

# DECOMMISSIONING ESTIMATES HIOS SYSTEM

**PREPARED FOR**

**EL PASO FIELD SERVICES**

**PREPARED BY**



**TWACHTMAN SNYDER & BYRD, INC.**  
**PROJECT NO. 22071**  
**AUGUST 2002**



**TWACHTMAN SNYDER & BYRD, INC.** \_\_\_\_\_

EL PASO FIELD SERVICES  
DECOMMISSIONING ESTIMATES  
HIOS SYSTEM  
REPORT CONTROL SHEET

Date	Rev. No.	Revisions
8/23/02	0	Final Report

PREPARED BY:

TWACHTMAN SNYDER & BYRD, INC.

Revision	Prepared By:	Checked By:	Approved By:	Issue Date
0	SMN/JFC	ERV	DSF	8/23/02



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### **EL PASO FIELD SERVICES**

August 2002

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**EL PASO FIELD SERVICES  
DECOMMISSIONING ESTIMATES  
HIOS SYSTEM**

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## El Paso Field Services Summary Report

### Field: High Island A264

Platform	Removal Options	Function	Lease	Year Inst/Rem	Owner	Platform Gross	Pipeline Gross	Well Gross	Total Gross	Total Net
1 HI A264 HIOS-A-LIQ	1	DRILL/MANIFOLD		79 / 02	100.00%	\$2,413,583	\$1,151,802	\$0	\$3,565,385	\$3,565,385
2 HI A264 HIOS-B Flar	1	AUXILIARY		79 / 02	100.00%	\$1,089,219	\$0	\$0	\$1,089,219	\$1,089,219
3 HI A264 HIOS-B-CM	1	COMPRESSOR		79 / 02	100.00%	\$2,812,457	\$0	\$0	\$2,812,457	\$2,812,457
4 HI A264 HIOS-C QT	1	QUARTERS		79 / 02	100.00%	\$1,212,326	\$0	\$0	\$1,212,326	\$1,212,326
<b>Field Total</b>						\$7,527,585	\$1,151,802	\$0	\$8,679,387	\$8,679,387

### Field: High Island A330

Platform	Removal Options	Function	Lease	Year Inst/Rem	Owner	Platform Gross	Pipeline Gross	Well Gross	Total Gross	Total Net
1 HI A330 HIOS (1)	1	DRILL/MANIFOLD		79 /	50.00%	\$2,233,962	\$647,867	\$0	\$2,881,829	\$1,440,914
<b>Field Total</b>						\$2,233,962	\$647,867	\$0	\$2,881,829	\$1,440,914

### Field: High Island A343

Platform	Removal Options	Function	Lease	Year Inst/Rem	Owner	Platform Gross	Pipeline Gross	Well Gross	Total Gross	Total Net
1 HI A343 HIOS (1)	1	DRILL/MANIFOLD		79 / 02	100.00%	\$2,012,419	\$625,737	\$0	\$2,638,156	\$2,638,156
<b>Field Total</b>						\$2,012,419	\$625,737	\$0	\$2,638,156	\$2,638,156

### Field: High Island A350

Platform	Removal Options	Function	Lease	Year Inst/Rem	Owner	Platform Gross	Pipeline Gross	Well Gross	Total Gross	Total Net
1 HI A350 Pipeline (1)				/	50.62%	\$0	\$520,398	\$0	\$520,398	\$263,425
<b>Field Total</b>						\$0	\$520,398	\$0	\$520,398	\$263,425



## El Paso Field Services Summary Report

### Field: High Island A370

Platform	Removal Options	Function	Lease	Year Inst/Rem	Owner	Platform Gross	Pipeline Gross	Well Gross	Total Gross	Total Net
1	HI A370 Pipeline (1)			/	66.01%	\$0	\$409,698	\$0	\$409,698	\$270,441
<b>Field Total</b>						\$0	\$409,698	\$0	\$409,698	\$270,441

