.00	1.67%
Cargo Barge 400	\$1,297,920				
CB Damage Deduct	\$140,000				
Total		8430.40	93.78%	\$58,946,757.68	68.65%



BSEE-POCSR

Pipeline Information

Hermosa Segment#:4410316-S

General Data

Water Depth:	603'
Origin / Terminus:	Origin
Opposite End Name:	Gaviota
Opposite End Water Depth:	
Pipeline Operator:	Freeport-McMoRan Oil & Gas
Provision for Misc. Work%:	15.00%
Weather Contingency %:	15.00%

Pipeline Data

Outside Diameter:	24"	Wall Thickness:		Length:	54900'
Depth of Burial:		# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Hermosa Segment#:4520316-S

General Data

Water Depth:	603'
Origin / Terminus:	Origin
Opposite End Name:	Gaviota
Opposite End Water Depth:	
Pipeline Operator:	Freeport-McMoRan Oil & Gas
Provision for Misc. Work%:	15.00%
Weather Contingency %:	15.00%

Pipeline Data

Outside Diameter:	20"	Wall Thickness:		Length:	54800'
Depth of Burial:		# Crossings:		Product:	H2S
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Hermosa Segment#:4410316-Shore

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.14%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.29	0.36%	\$250,000	14.12%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.84%	\$22,035	1.24%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.41%	\$36,725	2.07%
Pig & Flush Pipeline	Pumping at 600 gpm	<input checked="" type="checkbox"/>	33.63	9.46%	\$247,012	13.95%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.56%	\$14,690	0.83%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.14%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	11.55	3.25%	\$77,327	4.37%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	2.17%	\$51,552	2.91%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	2.17%	\$57,334	3.24%
Mob P/L Removal Spread	Shared b/w 5 P/L's	<input type="checkbox"/>	2.24	0.63%	\$15,084	0.85%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	3.25%	\$77,778	4.39%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	11.55	3.25%	\$77,778	4.39%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	18.00	5.06%	\$35,800	2.02%
Remove Pipeline	Remove 0.55 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	9.70	2.73%	\$70,655	3.99%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	2.17%	\$56,087	3.17%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	18.00	5.06%	\$19,800	1.12%
Demob P/L Removal Spread	Shared b/w 5 P/L's	<input type="checkbox"/>	2.24	0.63%	\$15,084	0.85%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.29	0.36%	\$250,000	14.12%
Offload CB 180		<input type="checkbox"/>	168.00	47.26%	\$41,000	2.32%
Task Total			322.14	90.63%	\$1,420,669	80.22%
Misc. Work Provision (15.00%)			16.66	4.69%	\$118,346	6.68%
Weather Provision (15.00%)			16.66	4.69%	\$118,346	6.68%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$113,653	6.42%
Total:			355.46	100.00%	\$1,771,014	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Hermosa Segment#:4520316-Shore

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.15%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.29	0.38%	\$250,000	15.03%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.88%	\$22,035	1.32%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.46%	\$36,725	2.21%
Pig & Flush Pipeline	Pumping at 600 gpm	<input checked="" type="checkbox"/>	23.01	6.73%	\$169,008	10.16%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.59%	\$14,690	0.88%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.15%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	11.55	3.38%	\$77,327	4.65%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	2.25%	\$51,552	3.10%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	2.25%	\$57,334	3.45%
Mob P/L Removal Spread	Shared b/w 5 P/L's	<input type="checkbox"/>	2.24	0.66%	\$15,084	0.91%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	3.38%	\$77,778	4.68%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	11.55	3.38%	\$77,778	4.68%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	18.00	5.27%	\$35,800	2.15%
Remove Pipeline	Remove 0.55 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	9.70	2.84%	\$70,655	4.25%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	2.25%	\$56,087	3.37%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	18.00	5.27%	\$19,800	1.19%
Demob P/L Removal Spread	Shared b/w 5 P/L's	<input type="checkbox"/>	2.24	0.66%	\$15,084	0.91%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.29	0.38%	\$250,000	15.03%
Offload CB 180		<input type="checkbox"/>	168.00	49.17%	\$41,000	2.46%
Task Total			311.52	91.18%	\$1,342,665	80.72%
Misc. Work Provision (15.00%)			15.07	4.41%	\$106,645	6.41%
Weather Provision (15.00%)			15.07	4.41%	\$106,645	6.41%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$107,413	6.46%
Total:			341.66	100.00%	\$1,663,368	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hermosa Segment#:4410316

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	1.22%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$49,170	2.86%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	1.16%
Decommissioning Crew	\$650	per Hour	\$28,360	1.65%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$56,225	3.27%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$223,386	12.98%
DP Dive Boat	\$3,300	per Hour	\$381,348	22.17%
Manual Calculation	\$0	Independently Calculated	\$504,928	29.35%
Pipelay Barge	\$1,954	per Hour	\$87,891	5.11%
Pipeline Surveying	\$230	per Hour	\$26,579	1.54%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.93%
Saturation Decompression	\$751	per Hour	\$5,783	0.34%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hermosa Segment#:4520316

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	1.30%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$49,170	3.05%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	1.24%
Decommissioning Crew	\$650	per Hour	\$21,457	1.33%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$56,225	3.49%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$189,773	11.77%
DP Dive Boat	\$3,300	per Hour	\$346,302	21.47%
Manual Calculation	\$0	Independently Calculated	\$504,928	31.31%
Pipelay Barge	\$1,954	per Hour	\$87,891	5.45%
Pipeline Surveying	\$230	per Hour	\$24,136	1.50%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.99%
Saturation Decompression	\$751	per Hour	\$5,783	0.36%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hermosa Segment#:4410316

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.14%
Manual Calculation		\$2,464
Mobilize Dive Boat	1.29 0.36%	\$250,000 14.53%
Manual Calculation		\$250,000
Set Up Dive Boat	3.00 0.84%	\$22,035 1.28%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 1.41%	\$36,725 2.13%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	33.63 9.46%	\$247,012 14.36%
DP Dive Boat		\$110,979
Dive Basic Spread Saturation		\$106,439
Decommissioning Crew		\$21,860
Pipeline Surveying		\$7,735
Derig Decomm Equipment	2.00 0.56%	\$14,690 0.85%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.14%
Manual Calculation		\$2,464
Cut & Plug Pipeline	11.55 3.25%	\$77,327 4.49%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	2.17%	\$51,552	3.00%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	2.17%	\$57,334	3.33%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Saturation Decompression	\$5,783				
Mob P/L Removal Spread		2.24	0.63%	\$15,084	0.88%
DP Dive Boat	\$7,392				
Dive Basic Spread- Mixed Gas	\$2,800				
Pipeline Surveying	\$515				
Pipelay Barge	\$4,377				
Expose Pipeline		11.55	3.25%	\$77,778	4.52%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Cut & Plug Pipeline		11.55	3.25%	\$77,778	4.52%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Mobilize Vessel		18.00	5.06%	\$35,800	2.08%
CB 180 & Tug	\$19,800				
Rig Up CB 180	\$16,000				
Remove Pipeline		9.70	2.73%	\$70,655	4.11%
Pipeline Surveying	\$2,231				
DP Dive Boat	\$32,010				
Dive Basic Spread- Mixed Gas	\$12,125				
Pipelay Barge	\$18,954				
CB 180 & Tug	\$5,335				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	2.17%	\$56,087	3.26%	
Pipeline Surveying	\$1,771					
DP Dive Boat	\$25,410					
Dive Basic Spread- Mixed Gas	\$9,625					
Pipelay Barge	\$15,046					
CB 180 & Tug	\$4,235					
Demob Vessel		18.00	5.06%	\$19,800	1.15%	
CB 180 & Tug	\$19,800					
Demob P/L Removal Spread		2.24	0.63%	\$15,084	0.88%	
Pipeline Surveying	\$515					
Dive Basic Spread- Mixed Gas	\$2,800					
Pipelay Barge	\$4,377					
DP Dive Boat	\$7,392					
Demob Dive Boat		1.29	0.36%	\$250,000	14.53%	
Manual Calculation	\$250,000					
Offload CB 180		168.00	47.26%	\$41,000	2.38%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	322.14	90.63%	\$1,420,668.67	82.57%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hermosa Segment#:4520316

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.15%
Manual Calculation		\$2,464
Mobilize Dive Boat	1.29 0.38%	\$250,000 15.50%
Manual Calculation		\$250,000
Set Up Dive Boat	3.00 0.88%	\$22,035 1.37%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 1.46%	\$36,725 2.28%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	23.01 6.73%	\$169,008 10.48%
DP Dive Boat		\$75,933
Dive Basic Spread Saturation		\$72,827
Decommissioning Crew		\$14,957
Pipeline Surveying		\$5,292
Derig Decomm Equipment	2.00 0.59%	\$14,690 0.91%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.15%
Manual Calculation		\$2,464
Cut & Plug Pipeline	11.55 3.38%	\$77,327 4.79%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	2.25%	\$51,552	3.20%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	2.25%	\$57,334	3.55%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Saturation Decompression	\$5,783				
Mob P/L Removal Spread		2.24	0.66%	\$15,084	0.94%
DP Dive Boat	\$7,392				
Dive Basic Spread- Mixed Gas	\$2,800				
Pipeline Surveying	\$515				
Pipelay Barge	\$4,377				
Expose Pipeline		11.55	3.38%	\$77,778	4.82%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Cut & Plug Pipeline		11.55	3.38%	\$77,778	4.82%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Mobilize Vessel		18.00	5.27%	\$35,800	2.22%
CB 180 & Tug	\$19,800				
Rig Up CB 180	\$16,000				
Remove Pipeline		9.70	2.84%	\$70,655	4.38%
Pipeline Surveying	\$2,231				
DP Dive Boat	\$32,010				
Dive Basic Spread- Mixed Gas	\$12,125				
Pipelay Barge	\$18,954				
CB 180 & Tug	\$5,335				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	2.25%	\$56,087	3.48%	
Pipeline Surveying	\$1,771					
DP Dive Boat	\$25,410					
Dive Basic Spread- Mixed Gas	\$9,625					
Pipelay Barge	\$15,046					
CB 180 & Tug	\$4,235					
Demob Vessel		18.00	5.27%	\$19,800	1.23%	
CB 180 & Tug	\$19,800					
Demob P/L Removal Spread		2.24	0.66%	\$15,084	0.94%	
Pipeline Surveying	\$515					
Dive Basic Spread- Mixed Gas	\$2,800					
Pipelay Barge	\$4,377					
DP Dive Boat	\$7,392					
Demob Dive Boat		1.29	0.38%	\$250,000	15.50%	
Manual Calculation	\$250,000					
Offload CB 180		168.00	49.17%	\$41,000	2.54%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	311.52	91.18%	\$1,342,664.72	83.25%



TSB OFFSHORE

BSEE-POCSR

Well Decommission Task Information

Hermosa Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$3,379,396 72.46%
Task Total			0.00	\$3,379,396 72.46%
Misc. Work Provision (15.00%)			0.00	\$506,909 10.87%
Weather Provision (15.00%)			0.00	\$506,909 10.87%
Consumables				\$0 0.00%
Waste Disposal				\$0 0.00%
Structure & Equipment Disposal				\$0 0.00%
Offloading				\$0 0.00%
Storage / Scrapping				\$0 0.00%
Reef Donation				\$0 0.00%
Cost of Engineering (8.00%)				\$270,352 5.80%
Total:			0.00 100.00%	\$4,663,567 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Hermosa Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$3,379,396 72.46%



BSEE-POCSR

Well Decommission Cost Breakdown

Hermosa Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$3,379,396	72.46%
Manual Calculation	\$3,379,396				
	Total	0.00	0.00%	\$3,379,396	72.46%



BSEE-POCSR

Platform Salvage Option

Hidalgo

COMPLETE REMOVAL

-Platform Hidalgo will be removed along with Platforms Gail, Grace, Harvest, Hermosa and Irene.

-Platform Hidalgo is an 8-pile platform installed in 1986 in 430' of water.

-The estimated removal weight is the deck weight is 8,100 tons and the jacket weight is 10,950 tons.

-The platform has a total of 14 wells that will be plugged and abandoned.

-The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.

-Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.

-A total of 14 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.

-A lifting barge will be outfitted and utilized to lift pieces from the jacket structure. The loads will then be transferred midwater to the DB2000 to complete the lift and place on cargo barge.

-The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.

-The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.

-Three 300' cargo barges will transport the deck modules to shore and six 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 9 cargo barge trips will be required.



BSEE-POCSR

Platform Salvage Option

Hidalgo

-The two pipelines (oil, gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 15% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and



BSEE-POCSR

Platform Salvage Option

Hidalgo

Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$73,878,679

Estimated Decommissioning Net Cost = \$73,878,679



BSEE-POCSR

Basic Information

Hidalgo

General Data

Platform:	Hidalgo
Function:	SELF CONTAINED
Type:	Steel
Water Depth:	430'
Pre 461H?:	No
Year Installed:	1986
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0450
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	14
# Pipelines to Abandon:	2
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Freeport-McMoRan Oil & Gas	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$65,621,528	\$65,621,528
Well Plugging & Abandonment:	\$5,405,118	\$5,405,118
Pipeline Abandonment:	\$2,852,033	\$2,852,033
Total Decommissioning Cost:	\$73,878,679	\$73,878,679



BSEE-POCSR

Platform Information

Hidalgo

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	60"		Yes	No	
Skirt/Braced	8	72"		No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	56
Number Installed:	14
Outside Diameter:	24"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	10950.00		
Jacket Installation Date:	1/1/1986		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	8100 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1986
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Hidalgo

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Equipment	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	15.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$9,756,575.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Hidalgo

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$3,102,321.00	4.73%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.01%	\$827,534.00	1.26%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.01%	\$2,188,946.00	3.34%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.01%	\$3,707,793.00	5.65%
Platform Abandonment - Manual Calculation	Lifting barge costs	<input type="checkbox"/>	0.00	0.00%	\$2,404,720.00	3.66%
Mobilize DB 2000	Mob from Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	2.39%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 3)	<input type="checkbox"/>	36.00	0.43%	\$147,840.00	0.23%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 6) + 1 Lifting Barge = 7	<input type="checkbox"/>	36.00	0.43%	\$350,000.00	0.53%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.08%	\$58,781.23	0.09%
Cut Deck/Equip/Misc	Seperate 8 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.28%	\$232,519.91	0.35%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.28%	\$232,519.91	0.35%
Remove 8 Pile Deck	Remove 8 Pile Deck, 8 modules	<input checked="" type="checkbox"/>	72.00	0.85%	\$697,559.81	1.06%
Demob CB 300 & Tug	Demob to Port of LA (Qty 3)	<input type="checkbox"/>	36.00	0.43%	\$105,840.00	0.16%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	35.00	0.41%	\$339,791.59	0.52%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.01%	\$8,391.00	0.01%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	18.50	0.22%	\$165,020.00	0.25%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	114.90	1.36%	\$2,312,395.00	3.52%
Cut Jacket	45 Hours per section, times 11 section(s), per MMS	<input checked="" type="checkbox"/>	495.00	5.86%	\$9,795,576.00	14.93%
Remove Jacket - Meth 1	57 Hours per section, times 11 section(s), per MMS	<input checked="" type="checkbox"/>	627.00	7.43%	\$12,306,963.00	18.75%
Demob CB 400 & Tug	Demob to Port of LA (Qty 6) + 1 lifting barge	<input type="checkbox"/>	36.00	0.43%	\$252,000.00	0.38%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.08%	\$58,781.23	0.09%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	18.50	0.22%	\$165,020.00	0.25%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.01%	\$8,391.00	0.01%
Demob DB 2000	Demob to Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	2.39%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	0.85%	\$1,472,000.00	2.24%
Offload CB 300		<input type="checkbox"/>	1440.00	17.06%	\$355,200.00	0.54%
Offload CB 400		<input type="checkbox"/>	4896.00	57.99%	\$1,412,960.00	2.15%
Task Total			7999.40	94.74%	\$5,843,863.68	69.86%
Misc. Work Provision (15.00%)			221.91	2.63%	\$5,010,544.00	7.64%
Weather Contingency (15.00%)			221.91	2.63%	\$5,010,544.00	7.64%



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Platform Decommission Task Information

Hidalgo

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal		\$9,756,575.00 14.87%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			8443.22 100.00%	\$5,621,526.68 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Hidalgo

Resource Used	Unit Cost	Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$796,188	1.21%
Cargo Barge 300	\$4,920 per Day per Barge	\$295,200	0.45%
Cargo Barge 400	\$6,240 per Day per Barge	\$1,272,960	1.94%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$329,280	0.50%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$2,897,900	4.42%
CB Damage Deduct	\$20,000 per Cargo Barge	\$200,000	0.30%
Derrick Barge 2000	\$8,708 per Hour per barge	\$15,373,688	23.43%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$4,031,894	6.14%
DP Dive Boat	\$3,300 Per Hour	\$4,203,870	6.41%
Manual Calculation	\$0 Independently Calculated	\$13,720,096	20.91%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$79,552	0.12%
Pile Abrasive Cut 70 to 96 inches	\$5,375 per Cut	\$172,000	0.26%
Pipeline Survey	\$230 per Hour	\$292,997	0.45%
Rem. Operated Vehicle	\$800 per Hour	\$2,038,240	3.11%
Rig Up CB 300	\$14,000 per Barge	\$42,000	0.06%
Rig Up CB 400	\$14,000 per Barge	\$98,000	0.15%



BSEE-POCSR

Platform Decommission Cost Breakdown

Hidalgo

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$3,102,321.00	4.73%
Manual Calculation			\$3,102,321	
Platform Abandonment - Manual Calculation	1.00	0.01%	\$827,534.00	1.26%
Manual Calculation			\$827,534	
Sever Conductors- Abrasive	1.00	0.01%	\$2,188,946.00	3.34%
Manual Calculation			\$2,188,946	
Platform Removal Preparation	1.00	0.01%	\$3,707,793.00	5.65%
Manual Calculation			\$3,707,793	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$2,404,720.00	3.66%
Manual Calculation			\$2,404,720	
Mobilize DB 2000	0.00	0.00%	\$1,567,500.00	2.39%
Derrick Barge 2000			\$1,567,500	
Mobilize CB 300 & Tug	36.00	0.43%	\$147,840.00	0.23%
CB 300 & Tug			\$105,840	
Rig Up CB 300			\$42,000	
Mobilize CB 400 & Tug	36.00	0.43%	\$350,000.00	0.53%
Rig Up CB 400			\$98,000	
CB 400 & Tug			\$252,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Hidalgo

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Setup Derrick Barge	6.75	0.08%	\$58,781.23	0.09%
Derrick Barge 2000			\$58,781	
Cut Deck/Equip/Misc	24.00	0.28%	\$232,519.91	0.35%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove Equipment	24.00	0.28%	\$232,519.91	0.35%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove 8 Pile Deck	72.00	0.85%	\$697,559.81	1.06%
Derrick Barge 2000			\$627,000	
CB 300 & Tug			\$70,560	
Demob CB 300 & Tug	36.00	0.43%	\$105,840.00	0.16%
CB 300 & Tug			\$105,840	
Jet/Airlift Pile Mud Plug	35.00	0.41%	\$339,791.59	0.52%
Derrick Barge 2000			\$304,792	
CB 400 & Tug			\$35,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Hidalgo

Task		Task Hours		Task Cost	
Mobilize Abrasive Cutting Spread		1.00	0.01%	\$8,391.00	0.01%
Manual Calculation	\$1,100				
Manual Calculation	\$422				
Manual Calculation	\$4,800				
Manual Calculation	\$2,069				
Mobilize Dive Spread		18.50	0.22%	\$165,020.00	0.25%
DP Dive Boat	\$61,050				
Dive Basic Spread Saturation	\$58,553				
Abrasive Cutter Spread	\$11,563				
Pipeline Survey	\$4,255				
Rem. Operated Vehicle	\$29,600				
Sever Piles- Abrasive		114.90	1.36%	\$2,312,395.00	3.52%
Derrick Barge 2000	\$1,000,587				
DP Dive Boat	\$379,170				
Dive Basic Spread Saturation	\$363,659				
Pipeline Survey	\$26,427				
Abrasive Cutter Spread	\$71,813				
CB 400 & Tug	\$114,900				
Pile Abrasive Cut 70 to 96 inches	\$172,000				
Rem. Operated Vehicle	\$183,840				



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Platform Decommission Cost Breakdown

Hidalgo

Task		Task Hours		Task Cost	
Cut Jacket		495.00	5.86%	\$9,795,576.00	14.93%
Derrick Barge 2000	\$4,310,624				
DP Dive Boat	\$1,633,500				
Dive Basic Spread Saturation	\$1,566,675				
Pipeline Survey	\$113,850				
Abrasive Cutter Spread	\$309,375				
CB 400 & Tug	\$990,000				
Pile Abrasive Cut 7 to 48 inches	\$79,552				
Rem. Operated Vehicle	\$792,000				
Remove Jacket - Meth 1		627.00	7.43%	\$12,306,963.00	18.75%
Derrick Barge 2000	\$5,460,123				
DP Dive Boat	\$2,069,100				
Dive Basic Spread Saturation	\$1,984,455				
Pipeline Survey	\$144,210				
Abrasive Cutter Spread	\$391,875				
CB 400 & Tug	\$1,254,000				
Rem. Operated Vehicle	\$1,003,200				
Demob CB 400 & Tug		36.00	0.43%	\$252,000.00	0.38%
CB 400 & Tug	\$252,000				
Pick Up DB Anchors		6.75	0.08%	\$58,781.23	0.09%
Derrick Barge 2000	\$58,781				



BSEE-POCSR

Platform Decommission Cost Breakdown

Hidalgo

Task		Task Hours		Task Cost	
Demob Dive Spread		18.50	0.22%	\$165,020.00	0.25%
DP Dive Boat	\$61,050				
Dive Basic Spread Saturation	\$58,553				
Abrasive Cutter Spread	\$11,563				
Pipeline Survey	\$4,255				
Rem. Operated Vehicle	\$29,600				
Demob Abrasive Cutting Spread		1.00	0.01%	\$8,391.00	0.01%
Manual Calculation	\$1,100				
Manual Calculation	\$422				
Manual Calculation	\$4,800				
Manual Calculation	\$2,069				
Demob DB 2000		0.00	0.00%	\$1,567,500.00	2.39%
Derrick Barge 2000	\$1,567,500				
Site Clearance - with Divers		72.00	0.85%	\$1,472,000.00	2.24%
Manual Calculation	\$1,472,000				
Offload CB 300		1440.00	17.06%	\$355,200.00	0.54%
Cargo Barge 300	\$295,200				
CB Damage Deduct	\$60,000				
Offload CB 400		4896.00	57.99%	\$1,412,960.00	2.15%
Cargo Barge 400	\$1,272,960				
CB Damage Deduct	\$140,000				
Total		7999.40	94.74%	\$45,843,863.68	69.86%