### Field: High Island A573

Platform	Removal Options	Function	Lease	Year Inst/Rem	Owner	Platform Gross	Pipeline Gross	Well Gross	Total Gross	Total Net
1	HI A573 HIOS (1)	1	DRILL/MANIFOLD	79 / 02	100.00%	\$5,070,974	\$727,302	\$0	\$5,798,276	\$5,798,276
<b>Field Total</b>						\$5,070,974	\$727,302	\$0	\$5,798,276	\$5,798,276

### Field: High Island A582

Platform	Removal Options	Function	Lease	Year Inst/Rem	Owner	Platform Gross	Pipeline Gross	Well Gross	Total Gross	Total Net
1	HI A582 HIOS (1)	1	DRILL/MANIFOLD	79 / 02	100.00%	\$5,070,974	\$1,326,318	\$0	\$6,397,292	\$6,397,292
<b>Field Total</b>						\$5,070,974	\$1,326,318	\$0	\$6,397,292	\$6,397,292

### Field: West Cameron 167

Platform	Removal Options	Function	Lease	Year Inst/Rem	Owner	Platform Gross	Pipeline Gross	Well Gross	Total Gross	Total Net
1	WC 167 HIOS (1)	1	DRILL/MANIFOLD	79 / 02	100.00%	\$1,364,044	\$0	\$0	\$1,364,044	\$1,364,044
2	WC 167 HIOS-Flare	1	AUXILIARY	79 / 02	100.00%	\$652,946	\$0	\$0	\$652,946	\$652,946
<b>Field Total</b>						\$2,016,990	\$0	\$0	\$2,016,990	\$2,016,990



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Summary Report**

**Number of Platforms: 12**

<b>Grand Totals</b>	\$23,932,904	\$5,409,122	\$0	\$29,342,026	\$27,504,881
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**\*\*Removal Options:**

**1: Complete removal; 2: Remote reef site; 3: Topple in place; 4: Partial removal in place**



## El Paso Field Services

### Summary Datasheet

#### Field: High Island A264

Platform	Function	Year Installe	Water Depth (ft)	#Piles(Ø")	Top Deck Dim (ft x ft)	Deck Weight	Jacket Weight (ton)	# Slots/ # Conductors (Ø")	#Wells	#Pipelines
1 HI A264 HIOS-A-LIQ (1)	DRILL/MANIFOLD	79	152	8(36)	135X70	1100	1218		0	4
2 HI A264 HIOS-B Flare (1)	AUXILIARY	79	152	3(30)			230		0	0
3 HI A264 HIOS-B-CMP (1)	COMPRESSOR	79	152	10(48)	195X80	1300	1518		0	0
4 HI A264 HIOS-C QTRS (1)	QUARTERS	79	152	4(36)	50X50	300	600		0	0

#### Field: High Island A330

Platform	Function	Year Installe	Water Depth (ft)	#Piles(Ø")	Top Deck Dim (ft x ft)	Deck Weight	Jacket Weight (ton)	# Slots/ # Conductors (Ø")	#Wells	#Pipelines
1 HI A330 HIOS (1)	DRILL/MANIFOLD	79	255	4(48)	41X41	300	1100		0	1

#### Field: High Island A343

Platform	Function	Year Installe	Water Depth (ft)	#Piles(Ø")	Top Deck Dim (ft x ft)	Deck Weight	Jacket Weight (ton)	# Slots/ # Conductors (Ø")	#Wells	#Pipelines
1 HI A343 HIOS (1)	DRILL/MANIFOLD	79	235	4(48)	70X70	550	800		0	1

#### Field: High Island A350

Platform	Function	Year Installe	Water Depth (ft)	#Piles(Ø")	Top Deck Dim (ft x ft)	Deck Weight	Jacket Weight (ton)	# Slots/ # Conductors (Ø")	#Wells	#Pipelines
1 HI A350 Pipeline (1)			0			0	0		0	1





## El Paso Field Services

### Summary Datasheet

#### Field: High Island A370

Platform	Function	Year Installe	Water Depth (ft)	#Piles(Ø")	Top Deck Dim (ft x ft)	Deck Weight	Jacket Weight (ton)	# Slots/ # Conductors (Ø")	#Wells	#Pipelines
1 HI A370 Pipeline (1)			0			0	0		0	1

#### Field: High Island A573

Platform	Function	Year Installe	Water Depth (ft)	#Piles(Ø")	Top Deck Dim (ft x ft)	Deck Weight	Jacket Weight (ton)	# Slots/ # Conductors (Ø")	#Wells	#Pipelines
1 HI A573 HIOS (1)	DRILL/MANIFOLD	79	340	4(36)	60X60	300	1901		0	1

#### Field: High Island A582

Platform	Function	Year Installe	Water Depth (ft)	#Piles(Ø")	Top Deck Dim (ft x ft)	Deck Weight	Jacket Weight (ton)	# Slots/ # Conductors (Ø")	#Wells	#Pipelines
1 HI A582 HIOS (1)	DRILL/MANIFOLD	79	330	4(36)	60X60	300	1701		0	2

#### Field: West Cameron 167

Platform	Function	Year Installe	Water Depth (ft)	#Piles(Ø")	Top Deck Dim (ft x ft)	Deck Weight	Jacket Weight (ton)	# Slots/ # Conductors (Ø")	#Wells	#Pipelines
1 WC 167 HIOS (1)	DRILL/MANIFOLD	79	46	8(36)	166X56	311	389		0	0
2 WC 167 HIOS-Flare (1)	AUXILIARY	79	46	3(30)			100		0	0

Number of Platforms: 12

**HI A264 HIOS-A-LIQ**



## **El Paso Field Services**

### **Platform Salvage Option**

### **HI A264 HIOS-A-LIQ (Ver 1)**

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High Island Block A264 has five structures that are operated by El Paso Field Services. The structures will be removed in one mobilization and demobilization of a 2000-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be pigged, flushed, cleaned, plugged and left in-situ. (See #12 below.)

High Island A264 HIOS-A-LIQ is an 8-pile Liquid Gathering Platform installed in 1979 in 152' water depth and bridge connected to the HI A264 HIOS-C-QTR platform. Since the A and C platforms are bridge connected, one 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The top deck equipment, and deck will be placed on a 180' x 54' cargo barge. Piles will be explosively severed and a second 300' x 100' cargo barge will be used for the jacket. The decks, facilities and jacket will be taken to shore and scrapped. A 1,400 ft radius will be needed to clear both platform sites of any bottom debris.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.
17. Engineering & Project Management cost 8% (company or other)



**El Paso Field Services**

**Platform Salvage Option**

**HI A264 HIOS-A-LIQ (Ver 1)**

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18. Work Contingency 15%

19. Weather Contingency 6%

20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.

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Estimated Decommissioning Gross Cost = \$3,565,385

Estimated Decommissioning Net Cost = \$3,565,385



## El Paso Field Services

### Basic Information

#### HI A264 HIOS-A-LIQ (Ver 1)

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#### General Data

Platform:	HI A264 HIOS-A-LIQ
Function:	DRILL/MANIFOLD
Type:	Steel
Water Depth:	152'
Pre 461H?:	Yes
Year Installed:	1979
Estimated Removal Year:	2002
District:	Gulf of Mexico
Lease Number:	
Account Code:	TSB - 22071
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	4
Estimate Complete?:	No

#### Partner Data

Partner	Working Intere
1 El Paso	100.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$2,413,583	\$2,413,583
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$1,151,802	\$1,151,802
Total Decommissioning Cost:	\$3,565,385	\$3,565,385



## El Paso Field Services

### Platform Information

### HI A264 HIOS-A-LIQ (Ver 1)

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#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	8	36"	1.5"	No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:	135X70	
Middle:		
Lower:		

#### 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:	1218.00		
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	1100 Tons
Number of Padeyes Required:	0
Deck Installation Date:	3/30/79
Deck Contractor:	



## El Paso Field Services

### Platform Information

### HI A264 HIOS-A-LIQ (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Bridge 200'	75.00
Equipment	0.00
Heliport	20.00