BSEE-POCSR

Pipeline Information

Hidalgo Segment#:4920450

General Data

Water Depth:	430'
Origin / Terminus:	Origin
Opposite End Name:	Hermosa
Opposite End Water Depth:	603'
Pipeline Operator:	Freeport-McMoRan Oil & Gas
Provision for Misc. Work%:	15.00%
Weather Contingency %:	15.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:		Length:	25100'
Depth of Burial:		# Crossings:		Product:	H2S
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Hidalgo Segment#:5010450

General Data

Water Depth:	430'
Origin / Terminus:	Origin
Opposite End Name:	Hermosa
Opposite End Water Depth:	603'
Pipeline Operator:	Freeport-McMoRan Oil & Gas
Provision for Misc. Work%:	15.00%
Weather Contingency %:	15.00%

Pipeline Data

Outside Diameter:	16"	Wall Thickness:		Length:	25450'
Depth of Burial:		# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Hidalgo Segment#:4920450

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.17%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.30	1.06%	\$250,000	17.51%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.44%	\$22,035	1.54%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.06%	\$36,725	2.57%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	6.85	5.57%	\$50,313	3.52%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.63%	\$14,690	1.03%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.17%
Cut & Plug Pipeline	Cut & plug P/L at Hidalgo	<input checked="" type="checkbox"/>	11.55	9.39%	\$77,327	5.42%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.26%	\$51,552	3.61%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.26%	\$51,552	3.61%
Bury Pipeline	Burry P/L at Hidalgo	<input checked="" type="checkbox"/>	7.70	6.26%	\$51,552	3.61%
Reposition Vessel	Re-locate to Hermosa	<input checked="" type="checkbox"/>	3.48	2.83%	\$25,912	1.81%
Set Up Dive Boat	Set up at Hermosa	<input checked="" type="checkbox"/>	3.00	2.44%	\$20,085	1.41%
Cut & Plug Pipeline	Cut & plug P/L at Hermosa	<input checked="" type="checkbox"/>	11.55	9.39%	\$77,327	5.42%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.26%	\$51,552	3.61%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.26%	\$51,552	3.61%
Bury Pipeline	Burry P/L at Hermosa	<input checked="" type="checkbox"/>	7.70	6.26%	\$57,334	4.02%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.30	1.06%	\$250,000	17.51%
Task Total			95.23	77.41%	\$1,144,435	80.15%
Misc. Work Provision (15.00%)			13.89	11.29%	\$95,926	6.72%
Weather Provision (15.00%)			13.89	11.29%	\$95,926	6.72%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$91,555	6.41%
Total:			123.02	100.00%	\$1,427,841	100.00%



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Pipeline Decommission Task Information

Hidalgo Segment#:5010450

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.17%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.30	1.06%	\$250,000	17.55%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.45%	\$22,035	1.55%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.08%	\$36,725	2.58%
Pig & Flush Pipeline	Pumping at 600 gpm	<input checked="" type="checkbox"/>	6.49	5.30%	\$47,669	3.35%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.63%	\$14,690	1.03%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.17%
Cut & Plug Pipeline	Cut & plug P/L at Hidalgo	<input checked="" type="checkbox"/>	11.55	9.42%	\$77,327	5.43%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.28%	\$51,552	3.62%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.28%	\$51,552	3.62%
Bury Pipeline	Burry P/L at Hidalgo	<input checked="" type="checkbox"/>	7.70	6.28%	\$51,552	3.62%
Reposition Vessel	Re-locate to Hermosa	<input checked="" type="checkbox"/>	3.48	2.84%	\$25,912	1.82%
Set Up Dive Boat	Set up at Hermosa	<input checked="" type="checkbox"/>	3.00	2.45%	\$20,085	1.41%
Cut & Plug Pipeline	Cut & plug P/L at Hermosa	<input checked="" type="checkbox"/>	11.55	9.42%	\$77,327	5.43%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	6.28%	\$51,552	3.62%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	6.28%	\$51,552	3.62%
Bury Pipeline	Bury P/L at Hermosa	<input checked="" type="checkbox"/>	7.70	6.28%	\$57,334	4.03%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.30	1.06%	\$250,000	17.55%
Task Total			94.87	77.41%	\$1,141,790	80.17%
Misc. Work Provision (15.00%)			13.84	11.29%	\$95,529	6.71%
Weather Provision (15.00%)			13.84	11.29%	\$95,529	6.71%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$91,343	6.41%
Total:			122.55	100.00%	\$1,424,192	100.00%



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Pipeline Decommission Resources Breakdown

Hidalgo Segment#:4920450

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$10,953	0.79%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$293,174	21.13%
DP Dive Boat	\$3,300	per Hour	\$305,679	22.03%
Manual Calculation	\$0	Independently Calculated	\$504,928	36.39%
Pipeline Surveying	\$230	per Hour	\$21,305	1.54%
Saturation Decompression	\$751	per Hour	\$8,396	0.61%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hidalgo Segment#:5010450

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$10,719	0.77%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$292,035	21.10%
DP Dive Boat	\$3,300	per Hour	\$304,491	22.00%
Manual Calculation	\$0	Independently Calculated	\$504,928	36.49%
Pipeline Surveying	\$230	per Hour	\$21,222	1.53%
Saturation Decompression	\$751	per Hour	\$8,396	0.61%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hidalgo Segment#:4920450

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.18%
Manual Calculation		\$2,464
Mobilize Dive Boat	1.30 1.06%	\$250,000 18.02%
Manual Calculation		\$250,000
Set Up Dive Boat	3.00 2.44%	\$22,035 1.59%
DP Dive Boat		\$9,900
Dive Basic Spread Saturation		\$9,495
Decommissioning Crew		\$1,950
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 4.06%	\$36,725 2.65%
DP Dive Boat		\$16,500
Dive Basic Spread Saturation		\$15,825
Decommissioning Crew		\$3,250
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	6.85 5.57%	\$50,313 3.63%
DP Dive Boat		\$22,605
Dive Basic Spread Saturation		\$21,680
Decommissioning Crew		\$4,453
Pipeline Surveying		\$1,576
Derig Decomm Equipment	2.00 1.63%	\$14,690 1.06%
DP Dive Boat		\$6,600
Dive Basic Spread Saturation		\$6,330
Decommissioning Crew		\$1,300
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$2,464 0.18%
Manual Calculation		\$2,464
Cut & Plug Pipeline	11.55 9.39%	\$77,327 5.57%
DP Dive Boat		\$38,115
Dive Basic Spread Saturation		\$36,556
Pipeline Surveying		\$2,657



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Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	6.26%	\$51,552	3.72%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.26%	\$51,552	3.72%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	6.26%	\$51,552	3.72%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.48	2.83%	\$25,912	1.87%
DP Dive Boat	\$11,484				
Dive Basic Spread Saturation	\$11,014				
Pipeline Surveying	\$800				
Saturation Decompression	\$2,613				
Set Up Dive Boat		3.00	2.44%	\$20,085	1.45%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	9.39%	\$77,327	5.57%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	6.26%	\$51,552	3.72%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.26%	\$51,552	3.72%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	6.26%	\$57,334	4.13%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Saturation Decompression	\$5,783					
Demob Dive Boat		1.30	1.06%	\$250,000	18.02%	
Manual Calculation	\$250,000					
		Total	95.23	77.41%	\$1,144,434.53	82.48%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hidalgo Segment#:5010450

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.18%
Manual Calculation	\$2,464				
Mobilize Dive Boat		1.30	1.06%	\$250,000	18.07%
Manual Calculation	\$250,000				
Set Up Dive Boat		3.00	2.45%	\$22,035	1.59%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Decommissioning Crew	\$1,950				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	4.08%	\$36,725	2.65%
DP Dive Boat	\$16,500				
Dive Basic Spread Saturation	\$15,825				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		6.49	5.30%	\$47,669	3.44%
DP Dive Boat	\$21,417				
Dive Basic Spread Saturation	\$20,541				
Decommissioning Crew	\$4,219				
Pipeline Surveying	\$1,493				
Derig Decomm Equipment		2.00	1.63%	\$14,690	1.06%
DP Dive Boat	\$6,600				
Dive Basic Spread Saturation	\$6,330				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.18%
Manual Calculation	\$2,464				
Cut & Plug Pipeline		11.55	9.42%	\$77,327	5.59%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	6.28%	\$51,552	3.73%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.28%	\$51,552	3.73%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Bury Pipeline		7.70	6.28%	\$51,552	3.73%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.48	2.84%	\$25,912	1.87%
DP Dive Boat	\$11,484				
Dive Basic Spread Saturation	\$11,014				
Pipeline Surveying	\$800				
Saturation Decompression	\$2,613				
Set Up Dive Boat		3.00	2.45%	\$20,085	1.45%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	9.42%	\$77,327	5.59%
DP Dive Boat	\$38,115				
Dive Basic Spread Saturation	\$36,556				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	6.28%	\$51,552	3.73%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	6.28%	\$51,552	3.73%
DP Dive Boat	\$25,410				
Dive Basic Spread Saturation	\$24,371				
Pipeline Surveying	\$1,771				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	6.28%	\$57,334	4.14%	
DP Dive Boat	\$25,410					
Dive Basic Spread Saturation	\$24,371					
Pipeline Surveying	\$1,771					
Saturation Decompression	\$5,783					
<hr/>						
Demob Dive Boat		1.30	1.06%	\$250,000	18.07%	
Manual Calculation	\$250,000					
<hr/>						
		Total	94.87	77.41%	\$1,141,790.33	82.51%
<hr/> <hr/>						



TSB OFFSHORE

BSEE-POCSR

Well Decommission Task Information

Hidalgo Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$3,916,752 72.46%
		Task Total	0.00	\$3,916,752 72.46%
		Misc. Work Provision (15.00%)	0.00	\$587,513 10.87%
		Weather Provision (15.00%)	0.00	\$587,513 10.87%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$313,340 5.80%
		Total:	0.00 100.00%	\$5,405,118 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Hidalgo Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$3,916,752 72.46%



BSEE-POCSR

Well Decommission Cost Breakdown

Hidalgo Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$3,916,752	72.46%
Manual Calculation	\$3,916,752				
	Total	0.00	0.00%	\$3,916,752	72.46%



BSEE-POCSR

Platform Salvage Option

Hillhouse

COMPLETE REMOVAL

- Platform Hillhouse will be removed along with Platforms A, B, C and Henry.
- Platform Hillhouse is an 8-pile platform installed in 1969 in 190' of water.
- The estimated removal weight is the deck weight is 1,200 tons and the jacket weight is 1,500 tons.
- The platform has a total of 47 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 50 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and one 400' cargo barge will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 3 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and disposed of.



BSEE-POCSR

Platform Salvage Option

Hillhouse

-The three pipelines (1 oil, 2 gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and



BSEE-POCSR

Platform Salvage Option

Hillhouse

Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$31,323,372

Estimated Decommissioning Net Cost = \$31,323,372



BSEE-POCSR

Basic Information

Hillhouse

General Data

Platform:	Hillhouse
Function:	DRILL/PROD
Type:	Steel
Water Depth:	192'
Pre 461H?:	Yes
Year Installed:	1969
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0240
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	47
# Pipelines to Abandon:	4
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 DCOR, LLC	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$20,872,090	\$20,872,090
Well Plugging & Abandonment:	\$9,523,215	\$9,523,215
Pipeline Abandonment:	\$928,067	\$928,067
Total Decommissioning Cost:	\$31,323,372	\$31,323,372



BSEE-POCSR

Platform Information

Hillhouse

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	39"	0.5"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	60
Number Installed:	50
Outside Diameter:	20"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	1500.00		
Jacket Installation Date:	11/26/69		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	1200 Tons
Number of Padeyes Required:	12
Deck Installation Date:	11/26/69
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Hillhouse

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 400 x 100	Jkt > 700T	Conductors	Conductors	0
0	0	0	0	0
0	0	0	0	0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$1,865,735.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Hillhouse

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$864,483.00	4.14%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.06%	\$1,026,487.00	4.92%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.06%	\$4,169,988.00	19.98%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.06%	\$1,474,401.00	7.06%
Mobilize DB 2000	Mob from Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	9.01%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.41%	\$72,296.00	0.35%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.41%	\$36,600.00	0.18%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.42%	\$58,781.23	0.28%
Cut Deck/Equip/Misc	Seperate 4 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	1.49%	\$232,519.91	1.11%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	1.49%	\$232,519.91	1.11%
Remove 8 Pile Deck	Remove 8 Pile Deck, 4 modules	<input checked="" type="checkbox"/>	48.00	2.99%	\$465,039.81	2.23%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	22.60	1.41%	\$44,296.00	0.21%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	46.00	2.86%	\$446,583.19	2.14%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.06%	\$6,993.00	0.03%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	12.50	0.78%	\$61,500.00	0.29%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	60.74	3.78%	\$928,300.79	4.45%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	36.00	2.24%	\$526,619.91	2.52%
Demob CB 400 & Tug	Demob to Port of LA (Qty 1)	<input type="checkbox"/>	22.60	1.41%	\$22,600.00	0.11%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.42%	\$58,781.23	0.28%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	12.50	0.78%	\$61,500.00	0.29%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.06%	\$6,993.00	0.03%
Demob DB 2000	Demob to Asia, 50 days divided by 5 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,881,000.00	9.01%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	4.48%	\$884,000.00	4.24%
Offload CB 300		<input type="checkbox"/>	672.00	41.84%	\$177,760.00	0.85%
Offload CB 400		<input type="checkbox"/>	408.00	25.40%	\$126,080.00	0.60%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$711,880.00	3.41%
Task Total			1524.64	94.92%	\$6,459,002.97	78.86%
Misc. Work Provision (15.00%)			48.94	3.05%	\$1,528,412.00	7.32%
Weather Contingency (10.00%)			32.62	2.03%	\$1,018,942.00	4.88%
Consumables					\$0.00	0.00%



BSEE-POCSR

Platform Decommission Task Information

Hillhouse

Task	Note	Weather Provision	Task Hours	Task Cost
		Waste Disposal		1,865,735.00 8.94%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			1606.20 100.00%	20,872,091.97 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Hillhouse

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$76,088 0.36%
Cargo Barge 300	\$4,920 per Day per Barge	\$137,760 0.66%
Cargo Barge 400	\$6,240 per Day per Barge	\$106,080 0.51%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$182,672 0.88%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$187,940 0.90%
CB Damage Deduct	\$20,000 per Cargo Barge	\$60,000 0.29%
Derrick Barge 2000	\$8,708 per Hour per barge	\$5,958,589 28.55%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$385,307 1.85%
Dive Boat	\$900 per Hour	\$109,566 0.52%
Manual Calculation	\$0 Independently Calculated	\$9,145,225 43.82%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$39,776 0.19%
Pipeline Survey	\$230 per Hour	\$28,000 0.13%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.13%
Rig Up CB 400	\$14,000 per Barge	\$14,000 0.07%



BSEE-POCSR

Platform Decommission Cost Breakdown

Hillhouse

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$864,483.00	4.14%
Manual Calculation			\$864,483	
Platform Abandonment - Manual Calculation	1.00	0.06%	\$1,026,487.00	4.92%
Manual Calculation			\$1,026,487	
Sever Conductors- Abrasive	1.00	0.06%	\$4,169,988.00	19.98%
Manual Calculation			\$4,169,988	
Platform Removal Preparation	1.00	0.06%	\$1,474,401.00	7.06%
Manual Calculation			\$1,474,401	
Mobilize DB 2000	0.00	0.00%	\$1,881,000.00	9.01%
Derrick Barge 2000			\$1,881,000	
Mobilize CB 300 & Tug	22.60	1.41%	\$72,296.00	0.35%
CB 300 & Tug			\$44,296	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	22.60	1.41%	\$36,600.00	0.18%
Rig Up CB 400			\$14,000	
CB 400 & Tug			\$22,600	
Setup Derrick Barge	6.75	0.42%	\$58,781.23	0.28%
Derrick Barge 2000			\$58,781	



BSEE-POCSR
Platform Decommission Cost Breakdown
Hillhouse

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		24.00	1.49%	\$232,519.91	1.11%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove Equipment		24.00	1.49%	\$232,519.91	1.11%
Derrick Barge 2000	\$209,000				
CB 300 & Tug	\$23,520				
Remove 8 Pile Deck		48.00	2.99%	\$465,039.81	2.23%
Derrick Barge 2000	\$418,000				
CB 300 & Tug	\$47,040				
Demob CB 300 & Tug		22.60	1.41%	\$44,296.00	0.21%
CB 300 & Tug	\$44,296				
Jet/Airlift Pile Mud Plug		46.00	2.86%	\$446,583.19	2.14%
Derrick Barge 2000	\$400,583				
CB 400 & Tug	\$46,000				
Mobilize Abrasive Cutting Spread		1.00	0.06%	\$6,993.00	0.03%
Manual Calculation	\$917				
Manual Calculation	\$352				
Manual Calculation	\$4,000				
Manual Calculation	\$1,724				



BSEE-POCSR

Platform Decommission Cost Breakdown

Hillhouse

Task		Task Hours		Task Cost	
Mobilize Dive Spread		12.50	0.78%	\$61,500.00	0.29%
Dive Boat	\$11,250				
Dive Basic Spread Saturation	\$39,563				
Abrasive Cutter Spread	\$7,813				
Pipeline Survey	\$2,875				
Sever Piles- Abrasive		60.74	3.78%	\$928,300.79	4.45%
Derrick Barge 2000	\$528,944				
Dive Boat	\$54,666				
Dive Basic Spread Saturation	\$192,242				
Pipeline Survey	\$13,970				
Abrasive Cutter Spread	\$37,963				
CB 400 & Tug	\$60,740				
Pile Abrasive Cut 7 to 48 inches	\$39,776				
Remove Jacket - Meth 1		36.00	2.24%	\$526,619.91	2.52%
Derrick Barge 2000	\$313,500				
Dive Boat	\$32,400				
Dive Basic Spread Saturation	\$113,940				
Pipeline Survey	\$8,280				
Abrasive Cutter Spread	\$22,500				
CB 400 & Tug	\$36,000				
Demob CB 400 & Tug		22.60	1.41%	\$22,600.00	0.11%
CB 400 & Tug	\$22,600				



BSEE-POCSR
Platform Decommission Cost Breakdown
Hillhouse

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Pick Up DB Anchors	6.75	0.42%	\$58,781.23	0.28%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	12.50	0.78%	\$61,500.00	0.29%
Dive Boat			\$11,250	
Dive Basic Spread Saturation			\$39,563	
Abrasive Cutter Spread			\$7,813	
Pipeline Survey			\$2,875	
Demob Abrasive Cutting Spread	1.00	0.06%	\$6,993.00	0.03%
Manual Calculation			\$917	
Manual Calculation			\$352	
Manual Calculation			\$4,000	
Manual Calculation			\$1,724	
Demob DB 2000	0.00	0.00%	\$1,881,000.00	9.01%
Derrick Barge 2000			\$1,881,000	
Site Clearance - with Divers	72.00	4.48%	\$884,000.00	4.24%
Manual Calculation			\$884,000	
Offload CB 300	672.00	41.84%	\$177,760.00	0.85%
Cargo Barge 300			\$137,760	
CB Damage Deduct			\$40,000	



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Cost Breakdown

Hillhouse

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Offload CB 400	408.00	25.40%	\$126,080.00	0.60%
Cargo Barge 400			\$106,080	
CB Damage Deduct			\$20,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$711,880.00	3.41%
Manual Calculation			\$711,880	
Total	1524.64	94.92%	\$16,459,002.97	78.86%



BSEE-POCSR

Pipeline Information

Hillhouse Segment#:1810240

General Data

Water Depth: 190'
Origin / Terminus: Origin
Opposite End Name: A
Opposite End Water Depth: 188'
Pipeline Operator: DCOR, LLC
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:	0.5"	Length:	2560'
Depth of Burial:	3'	# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Hillhouse Segment#:1920240

General Data

Water Depth:	190'
Origin / Terminus:	Origin
Opposite End Name:	A
Opposite End Water Depth:	188'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	2560'
Depth of Burial:	3'	# Crossings:		Product:	Spare
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Hillhouse Segment#:2030240

General Data

Water Depth:	190'
Origin / Terminus:	Origin
Opposite End Name:	A
Opposite End Water Depth:	188'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	6.625"	Wall Thickness:	0.432"	Length:	2560'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Hillhouse Segment#:8" OOS

General Data

Water Depth:	190'
Origin / Terminus:	Terminus
Opposite End Name:	A
Opposite End Water Depth:	188'
Pipeline Operator:	DCOR, LLC
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:		Length:	2560'
Depth of Burial:	3'	# Crossings:		Product:	Out of Service
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Hillhouse Segment#:1810240

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.35%	\$13,565	5.84%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	0.55	0.70%	\$1,492	0.64%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.54%	\$5,426	2.34%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.11%	\$17,309	7.45%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.11%	\$17,309	7.45%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Reposition Workboat	Re-locate to "A"	<input checked="" type="checkbox"/>	3.05	3.88%	\$8,275	3.56%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.11%	\$17,309	7.45%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.11%	\$17,309	7.45%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Task Total			63.30	80.43%	\$176,333	75.93%
Misc. Work Provision (15.00%)			9.24	11.74%	\$25,076	10.80%
Weather Provision (10.00%)			6.16	7.83%	\$16,718	7.20%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$14,107	6.07%
Total:			78.71	100.00%	\$232,233	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Hillhouse Segment#:1920240

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.36%	\$13,565	5.85%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	0.43	0.55%	\$1,167	0.50%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.55%	\$5,426	2.34%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Reposition Workboat	Re-locate to "A"	<input checked="" type="checkbox"/>	3.05	3.88%	\$8,275	3.57%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Task Total			63.18	80.43%	\$176,007	75.93%
Misc. Work Provision (15.00%)			9.23	11.74%	\$25,027	10.80%
Weather Provision (10.00%)			6.15	7.83%	\$16,685	7.20%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$14,081	6.07%
Total:			78.56	100.00%	\$231,800	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Hillhouse Segment#:2030240