### Members to be Cut Data

Top Members		Underwater Members	
Size	Qty	Size	Qty
14.00	1.00	14.00	2.00
16.00	2.00	16.00	6.00
		18.00	7.00
		20.00	5.00
		30.00	4.00

### Cargo Descriptions

Cargo Barge Size	Cargo Description
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CB 180 x 54	Deck > 500T	Equipment
CB 300 x 100	Jkt > 700T	Piles

### Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$155,582.41



## **El Paso Field Services**

### **Platform Comments**

#### **HI A264 HIOS-A-LIQ (Ver 1)**

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Assumed the following:

Jacket Weights, Deck Weights, Pile Sizes, Equipment Weights, Bridge Weights,  
Deck(s) Sizes





## El Paso Field Services

### Platform Decommission Task Information

#### HI A264 HIOS-A-LIQ (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$16,801.92	0.70%
Platform Removal Preparation		<input type="checkbox"/>	504.00	22.64%	\$177,786.00	7.37%
Mobilize Work Boat		<input type="checkbox"/>	17.20	0.77%	\$5,624.40	0.23%
NMFS Marine Observation		<input type="checkbox"/>	48.00	2.16%	\$15,696.00	0.65%
Demob Work Boat		<input type="checkbox"/>	17.20	0.77%	\$4,902.00	0.20%
Mobilize DB 2000	Divided between the HIOS platforms in the field.	<input type="checkbox"/>	5.08	0.23%	\$39,133.05	1.62%
Mobilize CB 180 & Tug	For Deck, Equipment	<input type="checkbox"/>	36.40	1.64%	\$26,560.00	1.10%
Mobilize CB 240 & Tug	For Jacket and Piles	<input type="checkbox"/>	36.40	1.64%	\$26,560.00	1.10%
Mobilize CB 240 & Tug	For Jacket and Piles	<input type="checkbox"/>	36.40	1.64%	\$26,560.00	1.10%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.30%	\$47,630.57	1.97%
Bring in Cargo Barge		<input checked="" type="checkbox"/>	2.00	0.09%	\$14,702.76	0.61%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	3.85	0.17%	\$28,302.82	1.17%
Remove Equipment		<input checked="" type="checkbox"/>	1.50	0.07%	\$11,027.07	0.46%
Remove 8 Pile Deck		<input checked="" type="checkbox"/>	9.35	0.42%	\$68,735.41	2.85%
Demob CB 180 & Tug		<input type="checkbox"/>	36.40	1.64%	\$10,738.00	0.44%
Bring in Cargo Barge	For 1st half of Jacket	<input checked="" type="checkbox"/>	2.00	0.09%	\$14,912.76	0.62%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.36%	\$59,651.04	2.47%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.04%	\$10,956.38	0.45%
Sever Piles		<input checked="" type="checkbox"/>	4.84	0.22%	\$36,088.88	1.50%
Remove Piles from Jackt Legs		<input checked="" type="checkbox"/>	18.78	0.84%	\$140,030.82	5.80%
Install Closure Plates		<input checked="" type="checkbox"/>	9.00	0.40%	\$67,107.42	2.78%
Deballast Piles or Jkt Lg		<input checked="" type="checkbox"/>	10.00	0.45%	\$74,563.80	3.09%
Cut Jacket		<input checked="" type="checkbox"/>	52.18	2.34%	\$389,073.91	16.12%
Remove Jacket - Meth 3	Modified	<input checked="" type="checkbox"/>	21.70	0.97%	\$160,892.05	6.67%
Demob CB 240 & Tug		<input type="checkbox"/>	36.40	1.64%	\$14,560.00	0.60%
Bring in Cargo Barge	For 2nd half of Jacket	<input checked="" type="checkbox"/>	2.00	0.09%	\$14,912.76	0.62%
Remove Jacket - Meth 3	Modified	<input checked="" type="checkbox"/>	21.70	0.97%	\$160,892.05	6.67%
Demob CB 240 & Tug		<input checked="" type="checkbox"/>	36.40	1.64%	\$14,560.00	0.60%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.30%	\$47,347.07	1.96%
Demob DB 2000	Divided between the HIOS platforms in the field.	<input type="checkbox"/>	5.08	0.23%	\$39,133.05	1.62%
Site Clearance - with Trawler	Divided between the HIOS platforms in the field.	<input checked="" type="checkbox"/>	260.29	11.69%	\$64,963.06	2.69%
Site Clearance Verify	Divided between the HIOS platforms in the field.	<input checked="" type="checkbox"/>	400.57	18.00%	\$65,174.81	2.70%
Offload CB 180		<input type="checkbox"/>	384.00	17.25%	\$29,200.00	1.21%
Offload CB 240		<input type="checkbox"/>	0.00	0.00%	\$10,000.00	0.41%



## El Paso Field Services

### Platform Decommission Task Information

#### HI A264 HIOS-A-LIQ (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Offload CB 240		<input type="checkbox"/>	0.00	0.00%	\$10,000.00	0.41%
<b>Task Total</b>			2041.22	91.71%	\$1,944,779.86	80.58%
<b>Misc. Work Provision (15.00%)</b>			131.8	5.92%	\$223,728.80	9.27%
<b>Weather Contingency (6.00%)</b>			52.72	2.37%	\$89,491.52	3.71%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$155,582.40	6.45%
<b>Total:</b>			2225.74	100.00%	\$2,413,582.58	100.00%



## El Paso Field Services

### Platform Decommission Resources Breakdown

### HI A264 HIOS-A-LIQ (Ver 1)

**Total Cost: \$2,413,583.00**

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$1,200.00	per Day per Barge	\$19,200.00	0.80%
CB 180 & Tug	\$295.00	per Hour per Barge/Tug	\$15,664.50	0.65%
CB 240 & Tug	\$400.00	per Hour per Barge/Tug	\$133,280.00	5.52%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$30,000.00	1.24%
Decomm Platform	\$0.00	Calculated from tables	\$177,786.00	7.37%
Derrick Barge 2000	\$6,650.00	per Hour per barge	\$1,273,874.00	52.78%
Dive Serv - Basic	\$0.00	Calculated from tables	\$45,376.75	1.88%
Expl Charge - Piling	\$58.34	per Inch of Outside Diam	\$16,801.92	0.70%
Expl Technician	\$62.50	per Hour	\$11,972.52	0.50%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	0.44%
Nets (Heavy Duty, Non-Repairable)	\$4,400.00	ea	\$13,200.00	0.55%
Nets (Heavy Duty, Repairable)	\$2,200.00	ea	\$17,600.00	0.73%
Nets (Non-Repairable)	\$2,000.00	ea	\$6,000.00	0.25%
Nets (Repairable)	\$1,100.00	ea	\$6,600.00	0.27%
NMFS Observers (2)	\$42.00	per Hour	\$8,250.90	0.34%
Pipeline Survey	\$65.00	per Hour	\$12,451.40	0.52%
Rig Up CB 240	\$12,000.00	per Barge	\$12,000.00	0.50%
Rig Up CB 300	\$12,000.00	per Barge	\$24,000.00	0.99%
Trawler	\$131.25	per Hour	\$86,737.87	3.59%
Work Boat	\$285.00	per Hour	\$23,484.00	0.97%



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-A-LIQ (Ver 1)