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.36%	\$13,565	5.85%
Pig & Flush Pipeline	Pumping at 150 gpm	<input checked="" type="checkbox"/>	0.43	0.55%	\$1,167	0.50%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.55%	\$5,426	2.34%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Reposition Workboat	Re-locate to "A"	<input checked="" type="checkbox"/>	3.05	3.88%	\$8,275	3.57%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.12%	\$17,309	7.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.41%	\$11,530	4.97%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Task Total			63.18	80.43%	\$176,007	75.93%
Misc. Work Provision (15.00%)			9.23	11.74%	\$25,027	10.80%
Weather Provision (10.00%)			6.15	7.83%	\$16,685	7.20%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$14,081	6.07%
Total:			78.56	100.00%	\$231,800	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Hillhouse Segment#:8" OOS

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Mobilize Work Boat	Mob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	6.35%	\$13,565	5.84%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	0.55	0.70%	\$1,492	0.64%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.54%	\$5,426	2.34%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 15 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,300	0.99%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.11%	\$17,309	7.45%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.11%	\$17,309	7.45%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Reposition Workboat	Re-locate to "A"	<input checked="" type="checkbox"/>	3.05	3.88%	\$8,275	3.56%
Expose Pipeline		<input checked="" type="checkbox"/>	6.38	8.11%	\$17,309	7.45%
Cut & Plug Pipeline	Cut PL from riser	<input checked="" type="checkbox"/>	6.38	8.11%	\$17,309	7.45%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Remove Tube Turn		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Bury Pipeline		<input checked="" type="checkbox"/>	4.25	5.40%	\$11,530	4.96%
Demob Work Boat	Demob shared with 15 pipelines	<input type="checkbox"/>	0.84	1.07%	\$2,279	0.98%
Task Total			63.30	80.43%	\$176,333	75.93%
Misc. Work Provision (15.00%)			9.24	11.74%	\$25,076	10.80%
Weather Provision (10.00%)			6.16	7.83%	\$16,718	7.20%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$14,107	6.07%
Total:			78.71	100.00%	\$232,233	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hillhouse Segment#:1810240

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$41,145	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$79,125	34.18%
Manual Calculation	\$0	Independently Calculated	\$4,600	1.99%
Pipeline Surveying	\$230	per Hour	\$14,559	6.29%
Work Boat	\$583	per Hour	\$36,904	15.94%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hillhouse Segment#:1920240

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$41,067	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$78,975	34.18%
Manual Calculation	\$0	Independently Calculated	\$4,600	1.99%
Pipeline Surveying	\$230	per Hour	\$14,531	6.29%
Work Boat	\$583	per Hour	\$36,834	15.94%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hillhouse Segment#:2030240

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$41,067	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$78,975	34.18%
Manual Calculation	\$0	Independently Calculated	\$4,600	1.99%
Pipeline Surveying	\$230	per Hour	\$14,531	6.29%
Work Boat	\$583	per Hour	\$36,834	15.94%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hillhouse Segment#:8" OOS

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$41,145	17.77%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$79,125	34.18%
Manual Calculation	\$0	Independently Calculated	\$4,600	1.99%
Pipeline Surveying	\$230	per Hour	\$14,559	6.29%
Work Boat	\$583	per Hour	\$36,904	15.94%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hillhouse Segment#:1810240

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.99%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.07%	\$2,279	0.98%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.35%	\$13,565	5.86%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.55	0.70%	\$1,492	0.64%
Work Boat	\$321				
Dive Basic Spread- Mixed Gas	\$688				
Decommissioning Crew	\$358				
Pipeline Surveying	\$127				
Derig Decomm Equipment		2.00	2.54%	\$5,426	2.34%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.99%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.11%	\$17,309	7.48%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.11%	\$17,309	7.48%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.25	5.40%	\$11,530	4.98%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Remove Tube Turn		4.25	5.40%	\$11,530	4.98%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Bury Pipeline		4.25	5.40%	\$11,530	4.98%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.88%	\$8,275	3.57%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.11%	\$17,309	7.48%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.11%	\$17,309	7.48%	
Work Boat	\$3,720					
Dive Basic Spread- Mixed Gas	\$7,975					
Decommissioning Crew	\$4,147					
Pipeline Surveying	\$1,467					
Cut Pipeline Riser		4.25	5.40%	\$11,530	4.98%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Remove Tube Turn		4.25	5.40%	\$11,530	4.98%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Bury Pipeline		4.25	5.40%	\$11,530	4.98%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Demob Work Boat		0.84	1.07%	\$2,279	0.98%	
Work Boat	\$490					
Dive Basic Spread- Mixed Gas	\$1,050					
Decommissioning Crew	\$546					
Pipeline Surveying	\$193					
		Total	63.30	80.43%	\$176,332.90	76.17%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hillhouse Segment#:1920240

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.07%	\$2,279	0.99%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.36%	\$13,565	5.87%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.43	0.55%	\$1,167	0.50%
Work Boat	\$251				
Dive Basic Spread- Mixed Gas	\$538				
Decommissioning Crew	\$280				
Pipeline Surveying	\$99				
Derig Decomm Equipment		2.00	2.55%	\$5,426	2.35%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Remove Tube Turn		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Bury Pipeline		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.88%	\$8,275	3.58%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%	
Work Boat	\$3,720					
Dive Basic Spread- Mixed Gas	\$7,975					
Decommissioning Crew	\$4,147					
Pipeline Surveying	\$1,467					
Cut Pipeline Riser		4.25	5.41%	\$11,530	4.99%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Remove Tube Turn		4.25	5.41%	\$11,530	4.99%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Bury Pipeline		4.25	5.41%	\$11,530	4.99%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Demob Work Boat		0.84	1.07%	\$2,279	0.99%	
Work Boat	\$490					
Dive Basic Spread- Mixed Gas	\$1,050					
Decommissioning Crew	\$546					
Pipeline Surveying	\$193					
		Total	63.18	80.43%	\$176,007.34	76.17%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hillhouse Segment#:2030240

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.07%	\$2,279	0.99%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.36%	\$13,565	5.87%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.43	0.55%	\$1,167	0.50%
Work Boat	\$251				
Dive Basic Spread- Mixed Gas	\$538				
Decommissioning Crew	\$280				
Pipeline Surveying	\$99				
Derig Decomm Equipment		2.00	2.55%	\$5,426	2.35%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	1.00%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Remove Tube Turn		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Bury Pipeline		4.25	5.41%	\$11,530	4.99%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.88%	\$8,275	3.58%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.12%	\$17,309	7.49%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.12%	\$17,309	7.49%	
Work Boat	\$3,720					
Dive Basic Spread- Mixed Gas	\$7,975					
Decommissioning Crew	\$4,147					
Pipeline Surveying	\$1,467					
Cut Pipeline Riser		4.25	5.41%	\$11,530	4.99%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Remove Tube Turn		4.25	5.41%	\$11,530	4.99%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Bury Pipeline		4.25	5.41%	\$11,530	4.99%	
Work Boat	\$2,478					
Dive Basic Spread- Mixed Gas	\$5,313					
Decommissioning Crew	\$2,763					
Pipeline Surveying	\$978					
Demob Work Boat		0.84	1.07%	\$2,279	0.99%	
Work Boat	\$490					
Dive Basic Spread- Mixed Gas	\$1,050					
Decommissioning Crew	\$546					
Pipeline Surveying	\$193					
		Total	63.18	80.43%	\$176,007.34	76.17%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hillhouse Segment#:8" OOS

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.99%
Manual Calculation	\$2,300				
Mobilize Work Boat		0.84	1.07%	\$2,279	0.98%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Rig Up Decomm Equipment		5.00	6.35%	\$13,565	5.86%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.55	0.70%	\$1,492	0.64%
Work Boat	\$321				
Dive Basic Spread- Mixed Gas	\$688				
Decommissioning Crew	\$358				
Pipeline Surveying	\$127				
Derig Decomm Equipment		2.00	2.54%	\$5,426	2.34%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,300	0.99%
Manual Calculation	\$2,300				
Expose Pipeline		6.38	8.11%	\$17,309	7.48%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.11%	\$17,309	7.48%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.25	5.40%	\$11,530	4.98%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Remove Tube Turn		4.25	5.40%	\$11,530	4.98%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Bury Pipeline		4.25	5.40%	\$11,530	4.98%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Reposition Workboat		3.05	3.88%	\$8,275	3.57%
Work Boat	\$1,778				
Dive Basic Spread- Mixed Gas	\$3,813				
Decommissioning Crew	\$1,983				
Pipeline Surveying	\$702				
Expose Pipeline		6.38	8.11%	\$17,309	7.48%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		6.38	8.11%	\$17,309	7.48%
Work Boat	\$3,720				
Dive Basic Spread- Mixed Gas	\$7,975				
Decommissioning Crew	\$4,147				
Pipeline Surveying	\$1,467				
Cut Pipeline Riser		4.25	5.40%	\$11,530	4.98%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Remove Tube Turn		4.25	5.40%	\$11,530	4.98%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Bury Pipeline		4.25	5.40%	\$11,530	4.98%
Work Boat	\$2,478				
Dive Basic Spread- Mixed Gas	\$5,313				
Decommissioning Crew	\$2,763				
Pipeline Surveying	\$978				
Demob Work Boat		0.84	1.07%	\$2,279	0.98%
Work Boat	\$490				
Dive Basic Spread- Mixed Gas	\$1,050				
Decommissioning Crew	\$546				
Pipeline Surveying	\$193				
Total		63.30	80.43%	\$176,332.90	76.17%



BSEE-POCSR

Well Decommission Task Information

Hillhouse Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$7,160,312 75.19%
		Task Total	0.00	\$7,160,312 75.19%
		Misc. Work Provision (15.00%)	0.00	\$1,074,047 11.28%
		Weather Provision (10.00%)	0.00	\$716,031 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$572,825 6.02%
		Total:	0.00 100.00%	\$9,523,215 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Hillhouse Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$7,160,312 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Hillhouse Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$7,160,312	75.19%
Manual Calculation	\$7,160,312				
	Total	0.00	0.00%	\$7,160,312	75.19%



BSEE-POCSR

Platform Salvage Option

Hogan

COMPLETE REMOVAL

-Platform Hogan will be removed along with Platform Houchin.

-Platform Hogan is a 12-pile platform installed in 1967 in 154' of water.

-The estimated removal weight is the deck weight is 2,259 tons and the jacket weight is 1,263 tons.

-The platform has a total of 39 wells that will be plugged and abandoned.

-The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico (GOM) to the POCSR.

-Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.

-A total of 39 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.

-The platform topsides and jacket will be removed by a DB 500 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.

-The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.

-Two 300' cargo barges will transport the deck modules to shore and three 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 5 cargo barge trips will be required.

-The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.

-The power cable will be transported to shore on cargo barges to Port Hueneme or Los



BSEE-POCSR

Platform Salvage Option

Hogan

Angeles/Long Beach where it will be cut into segments and disposed of.

-The four pipelines (oil, gas, gas lift, water return) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipelines to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate.



BSEE-POCSR

Platform Salvage Option

Hogan

Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$38,090,812

Estimated Decommissioning Net Cost = \$38,090,812



BSEE-POCSR

Basic Information

Hogan

General Data

Platform:	Hogan
Function:	FACILITIES
Type:	Steel
Water Depth:	154'
Pre 461H?:	Yes
Year Installed:	1967
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0166
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	39
# Pipelines to Abandon:	4
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Pacific Operators Offshore, Inc.	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$27,219,170	\$27,219,170
Well Plugging & Abandonment:	\$9,638,180	\$9,638,180
Pipeline Abandonment:	\$1,233,462	\$1,233,462
Total Decommissioning Cost:	\$38,090,812	\$38,090,812



BSEE-POCSR

Platform Information

Hogan

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	12	36"		Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:	86x170	
Middle:	86x170	
Lower:	87x170	

Conductors

Number of Slots:	66
Number Installed:	39
Outside Diameter:	18.625"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	1263.00		
Jacket Installation Date:	1/1/1967		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	2259 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1967
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Hogan

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Deck 100-500T	Deck 100-500T
CB 300 x 100	Deck 100-500T	Deck 100-500T	Deck 100-500T	Deck 100-500T
CB 400 x 100	Deck 100-500T	Deck 100-500T	Jkt < 300T	
CB 400 x 100	Jkt 300-700T	Jkt 300-700T		
CB 400 x 100	Jkt 300-700T	Jkt 300-700T		

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$1,902,952.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Hogan

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$963,495.00	3.54%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.03%	\$2,144,518.00	7.88%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.03%	\$2,906,310.00	10.68%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.03%	\$1,096,971.00	4.03%
Mobilize DB 500	Mob from Asia, 50 days divided by 2 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,712,500.00	13.64%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	22.20	0.66%	\$71,512.00	0.26%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 3)	<input type="checkbox"/>	22.20	0.66%	\$108,600.00	0.40%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.20%	\$46,406.25	0.17%
Cut Deck/Equip/Misc	Seperate 8 Modules	<input checked="" type="checkbox"/>	24.00	0.71%	\$188,520.00	0.69%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.71%	\$188,520.00	0.69%
Remove 8 Pile Deck	Remove 12 Pile Deck Modules (Qty 8)	<input checked="" type="checkbox"/>	192.00	5.68%	\$1,508,160.00	5.54%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	22.20	0.66%	\$43,512.00	0.16%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	46.00	1.36%	\$362,250.00	1.33%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.03%	\$20,977.00	0.08%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	12.20	0.36%	\$36,661.00	0.13%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	57.91	1.71%	\$689,724.86	2.53%
Cut Jacket	24 Hours per section, times 5 sections, per MMS	<input checked="" type="checkbox"/>	120.00	3.55%	\$1,365,264.00	5.02%
Remove Jacket - Meth 1	24 Hours per section, times 5 sections, per MMS	<input checked="" type="checkbox"/>	120.00	3.55%	\$1,305,600.00	4.80%
Demob CB 400 & Tug	Demob to Port of LA (Qty 3)	<input type="checkbox"/>	22.20	0.66%	\$66,600.00	0.24%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.20%	\$46,406.25	0.17%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	12.20	0.36%	\$36,661.00	0.13%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.03%	\$20,977.00	0.08%
Demob DB 500	Demob to Asia, 50 days divided by 2 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,712,500.00	13.64%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	2.13%	\$884,000.00	3.25%
Offload CB 300		<input type="checkbox"/>	912.00	26.99%	\$226,960.00	0.83%
Offload CB 400		<input type="checkbox"/>	1512.00	44.74%	\$453,120.00	1.66%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$369,971.00	1.36%
Task Total			3211.61	95.03%	22,576,696.36	82.94%
Misc. Work Provision (15.00%)			100.71	2.98%	\$1,643,716.00	6.04%
Weather Contingency (10.00%)			67.14	1.99%	\$1,095,810.00	4.03%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Hogan

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal	1,902,952.00	6.99%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			3379.46 100.00%	27,219,174.36 100.00%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Resources Breakdown

Hogan

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$201,444 0.74%
Cargo Barge 300	\$4,920 per Day per Barge	\$186,960 0.69%
Cargo Barge 400	\$6,240 per Day per Barge	\$393,120 1.44%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$322,224 1.18%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$477,110 1.75%
CB Damage Deduct	\$20,000 per Cargo Barge	\$100,000 0.37%
Derrick Barge 500	\$6,875 per Hour	\$11,532,194 42.37%
Dive Basic Spread- Mixed Gas	\$1,250 Per Hour	\$402,888 1.48%
Dive Boat	\$900 per Hour	\$290,079 1.07%
Manual Calculation	\$0 Independently Calculated	\$8,407,219 30.89%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$119,328 0.44%
Pipeline Survey	\$230 per Hour	\$74,131 0.27%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.10%
Rig Up CB 400	\$14,000 per Barge	\$42,000 0.15%



BSEE-POCSR

Platform Decommission Cost Breakdown

Hogan

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$963,495.00	3.54%
Manual Calculation			\$963,495	
Platform Abandonment - Manual Calculation	1.00	0.03%	\$2,144,518.00	7.88%
Manual Calculation			\$2,144,518	
Sever Conductors- Abrasive	1.00	0.03%	\$2,906,310.00	10.68%
Manual Calculation			\$2,906,310	
Platform Removal Preparation	1.00	0.03%	\$1,096,971.00	4.03%
Manual Calculation			\$1,096,971	
Mobilize DB 500	0.00	0.00%	\$3,712,500.00	13.64%
Derrick Barge 500			\$3,712,500	
Mobilize CB 300 & Tug	22.20	0.66%	\$71,512.00	0.26%
CB 300 & Tug			\$43,512	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	22.20	0.66%	\$108,600.00	0.40%
Rig Up CB 400			\$42,000	
CB 400 & Tug			\$66,600	
Setup Derrick Barge	6.75	0.20%	\$46,406.25	0.17%
Derrick Barge 500			\$46,406	



BSEE-POCSR

Platform Decommission Cost Breakdown

Hogan

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		24.00	0.71%	\$188,520.00	0.69%
Derrick Barge 500	\$165,000				
CB 300 & Tug	\$23,520				
Remove Equipment		24.00	0.71%	\$188,520.00	0.69%
Derrick Barge 500	\$165,000				
CB 300 & Tug	\$23,520				
Remove 8 Pile Deck		192.00	5.68%	\$1,508,160.00	5.54%
Derrick Barge 500	\$1,320,000				
CB 300 & Tug	\$188,160				
Demob CB 300 & Tug		22.20	0.66%	\$43,512.00	0.16%
CB 300 & Tug	\$43,512				
Jet/Airlift Pile Mud Plug		46.00	1.36%	\$362,250.00	1.33%
Derrick Barge 500	\$316,250				
CB 400 & Tug	\$46,000				
Mobilize Abrasive Cutting Spread		1.00	0.03%	\$20,977.00	0.08%
Manual Calculation	\$2,750				
Manual Calculation	\$1,055				
Manual Calculation	\$12,000				
Manual Calculation	\$5,172				



BSEE-POCSR

Platform Decommission Cost Breakdown

Hogan

Task		Task Hours		Task Cost	
Mobilize Dive Spread		12.20	0.36%	\$36,661.00	0.13%
Dive Boat	\$10,980				
Dive Basic Spread- Mixed Gas	\$15,250				
Abrasive Cutter Spread	\$7,625				
Pipeline Survey	\$2,806				
Sever Piles- Abrasive		57.91	1.71%	\$689,724.86	2.53%
Derrick Barge 500	\$398,131				
Dive Boat	\$52,119				
Dive Basic Spread- Mixed Gas	\$72,388				
Pipeline Survey	\$13,319				
Abrasive Cutter Spread	\$36,194				
CB 400 & Tug	\$57,910				
Pile Abrasive Cut 7 to 48 inches	\$59,664				
Cut Jacket		120.00	3.55%	\$1,365,264.00	5.02%
Derrick Barge 500	\$825,000				
Dive Boat	\$108,000				
Dive Basic Spread- Mixed Gas	\$150,000				
Pipeline Survey	\$27,600				
Abrasive Cutter Spread	\$75,000				
CB 400 & Tug	\$120,000				
Pile Abrasive Cut 7 to 48 inches	\$59,664				



BSEE-POCSR

Platform Decommission Cost Breakdown

Hogan (

Task		Task Hours		Task Cost	
Remove Jacket - Meth 1		120.00	3.55%	\$1,305,600.00	4.80%
Derrick Barge 500	\$825,000				
Dive Boat	\$108,000				
Dive Basic Spread- Mixed Gas	\$150,000				
Pipeline Survey	\$27,600				
CB 400 & Tug	\$120,000				
Abrasive Cutter Spread	\$75,000				
Demob CB 400 & Tug		22.20	0.66%	\$66,600.00	0.24%
CB 400 & Tug	\$66,600				
Pick Up DB Anchors		6.75	0.20%	\$46,406.25	0.17%
Derrick Barge 500	\$46,406				
Demob Dive Spread		12.20	0.36%	\$36,661.00	0.13%
Dive Boat	\$10,980				
Dive Basic Spread- Mixed Gas	\$15,250				
Abrasive Cutter Spread	\$7,625				
Pipeline Survey	\$2,806				
Demob Abrasive Cutting Spread		1.00	0.03%	\$20,977.00	0.08%
Manual Calculation	\$2,750				
Manual Calculation	\$1,055				
Manual Calculation	\$12,000				
Manual Calculation	\$5,172				



BSEE-POCSR

Platform Decommission Cost Breakdown

Hogan

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Demob DB 500	0.00	0.00%	\$3,712,500.00	13.64%
Derrick Barge 500			\$3,712,500	
Site Clearance - with Divers	72.00	2.13%	\$884,000.00	3.25%
Manual Calculation			\$884,000	
Offload CB 300	912.00	26.99%	\$226,960.00	0.83%
Cargo Barge 300			\$186,960	
CB Damage Deduct			\$40,000	
Offload CB 400	1512.00	44.74%	\$453,120.00	1.66%
Cargo Barge 400			\$393,120	
CB Damage Deduct			\$60,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$369,971.00	1.36%
Manual Calculation			\$369,971	
Total	3211.61	95.03%	\$22,576,696.36	82.94%



BSEE-POCSR

Pipeline Information

Hogan Segment#:110166

General Data

Water Depth: 154'
Origin / Terminus: Origin
Opposite End Name: La Conchita
Opposite End Water Depth:
Pipeline Operator: Pacific Operators Offshore, Inc.
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:		Length:	30250'
Depth of Burial:	3'	# Crossings:		Product:	Oil/Water
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Hogan Segment#:1630166

General Data

Water Depth: 154'
Origin / Terminus: Origin
Opposite End Name: La Conchita
Opposite End Water Depth:
Pipeline Operator: Pacific Operators Offshore, Inc.
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	4.5"	Wall Thickness:		Length:	30250'
Depth of Burial:	3'	# Crossings:		Product:	H20
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Hogan Segment#:1720166

General Data

Water Depth: 154'
Origin / Terminus: Origin
Opposite End Name: La Conchita
Opposite End Water Depth:
Pipeline Operator: Pacific Operators Offshore, Inc.
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:		Length:	30250'
Depth of Burial:	3'	# Crossings:		Product:	Gas Lift
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Hogan Segment#:220166

General Data

Water Depth: 154'
Origin / Terminus: Origin
Opposite End Name: La Conchita
Opposite End Water Depth:
Pipeline Operator: Pacific Operators Offshore, Inc.
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	30250'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Hogan Segment#:110166