Total Hours: 2225.74

Total Cost: \$2,413,583.00

Task Cost

## Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$16,801.92</b>	<b>0.70%</b>
Expl Charge - Piling	\$16,801.92				
<b>Platform Removal Preparation</b>		<b>504.00</b>	<b>22.64%</b>	<b>\$177,786.00</b>	<b>7.37%</b>
Decomm Platform	\$177,786.00				
<b>Mobilize Work Boat</b>		<b>17.20</b>	<b>0.77%</b>	<b>\$5,624.40</b>	<b>0.23%</b>
Work Boat	\$4,902.00				
NMFS Observers (2)	\$722.40				
<b>NMFS Marine Observation</b>		<b>48.00</b>	<b>2.16%</b>	<b>\$15,696.00</b>	<b>0.65%</b>
Work Boat	\$13,680.00				
NMFS Observers (2)	\$2,016.00				
<b>Demob Work Boat</b>		<b>17.20</b>	<b>0.77%</b>	<b>\$4,902.00</b>	<b>0.20%</b>
Work Boat	\$4,902.00				
<b>Mobilize DB 2000</b>		<b>5.08</b>	<b>0.23%</b>	<b>\$39,133.05</b>	<b>1.62%</b>
Derrick Barge 2000	\$33,782.00				
Pipeline Survey	\$330.20				
Expl Technician	\$317.50				
Dive Serv - Basic	\$1,203.35				
Helicopter Trips	\$3,500.00				
<b>Mobilize CB 180 &amp; Tug</b>		<b>36.40</b>	<b>1.64%</b>	<b>\$26,560.00</b>	<b>1.10%</b>
CB 240 & Tug	\$14,560.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>36.40</b>	<b>1.64%</b>	<b>\$26,560.00</b>	<b>1.10%</b>
CB 240 & Tug	\$14,560.00				
Rig Up CB 300	\$12,000.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>36.40</b>	<b>1.64%</b>	<b>\$26,560.00</b>	<b>1.10%</b>
CB 240 & Tug	\$14,560.00				
Rig Up CB 300	\$12,000.00				

**El Paso Field Services****Platform Decommission Cost Breakdown****HI A264 HIOS-A-LIQ (Ver 1)****Total Hours: 2225.74****Total Cost: \$2,413,583.00****Task Cost****Task**

<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.30%</b>	<b>\$47,630.57</b>	<b>1.97%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$1,598.94				
Pipeline Survey	\$438.75				
NMFS Observers (2)	\$283.50				
Expl Technician	\$421.88				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.09%</b>	<b>\$14,702.76</b>	<b>0.61%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$473.76				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 180 & Tug	\$590.00				
Expl Technician	\$125.00				
<b>Cut Deck/Equip/Misc</b>		<b>3.85</b>	<b>0.17%</b>	<b>\$28,302.82</b>	<b>1.17%</b>
CB 180 & Tug	\$1,135.75				
Derrick Barge 2000	\$25,602.50				
Dive Serv - Basic	\$911.99				
Expl Technician	\$240.63				
Pipeline Survey	\$250.25				
NMFS Observers (2)	\$161.70				
<b>Remove Equipment</b>		<b>1.50</b>	<b>0.07%</b>	<b>\$11,027.07</b>	<b>0.46%</b>
CB 180 & Tug	\$442.50				
Derrick Barge 2000	\$9,975.00				
Dive Serv - Basic	\$355.32				
Pipeline Survey	\$97.50				
NMFS Observers (2)	\$63.00				
Expl Technician	\$93.75				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-A-LIQ (Ver 1)

Total Hours: 2225.74

Total Cost: \$2,413,583.00

Task Cost

## Task

<b>Remove 8 Pile Deck</b>		<b>9.35</b>	<b>0.42%</b>	<b>\$68,735.41</b>	<b>2.85%</b>
CB 180 & Tug	\$2,758.25				
Derrick Barge 2000	\$62,177.50				
Dive Serv - Basic	\$2,214.83				
Expl Technician	\$584.38				
Pipeline Survey	\$607.75				
NMFS Observers (2)	\$392.70				
<b>Demob CB 180 &amp; Tug</b>		<b>36.40</b>	<b>1.64%</b>	<b>\$10,738.00</b>	<b>0.44%</b>
CB 180 & Tug	\$10,738.00				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.09%</b>	<b>\$14,912.76</b>	<b>0.62%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$473.76				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 240 & Tug	\$800.00				
Expl Technician	\$125.00				
<b>Jet/Airlift Pile Mud Plug</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
CB 240 & Tug	\$0.00				
Derrick Barge 2000	\$0.00				
Dive Serv - Basic	\$0.00				
Expl Technician	\$0.00				
Pipeline Survey	\$0.00				
NMFS Observers (2)	\$0.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-A-LIQ (Ver 1)