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.38%
Mobilize Work Boat	Mob shared with 8 pipelines	<input type="checkbox"/>	1.52	0.58%	\$1,880	0.60%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.90%	\$6,165	1.97%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	8.26	3.13%	\$10,185	3.25%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.76%	\$2,466	0.79%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.38%
Demob Work Boat	Demob shared with 8 pipelines	<input type="checkbox"/>	1.52	0.58%	\$889	0.28%
Mob P/L Removal Spread	Shared between 4 pipelines	<input type="checkbox"/>	3.05	1.16%	\$10,474	3.35%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.22%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.22%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.18	1.21%	\$10,920	3.49%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.18	1.21%	\$10,920	3.49%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	1.14%	\$10,302	3.29%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.22%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.22%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	12.20	4.62%	\$29,420	9.40%
Remove Pipeline	Remove 0.15 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	3.00	1.14%	\$11,952	3.82%
Bury Pipeline		<input checked="" type="checkbox"/>	3.18	1.21%	\$12,669	4.05%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	12.20	4.62%	\$13,420	4.29%
Demob P/L Removal Spread	Shared between 4 pipelines	<input type="checkbox"/>	3.05	1.16%	\$10,474	3.35%
Offload CB 180		<input type="checkbox"/>	168.00	63.67%	\$41,000	13.10%
Task Total			251.39	95.28%	\$257,145	82.17%
Misc. Work Provision (15.00%)			7.48	2.83%	\$21,144	6.76%
Weather Provision (10.00%)			4.98	1.89%	\$14,096	4.50%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$20,572	6.57%
Total:			263.85	100.00%	\$312,957	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Hogan Segment#:1630166

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.43%
Mobilize Work Boat	Mob shared with 8 pipelines	<input type="checkbox"/>	1.52	0.59%	\$1,880	0.62%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.94%	\$6,165	2.05%
Pig & Flush Pipeline	Pumping at 100 gpm	<input checked="" type="checkbox"/>	3.33	1.29%	\$4,106	1.36%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.78%	\$2,466	0.82%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.43%
Demob Work Boat	Demob shared with 8 pipelines	<input type="checkbox"/>	1.52	0.59%	\$889	0.30%
Mob P/L Removal Spread	Shared between 4 pipelines	<input type="checkbox"/>	3.05	1.18%	\$10,474	3.48%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	1.85%	\$16,346	5.42%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	4.76	1.85%	\$16,346	5.42%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.18	1.23%	\$10,920	3.62%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.18	1.23%	\$10,920	3.62%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	1.16%	\$10,302	3.42%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	1.85%	\$16,346	5.42%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	4.76	1.85%	\$16,346	5.42%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	12.20	4.73%	\$29,420	9.76%
Remove Pipeline	Remove 0.15 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	3.00	1.16%	\$10,677	3.54%
Bury Pipeline		<input checked="" type="checkbox"/>	3.18	1.23%	\$11,318	3.76%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	12.20	4.73%	\$13,420	4.45%
Demob P/L Removal Spread	Shared between 4 pipelines	<input type="checkbox"/>	3.05	1.18%	\$10,474	3.48%
Offload CB 180		<input type="checkbox"/>	168.00	65.20%	\$41,000	13.60%
Task Total			246.46	95.64%	\$248,440	82.43%
Misc. Work Provision (15.00%)			6.74	2.61%	\$19,839	6.58%
Weather Provision (10.00%)			4.49	1.74%	\$13,226	4.39%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$19,875	6.59%
Total:			257.69	100.00%	\$301,379	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Hogan Segment#:1720166

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.39%
Mobilize Work Boat	Mob shared with 8 pipelines	<input type="checkbox"/>	1.52	0.58%	\$1,880	0.61%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.90%	\$6,165	1.99%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	8.26	3.13%	\$10,185	3.29%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.76%	\$2,466	0.80%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.39%
Demob Work Boat	Demob shared with 8 pipelines	<input type="checkbox"/>	1.52	0.58%	\$889	0.29%
Mob P/L Removal Spread	Shared between 4 pipelines	<input type="checkbox"/>	3.05	1.16%	\$10,474	3.38%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.28%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.28%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.18	1.21%	\$10,920	3.53%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.18	1.21%	\$10,920	3.53%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	1.14%	\$10,302	3.33%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.28%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.28%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	12.20	4.62%	\$29,420	9.51%
Remove Pipeline	Remove 0.15 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	3.00	1.14%	\$10,677	3.45%
Bury Pipeline		<input checked="" type="checkbox"/>	3.18	1.21%	\$11,318	3.66%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	12.20	4.62%	\$13,420	4.34%
Demob P/L Removal Spread	Shared between 4 pipelines	<input type="checkbox"/>	3.05	1.16%	\$10,474	3.38%
Offload CB 180		<input type="checkbox"/>	168.00	63.67%	\$41,000	13.25%
Task Total			251.39	95.28%	\$254,519	82.24%
Misc. Work Provision (15.00%)			7.48	2.83%	\$20,750	6.71%
Weather Provision (10.00%)			4.98	1.89%	\$13,834	4.47%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$20,361	6.58%
Total:			263.85	100.00%	\$309,464	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Hogan Segment#:220166

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.39%
Mobilize Work Boat	Mob shared with 8 pipelines	<input type="checkbox"/>	1.52	0.58%	\$1,880	0.61%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.89%	\$6,165	1.99%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	8.38	3.17%	\$10,333	3.34%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.76%	\$2,466	0.80%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	1.39%
Demob Work Boat	Demob shared with 8 pipelines	<input type="checkbox"/>	1.52	0.58%	\$889	0.29%
Mob P/L Removal Spread	Shared between 4 pipelines	<input type="checkbox"/>	3.05	1.16%	\$10,474	3.38%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.28%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.28%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.18	1.20%	\$10,920	3.53%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.18	1.20%	\$10,920	3.53%
Re-position P/L Remove Spread	Re-position to shore end 200' seaward of the surf zone	<input checked="" type="checkbox"/>	3.00	1.14%	\$10,302	3.33%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.28%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	4.76	1.80%	\$16,346	5.28%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	12.20	4.62%	\$29,420	9.50%
Remove Pipeline	Remove 0.15 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	3.00	1.14%	\$10,677	3.45%
Bury Pipeline		<input checked="" type="checkbox"/>	3.18	1.20%	\$11,318	3.65%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	12.20	4.62%	\$13,420	4.33%
Demob P/L Removal Spread	Shared between 4 pipelines	<input type="checkbox"/>	3.05	1.16%	\$10,474	3.38%
Offload CB 180		<input type="checkbox"/>	168.00	63.64%	\$41,000	13.24%
Task Total			251.51	95.27%	\$254,667	82.24%
Misc. Work Provision (15.00%)			7.49	2.84%	\$20,773	6.71%
Weather Provision (10.00%)			5.00	1.89%	\$13,848	4.47%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$20,373	6.58%
Total:			264.00	100.00%	\$309,661	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hogan Segment#:110166

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	6.92%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$30,239	9.96%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	6.59%
Decommissioning Crew	\$650	per Hour	\$10,910	3.59%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$50,850	16.75%
Manual Calculation	\$0	Independently Calculated	\$8,626	2.84%
Pipelay Barge	\$1,954	per Hour	\$79,489	26.18%
Pipeline Surveying	\$230	per Hour	\$9,356	3.08%
Rig Up CB 180	\$8,000	per Barge	\$16,000	5.27%
Work Boat	\$583	per Hour	\$10,675	3.52%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hogan Segment#:1630166

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,773	7.45%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$26,840	9.19%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	6.85%
Decommissioning Crew	\$650	per Hour	\$7,706	2.64%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$50,850	17.41%
Manual Calculation	\$0	Independently Calculated	\$8,626	2.95%
Pipelay Barge	\$1,954	per Hour	\$79,489	27.21%
Pipeline Surveying	\$230	per Hour	\$9,356	3.20%
Rig Up CB 180	\$8,000	per Barge	\$16,000	5.48%
Work Boat	\$583	per Hour	\$7,801	2.67%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hogan Segment#:1720166

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,773	7.25%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$26,840	8.94%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	6.66%
Decommissioning Crew	\$650	per Hour	\$10,910	3.63%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$50,850	16.94%
Manual Calculation	\$0	Independently Calculated	\$8,626	2.87%
Pipelay Barge	\$1,954	per Hour	\$79,489	26.48%
Pipeline Surveying	\$230	per Hour	\$9,356	3.12%
Rig Up CB 180	\$8,000	per Barge	\$16,000	5.33%
Work Boat	\$583	per Hour	\$10,675	3.56%



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hogan Segment#:220166

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,773	7.25%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$26,840	8.94%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	6.66%
Decommissioning Crew	\$650	per Hour	\$10,988	3.66%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$50,850	16.93%
Manual Calculation	\$0	Independently Calculated	\$8,626	2.87%
Pipelay Barge	\$1,954	per Hour	\$79,489	26.46%
Pipeline Surveying	\$230	per Hour	\$9,356	3.11%
Rig Up CB 180	\$8,000	per Barge	\$16,000	5.33%
Work Boat	\$583	per Hour	\$10,745	3.58%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hogan Segment#:110166

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	1.42%
Manual Calculation	\$4,313				
Mobilize Work Boat		1.52	0.58%	\$1,880	0.62%
Work Boat	\$889				
Decommissioning Crew	\$991				
Rig Up Decomm Equipment		5.00	1.90%	\$6,165	2.03%
Work Boat	\$2,915				
Decommissioning Crew	\$3,250				
Pig & Flush Pipeline		8.26	3.13%	\$10,185	3.35%
Work Boat	\$4,816				
Decommissioning Crew	\$5,369				
Derig Decomm Equipment		2.00	0.76%	\$2,466	0.81%
Work Boat	\$1,166				
Decommissioning Crew	\$1,300				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	1.42%
Manual Calculation	\$4,313				
Demob Work Boat		1.52	0.58%	\$889	0.29%
Work Boat	\$889				
Mob P/L Removal Spread		3.05	1.16%	\$10,474	3.45%
Dive Basic Spread- Mixed Gas	\$3,813				
Pipeline Surveying	\$702				
Pipelay Barge	\$5,960				
Expose Pipeline		4.76	1.80%	\$16,346	5.38%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Cut & Plug Pipeline		4.76	1.80%	\$16,346	5.38%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		3.18	1.21%	\$10,920	3.60%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Remove Tube Turn		3.18	1.21%	\$10,920	3.60%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Re-position P/L Remove Spread		3.00	1.14%	\$10,302	3.39%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Expose Pipeline		4.76	1.80%	\$16,346	5.38%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Cut & Plug Pipeline		4.76	1.80%	\$16,346	5.38%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Mobilize Vessel		12.20	4.62%	\$29,420	9.69%
CB 180 & Tug	\$13,420				
Rig Up CB 180	\$16,000				
Remove Pipeline		3.00	1.14%	\$11,952	3.94%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
CB 180 & Tug	\$1,650				
Bury Pipeline		3.18	1.21%	\$12,669	4.17%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
CB 180 & Tug	\$1,749				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Demob Vessel		12.20	4.62%	\$13,420	4.42%
CB 180 & Tug	\$13,420				
Demob P/L Removal Spread		3.05	1.16%	\$10,474	3.45%
Pipeline Surveying	\$702				
Dive Basic Spread- Mixed Gas	\$3,813				
Pipelay Barge	\$5,960				
Offload CB 180		168.00	63.67%	\$41,000	13.50%
Cargo Barge 180	\$21,000				
CB Damage Deduct	\$20,000				
		Total		\$257,145.11	84.68%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hogan Segment#:1630166

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	1.48%
Manual Calculation	\$4,313				
Mobilize Work Boat		1.52	0.59%	\$1,880	0.64%
Work Boat	\$889				
Decommissioning Crew	\$991				
Rig Up Decomm Equipment		5.00	1.94%	\$6,165	2.11%
Work Boat	\$2,915				
Decommissioning Crew	\$3,250				
Pig & Flush Pipeline		3.33	1.29%	\$4,106	1.41%
Work Boat	\$1,941				
Decommissioning Crew	\$2,165				
Derig Decomm Equipment		2.00	0.78%	\$2,466	0.84%
Work Boat	\$1,166				
Decommissioning Crew	\$1,300				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	1.48%
Manual Calculation	\$4,313				
Demob Work Boat		1.52	0.59%	\$889	0.30%
Work Boat	\$889				
Mob P/L Removal Spread		3.05	1.18%	\$10,474	3.59%
Dive Basic Spread- Mixed Gas	\$3,813				
Pipeline Surveying	\$702				
Pipelay Barge	\$5,960				
Expose Pipeline		4.76	1.85%	\$16,346	5.60%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Cut & Plug Pipeline		4.76	1.85%	\$16,346	5.60%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		3.18	1.23%	\$10,920	3.74%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Remove Tube Turn		3.18	1.23%	\$10,920	3.74%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Re-position P/L Remove Spread		3.00	1.16%	\$10,302	3.53%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Expose Pipeline		4.76	1.85%	\$16,346	5.60%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Cut & Plug Pipeline		4.76	1.85%	\$16,346	5.60%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Mobilize Vessel		12.20	4.73%	\$29,420	10.07%
CB 180 & Tug	\$13,420				
Rig Up CB 180	\$16,000				
Remove Pipeline		3.00	1.16%	\$10,677	3.66%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Cargo Barge 180	\$375				
Bury Pipeline		3.18	1.23%	\$11,318	3.87%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Cargo Barge 180	\$398				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Demob Vessel		12.20	4.73%	\$13,420	4.59%
CB 180 & Tug	\$13,420				
Demob P/L Removal Spread		3.05	1.18%	\$10,474	3.59%
Pipeline Surveying	\$702				
Dive Basic Spread- Mixed Gas	\$3,813				
Pipelay Barge	\$5,960				
Offload CB 180		168.00	65.20%	\$41,000	14.04%
Cargo Barge 180	\$21,000				
CB Damage Deduct	\$20,000				
		Total		\$248,439.92	85.06%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hogan Segment#:1720166

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	1.44%
Manual Calculation	\$4,313				
Mobilize Work Boat		1.52	0.58%	\$1,880	0.63%
Work Boat	\$889				
Decommissioning Crew	\$991				
Rig Up Decomm Equipment		5.00	1.90%	\$6,165	2.05%
Work Boat	\$2,915				
Decommissioning Crew	\$3,250				
Pig & Flush Pipeline		8.26	3.13%	\$10,185	3.39%
Work Boat	\$4,816				
Decommissioning Crew	\$5,369				
Derig Decomm Equipment		2.00	0.76%	\$2,466	0.82%
Work Boat	\$1,166				
Decommissioning Crew	\$1,300				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	1.44%
Manual Calculation	\$4,313				
Demob Work Boat		1.52	0.58%	\$889	0.30%
Work Boat	\$889				
Mob P/L Removal Spread		3.05	1.16%	\$10,474	3.49%
Dive Basic Spread- Mixed Gas	\$3,813				
Pipeline Surveying	\$702				
Pipelay Barge	\$5,960				
Expose Pipeline		4.76	1.80%	\$16,346	5.45%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Cut & Plug Pipeline		4.76	1.80%	\$16,346	5.45%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		3.18	1.21%	\$10,920	3.64%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Remove Tube Turn		3.18	1.21%	\$10,920	3.64%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Re-position P/L Remove Spread		3.00	1.14%	\$10,302	3.43%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Expose Pipeline		4.76	1.80%	\$16,346	5.45%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Cut & Plug Pipeline		4.76	1.80%	\$16,346	5.45%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Mobilize Vessel		12.20	4.62%	\$29,420	9.80%
CB 180 & Tug	\$13,420				
Rig Up CB 180	\$16,000				
Remove Pipeline		3.00	1.14%	\$10,677	3.56%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Cargo Barge 180	\$375				
Bury Pipeline		3.18	1.21%	\$11,318	3.77%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Cargo Barge 180	\$398				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Demob Vessel		12.20	4.62%	\$13,420	4.47%
CB 180 & Tug	\$13,420				
Demob P/L Removal Spread		3.05	1.16%	\$10,474	3.49%
Pipeline Surveying	\$702				
Dive Basic Spread- Mixed Gas	\$3,813				
Pipelay Barge	\$5,960				
Offload CB 180		168.00	63.67%	\$41,000	13.66%
Cargo Barge 180	\$21,000				
CB Damage Deduct	\$20,000				
		Total		\$254,518.61	84.79%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hogan Segment#:220166

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,313 1.44%
Manual Calculation	\$4,313	
Mobilize Work Boat	1.52 0.58%	\$1,880 0.63%
Work Boat	\$889	
Decommissioning Crew	\$991	
Rig Up Decomm Equipment	5.00 1.89%	\$6,165 2.05%
Work Boat	\$2,915	
Decommissioning Crew	\$3,250	
Pig & Flush Pipeline	8.38 3.17%	\$10,333 3.44%
Work Boat	\$4,886	
Decommissioning Crew	\$5,447	
Derig Decomm Equipment	2.00 0.76%	\$2,466 0.82%
Work Boat	\$1,166	
Decommissioning Crew	\$1,300	
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,313 1.44%
Manual Calculation	\$4,313	
Demob Work Boat	1.52 0.58%	\$889 0.30%
Work Boat	\$889	
Mob P/L Removal Spread	3.05 1.16%	\$10,474 3.49%
Dive Basic Spread- Mixed Gas	\$3,813	
Pipeline Surveying	\$702	
Pipelay Barge	\$5,960	
Expose Pipeline	4.76 1.80%	\$16,346 5.44%
Pipeline Surveying	\$1,095	
Dive Basic Spread- Mixed Gas	\$5,950	
Pipelay Barge	\$9,301	
Cut & Plug Pipeline	4.76 1.80%	\$16,346 5.44%
Pipeline Surveying	\$1,095	
Dive Basic Spread- Mixed Gas	\$5,950	
Pipelay Barge	\$9,301	



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		3.18	1.20%	\$10,920	3.64%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Remove Tube Turn		3.18	1.20%	\$10,920	3.64%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Re-position P/L Remove Spread		3.00	1.14%	\$10,302	3.43%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Expose Pipeline		4.76	1.80%	\$16,346	5.44%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Cut & Plug Pipeline		4.76	1.80%	\$16,346	5.44%
Pipeline Surveying	\$1,095				
Dive Basic Spread- Mixed Gas	\$5,950				
Pipelay Barge	\$9,301				
Mobilize Vessel		12.20	4.62%	\$29,420	9.79%
CB 180 & Tug	\$13,420				
Rig Up CB 180	\$16,000				
Remove Pipeline		3.00	1.14%	\$10,677	3.55%
Pipeline Surveying	\$690				
Dive Basic Spread- Mixed Gas	\$3,750				
Pipelay Barge	\$5,862				
Cargo Barge 180	\$375				
Bury Pipeline		3.18	1.20%	\$11,318	3.77%
Pipeline Surveying	\$731				
Dive Basic Spread- Mixed Gas	\$3,975				
Pipelay Barge	\$6,214				
Cargo Barge 180	\$398				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Demob Vessel		12.20	4.62%	\$13,420	4.47%
CB 180 & Tug	\$13,420				
Demob P/L Removal Spread		3.05	1.16%	\$10,474	3.49%
Pipeline Surveying	\$702				
Dive Basic Spread- Mixed Gas	\$3,813				
Pipelay Barge	\$5,960				
Offload CB 180		168.00	63.64%	\$41,000	13.65%
Cargo Barge 180	\$21,000				
CB Damage Deduct	\$20,000				
		Total		\$254,666.57	84.79%



BSEE-POCSR

Well Decommission Task Information

Hogan Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$7,246,752 75.19%
		Task Total	0.00	\$7,246,752 75.19%
		Misc. Work Provision (15.00%)	0.00	\$1,087,013 11.28%
		Weather Provision (10.00%)	0.00	\$724,675 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$579,740 6.02%
		Total:	0.00 100.00%	\$9,638,180 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Hogan Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$7,246,752 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Hogan Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$7,246,752	75.19%
Manual Calculation	\$7,246,752				
	Total	0.00	0.00%	\$7,246,752	75.19%



BSEE-POCSR

Platform Salvage Option

Hondo

COMPLETE REMOVAL

- Platform Hondo will be removed along with Platforms Harmony and Heritage.
- Platform Hondo is an 8-pile platform installed in 1976 in 842' of water.
- The estimated removal weight is the deck weight is 8,450 tons and the jacket weight is 12,200 tons.
- The platform has a total of 28 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 28 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- A lifting barge will be outfitted and utilized to lift pieces from the jacket structure. The loads will then be transferred midwater to the DB2000 to complete the lift and place on cargo barge.
- The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Four 300' cargo barges will transport the deck modules to shore and six 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 10 cargo barge trips will be required.
- The two pipelines (oil, gas) on the OCS will be totally removed to the state water boundary



BSEE-POCSR

Platform Salvage Option

Hondo

when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.