Total Hours: 2225.74

Total Cost: \$2,413,583.00

Task Cost

## Task

<b>Standby for Daylight Det.</b>		<b>8.00</b>	<b>0.36%</b>	<b>\$59,651.04</b>	<b>2.47%</b>
Derrick Barge 2000	\$53,200.00				
CB 240 & Tug	\$3,200.00				
Expl Technician	\$500.00				
NMFS Observers (2)	\$336.00				
Pipeline Survey	\$520.00				
Dive Serv - Basic	\$1,895.04				
<b>Pre/Post Detonat'n Survey</b>		<b>1.00</b>	<b>0.04%</b>	<b>\$10,956.38</b>	<b>0.45%</b>
CB 240 & Tug	\$400.00				
Derrick Barge 2000	\$6,650.00				
Dive Serv - Basic	\$236.88				
Expl Technician	\$62.50				
Pipeline Survey	\$65.00				
Helicopter Trips	\$3,500.00				
NMFS Observers (2)	\$42.00				
<b>Sever Piles</b>		<b>4.84</b>	<b>0.22%</b>	<b>\$36,088.88</b>	<b>1.50%</b>
CB 240 & Tug	\$1,936.00				
Derrick Barge 2000	\$32,186.00				
Dive Serv - Basic	\$1,146.50				
Expl Technician	\$302.50				
Pipeline Survey	\$314.60				
NMFS Observers (2)	\$203.28				
<b>Remove Piles from Jackt Legs</b>		<b>18.78</b>	<b>0.84%</b>	<b>\$140,030.82</b>	<b>5.80%</b>
CB 240 & Tug	\$7,512.00				
Derrick Barge 2000	\$124,887.00				
Dive Serv - Basic	\$4,448.61				
Expl Technician	\$1,173.75				
Pipeline Survey	\$1,220.70				
NMFS Observers (2)	\$788.76				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-A-LIQ (Ver 1)

Total Hours: 2225.74

Total Cost: \$2,413,583.00

Task Cost

## Task

<b>Install Closure Plates</b>		<b>9.00</b>	<b>0.40%</b>	<b>\$67,107.42</b>	<b>2.78%</b>
CB 240 & Tug	\$3,600.00				
Derrick Barge 2000	\$59,850.00				
Dive Serv - Basic	\$2,131.92				
Expl Technician	\$562.50				
Pipeline Survey	\$585.00				
NMFS Observers (2)	\$378.00				
<b>Deballast Piles or Jkt Lg</b>		<b>10.00</b>	<b>0.45%</b>	<b>\$74,563.80</b>	<b>3.09%</b>
CB 240 & Tug	\$4,000.00				
Derrick Barge 2000	\$66,500.00				
Dive Serv - Basic	\$2,368.80				
Expl Technician	\$625.00				
Pipeline Survey	\$650.00				
NMFS Observers (2)	\$420.00				
<b>Cut Jacket</b>		<b>52.18</b>	<b>2.34%</b>	<b>\$389,073.91</b>	<b>16.12%</b>
Derrick Barge 2000	\$346,997.00				
CB 240 & Tug	\$20,872.00				
Expl Technician	\$3,261.25				
Pipeline Survey	\$3,391.70				
NMFS Observers (2)	\$2,191.56				
Dive Serv - Basic	\$12,360.40				
<b>Remove Jacket - Meth 3</b>		<b>21.70</b>	<b>0.97%</b>	<b>\$160,892.05</b>	<b>6.67%</b>
CB 240 & Tug	\$8,680.00				
Derrick Barge 2000	\$144,305.00				
Dive Serv - Basic	\$5,140.30				
Pipeline Survey	\$1,410.50				
Expl Technician	\$1,356.25				
<b>Demob CB 240 &amp; Tug</b>		<b>36.40</b>	<b>1.64%</b>	<b>\$14,560.00</b>	<b>0.60%</b>
CB 240 & Tug	\$14,560.00				





## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-A-LIQ (Ver 1)