BSEE-POCSR

Platform Salvage Option

Hondo

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$100,114,003

Estimated Decommissioning Net Cost = \$100,114,003



TSB OFFSHORE

BSEE-POCSR

Basic Information

Hondo

General Data

Platform:	Hondo
Function:	SELF CONTAINED
Type:	Steel
Water Depth:	842'
Pre 461H?:	Yes
Year Installed:	1976
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0188
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	28
# Pipelines to Abandon:	2
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 ExxonMobil Corporation	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$87,344,656	\$87,344,656
Well Plugging & Abandonment:	\$9,104,659	\$9,104,659
Pipeline Abandonment:	\$3,664,688	\$3,664,688
Total Decommissioning Cost:	\$100,114,003	\$100,114,003



BSEE-POCSR

Platform Information

Hondo

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	48"		Yes	No	
Skirt/Braced	12	54"		No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	28
Number Installed:	28
Outside Diameter:	20"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	12220.00		
Jacket Installation Date:	1/1/1976		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	8450 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1976
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Hondo

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Deck > 500T
CB 400 x 100	Deck > 500T	Deck > 500T	Deck > 500T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T
CB 400 x 100	Jkt > 700T	Jkt > 700T	Jkt > 700T	Jkt > 700T

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$11,588,796.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Hondo

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$4,223,632.00	4.84%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.01%	\$984,446.00	1.13%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.01%	\$7,252,563.00	8.30%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.01%	\$4,085,816.00	4.68%
Platform Abandonment - Manual Calculation	Lifting barge costs	<input type="checkbox"/>	0.00	0.00%	\$4,007,867.00	4.59%
Mobilize DB 2000	Mob from Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	3.59%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 4)	<input type="checkbox"/>	25.20	0.28%	\$154,784.00	0.18%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 6) + 1 lifting barge	<input type="checkbox"/>	25.20	0.28%	\$274,400.00	0.31%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.08%	\$58,781.23	0.07%
Cut Deck/Equip/Misc	Seperate 13 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.27%	\$232,519.91	0.27%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.27%	\$232,519.91	0.27%
Remove 8 Pile Deck	Remove 8 Pile Deck, 13 modules	<input checked="" type="checkbox"/>	120.00	1.34%	\$1,162,600.00	1.33%
Demob CB 300 & Tug	Demob to Port of LA (Qty 4)	<input type="checkbox"/>	25.20	0.28%	\$98,784.00	0.11%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	35.00	0.39%	\$339,791.59	0.39%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.01%	\$13,984.00	0.02%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	15.00	0.17%	\$133,800.00	0.15%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	121.01	1.35%	\$2,454,214.24	2.81%
Cut Jacket	48 Hours per section, times 13 section(s), per MMS	<input checked="" type="checkbox"/>	624.00	6.95%	\$2,347,518.00	14.14%
Remove Jacket - Meth 1	60 Hours per section, times 13 section(s), per MMS	<input checked="" type="checkbox"/>	780.00	8.69%	\$5,310,098.00	17.53%
Demob CB 400 & Tug	Demob to Port of LA (Qty 6) + 1 lifting barge	<input type="checkbox"/>	25.20	0.28%	\$176,400.00	0.20%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.08%	\$58,781.23	0.07%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	15.00	0.17%	\$141,300.00	0.16%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.01%	\$13,984.00	0.02%
Demob DB 2000	Demob to Asia, 50 days divided by 3 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,135,000.00	3.59%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	0.80%	\$1,472,000.00	1.69%
Offload CB 300		<input type="checkbox"/>	1440.00	16.04%	\$375,200.00	0.43%
Offload CB 400	Qty 6 + 1 lifting barge	<input type="checkbox"/>	5136.00	57.20%	\$1,475,360.00	1.69%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$922,327.00	1.06%
Task Total			8525.31	94.95%	\$4,273,471.11	73.59%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Hondo

Task	Note	Weather Provision	Task Hours	Task Cost
Misc. Work Provision (15.00%)		272.33	3.03%	\$6,889,430.00 7.89%
Weather Contingency (10.00%)		181.55	2.02%	\$4,592,953.00 5.26%
Consumables				\$0.00 0.00%
Waste Disposal				\$11,588,800.00 13.27%
Structure & Equipment Disposal				\$0.00 0.00%
Offloading				\$0.00 0.00%
Storage / Scrapping				\$0.00 0.00%
Reef Donation				\$0.00 0.00%
Cost of Engineering (0.00%)				\$0.00 0.00%
Total:		8979.19	100.00%	\$37,344,654.11 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Hondo

Resource Used	Unit Cost	Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$971,881	1.11%
Cargo Barge 300	\$4,920 per Day per Barge	\$295,200	0.34%
Cargo Barge 400	\$6,240 per Day per Barge	\$1,335,360	1.53%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$362,208	0.41%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$3,316,810	3.80%
CB Damage Deduct	\$20,000 per Cargo Barge	\$220,000	0.25%
Derrick Barge 2000	\$8,708 per Hour per barge	\$21,435,645	24.54%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$4,921,607	5.63%
DP Dive Boat	\$3,300 Per Hour	\$5,131,533	5.88%
Manual Calculation	\$0 Independently Calculated	\$22,976,619	26.31%
Pile Abrasive Cut 49 to 69 inches	\$5,000 per Cut	\$200,000	0.23%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$99,440	0.11%
Pipeline Survey	\$230 per Hour	\$357,652	0.41%
Rem. Operated Vehicle	\$800 per Hour	\$2,488,016	2.85%
Rig Up CB 300	\$14,000 per Barge	\$56,000	0.06%
Rig Up CB 400	\$14,000 per Barge	\$98,000	0.11%
Work Boat	\$500 per Hour	\$7,500	0.01%



BSEE-POCSR

Platform Decommission Cost Breakdown

Hondo

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$4,223,632.00	4.84%
Manual Calculation			\$4,223,632	
Platform Abandonment - Manual Calculation	1.00	0.01%	\$984,446.00	1.13%
Manual Calculation			\$984,446	
Sever Conductors- Abrasive	1.00	0.01%	\$7,252,563.00	8.30%
Manual Calculation			\$7,252,563	
Platform Removal Preparation	1.00	0.01%	\$4,085,816.00	4.68%
Manual Calculation			\$4,085,816	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$4,007,867.00	4.59%
Manual Calculation			\$4,007,867	
Mobilize DB 2000	0.00	0.00%	\$3,135,000.00	3.59%
Derrick Barge 2000			\$3,135,000	
Mobilize CB 300 & Tug	25.20	0.28%	\$154,784.00	0.18%
CB 300 & Tug			\$98,784	
Rig Up CB 300			\$56,000	
Mobilize CB 400 & Tug	25.20	0.28%	\$274,400.00	0.31%
Rig Up CB 400			\$98,000	
CB 400 & Tug			\$176,400	



BSEE-POCSR

Platform Decommission Cost Breakdown

Hondo

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Setup Derrick Barge	6.75	0.08%	\$58,781.23	0.07%
Derrick Barge 2000			\$58,781	
Cut Deck/Equip/Misc	24.00	0.27%	\$232,519.91	0.27%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove Equipment	24.00	0.27%	\$232,519.91	0.27%
Derrick Barge 2000			\$209,000	
CB 300 & Tug			\$23,520	
Remove 8 Pile Deck	120.00	1.34%	\$1,162,600.00	1.33%
Derrick Barge 2000			\$1,045,000	
CB 300 & Tug			\$117,600	
Demob CB 300 & Tug	25.20	0.28%	\$98,784.00	0.11%
CB 300 & Tug			\$98,784	
Jet/Airlift Pile Mud Plug	35.00	0.39%	\$339,791.59	0.39%
Derrick Barge 2000			\$304,792	
CB 400 & Tug			\$35,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Hondo

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Mobilize Abrasive Cutting Spread	1.00	0.01%	\$13,984.00	0.02%
Manual Calculation			\$1,833	
Manual Calculation			\$703	
Manual Calculation			\$8,000	
Manual Calculation			\$3,448	
Mobilize Dive Spread	15.00	0.17%	\$133,800.00	0.15%
DP Dive Boat			\$49,500	
Dive Basic Spread Saturation			\$47,475	
Abrasive Cutter Spread			\$9,375	
Pipeline Survey			\$3,450	
Rem. Operated Vehicle			\$24,000	
Sever Piles- Abrasive	121.01	1.35%	\$2,454,214.24	2.81%
Derrick Barge 2000			\$1,053,795	
DP Dive Boat			\$399,333	
Dive Basic Spread Saturation			\$382,997	
Pipeline Survey			\$27,832	
Abrasive Cutter Spread			\$75,631	
CB 400 & Tug			\$121,010	
Pile Abrasive Cut 49 to 69 inches			\$200,000	
Rem. Operated Vehicle			\$193,616	



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Cost Breakdown

Hondo

Task		Task Hours		Task Cost	
Cut Jacket		624.00	6.95%	\$12,347,518.00	14.14%
Derrick Barge 2000	\$5,433,998				
DP Dive Boat	\$2,059,200				
Dive Basic Spread Saturation	\$1,974,960				
Pipeline Survey	\$143,520				
Abrasive Cutter Spread	\$390,000				
CB 400 & Tug	\$1,248,000				
Pile Abrasive Cut 7 to 48 inches	\$99,440				
Rem. Operated Vehicle	\$998,400				
Remove Jacket - Meth 1		780.00	8.69%	\$15,310,098.00	17.53%
Derrick Barge 2000	\$6,792,498				
DP Dive Boat	\$2,574,000				
Dive Basic Spread Saturation	\$2,468,700				
Pipeline Survey	\$179,400				
Abrasive Cutter Spread	\$487,500				
CB 400 & Tug	\$1,560,000				
Rem. Operated Vehicle	\$1,248,000				
Demob CB 400 & Tug		25.20	0.28%	\$176,400.00	0.20%
CB 400 & Tug	\$176,400				
Pick Up DB Anchors		6.75	0.08%	\$58,781.23	0.07%
Derrick Barge 2000	\$58,781				



BSEE-POCSR

Platform Decommission Cost Breakdown

Hondo

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Demob Dive Spread	15.00	0.17%	\$141,300.00	0.16%
Work Boat			\$7,500	
DP Dive Boat			\$49,500	
Dive Basic Spread Saturation			\$47,475	
Abrasive Cutter Spread			\$9,375	
Pipeline Survey			\$3,450	
Rem. Operated Vehicle			\$24,000	
Demob Abrasive Cutting Spread	1.00	0.01%	\$13,984.00	0.02%
Manual Calculation			\$1,833	
Manual Calculation			\$703	
Manual Calculation			\$8,000	
Manual Calculation			\$3,448	
Demob DB 2000	0.00	0.00%	\$3,135,000.00	3.59%
Derrick Barge 2000			\$3,135,000	
Site Clearance - with Divers	72.00	0.80%	\$1,472,000.00	1.69%
Manual Calculation			\$1,472,000	
Offload CB 300	1440.00	16.04%	\$375,200.00	0.43%
Cargo Barge 300			\$295,200	
CB Damage Deduct			\$80,000	
Offload CB 400	5136.00	57.20%	\$1,475,360.00	1.69%
Cargo Barge 400			\$1,335,360	
CB Damage Deduct			\$140,000	



BSEE-POCSR

Platform Decommission Cost Breakdown

Hondo

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$922,327.00	1.06%
Manual Calculation			\$922,327	
Total	8525.31	94.95%	\$64,273,471.11	73.59%



BSEE-POCSR

Pipeline Information

Hondo Segment#:3520188

General Data

Water Depth: 842'
Origin / Terminus: Origin
Opposite End Name: Las Flores Canyon
Opposite End Water Depth:
Pipeline Operator: ExxonMobil Corporation
Provision for Misc. Work%: 15.00%
Weather Contingency %: 10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	36400'
Depth of Burial:		# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Hondo Segment#:5410188

General Data

Water Depth:	842'
Origin / Terminus:	Origin
Opposite End Name:	Harmony
Opposite End Water Depth:	1198'
Pipeline Operator:	ExxonMobil Corporation
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	14"	Wall Thickness:		Length:	15350'
Depth of Burial:		# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Hondo Segment#:3520188

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.24%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.15	0.64%	\$500,000	24.40%
Set Up Dive Boat	Set up at Hondo	<input checked="" type="checkbox"/>	3.00	0.90%	\$26,650	1.30%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.49%	\$28,900	1.41%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	10.08	3.01%	\$58,262	2.84%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.60%	\$11,560	0.56%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.24%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	11.55	3.45%	\$59,252	2.89%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	2.30%	\$39,501	1.93%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	2.30%	\$39,501	1.93%
Mob P/L Removal Spread	Shared b/w 3 P/L's	<input type="checkbox"/>	5.00	1.49%	\$33,670	1.64%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	3.45%	\$77,778	3.80%
Cut & Plug Pipeline	Plug the upstream end going To Hondo	<input checked="" type="checkbox"/>	11.55	3.45%	\$77,778	3.80%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	15.00	4.48%	\$9,875	0.48%
Remove Pipeline		<input checked="" type="checkbox"/>	20.00	5.98%	\$145,680	7.11%
Bury Pipeline	Bury the end going to shore	<input checked="" type="checkbox"/>	7.70	2.30%	\$56,087	2.74%
Demob P/L Removal Spread	Shared b/w 3 P/L's	<input type="checkbox"/>	5.00	1.49%	\$36,420	1.78%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.15	0.64%	\$500,000	24.40%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	15.00	4.48%	\$1,875	0.09%
Offload CB 180		<input type="checkbox"/>	168.00	50.21%	\$41,000	2.00%
Task Total			310.13	92.69%	\$1,753,646	85.58%
Misc. Work Provision (15.00%)			14.67	4.39%	\$93,142	4.55%
Weather Provision (10.00%)			9.78	2.92%	\$62,095	3.03%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$140,292	6.85%
Total:			334.59	100.00%	\$2,049,175	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Hondo Segment#:5410188

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.31%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.15	2.19%	\$500,000	30.95%
Set Up Dive Boat	Set up at Hondo	<input checked="" type="checkbox"/>	3.00	3.06%	\$17,340	1.07%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	5.09%	\$28,900	1.79%
Pig & Flush Pipeline	Pumping at 400 gpm	<input checked="" type="checkbox"/>	4.50	4.58%	\$26,010	1.61%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.04%	\$11,560	0.72%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 7 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,929	0.31%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	11.55	11.77%	\$59,252	3.67%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.84%	\$39,501	2.45%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.84%	\$39,501	2.45%
Reposition Vessel	Re-locate to Harmony	<input checked="" type="checkbox"/>	3.69	3.76%	\$18,930	1.17%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	3.06%	\$15,390	0.95%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	11.55	11.77%	\$59,252	3.67%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	7.84%	\$39,501	2.45%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	7.84%	\$39,501	2.45%
Demob Dive Boat	Man Calc is for demob of DP2 SAT DSV from the GOM. Shared w/ 7 P/L's	<input type="checkbox"/>	2.15	2.19%	\$500,000	30.95%
Task Total			79.39	80.88%	\$1,404,495	86.94%
Misc. Work Provision (15.00%)			11.26	11.47%	\$59,196	3.66%
Weather Provision (10.00%)			7.51	7.65%	\$39,464	2.44%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$112,360	6.96%
Total:			98.16	100.00%	\$1,615,513	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hondo Segment#:3520188

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$24,750	1.26%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$17,985	0.92%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	1.02%
Decommissioning Crew	\$650	per Hour	\$13,052	0.67%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$76,000	3.88%
DP Dive Boat	\$3,300	per Hour	\$355,839	18.17%
Manual Calculation	\$0	Independently Calculated	\$1,009,858	51.56%
Pipelay Barge	\$1,954	per Hour	\$118,803	6.07%
Pipeline Surveying	\$230	per Hour	\$34,111	1.74%
Rem. Operated Vehicle	\$800	per Hour	\$75,248	3.84%
Rig Up CB 180	\$8,000	per Barge	\$8,000	0.41%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Hondo Segment#:5410188

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$9,425	0.61%
DP Dive Boat	\$3,300	per Hour	\$247,797	16.15%
Manual Calculation	\$0	Independently Calculated	\$1,009,858	65.80%
Pipeline Surveying	\$230	per Hour	\$17,271	1.13%
Rem. Operated Vehicle	\$800	per Hour	\$120,144	7.83%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hondo Segment#:3520188

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,929	0.25%
Manual Calculation	\$4,929				
Mobilize Dive Boat		2.15	0.64%	\$500,000	25.53%
Manual Calculation	\$500,000				
Set Up Dive Boat		3.00	0.90%	\$26,650	1.36%
DP Dive Boat	\$9,900				
Decommissioning Crew	\$1,950				
Rem. Operated Vehicle	\$4,800				
Pipeline Surveying	\$10,000				
Rig Up Decomm Equipment		5.00	1.49%	\$28,900	1.48%
DP Dive Boat	\$16,500				
Rem. Operated Vehicle	\$8,000				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		10.08	3.01%	\$58,262	2.97%
DP Dive Boat	\$33,264				
Rem. Operated Vehicle	\$16,128				
Decommissioning Crew	\$6,552				
Pipeline Surveying	\$2,318				
Derig Decomm Equipment		2.00	0.60%	\$11,560	0.59%
DP Dive Boat	\$6,600				
Rem. Operated Vehicle	\$3,200				
Pipeline Surveying	\$460				
Decommissioning Crew	\$1,300				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,929	0.25%
Manual Calculation	\$4,929				
Cut & Plug Pipeline		11.55	3.45%	\$59,252	3.03%
DP Dive Boat	\$38,115				
Rem. Operated Vehicle	\$18,480				
Pipeline Surveying	\$2,657				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	2.30%	\$39,501	2.02%
DP Dive Boat	\$25,410				
Rem. Operated Vehicle	\$12,320				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	2.30%	\$39,501	2.02%
DP Dive Boat	\$25,410				
Rem. Operated Vehicle	\$12,320				
Pipeline Surveying	\$1,771				
Mob P/L Removal Spread		5.00	1.49%	\$33,670	1.72%
Pipeline Surveying	\$1,150				
DP Dive Boat	\$16,500				
Dive Basic Spread- Mixed Gas	\$6,250				
Pipelay Barge	\$9,770				
Expose Pipeline		11.55	3.45%	\$77,778	3.97%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Cut & Plug Pipeline		11.55	3.45%	\$77,778	3.97%
Pipeline Surveying	\$2,657				
DP Dive Boat	\$38,115				
Dive Basic Spread- Mixed Gas	\$14,438				
Pipelay Barge	\$22,569				
Mobilize Vessel		15.00	4.48%	\$9,875	0.50%
Cargo Barge 180	\$1,875				
Rig Up CB 180	\$8,000				
Remove Pipeline		20.00	5.98%	\$145,680	7.44%
Pipeline Surveying	\$4,600				
DP Dive Boat	\$66,000				
Dive Basic Spread- Mixed Gas	\$25,000				
Pipelay Barge	\$39,080				
CB 180 & Tug	\$11,000				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		7.70	2.30%	\$56,087	2.86%	
Pipeline Surveying	\$1,771					
DP Dive Boat	\$25,410					
Dive Basic Spread- Mixed Gas	\$9,625					
Pipelay Barge	\$15,046					
CB 180 & Tug	\$4,235					
Demob P/L Removal Spread		5.00	1.49%	\$36,420	1.86%	
Pipeline Surveying	\$1,150					
DP Dive Boat	\$16,500					
Dive Basic Spread- Mixed Gas	\$6,250					
Pipelay Barge	\$9,770					
CB 180 & Tug	\$2,750					
Demob Dive Boat		2.15	0.64%	\$500,000	25.53%	
Manual Calculation	\$500,000					
Demob Vessel		15.00	4.48%	\$1,875	0.10%	
Cargo Barge 180	\$1,875					
Offload CB 180		168.00	50.21%	\$41,000	2.09%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	310.13	92.69%	\$1,753,646.10	89.54%



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Hondo Segment#:5410188

Task	Task Hours	Task Cost
Mobilize Flushing Crew & Equipment	0.00 0.00%	\$4,929 0.32%
Manual Calculation		\$4,929
Mobilize Dive Boat	2.15 2.19%	\$500,000 32.58%
Manual Calculation		\$500,000
Set Up Dive Boat	3.00 3.06%	\$17,340 1.13%
DP Dive Boat		\$9,900
Decommissioning Crew		\$1,950
Rem. Operated Vehicle		\$4,800
Pipeline Surveying		\$690
Rig Up Decomm Equipment	5.00 5.09%	\$28,900 1.88%
DP Dive Boat		\$16,500
Decommissioning Crew		\$3,250
Rem. Operated Vehicle		\$8,000
Pipeline Surveying		\$1,150
Pig & Flush Pipeline	4.50 4.58%	\$26,010 1.69%
DP Dive Boat		\$14,850
Decommissioning Crew		\$2,925
Rem. Operated Vehicle		\$7,200
Pipeline Surveying		\$1,035
Derig Decomm Equipment	2.00 2.04%	\$11,560 0.75%
DP Dive Boat		\$6,600
Decommissioning Crew		\$1,300
Rem. Operated Vehicle		\$3,200
Pipeline Surveying		\$460
Demob Flushing Crew & Equipment	0.00 0.00%	\$4,929 0.32%
Manual Calculation		\$4,929
Cut & Plug Pipeline	11.55 11.77%	\$59,252 3.86%
DP Dive Boat		\$38,115
Rem. Operated Vehicle		\$18,480
Pipeline Surveying		\$2,657



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		7.70	7.84%	\$39,501	2.57%
DP Dive Boat	\$25,410				
Rem. Operated Vehicle	\$12,320				
Pipeline Surveying	\$1,771				
Remove Tube Turn		7.70	7.84%	\$39,501	2.57%
DP Dive Boat	\$25,410				
Rem. Operated Vehicle	\$12,320				
Pipeline Surveying	\$1,771				
Reposition Vessel		3.69	3.76%	\$18,930	1.23%
DP Dive Boat	\$12,177				
Rem. Operated Vehicle	\$5,904				
Pipeline Surveying	\$849				
Set Up Dive Boat		3.00	3.06%	\$15,390	1.00%
DP Dive Boat	\$9,900				
Rem. Operated Vehicle	\$4,800				
Pipeline Surveying	\$690				
Cut & Plug Pipeline		11.55	11.77%	\$59,252	3.86%
DP Dive Boat	\$38,115				
Rem. Operated Vehicle	\$18,480				
Pipeline Surveying	\$2,657				
Cut Pipeline Riser		7.70	7.84%	\$39,501	2.57%
DP Dive Boat	\$25,410				
Pipeline Surveying	\$1,771				
Rem. Operated Vehicle	\$12,320				
Remove Tube Turn		7.70	7.84%	\$39,501	2.57%
DP Dive Boat	\$25,410				
Rem. Operated Vehicle	\$12,320				
Pipeline Surveying	\$1,771				
Demob Dive Boat		2.15	2.19%	\$500,000	32.58%
Manual Calculation	\$500,000				
		Total	79.39 80.88%	\$1,404,494.70	91.51%



BSEE-POCSR

Well Decommission Task Information

Hondo Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$6,845,608 75.19%
		Task Total	0.00	\$6,845,608 75.19%
		Misc. Work Provision (15.00%)	0.00	\$1,026,841 11.28%
		Weather Provision (10.00%)	0.00	\$684,561 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$547,649 6.02%
		Total:	0.00 100.00%	\$9,104,659 100.00%



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BSEE-POCSR

Well Decommission Resources Breakdown

Hondo Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$6,845,608 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Hondo Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$6,845,608	75.19%
Manual Calculation	\$6,845,608				
	Total	0.00	0.00%	\$6,845,608	75.19%



BSEE-POCSR

Platform Salvage Option

Houchin

COMPLETE REMOVAL

- Platform Houchin will be removed along with Platform Hogan.
- Platform Houchin is an 8-pile platform installed in 1968 in 163' of water.
- The estimated removal weight is the deck weight is 2,591 tons and the jacket weight is 1,486 tons.
- The platform has a total of 35 wells that will be plugged and abandoned.
- The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.
- Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.
- A total of 35 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.
- The platform topsides and jacket will be removed by a DB 500 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.
- The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.
- Two 300' cargo barges will transport the deck modules to shore and three 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 5 cargo barge trips will be required.
- The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.
- The power cable will be transported to shore on cargo barges to Port Hueneme or Los



BSEE-POCSR

Platform Salvage Option

Houchin

Angeles/Long Beach where it will be cut into segments and disposed of.

-The four pipelines (oil, gas, gas lift, water return) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipelines to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;

-Weather Contingencies were calculated by taking 10% of each task cost listed with a check in the contingency box under each Task Information section of this estimate.



BSEE-POCSR

Platform Salvage Option

Houchin

Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$36,167,474

Estimated Decommissioning Net Cost = \$36,167,474



TSB OFFSHORE

BSEE-POCSR

Basic Information

Houchin

General Data

Platform:	Houchin
Function:	FACILITIES
Type:	Steel
Water Depth:	163'
Pre 461H?:	Yes
Year Installed:	1968
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0166
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	35
# Pipelines to Abandon:	4
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Pacific Operators Offshore, Inc.	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$26,699,960	\$26,699,960
Well Plugging & Abandonment:	\$8,634,200	\$8,634,200
Pipeline Abandonment:	\$833,314	\$833,314
Total Decommissioning Cost:	\$36,167,474	\$36,167,474



TSB OFFSHORE

BSEE-POCSR

Platform Information

Houchin

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	48"		Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	60
Number Installed:	35
Outside Diameter:	18.625"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	1486.00		
Jacket Installation Date:	1/1/1968		
Jacket Contractor:			

Deck Data

Deck Lift Weight with Equipment:	2591 Tons
Number of Padeyes Required:	0
Deck Installation Date:	1/1/1968
Deck Contractor:	



BSEE-POCSR

Platform Information

Houchin

Equipment Lift Weights

Members to be Cut Data

Underwater Members

Size	Qty
24.00	17.00
36.00	12.00

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Deck 100-500T	Deck 100-500T	Deck 100-500T	Equipment
CB 300 x 100	Deck 100-500T	Deck 100-500T	Deck 100-500T	Equipment
CB 400 x 100	Deck 100-500T	Deck 100-500T	Deck 100-500T	
CB 400 x 100	Jkt < 300T	Jkt 300-700T	Jkt 300-700T	
CB 400 x 100	Jkt 300-700T	Jkt 300-700T		

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	10.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$2,119,655.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Houchin

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$929,238.00	3.48%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.03%	\$1,987,482.00	7.44%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.03%	\$2,706,725.00	10.14%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.03%	\$1,096,971.00	4.11%
Mobilize DB 500	Mob from Asia, 50 days divided by 2 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,712,500.00	13.90%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	22.20	0.63%	\$71,512.00	0.27%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 3)	<input type="checkbox"/>	22.20	0.63%	\$108,600.00	0.41%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.19%	\$46,406.25	0.17%
Cut Deck/Equip/Misc	Seperate 9 Modules	<input checked="" type="checkbox"/>	24.00	0.69%	\$188,520.00	0.71%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.69%	\$188,520.00	0.71%
Remove 8 Pile Deck	Remove 8 Pile Deck Modules (Qty 9)	<input checked="" type="checkbox"/>	198.00	5.66%	\$1,555,290.00	5.83%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	22.20	0.63%	\$43,512.00	0.16%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	31.00	0.89%	\$244,125.00	0.91%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.03%	\$20,977.00	0.08%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	12.20	0.35%	\$36,661.00	0.14%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	46.14	1.32%	\$541,779.20	2.03%
Cut Jacket	24 Hours per section, times 5 sections, per MMS	<input checked="" type="checkbox"/>	120.00	3.43%	\$1,345,376.00	5.04%
Remove Jacket - Meth 1	24 Hours per section, times 5 sections, per MMS	<input checked="" type="checkbox"/>	120.00	3.43%	\$1,305,600.00	4.89%
Demob CB 400 & Tug	Demob to Port of LA (Qty 3)	<input type="checkbox"/>	22.20	0.63%	\$66,600.00	0.25%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.19%	\$46,406.25	0.17%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	12.20	0.35%	\$36,661.00	0.14%
Demob DB 500	Demob to Asia, 50 days divided by 2 platforms	<input type="checkbox"/>	0.00	0.00%	\$3,712,500.00	13.90%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	2.06%	\$884,000.00	3.31%
Offload CB 300		<input type="checkbox"/>	912.00	26.08%	\$226,960.00	0.85%
Offload CB 400		<input type="checkbox"/>	1656.00	47.35%	\$490,560.00	1.84%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.03%	\$20,977.00	0.08%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$342,733.00	1.28%
Task Total			3334.84	95.35%	\$1,957,191.70	82.24%
Misc. Work Provision (15.00%)			97.6	2.79%	\$1,573,868.00	5.89%
Weather Contingency (10.00%)			65.06	1.86%	\$1,049,245.00	3.93%



TSB OFFSHORE

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Platform Decommission Task Information

Houchin

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal		\$2,119,655.00 7.94%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			3497.50 100.00%	\$6,699,959.70 100.00%



BSEE-POCSR

Platform Decommission Resources Breakdown

Houchin

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$194,088 0.73%
Cargo Barge 300	\$4,920 per Day per Barge	\$186,960 0.70%
Cargo Barge 400	\$6,240 per Day per Barge	\$430,560 1.61%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$328,104 1.23%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$450,340 1.69%
CB Damage Deduct	\$20,000 per Cargo Barge	\$100,000 0.37%
Derrick Barge 500	\$6,875 per Hour	\$11,389,400 42.66%
Dive Basic Spread- Mixed Gas	\$1,250 Per Hour	\$388,175 1.45%
Dive Boat	\$900 per Hour	\$279,486 1.05%
Manual Calculation	\$0 Independently Calculated	\$7,989,103 29.92%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$79,552 0.30%
Pipeline Survey	\$230 per Hour	\$71,424 0.27%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.10%
Rig Up CB 400	\$14,000 per Barge	\$42,000 0.16%



BSEE-POCSR

Platform Decommission Cost Breakdown

Houchin

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Platform Abandonment - Manual Calculation	0.00	0.00%	\$929,238.00	3.48%
Manual Calculation			\$929,238	
Platform Abandonment - Manual Calculation	1.00	0.03%	\$1,987,482.00	7.44%
Manual Calculation			\$1,987,482	
Sever Conductors- Abrasive	1.00	0.03%	\$2,706,725.00	10.14%
Manual Calculation			\$2,706,725	
Platform Removal Preparation	1.00	0.03%	\$1,096,971.00	4.11%
Manual Calculation			\$1,096,971	
Mobilize DB 500	0.00	0.00%	\$3,712,500.00	13.90%
Derrick Barge 500			\$3,712,500	
Mobilize CB 300 & Tug	22.20	0.63%	\$71,512.00	0.27%
CB 300 & Tug			\$43,512	
Rig Up CB 300			\$28,000	
Mobilize CB 400 & Tug	22.20	0.63%	\$108,600.00	0.41%
Rig Up CB 400			\$42,000	
CB 400 & Tug			\$66,600	
Setup Derrick Barge	6.75	0.19%	\$46,406.25	0.17%
Derrick Barge 500			\$46,406	



BSEE-POCSR

Platform Decommission Cost Breakdown

Houchin

Task		Task Hours		Task Cost	
Cut Deck/Equip/Misc		24.00	0.69%	\$188,520.00	0.71%
Derrick Barge 500	\$165,000				
CB 300 & Tug	\$23,520				
Remove Equipment		24.00	0.69%	\$188,520.00	0.71%
Derrick Barge 500	\$165,000				
CB 300 & Tug	\$23,520				
Remove 8 Pile Deck		198.00	5.66%	\$1,555,290.00	5.83%
Derrick Barge 500	\$1,361,250				
CB 300 & Tug	\$194,040				
Demob CB 300 & Tug		22.20	0.63%	\$43,512.00	0.16%
CB 300 & Tug	\$43,512				
Jet/Airlift Pile Mud Plug		31.00	0.89%	\$244,125.00	0.91%
Derrick Barge 500	\$213,125				
CB 400 & Tug	\$31,000				
Mobilize Abrasive Cutting Spread		1.00	0.03%	\$20,977.00	0.08%
Manual Calculation	\$2,750				
Manual Calculation	\$1,055				
Manual Calculation	\$12,000				
Manual Calculation	\$5,172				



BSEE-POCSR

Platform Decommission Cost Breakdown

Houchin

Task	Task Hours		Task Cost	
Mobilize Dive Spread	12.20	0.35%	\$36,661.00	0.14%
Dive Boat			\$10,980	
Dive Basic Spread- Mixed Gas			\$15,250	
Abrasive Cutter Spread			\$7,625	
Pipeline Survey			\$2,806	
Sever Piles- Abrasive	46.14	1.32%	\$541,779.20	2.03%
Derrick Barge 500			\$317,213	
Dive Boat			\$41,526	
Dive Basic Spread- Mixed Gas			\$57,675	
Pipeline Survey			\$10,612	
Abrasive Cutter Spread			\$28,838	
CB 400 & Tug			\$46,140	
Pile Abrasive Cut 7 to 48 inches			\$39,776	
Cut Jacket	120.00	3.43%	\$1,345,376.00	5.04%
Derrick Barge 500			\$825,000	
Dive Boat			\$108,000	
Dive Basic Spread- Mixed Gas			\$150,000	
Pipeline Survey			\$27,600	
Abrasive Cutter Spread			\$75,000	
CB 400 & Tug			\$120,000	
Pile Abrasive Cut 7 to 48 inches			\$39,776	



BSEE-POCSR

Platform Decommission Cost Breakdown

Houchin

Task		Task Hours		Task Cost	
Remove Jacket - Meth 1		120.00	3.43%	\$1,305,600.00	4.89%
Derrick Barge 500	\$825,000				
Dive Boat	\$108,000				
Dive Basic Spread- Mixed Gas	\$150,000				
Pipeline Survey	\$27,600				
CB 400 & Tug	\$120,000				
Abrasive Cutter Spread	\$75,000				
Demob CB 400 & Tug		22.20	0.63%	\$66,600.00	0.25%
CB 400 & Tug	\$66,600				
Pick Up DB Anchors		6.75	0.19%	\$46,406.25	0.17%
Derrick Barge 500	\$46,406				
Demob Dive Spread		12.20	0.35%	\$36,661.00	0.14%
Dive Boat	\$10,980				
Dive Basic Spread- Mixed Gas	\$15,250				
Abrasive Cutter Spread	\$7,625				
Pipeline Survey	\$2,806				
Demob DB 500		0.00	0.00%	\$3,712,500.00	13.90%
Derrick Barge 500	\$3,712,500				
Site Clearance - with Divers		72.00	2.06%	\$884,000.00	3.31%
Manual Calculation	\$884,000				



BSEE-POCSR

Platform Decommission Cost Breakdown

Houchin

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Offload CB 300	912.00	26.08%	\$226,960.00	0.85%
Cargo Barge 300			\$186,960	
CB Damage Deduct			\$40,000	
Offload CB 400	1656.00	47.35%	\$490,560.00	1.84%
Cargo Barge 400			\$430,560	
CB Damage Deduct			\$60,000	
Demob Abrasive Cutting Spread	1.00	0.03%	\$20,977.00	0.08%
Manual Calculation			\$2,750	
Manual Calculation			\$1,055	
Manual Calculation			\$12,000	
Manual Calculation			\$5,172	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$342,733.00	1.28%
Manual Calculation			\$342,733	
Total	3334.84	95.35%	\$21,957,191.70	82.24%



BSEE-POCSR

Pipeline Information

Houchin Segment#:10" Lift

General Data

Water Depth:	163'
Origin / Terminus:	Origin
Opposite End Name:	Hogan
Opposite End Water Depth:	163'
Pipeline Operator:	Pacific Operators Offshore, Inc.
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:		Length:	3800'
Depth of Burial:	3'	# Crossings:		Product:	Gas Lift
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Houchin Segment#:1410166

General Data

Water Depth:	163'
Origin / Terminus:	Origin
Opposite End Name:	Hogan
Opposite End Water Depth:	163'
Pipeline Operator:	Pacific Operators Offshore, Inc.
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	10.75"	Wall Thickness:		Length:	3800'
Depth of Burial:	3'	# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Houchin Segment#:1520166

General Data

Water Depth:	163'
Origin / Terminus:	Origin
Opposite End Name:	Hogan
Opposite End Water Depth:	163'
Pipeline Operator:	Pacific Operators Offshore, Inc.
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	12.75"	Wall Thickness:		Length:	3800'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Houchin Segment#:4" Water

General Data

Water Depth:	163'
Origin / Terminus:	Origin
Opposite End Name:	Hogan
Opposite End Water Depth:	163'
Pipeline Operator:	Pacific Operators Offshore, Inc.
Provision for Misc. Work%:	15.00%
Weather Contingency %:	10.00%

Pipeline Data

Outside Diameter:	4.5"	Wall Thickness:		Length:	3800'
Depth of Burial:	3'	# Crossings:		Product:	H2O
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Houchin Segment#:10" Lift

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.06%
Mobilize Work Boat	Mob shared with 8 pipelines	<input type="checkbox"/>	1.52	2.21%	\$4,137	1.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	7.24%	\$13,565	6.49%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	1.04	1.51%	\$2,822	1.35%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.89%	\$5,426	2.60%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.06%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Reposition Workboat		<input checked="" type="checkbox"/>	3.07	4.44%	\$8,329	3.99%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Demob Work Boat	Demob shared with 8 pipelines	<input type="checkbox"/>	1.52	2.21%	\$4,137	1.98%
Task Total			55.88	80.88%	\$160,228	76.71%
Misc. Work Provision (15.00%)			7.92	11.47%	\$21,499	10.29%
Weather Provision (10.00%)			5.28	7.65%	\$14,333	6.86%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$12,818	6.14%
Total:			69.09	100.00%	\$208,879	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Houchin Segment#:1410166

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.06%
Mobilize Work Boat	Mob shared with 8 pipelines	<input type="checkbox"/>	1.52	2.21%	\$4,137	1.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	7.24%	\$13,565	6.49%
Pig & Flush Pipeline	Pumping at 250 gpm	<input checked="" type="checkbox"/>	1.04	1.51%	\$2,822	1.35%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.89%	\$5,426	2.60%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.06%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Reposition Workboat		<input checked="" type="checkbox"/>	3.07	4.44%	\$8,329	3.99%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Demob Work Boat	Demob shared with 8 pipelines	<input type="checkbox"/>	1.52	2.21%	\$4,137	1.98%
Task Total			55.88	80.88%	\$160,228	76.71%
Misc. Work Provision (15.00%)			7.92	11.47%	\$21,499	10.29%
Weather Provision (10.00%)			5.28	7.65%	\$14,333	6.86%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$12,818	6.14%
Total:			69.09	100.00%	\$208,879	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Houchin Segment#:1520166

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.06%
Mobilize Work Boat	Mob shared with 8 pipelines	<input type="checkbox"/>	1.52	2.21%	\$4,137	1.98%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	7.24%	\$13,565	6.49%
Pig & Flush Pipeline	Pumping at 350 gpm	<input checked="" type="checkbox"/>	1.05	1.52%	\$2,849	1.36%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.89%	\$5,426	2.60%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.06%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Reposition Workboat		<input checked="" type="checkbox"/>	3.07	4.44%	\$8,329	3.99%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.54%	\$14,135	6.77%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.04%	\$9,441	4.52%
Demob Work Boat	Demob shared with 8 pipelines	<input type="checkbox"/>	1.52	2.21%	\$4,137	1.98%
Task Total			55.89	80.88%	\$160,256	76.71%
Misc. Work Provision (15.00%)			7.93	11.47%	\$21,503	10.29%
Weather Provision (10.00%)			5.28	7.65%	\$14,335	6.86%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$12,820	6.14%
Total:			69.10	100.00%	\$208,915	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Houchin Segment#:4" Water

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.09%
Mobilize Work Boat	Mob shared with 8 pipelines	<input type="checkbox"/>	1.52	2.23%	\$4,137	2.00%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	7.32%	\$13,565	6.56%
Pig & Flush Pipeline	Pumping at 100 gpm	<input checked="" type="checkbox"/>	0.42	0.61%	\$1,139	0.55%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.93%	\$5,426	2.63%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 8 pipelines	<input type="checkbox"/>	0.00	0.00%	\$4,313	2.09%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.63%	\$14,135	6.84%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.63%	\$14,135	6.84%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.09%	\$9,441	4.57%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.09%	\$9,441	4.57%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.09%	\$9,441	4.57%
Reposition Workboat		<input checked="" type="checkbox"/>	3.07	4.49%	\$8,329	4.03%
Expose Pipeline		<input checked="" type="checkbox"/>	5.21	7.63%	\$14,135	6.84%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	5.21	7.63%	\$14,135	6.84%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.48	5.09%	\$9,441	4.57%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.48	5.09%	\$9,441	4.57%
Bury Pipeline		<input checked="" type="checkbox"/>	3.48	5.09%	\$9,441	4.57%
Demob Work Boat	Demob shared with 8 pipelines	<input type="checkbox"/>	1.52	2.23%	\$4,137	2.00%
Task Total			55.26	80.89%	\$158,546	76.73%
Misc. Work Provision (15.00%)			7.83	11.46%	\$21,247	10.28%
Weather Provision (10.00%)			5.22	7.64%	\$14,165	6.85%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$12,684	6.14%
Total:			68.31	100.00%	\$206,642	100.00%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Houchin Segment#:10" Lift

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$36,322	17.50%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$69,850	33.66%
Manual Calculation	\$0	Independently Calculated	\$8,626	4.16%
Pipeline Surveying	\$230	per Hour	\$12,852	6.19%
Work Boat	\$583	per Hour	\$32,578	15.70%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Houchin Segment#:1410166

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$36,322	17.50%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$69,850	33.66%
Manual Calculation	\$0	Independently Calculated	\$8,626	4.16%
Pipeline Surveying	\$230	per Hour	\$12,852	6.19%
Work Boat	\$583	per Hour	\$32,578	15.70%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Houchin Segment#:1520166

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$36,329	17.50%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$69,863	33.66%
Manual Calculation	\$0	Independently Calculated	\$8,626	4.16%
Pipeline Surveying	\$230	per Hour	\$12,855	6.19%
Work Boat	\$583	per Hour	\$32,584	15.70%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Houchin Segment#:4" Water

Resource Used	Unit Cost		Cost	
Decommissioning Crew	\$650	per Hour	\$35,919	17.50%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$69,075	33.65%
Manual Calculation	\$0	Independently Calculated	\$8,626	4.20%
Pipeline Surveying	\$230	per Hour	\$12,710	6.19%
Work Boat	\$583	per Hour	\$32,217	15.69%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Houchin Segment#:10" Lift

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.08%
Manual Calculation	\$4,313				
Mobilize Work Boat		1.52	2.21%	\$4,137	1.99%
Work Boat	\$889				
Dive Basic Spread- Mixed Gas	\$1,906				
Decommissioning Crew	\$991				
Pipeline Surveying	\$351				
Rig Up Decomm Equipment		5.00	7.24%	\$13,565	6.54%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		1.04	1.51%	\$2,822	1.36%
Work Boat	\$606				
Dive Basic Spread- Mixed Gas	\$1,300				
Decommissioning Crew	\$676				
Pipeline Surveying	\$239				
Derig Decomm Equipment		2.00	2.89%	\$5,426	2.61%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.08%
Manual Calculation	\$4,313				
Expose Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Reposition Workboat		3.07	4.44%	\$8,329	4.01%
Work Boat	\$1,790				
Dive Basic Spread- Mixed Gas	\$3,838				
Decommissioning Crew	\$1,996				
Pipeline Surveying	\$706				
Expose Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Demob Work Boat		1.52	2.21%	\$4,137	1.99%
Work Boat	\$889				
Dive Basic Spread- Mixed Gas	\$1,906				
Decommissioning Crew	\$991				
Pipeline Surveying	\$351				
Total		55.88	80.88%	\$160,228.45	77.21%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Houchin Segment#:1410166

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.08%
Manual Calculation	\$4,313				
Mobilize Work Boat		1.52	2.21%	\$4,137	1.99%
Work Boat	\$889				
Dive Basic Spread- Mixed Gas	\$1,906				
Decommissioning Crew	\$991				
Pipeline Surveying	\$351				
Rig Up Decomm Equipment		5.00	7.24%	\$13,565	6.54%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		1.04	1.51%	\$2,822	1.36%
Work Boat	\$606				
Dive Basic Spread- Mixed Gas	\$1,300				
Decommissioning Crew	\$676				
Pipeline Surveying	\$239				
Derig Decomm Equipment		2.00	2.89%	\$5,426	2.61%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.08%
Manual Calculation	\$4,313				
Expose Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Reposition Workboat		3.07	4.44%	\$8,329	4.01%
Work Boat	\$1,790				
Dive Basic Spread- Mixed Gas	\$3,838				
Decommissioning Crew	\$1,996				
Pipeline Surveying	\$706				
Expose Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Demob Work Boat		1.52	2.21%	\$4,137	1.99%
Work Boat	\$889				
Dive Basic Spread- Mixed Gas	\$1,906				
Decommissioning Crew	\$991				
Pipeline Surveying	\$351				
Total		55.88	80.88%	\$160,228.45	77.21%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Houchin Segment#:1520166

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.08%
Manual Calculation	\$4,313				
Mobilize Work Boat		1.52	2.21%	\$4,137	1.99%
Work Boat	\$889				
Dive Basic Spread- Mixed Gas	\$1,906				
Decommissioning Crew	\$991				
Pipeline Surveying	\$351				
Rig Up Decomm Equipment		5.00	7.24%	\$13,565	6.54%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		1.05	1.52%	\$2,849	1.37%
Work Boat	\$612				
Dive Basic Spread- Mixed Gas	\$1,313				
Decommissioning Crew	\$683				
Pipeline Surveying	\$242				
Derig Decomm Equipment		2.00	2.89%	\$5,426	2.61%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.08%
Manual Calculation	\$4,313				
Expose Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Reposition Workboat		3.07	4.44%	\$8,329	4.01%
Work Boat	\$1,790				
Dive Basic Spread- Mixed Gas	\$3,838				
Decommissioning Crew	\$1,996				
Pipeline Surveying	\$706				
Expose Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.54%	\$14,135	6.81%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.04%	\$9,441	4.55%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Demob Work Boat		1.52	2.21%	\$4,137	1.99%
Work Boat	\$889				
Dive Basic Spread- Mixed Gas	\$1,906				
Decommissioning Crew	\$991				
Pipeline Surveying	\$351				
Total		55.89	80.88%	\$160,255.58	77.21%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Houchin Segment#:4" Water

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.10%
Manual Calculation	\$4,313				
Mobilize Work Boat		1.52	2.23%	\$4,137	2.02%
Work Boat	\$889				
Dive Basic Spread- Mixed Gas	\$1,906				
Decommissioning Crew	\$991				
Pipeline Surveying	\$351				
Rig Up Decomm Equipment		5.00	7.32%	\$13,565	6.61%
Work Boat	\$2,915				
Dive Basic Spread- Mixed Gas	\$6,250				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		0.42	0.61%	\$1,139	0.56%
Work Boat	\$245				
Dive Basic Spread- Mixed Gas	\$525				
Decommissioning Crew	\$273				
Pipeline Surveying	\$97				
Derig Decomm Equipment		2.00	2.93%	\$5,426	2.64%
Work Boat	\$1,166				
Dive Basic Spread- Mixed Gas	\$2,500				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$4,313	2.10%
Manual Calculation	\$4,313				
Expose Pipeline		5.21	7.63%	\$14,135	6.89%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.63%	\$14,135	6.89%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.09%	\$9,441	4.60%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.09%	\$9,441	4.60%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.09%	\$9,441	4.60%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Reposition Workboat		3.07	4.49%	\$8,329	4.06%
Work Boat	\$1,790				
Dive Basic Spread- Mixed Gas	\$3,838				
Decommissioning Crew	\$1,996				
Pipeline Surveying	\$706				
Expose Pipeline		5.21	7.63%	\$14,135	6.89%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut & Plug Pipeline		5.21	7.63%	\$14,135	6.89%
Work Boat	\$3,037				
Dive Basic Spread- Mixed Gas	\$6,513				
Decommissioning Crew	\$3,387				
Pipeline Surveying	\$1,198				
Cut Pipeline Riser		3.48	5.09%	\$9,441	4.60%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Remove Tube Turn		3.48	5.09%	\$9,441	4.60%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Bury Pipeline		3.48	5.09%	\$9,441	4.60%
Work Boat	\$2,029				
Dive Basic Spread- Mixed Gas	\$4,350				
Decommissioning Crew	\$2,262				
Pipeline Surveying	\$800				
Demob Work Boat		1.52	2.23%	\$4,137	2.02%
Work Boat	\$889				
Dive Basic Spread- Mixed Gas	\$1,906				
Decommissioning Crew	\$991				
Pipeline Surveying	\$351				
Total		55.26	80.89%	\$158,546.39	77.23%



BSEE-POCSR

Well Decommission Task Information

Houchin Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$6,491,880 75.19%
		Task Total	0.00	\$6,491,880 75.19%
		Misc. Work Provision (15.00%)	0.00	\$973,782 11.28%
		Weather Provision (10.00%)	0.00	\$649,188 7.52%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$519,350 6.02%
		Total:	0.00 100.00%	\$8,634,200 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Houchin Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$6,491,880 75.19%



BSEE-POCSR

Well Decommission Cost Breakdown

Houchin Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$6,491,880	75.19%
Manual Calculation	\$6,491,880				
	Total	0.00	0.00%	\$6,491,880	75.19%



BSEE-POCSR

Platform Salvage Option

Irene

COMPLETE REMOVAL

-Platform Irene will be removed along with Platforms Gail, Grace, Harvest, Hermosa and Hidalgo.

-Platform Irene is an 8-pile platform installed in 1985 in 242' of water.

-The estimated removal weight is the deck weight is 2,500 tons and the jacket weight is 3,100 tons.

-The platform has a total of 26 wells that will be plugged and abandoned.

-The wells will be plugged and abandoned by a Gulf of Mexico Region well service company using rig-less methods mobilized from the Gulf of Mexico to the POCSR.

-Abrasive cutting equipment and crews will be mobilized from the GOM to conduct conductor and platform removal operations.

-A total of 28 conductors will be removed. The conductors will be removed by a local well service company using contracted casing jacks prior to the arrival of the DB. The conductors will be transported to shore by workboat and from there transported by truck to a disposal facility located near Long Beach, California.

-The platform topsides and jacket will be removed by a DB 2000 that will be mobilized from southeast Asia. The total mob/demob time will be 100 days.

-The deck modules and the jacket sections will be transported on barges to Los Angeles or Long Beach and scrapped.

-Two 300' cargo barges will transport the deck modules to shore and three 400' cargo barges will transport the jacket sections to shore. The barges will be mobilized locally. The mob/demob time will be 2 days round trip. A total of 5 cargo barge trips will be required.

-The power cable servicing the platform will be totally removed from the ocean floor. A workboat will be used to remove the power cable and will be mobilized from local ports. The mob/demob time will be 2 days round trip.



BSEE-POCSR

Platform Salvage Option

Irene

-The power cable will be transported to shore on cargo barges to Port Hueneme or Los Angeles/Long Beach where it will be cut into segments and from there transported by truck a distance of approximately 150 miles to a recycling facility or disposal facility located near Bakersfield, California.

-The three pipelines (oil, gas) on the OCS will be totally removed to the state water boundary when running to shore and in less than 200 feet of water. Segments running from platform to platform or in greater than 200 ft of water will be abandoned in place. The pipeline sections to be removed will be taken out using a small crane barge and cargo barges that will be mobilized from Los Angeles or Long Beach. The mob/demob time for the crane barge and cargo barges will be 1 day.

-A dynamically positioned (DP) dive vessel will be mobilized from the GOM to support the pipeline abandonment operations in greater than 200 feet of water. The total mob/demob time for the DP dive vessel will be 60 days round-trip.

-Site clearance procedures will be undertaken to ensure the area impacted by decommissioning operations (platform site and pipeline and power cable routes) is cleared of all obstructions to other activities. Pre-demolition and post-demolition high resolution side-scan surveys will be conducted using a local survey vessel or workboat. A workboat will be mobilized from a local port (Santa Barbara, Port Hueneme, Los Angeles/Long Beach) to support ROV/diver target identification and recovery of obstructions. Following these operations, a local fishing vessel will be deployed to test trawl the platform site and other selected locations.

-Platform Removal cost displayed on the next page includes the following costs: All of the Project Management, Engineering and Planning; All Permitting and Regulatory Compliance; Platform Prep and Marine Growth Removal; Conductor Removal; Mobilization and Demobilization Of Derrick Barge; Platform Removal; Site Clearance; Power Cable Removal; All Material Disposal; All the previously listed categories' respective Weather Contingencies (when applicable); All the previously listed categories' Misc. Work Provision;

-Well Plugging and Abandonment cost displayed on the next page includes the following costs: Rig-less Well P&A; Well P&A Weather Contingency; Well P&A Misc. Work Provision;

-Pipeline Abandonment cost displayed on the next page includes the following costs: Pipeline Abandonment; Pipeline Abandonment Weather Contingency; Pipeline Abandonment Misc. Work Provision;



BSEE-POCSR

Platform Salvage Option

Irene

-Weather Contingencies were calculated by taking 15% of each task cost listed with a check in the contingency box under each Task Information section of this estimate. Weather Contingency costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Misc. Work Provision costs were calculated by taking 15% of every task cost listed with a check in the contingency box under each Task Information section of this estimate. Misc. Work Provision costs for each task are then summed and displayed in Appendix 2 and are also already included in their respective Platform Removal, Well P&A, and Pipeline Abandonment Totals listed on the next page.

-Project Management, Engineering and Planning costs are listed as a single line item under Platform Decommission Task Information section of this estimate and therefore are included in Platform Removal costs listed on the next page. Project Management, Engineering and Planning costs are also displayed in Appendix 2 of the report. Project Management, Engineering and Planning costs are calculated by taking 8% of the following categories' costs: Platform Prep; Conductor Removal; Platform Removal; Site Clearance; Power Cable Removal; Pipeline Abandonment; Well P&A. The 8% Project Management, Engineering and Planning costs are not applied to the following categories: Permitting and Regulatory Compliance; Mobilization and Demobilization of Derrick Barge; Materials Disposal; Weather Contingencies; Misc. Work Provision;

Estimated Decommissioning Gross Cost = \$37,331,708

Estimated Decommissioning Net Cost = \$37,331,708



TSB OFFSHORE

BSEE-POCSR

Basic Information

Irene

General Data

Platform:	Irene
Function:	DRILL/PROD
Type:	Steel
Water Depth:	242'
Pre 461H?:	No
Year Installed:	1985
Year Estimate Developed:	2014
District:	California
Lease Number:	OCS-P 0441
Account Code:	TSB - 139681-Z
Amortization:	1.00
# Wells to P & A:	26
# Pipelines to Abandon:	3
Estimate Complete?:	Yes

Partner Data

Partner	Working Interest
1 Freeport-McMoRan Oil & Gas	100.00%

Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$23,795,930	\$23,795,930
Well Plugging & Abandonment:	\$8,679,317	\$8,679,317
Pipeline Abandonment:	\$4,856,461	\$4,856,461
Total Decommissioning Cost:	\$37,331,708	\$37,331,708



BSEE-POCSR

Platform Information

Irene

Pile/Tendon Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below Mudline
Main:	8	60"	0.688"	Yes	No	
Skirt/Braced	0			No	No	

Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

Conductors

Number of Slots:	72
Number Installed:	28
Outside Diameter:	20"
Wall Thickness:	0.375"
Number Slanted:	0

Jacket Data

	Weight (Tons)	With Piles	With Piles & Grout
Submerged:			
Dry:	3100.00		
Jacket Installation Date:	8/7/85		
Jacket Contractor:	Unknown		

Deck Data

Deck Lift Weight with Equipment:	2500 Tons
Number of Padeyes Required:	12
Deck Installation Date:	8/7/85
Deck Contractor:	Unknown



BSEE-POCSR

Platform Information

Irene

Equipment Lift Weights

Members to be Cut Data

Cargo Descriptions

Cargo Barge Size	Cargo Description			
CB 300 x 100	Equipment	Equipment	Equipment	
CB 300 x 100	Deck 100-500T	Equipment	0	0
CB 400 x 100	Deck > 500T	Deck > 500T	0	0
CB 400 x 100	Deck > 500T	Deck > 500T		
CB 400 x 100	Jkt > 700T	Jkt > 700T	0	0

Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	
Provision for Misc. Work%:	15.00%
Weather Contingency%:	15.00%
Engineering%:	0.00%

Miscellaneous Costs

Consumables:	\$0.00
Waste Disposal:	\$3,639,897.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$0.00



BSEE-POCSR

Platform Decommission Task Information

Irene

Task	Note	Weather Provision	Task Hours		Task Cost	
Platform Abandonment - Manual Calculation	Project Management, Engineering & Planning Costs	<input type="checkbox"/>	0.00	0.00%	\$988,112.00	4.15%
Platform Abandonment - Manual Calculation	Representative of all permitting and regulation costs	<input type="checkbox"/>	1.00	0.03%	\$413,762.00	1.74%
Sever Conductors- Abrasive	Abrasive severing and casing jack removal prior to DB arrival. See Conductor Removal spreadsheet.	<input checked="" type="checkbox"/>	1.00	0.03%	\$2,807,010.00	11.80%
Platform Removal Preparation	Manual Calculation	<input checked="" type="checkbox"/>	1.00	0.03%	\$1,826,637.00	7.68%
Mobilize DB 2000	Mob from Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	6.59%
Mobilize CB 300 & Tug	Mob From Port of LA (Qty 2)	<input type="checkbox"/>	37.80	1.25%	\$102,088.00	0.43%
Mobilize CB 400 & Tug	Mob From Port of LA (Qty 3)	<input type="checkbox"/>	37.80	1.25%	\$155,400.00	0.65%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.22%	\$58,781.23	0.25%
Cut Deck/Equip/Misc	Seperate 5 Modules, per MMS	<input checked="" type="checkbox"/>	24.00	0.79%	\$232,519.91	0.98%
Remove Equipment		<input checked="" type="checkbox"/>	24.00	0.79%	\$232,519.91	0.98%
Remove 8 Pile Deck	Remove 8 Pile Deck, 5 modules	<input checked="" type="checkbox"/>	72.00	2.37%	\$697,559.81	2.93%
Demob CB 300 & Tug	Demob to Port of LA (Qty 2)	<input type="checkbox"/>	37.80	1.25%	\$74,088.00	0.31%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	31.00	1.02%	\$300,958.19	1.26%
Mobilize Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from Houma to LA+ Loading and Unloading costs	<input type="checkbox"/>	1.00	0.03%	\$13,984.00	0.06%
Mobilize Dive Spread	Mob of PI Survey, Dive Spread and Abrasive Spread from LA/Long Beach to DB on location.	<input type="checkbox"/>	20.50	0.68%	\$150,060.00	0.63%
Sever Piles- Abrasive		<input checked="" type="checkbox"/>	53.68	1.77%	\$994,080.79	4.18%
Cut Jacket	30 Hours per section, times 2 section(s), per MMS	<input checked="" type="checkbox"/>	60.00	1.98%	\$1,061,475.81	4.46%
Remove Jacket - Meth 1	30 Hours per section, times 2 section(s), per MMS	<input checked="" type="checkbox"/>	60.00	1.98%	\$1,081,699.81	4.55%
Demob CB 400 & Tug	Demob to Port of LA (Qty 3)	<input type="checkbox"/>	37.80	1.25%	\$113,400.00	0.48%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.22%	\$58,781.23	0.25%
Demob Dive Spread	Demob of PI Survey, Dive Spread and Abrasive Spread from DB on location to LA/Long Beach.	<input type="checkbox"/>	20.50	0.68%	\$150,060.00	0.63%
Demob Abrasive Cutting Spread	Crew travel hourly pay + Crew Airfare + Spread Shipping costs from LA to Houma + Loading and Unloading Costs	<input type="checkbox"/>	1.00	0.03%	\$13,984.00	0.06%
Demob DB 2000	Demob to Asia, 50 days divided by 6 platforms	<input type="checkbox"/>	0.00	0.00%	\$1,567,500.00	6.59%
Site Clearance - with Divers	Represents All Site Clearance Operations in Section 14	<input checked="" type="checkbox"/>	72.00	2.37%	\$884,000.00	3.71%
Offload CB 300		<input type="checkbox"/>	240.00	7.91%	\$89,200.00	0.37%
Offload CB 400		<input type="checkbox"/>	2064.00	68.01%	\$596,640.00	2.51%
Platform Abandonment - Manual Calculation	Power Cable Removal	<input checked="" type="checkbox"/>	0.00	0.00%	\$656,477.00	2.76%
Task Total			2911.38	95.93%	\$6,888,278.69	70.97%
Misc. Work Provision (15.00%)			61.83	2.04%	\$1,633,875.00	6.87%
Weather Contingency (15.00%)			61.83	2.04%	\$1,633,875.00	6.87%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Task Information

Irene

Task	Note	Weather Provision	Task Hours	Task Cost
		Consumables		\$0.00 0.00%
		Waste Disposal	3,639,897.00	15.30%
		Structure & Equipment Disposal		\$0.00 0.00%
		Offloading		\$0.00 0.00%
		Storage / Scrapping		\$0.00 0.00%
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (0.00%)		\$0.00 0.00%
Total:			3035.04 100.00%	23,795,925.69 100.00%



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Resources Breakdown

Irene

Resource Used	Unit Cost	Cost
Abrasive Cutter Spread	\$625 per Hour	\$134,175 0.56%
Cargo Barge 300	\$4,920 per Day per Barge	\$49,200 0.21%
Cargo Barge 400	\$6,240 per Day per Barge	\$536,640 2.26%
CB 300 & Tug	\$980 per Hour per Barge/Tug	\$265,776 1.12%
CB 400 & Tug	\$1,000 per Hour per Barge/Tug	\$491,480 2.07%
CB Damage Deduct	\$20,000 per Cargo Barge	\$100,000 0.42%
Derrick Barge 2000	\$8,708 per Hour per barge	\$6,079,983 25.55%
Dive Basic Spread Saturation	\$3,165 Per Hour	\$679,462 2.86%
DP Dive Boat	\$3,300 Per Hour	\$708,444 2.98%
Manual Calculation	\$0 Independently Calculated	\$7,603,966 31.95%
Pile Abrasive Cut 49 to 69 inches	\$5,000 per Cut	\$80,000 0.34%
Pile Abrasive Cut 7 to 48 inches	\$2,486 per Cut	\$39,776 0.17%
Pipeline Survey	\$230 per Hour	\$49,376 0.21%
Rig Up CB 300	\$14,000 per Barge	\$28,000 0.12%
Rig Up CB 400	\$14,000 per Barge	\$42,000 0.18%



BSEE-POCSR
Platform Decommission Cost Breakdown
Irene

Task		Task Hours		Task Cost	
Platform Abandonment - Manual Calculation		0.00	0.00%	\$988,112.00	4.15%
Manual Calculation	\$988,112				
Platform Abandonment - Manual Calculation		1.00	0.03%	\$413,762.00	1.74%
Manual Calculation	\$413,762				
Sever Conductors- Abrasive		1.00	0.03%	\$2,807,010.00	11.80%
Manual Calculation	\$2,807,010				
Platform Removal Preparation		1.00	0.03%	\$1,826,637.00	7.68%
Manual Calculation	\$1,826,637				
Mobilize DB 2000		0.00	0.00%	\$1,567,500.00	6.59%
Derrick Barge 2000	\$1,567,500				
Mobilize CB 300 & Tug		37.80	1.25%	\$102,088.00	0.43%
CB 300 & Tug	\$74,088				
Rig Up CB 300	\$28,000				
Mobilize CB 400 & Tug		37.80	1.25%	\$155,400.00	0.65%
Rig Up CB 400	\$42,000				
CB 400 & Tug	\$113,400				
Setup Derrick Barge		6.75	0.22%	\$58,781.23	0.25%
Derrick Barge 2000	\$58,781				



BSEE-POCSR
Platform Decommission Cost Breakdown
Irene

Task			Task Hours		Task Cost	
Cut Deck/Equip/Misc			24.00	0.79%	\$232,519.91	0.98%
Derrick Barge 2000	\$209,000					
CB 300 & Tug	\$23,520					
Remove Equipment			24.00	0.79%	\$232,519.91	0.98%
Derrick Barge 2000	\$209,000					
CB 300 & Tug	\$23,520					
Remove 8 Pile Deck			72.00	2.37%	\$697,559.81	2.93%
Derrick Barge 2000	\$627,000					
CB 300 & Tug	\$70,560					
Demob CB 300 & Tug			37.80	1.25%	\$74,088.00	0.31%
CB 300 & Tug	\$74,088					
Jet/Airlift Pile Mud Plug			31.00	1.02%	\$300,958.19	1.26%
Derrick Barge 2000	\$269,958					
CB 400 & Tug	\$31,000					
Mobilize Abrasive Cutting Spread			1.00	0.03%	\$13,984.00	0.06%
Manual Calculation	\$1,833					
Manual Calculation	\$703					
Manual Calculation	\$8,000					
Manual Calculation	\$3,448					



TSB OFFSHORE

BSEE-POCSR

Platform Decommission Cost Breakdown

Irene

Task		Task Hours		Task Cost	
Mobilize Dive Spread		20.50	0.68%	\$150,060.00	0.63%
DP Dive Boat	\$67,650				
Dive Basic Spread Saturation	\$64,883				
Abrasive Cutter Spread	\$12,813				
Pipeline Survey	\$4,715				
<hr/>					
Sever Piles- Abrasive		53.68	1.77%	\$994,080.79	4.18%
Derrick Barge 2000	\$467,463				
DP Dive Boat	\$177,144				
Dive Basic Spread Saturation	\$169,897				
Pipeline Survey	\$12,346				
Abrasive Cutter Spread	\$33,550				
CB 400 & Tug	\$53,680				
Pile Abrasive Cut 49 to 69 inches	\$80,000				
<hr/>					
Cut Jacket		60.00	1.98%	\$1,061,475.81	4.46%
Derrick Barge 2000	\$522,500				
DP Dive Boat	\$198,000				
Dive Basic Spread Saturation	\$189,900				
Pipeline Survey	\$13,800				
Abrasive Cutter Spread	\$37,500				
CB 400 & Tug	\$60,000				
Pile Abrasive Cut 7 to 48 inches	\$39,776				



BSEE-POCSR

Platform Decommission Cost Breakdown

Irene

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Remove Jacket - Meth 1	60.00	1.98%	\$1,081,699.81	4.55%
Derrick Barge 2000			\$522,500	
DP Dive Boat			\$198,000	
Dive Basic Spread Saturation			\$189,900	
Pipeline Survey			\$13,800	
Abrasive Cutter Spread			\$37,500	
CB 400 & Tug			\$120,000	
Demob CB 400 & Tug	37.80	1.25%	\$113,400.00	0.48%
CB 400 & Tug			\$113,400	
Pick Up DB Anchors	6.75	0.22%	\$58,781.23	0.25%
Derrick Barge 2000			\$58,781	
Demob Dive Spread	20.50	0.68%	\$150,060.00	0.63%
DP Dive Boat			\$67,650	
Dive Basic Spread Saturation			\$64,883	
Abrasive Cutter Spread			\$12,813	
Pipeline Survey			\$4,715	
Demob Abrasive Cutting Spread	1.00	0.03%	\$13,984.00	0.06%
Manual Calculation			\$1,833	
Manual Calculation			\$703	
Manual Calculation			\$8,000	
Manual Calculation			\$3,448	



BSEE-POCSR

Platform Decommission Cost Breakdown

Irene

Task	Task Hours		Task Cost	
	Hours	Percentage	Amount	Percentage
Demob DB 2000	0.00	0.00%	\$1,567,500.00	6.59%
Derrick Barge 2000			\$1,567,500	
Site Clearance - with Divers	72.00	2.37%	\$884,000.00	3.71%
Manual Calculation			\$884,000	
Offload CB 300	240.00	7.91%	\$89,200.00	0.37%
Cargo Barge 300			\$49,200	
CB Damage Deduct			\$40,000	
Offload CB 400	2064.00	68.01%	\$596,640.00	2.51%
Cargo Barge 400			\$536,640	
CB Damage Deduct			\$60,000	
Platform Abandonment - Manual Calculation	0.00	0.00%	\$656,477.00	2.76%
Manual Calculation			\$656,477	
Total	2911.38	95.93%	\$16,888,278.69	70.97%



BSEE-POCSR

Pipeline Information

Irene Segment#:4610441

General Data

Water Depth:	242'
Origin / Terminus:	Origin
Opposite End Name:	Orcutt
Opposite End Water Depth:	
Pipeline Operator:	Freeport-McMoRan Oil & Gas
Provision for Misc. Work%:	15.00%
Weather Contingency %:	15.00%

Pipeline Data

Outside Diameter:	20"	Wall Thickness:	1.031"	Length:	53050'
Depth of Burial:	3'	# Crossings:		Product:	Oil
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Information

Irene Segment#:4820441

General Data

Water Depth:	242'
Origin / Terminus:	Origin
Opposite End Name:	Orcutt
Opposite End Water Depth:	
Pipeline Operator:	Freeport-McMoRan Oil & Gas
Provision for Misc. Work%:	15.00%
Weather Contingency %:	15.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:	0.5"	Length:	53050'
Depth of Burial:	3'	# Crossings:		Product:	Gas
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



TSB OFFSHORE

BSEE-POCSR

Pipeline Information

Irene Segment#:8" Water-Shore

General Data

Water Depth:	242'
Origin / Terminus:	Origin
Opposite End Name:	Orcutt
Opposite End Water Depth:	
Pipeline Operator:	Freeport-McMoRan Oil & Gas
Provision for Misc. Work%:	15.00%
Weather Contingency %:	15.00%

Pipeline Data

Outside Diameter:	8.625"	Wall Thickness:	0.5"	Length:	53050'
Depth of Burial:	3'	# Crossings:		Product:	H2O
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	Yes	Riser Guard?:	No		



BSEE-POCSR

Pipeline Decommission Task Information

Irene Segment#:4610441

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.15%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.53	0.44%	\$250,000	14.78%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.86%	\$22,035	1.30%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.43%	\$36,725	2.17%
Pig & Flush Pipeline	Pumping at 600 gpm	<input checked="" type="checkbox"/>	22.28	6.38%	\$163,647	9.67%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.57%	\$14,690	0.87%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.15%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	7.95	2.28%	\$53,225	3.15%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	5.30	1.52%	\$35,484	2.10%
Remove Tube Turn		<input checked="" type="checkbox"/>	5.30	1.52%	\$39,464	2.33%
Mob P/L Removal Spread	Shared between 5 pipelines	<input type="checkbox"/>	4.10	1.17%	\$27,609	1.63%
Expose Pipeline		<input checked="" type="checkbox"/>	7.95	2.28%	\$53,535	3.16%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	7.95	2.28%	\$53,535	3.16%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	20.50	5.87%	\$38,550	2.28%
Remove Pipeline	Remove 1.53 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	27.00	7.74%	\$196,668	11.63%
Bury Pipeline		<input checked="" type="checkbox"/>	5.30	1.52%	\$38,605	2.28%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	20.50	5.87%	\$22,550	1.33%
Demob P/L Removal Spread	Shared b/w 5 P/L's	<input type="checkbox"/>	4.10	1.17%	\$27,609	1.63%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	0.44%	\$250,000	14.78%
Offload CB 180		<input type="checkbox"/>	168.00	48.14%	\$41,000	2.42%
Task Total			319.29	91.49%	\$1,369,860	80.97%
Misc. Work Provision (15.00%)			14.85	4.26%	\$106,142	6.27%
Weather Provision (15.00%)			14.85	4.26%	\$106,142	6.27%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$109,589	6.48%
Total:			349.00	100.00%	\$1,691,732	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Irene Segment#:4820441

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.16%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.53	0.46%	\$250,000	15.80%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.90%	\$22,035	1.39%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.49%	\$36,725	2.32%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	11.49	3.43%	\$84,394	5.33%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.60%	\$14,690	0.93%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.16%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	7.95	2.37%	\$53,225	3.36%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	5.30	1.58%	\$35,484	2.24%
Remove Tube Turn		<input checked="" type="checkbox"/>	5.30	1.58%	\$39,464	2.49%
Mob P/L Removal Spread	Shared between 5 pipelines	<input type="checkbox"/>	4.10	1.22%	\$27,609	1.74%
Expose Pipeline		<input checked="" type="checkbox"/>	7.95	2.37%	\$53,535	3.38%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	7.95	2.37%	\$53,535	3.38%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	20.50	6.12%	\$38,550	2.44%
Remove Pipeline	Remove 1.53 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	27.00	8.06%	\$196,668	12.43%
Bury Pipeline		<input checked="" type="checkbox"/>	5.30	1.58%	\$38,605	2.44%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	20.50	6.12%	\$22,550	1.43%
Demob P/L Removal Spread	Shared b/w 5 P/L's	<input type="checkbox"/>	4.10	1.22%	\$27,609	1.74%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	0.46%	\$250,000	15.80%
Offload CB 180		<input type="checkbox"/>	168.00	50.15%	\$41,000	2.59%
Task Total			308.50	92.10%	\$1,290,607	81.56%
Misc. Work Provision (15.00%)			13.24	3.95%	\$94,254	5.96%
Weather Provision (15.00%)			13.24	3.95%	\$94,254	5.96%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$103,249	6.52%
Total:			334.97	100.00%	\$1,582,364	100.00%



BSEE-POCSR

Pipeline Decommission Task Information

Irene Segment#:8" Water-Shore

Task	Note	Weather Provision	Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment	Mob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.16%
Mobilize Dive Boat	Man Calc is for mob of DP2 SAT DSV from the GOM. Shared w/ 14 P/L's	<input type="checkbox"/>	1.53	0.46%	\$250,000	15.80%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	0.90%	\$22,035	1.39%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.49%	\$36,725	2.32%
Pig & Flush Pipeline	Pumping at 200 gpm	<input checked="" type="checkbox"/>	11.49	3.43%	\$84,394	5.33%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.60%	\$14,690	0.93%
Demob Flushing Crew & Equipment	Demob PL P&E from GOM shared b/w 14 pipelines	<input type="checkbox"/>	0.00	0.00%	\$2,464	0.16%
Cut & Plug Pipeline	Cut P/L from Riser	<input checked="" type="checkbox"/>	7.95	2.37%	\$53,225	3.36%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	5.30	1.58%	\$35,484	2.24%
Remove Tube Turn		<input checked="" type="checkbox"/>	5.30	1.58%	\$39,464	2.49%
Mob P/L Removal Spread	Shared between 5 pipelines	<input type="checkbox"/>	4.10	1.22%	\$27,609	1.74%
Expose Pipeline		<input checked="" type="checkbox"/>	7.95	2.37%	\$53,535	3.38%
Cut & Plug Pipeline	Plug shore end of P/L	<input checked="" type="checkbox"/>	7.95	2.37%	\$53,535	3.38%
Mobilize Vessel	Mob is for CB 180 & tug	<input type="checkbox"/>	20.50	6.12%	\$38,550	2.44%
Remove Pipeline	Remove 1.53 miles of P/L to State Tideland Boundary	<input checked="" type="checkbox"/>	27.00	8.06%	\$196,668	12.43%
Bury Pipeline		<input checked="" type="checkbox"/>	5.30	1.58%	\$38,605	2.44%
Demob Vessel	Demob is for CB 180 & tug	<input type="checkbox"/>	20.50	6.12%	\$22,550	1.43%
Demob P/L Removal Spread	Shared b/w 5 P/L's	<input type="checkbox"/>	4.10	1.22%	\$27,609	1.74%
Demob Dive Boat	Man Calc is for Demob of DP2 SAT DSV from the GOM. Shared w/ 6 P/L's	<input type="checkbox"/>	1.53	0.46%	\$250,000	15.80%
Offload CB 180		<input type="checkbox"/>	168.00	50.15%	\$41,000	2.59%
Task Total			308.50	92.10%	\$1,290,607	81.56%
Misc. Work Provision (15.00%)			13.24	3.95%	\$94,254	5.96%
Weather Provision (15.00%)			13.24	3.95%	\$94,254	5.96%
Consumables					\$0	0.00%
Waste Disposal					\$0	0.00%
Structure & Equipment Disposal					\$0	0.00%
Offloading					\$0	0.00%
Storage / Scrapping					\$0	0.00%
Reef Donation					\$0	0.00%
Cost of Engineering (8.00%)					\$103,249	6.52%
Total:			334.97	100.00%	\$1,582,364	100.00%



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Resources Breakdown

Irene Segment#:4610441

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	1.28%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$62,865	3.84%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	1.22%
Decommissioning Crew	\$650	per Hour	\$20,982	1.28%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$70,500	4.30%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$160,877	9.82%
DP Dive Boat	\$3,300	per Hour	\$353,859	21.59%
Manual Calculation	\$0	Independently Calculated	\$504,928	30.81%
Pipelay Barge	\$1,954	per Hour	\$110,206	6.72%
Pipeline Surveying	\$230	per Hour	\$24,663	1.50%
Rig Up CB 180	\$8,000	per Barge	\$16,000	0.98%
Saturation Decompression	\$751	per Hour	\$3,980	0.24%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Irene Segment#:4820441

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	1.37%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$62,865	4.11%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	1.31%
Decommissioning Crew	\$650	per Hour	\$13,969	0.91%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$70,500	4.61%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$126,727	8.29%
DP Dive Boat	\$3,300	per Hour	\$318,252	20.81%
Manual Calculation	\$0	Independently Calculated	\$504,928	33.02%
Pipelay Barge	\$1,954	per Hour	\$110,206	7.21%
Pipeline Surveying	\$230	per Hour	\$22,181	1.45%
Rig Up CB 180	\$8,000	per Barge	\$16,000	1.05%
Saturation Decompression	\$751	per Hour	\$3,980	0.26%



BSEE-POCSR

Pipeline Decommission Resources Breakdown

Irene Segment#:8" Water-Shore

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$3,000	per Day per Barge	\$21,000	1.37%
CB 180 & Tug	\$550	per Hour per Barge/Tug	\$62,865	4.11%
CB Damage Deduct	\$20,000	per Cargo Barge	\$20,000	1.31%
Decommissioning Crew	\$650	per Hour	\$13,969	0.91%
Dive Basic Spread- Mixed Gas	\$1,250	Per Hour	\$70,500	4.61%
Dive Basic Spread Saturation	\$3,165	Per Hour	\$126,727	8.29%
DP Dive Boat	\$3,300	per Hour	\$318,252	20.81%
Manual Calculation	\$0	Independently Calculated	\$504,928	33.02%
Pipelay Barge	\$1,954	per Hour	\$110,206	7.21%
Pipeline Surveying	\$230	per Hour	\$22,181	1.45%
Rig Up CB 180	\$8,000	per Barge	\$16,000	1.05%
Saturation Decompression	\$751	per Hour	\$3,980	0.26%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Irene Segment#:4610441

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.15%
Manual Calculation	\$2,464				
Mobilize Dive Boat		1.53	0.44%	\$250,000	15.26%
Manual Calculation	\$250,000				
Set Up Dive Boat		3.00	0.86%	\$22,035	1.34%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Decommissioning Crew	\$1,950				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	1.43%	\$36,725	2.24%
DP Dive Boat	\$16,500				
Dive Basic Spread Saturation	\$15,825				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		22.28	6.38%	\$163,647	9.99%
DP Dive Boat	\$73,524				
Dive Basic Spread Saturation	\$70,516				
Decommissioning Crew	\$14,482				
Pipeline Surveying	\$5,124				
Derig Decomm Equipment		2.00	0.57%	\$14,690	0.90%
DP Dive Boat	\$6,600				
Dive Basic Spread Saturation	\$6,330				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.15%
Manual Calculation	\$2,464				
Cut & Plug Pipeline		7.95	2.28%	\$53,225	3.25%
DP Dive Boat	\$26,235				
Dive Basic Spread Saturation	\$25,162				
Pipeline Surveying	\$1,829				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		5.30	1.52%	\$35,484	2.17%
DP Dive Boat	\$17,490				
Dive Basic Spread Saturation	\$16,775				
Pipeline Surveying	\$1,219				
Remove Tube Turn		5.30	1.52%	\$39,464	2.41%
DP Dive Boat	\$17,490				
Dive Basic Spread Saturation	\$16,775				
Pipeline Surveying	\$1,219				
Saturation Decompression	\$3,980				
Mob P/L Removal Spread		4.10	1.17%	\$27,609	1.68%
DP Dive Boat	\$13,530				
Dive Basic Spread- Mixed Gas	\$5,125				
Pipeline Surveying	\$943				
Pipelay Barge	\$8,011				
Expose Pipeline		7.95	2.28%	\$53,535	3.27%
Pipeline Surveying	\$1,829				
DP Dive Boat	\$26,235				
Dive Basic Spread- Mixed Gas	\$9,938				
Pipelay Barge	\$15,534				
Cut & Plug Pipeline		7.95	2.28%	\$53,535	3.27%
Pipeline Surveying	\$1,829				
DP Dive Boat	\$26,235				
Dive Basic Spread- Mixed Gas	\$9,938				
Pipelay Barge	\$15,534				
Mobilize Vessel		20.50	5.87%	\$38,550	2.35%
CB 180 & Tug	\$22,550				
Rig Up CB 180	\$16,000				
Remove Pipeline		27.00	7.74%	\$196,668	12.00%
Pipeline Surveying	\$6,210				
DP Dive Boat	\$89,100				
Dive Basic Spread- Mixed Gas	\$33,750				
Pipelay Barge	\$52,758				
CB 180 & Tug	\$14,850				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		5.30	1.52%	\$38,605	2.36%	
Pipeline Surveying	\$1,219					
DP Dive Boat	\$17,490					
Dive Basic Spread- Mixed Gas	\$6,625					
Pipelay Barge	\$10,356					
CB 180 & Tug	\$2,915					
Demob Vessel		20.50	5.87%	\$22,550	1.38%	
CB 180 & Tug	\$22,550					
Demob P/L Removal Spread		4.10	1.17%	\$27,609	1.68%	
Pipeline Surveying	\$943					
DP Dive Boat	\$13,530					
Dive Basic Spread- Mixed Gas	\$5,125					
Pipelay Barge	\$8,011					
Demob Dive Boat		1.53	0.44%	\$250,000	15.26%	
Manual Calculation	\$250,000					
Offload CB 180		168.00	48.14%	\$41,000	2.50%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	319.29	91.49%	\$1,369,859.75	83.59%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Irene Segment#:4820441

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.16%
Manual Calculation	\$2,464				
Mobilize Dive Boat		1.53	0.46%	\$250,000	16.35%
Manual Calculation	\$250,000				
Set Up Dive Boat		3.00	0.90%	\$22,035	1.44%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Decommissioning Crew	\$1,950				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	1.49%	\$36,725	2.40%
DP Dive Boat	\$16,500				
Dive Basic Spread Saturation	\$15,825				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		11.49	3.43%	\$84,394	5.52%
DP Dive Boat	\$37,917				
Dive Basic Spread Saturation	\$36,366				
Decommissioning Crew	\$7,469				
Pipeline Surveying	\$2,643				
Derig Decomm Equipment		2.00	0.60%	\$14,690	0.96%
DP Dive Boat	\$6,600				
Dive Basic Spread Saturation	\$6,330				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.16%
Manual Calculation	\$2,464				
Cut & Plug Pipeline		7.95	2.37%	\$53,225	3.48%
DP Dive Boat	\$26,235				
Dive Basic Spread Saturation	\$25,162				
Pipeline Surveying	\$1,829				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		5.30	1.58%	\$35,484	2.32%
DP Dive Boat	\$17,490				
Dive Basic Spread Saturation	\$16,775				
Pipeline Surveying	\$1,219				
Remove Tube Turn		5.30	1.58%	\$39,464	2.58%
DP Dive Boat	\$17,490				
Dive Basic Spread Saturation	\$16,775				
Pipeline Surveying	\$1,219				
Saturation Decompression	\$3,980				
Mob P/L Removal Spread		4.10	1.22%	\$27,609	1.81%
DP Dive Boat	\$13,530				
Dive Basic Spread- Mixed Gas	\$5,125				
Pipeline Surveying	\$943				
Pipelay Barge	\$8,011				
Expose Pipeline		7.95	2.37%	\$53,535	3.50%
Pipeline Surveying	\$1,829				
DP Dive Boat	\$26,235				
Dive Basic Spread- Mixed Gas	\$9,938				
Pipelay Barge	\$15,534				
Cut & Plug Pipeline		7.95	2.37%	\$53,535	3.50%
Pipeline Surveying	\$1,829				
DP Dive Boat	\$26,235				
Dive Basic Spread- Mixed Gas	\$9,938				
Pipelay Barge	\$15,534				
Mobilize Vessel		20.50	6.12%	\$38,550	2.52%
CB 180 & Tug	\$22,550				
Rig Up CB 180	\$16,000				
Remove Pipeline		27.00	8.06%	\$196,668	12.86%
Pipeline Surveying	\$6,210				
DP Dive Boat	\$89,100				
Dive Basic Spread- Mixed Gas	\$33,750				
Pipelay Barge	\$52,758				
CB 180 & Tug	\$14,850				



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		5.30	1.58%	\$38,605	2.52%	
Pipeline Surveying	\$1,219					
DP Dive Boat	\$17,490					
Dive Basic Spread- Mixed Gas	\$6,625					
Pipelay Barge	\$10,356					
CB 180 & Tug	\$2,915					
Demob Vessel		20.50	6.12%	\$22,550	1.47%	
CB 180 & Tug	\$22,550					
Demob P/L Removal Spread		4.10	1.22%	\$27,609	1.81%	
Pipeline Surveying	\$943					
DP Dive Boat	\$13,530					
Dive Basic Spread- Mixed Gas	\$5,125					
Pipelay Barge	\$8,011					
Demob Dive Boat		1.53	0.46%	\$250,000	16.35%	
Manual Calculation	\$250,000					
Offload CB 180		168.00	50.15%	\$41,000	2.68%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	308.50	92.10%	\$1,290,607.20	84.39%



BSEE-POCSR

Pipeline Decommission Cost Breakdown

Irene Segment#:8" Water-Shore

Task		Task Hours		Task Cost	
Mobilize Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.16%
Manual Calculation	\$2,464				
Mobilize Dive Boat		1.53	0.46%	\$250,000	16.35%
Manual Calculation	\$250,000				
Set Up Dive Boat		3.00	0.90%	\$22,035	1.44%
DP Dive Boat	\$9,900				
Dive Basic Spread Saturation	\$9,495				
Decommissioning Crew	\$1,950				
Pipeline Surveying	\$690				
Rig Up Decomm Equipment		5.00	1.49%	\$36,725	2.40%
DP Dive Boat	\$16,500				
Dive Basic Spread Saturation	\$15,825				
Decommissioning Crew	\$3,250				
Pipeline Surveying	\$1,150				
Pig & Flush Pipeline		11.49	3.43%	\$84,394	5.52%
DP Dive Boat	\$37,917				
Dive Basic Spread Saturation	\$36,366				
Decommissioning Crew	\$7,469				
Pipeline Surveying	\$2,643				
Derig Decomm Equipment		2.00	0.60%	\$14,690	0.96%
DP Dive Boat	\$6,600				
Dive Basic Spread Saturation	\$6,330				
Decommissioning Crew	\$1,300				
Pipeline Surveying	\$460				
Demob Flushing Crew & Equipment		0.00	0.00%	\$2,464	0.16%
Manual Calculation	\$2,464				
Cut & Plug Pipeline		7.95	2.37%	\$53,225	3.48%
DP Dive Boat	\$26,235				
Dive Basic Spread Saturation	\$25,162				
Pipeline Surveying	\$1,829				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Cut Pipeline Riser		5.30	1.58%	\$35,484	2.32%
DP Dive Boat	\$17,490				
Dive Basic Spread Saturation	\$16,775				
Pipeline Surveying	\$1,219				
Remove Tube Turn		5.30	1.58%	\$39,464	2.58%
DP Dive Boat	\$17,490				
Dive Basic Spread Saturation	\$16,775				
Pipeline Surveying	\$1,219				
Saturation Decompression	\$3,980				
Mob P/L Removal Spread		4.10	1.22%	\$27,609	1.81%
DP Dive Boat	\$13,530				
Dive Basic Spread- Mixed Gas	\$5,125				
Pipeline Surveying	\$943				
Pipelay Barge	\$8,011				
Expose Pipeline		7.95	2.37%	\$53,535	3.50%
Pipeline Surveying	\$1,829				
DP Dive Boat	\$26,235				
Dive Basic Spread- Mixed Gas	\$9,938				
Pipelay Barge	\$15,534				
Cut & Plug Pipeline		7.95	2.37%	\$53,535	3.50%
Pipeline Surveying	\$1,829				
DP Dive Boat	\$26,235				
Dive Basic Spread- Mixed Gas	\$9,938				
Pipelay Barge	\$15,534				
Mobilize Vessel		20.50	6.12%	\$38,550	2.52%
CB 180 & Tug	\$22,550				
Rig Up CB 180	\$16,000				
Remove Pipeline		27.00	8.06%	\$196,668	12.86%
Pipeline Surveying	\$6,210				
DP Dive Boat	\$89,100				
Dive Basic Spread- Mixed Gas	\$33,750				
Pipelay Barge	\$52,758				
CB 180 & Tug	\$14,850				



TSB OFFSHORE

BSEE-POCSR

Pipeline Decommission Cost Breakdown

Bury Pipeline		5.30	1.58%	\$38,605	2.52%	
Pipeline Surveying	\$1,219					
DP Dive Boat	\$17,490					
Dive Basic Spread- Mixed Gas	\$6,625					
Pipelay Barge	\$10,356					
CB 180 & Tug	\$2,915					
Demob Vessel		20.50	6.12%	\$22,550	1.47%	
CB 180 & Tug	\$22,550					
Demob P/L Removal Spread		4.10	1.22%	\$27,609	1.81%	
Pipeline Surveying	\$943					
DP Dive Boat	\$13,530					
Dive Basic Spread- Mixed Gas	\$5,125					
Pipelay Barge	\$8,011					
Demob Dive Boat		1.53	0.46%	\$250,000	16.35%	
Manual Calculation	\$250,000					
Offload CB 180		168.00	50.15%	\$41,000	2.68%	
Cargo Barge 180	\$21,000					
CB Damage Deduct	\$20,000					
		Total	308.50	92.10%	\$1,290,607.20	84.39%



BSEE-POCSR

Well Decommission Task Information

Irene Well#:All

Task	Note	Weather Provision	Task Hours	Task Cost
Well Abandonment - Manual Calculation		<input checked="" type="checkbox"/>	0.00	\$6,289,360 72.46%
		Task Total	0.00	\$6,289,360 72.46%
		Misc. Work Provision (15.00%)	0.00	\$943,404 10.87%
		Weather Provision (15.00%)	0.00	\$943,404 10.87%
		Consumables		\$0 0.00%
		Waste Disposal		\$0 0.00%
		Structure & Equipment Disposal		\$0 0.00%
		Offloading		\$0 0.00%
		Storage / Scrapping		\$0 0.00%
		Reef Donation		\$0 0.00%
		Cost of Engineering (8.00%)		\$503,149 5.80%
		Total:	0.00 100.00%	\$8,679,317 100.00%



BSEE-POCSR

Well Decommission Resources Breakdown

Irene Well#:All

Resource Used	Unit Cost	Cost
Manual Calculation	\$0 Independently Calculated	\$6,289,360 72.46%



BSEE-POCSR

Well Decommission Cost Breakdown

Irene Well#:All

Task		Task Hours		Task Cost	
Well Abandonment - Manual Calculation		0.00	0.00%	\$6,289,360	72.46%
Manual Calculation	\$6,289,360				
	Total	0.00	0.00%	\$6,289,360	72.46%