Total Hours: 2225.74

Total Cost: \$2,413,583.00

Task Cost

## Task

<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.09%</b>	<b>\$14,912.76</b>	<b>0.62%</b>
CB 240 & Tug	\$800.00				
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$473.76				
Expl Technician	\$125.00				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
<b>Remove Jacket - Meth 3</b>		<b>21.70</b>	<b>0.97%</b>	<b>\$160,892.05</b>	<b>6.67%</b>
CB 240 & Tug	\$8,680.00				
Derrick Barge 2000	\$144,305.00				
Dive Serv - Basic	\$5,140.30				
Pipeline Survey	\$1,410.50				
Expl Technician	\$1,356.25				
<b>Demob CB 240 &amp; Tug</b>		<b>36.40</b>	<b>1.64%</b>	<b>\$14,560.00</b>	<b>0.60%</b>
CB 240 & Tug	\$14,560.00				
<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.30%</b>	<b>\$47,347.07</b>	<b>1.96%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$1,598.94				
Pipeline Survey	\$438.75				
Expl Technician	\$421.88				
<b>Demob DB 2000</b>		<b>5.08</b>	<b>0.23%</b>	<b>\$39,133.05</b>	<b>1.62%</b>
Derrick Barge 2000	\$33,782.00				
Pipeline Survey	\$330.20				
Dive Serv - Basic	\$1,203.35				
Expl Technician	\$317.50				
Helicopter Trips	\$3,500.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-A-LIQ (Ver 1)

Total Hours: 2225.74

Total Cost: \$2,413,583.00

Task Cost

## Task

<b>Site Clearance - with Trawler</b>		<b>260.29</b>	<b>11.69%</b>	<b>\$64,963.06</b>	<b>2.69%</b>
Trawler	\$34,163.06				
Nets (Heavy Duty, Non-Repairable)	\$13,200.00				
Nets (Heavy Duty, Repairable)	\$17,600.00				
<b>Site Clearance Verify</b>		<b>400.57</b>	<b>18.00%</b>	<b>\$65,174.81</b>	<b>2.70%</b>
Trawler	\$52,574.81				
Nets (Non-Repairable)	\$6,000.00				
Nets (Repairable)	\$6,600.00				
<b>Offload CB 180</b>		<b>384.00</b>	<b>17.25%</b>	<b>\$29,200.00</b>	<b>1.21%</b>
Cargo Barge 180	\$19,200.00				
CB Damage Deduct	\$10,000.00				
<b>Offload CB 240</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,000.00</b>	<b>0.41%</b>
CB 240 & Tug	\$0.00				
CB Damage Deduct	\$10,000.00				
<b>Offload CB 240</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,000.00</b>	<b>0.41%</b>
CB 240 & Tug	\$0.00				
CB Damage Deduct	\$10,000.00				
<b>Total</b>		<b>2041.22</b>	<b>91.71%</b>	<b>\$1,944,779.86</b>	<b>80.58%</b>



## El Paso Field Services

### Pipeline Information

#### HI A264 HIOS-A-LIQ (Ver1) Segment#:0001

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#### General Data

Water Depth:	152'
Origin / Terminus:	Origin
Opposite End Name:	HI A 264 B
Opposite End Water Depth:	152'
Pipeline Operator:	El Paso Field Services
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	36"	Wall Thickness:		Length:	300'
Depth of Burial:		# Crossings:		Product:	
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

This pipeline will be removed with the derrick barge that removes the platform. The derrick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

### Pipeline Information

#### HI A264 HIOS-A-LIQ (Ver1) Segment#:0002

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#### General Data

Water Depth:	152'
Origin / Terminus:	Terminus
Opposite End Name:	HI A 264 B
Opposite End Water Depth:	152'
Pipeline Operator:	El Paso Field Services
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	36"	Wall Thickness:		Length:	300'
Depth of Burial:		# Crossings:		Product:	
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

This pipeline will be removed with the derrick barge that removes the platform. The derrick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

### Pipeline Information

#### HI A264 HIOS-A-LIQ (Ver1) Segment#:4593

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#### General Data

Water Depth:	152'
Origin / Terminus:	Origin
Opposite End Name:	HI A264B
Opposite End Water Depth:	152'
Pipeline Operator:	El Paso Field Services
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	36"	Wall Thickness:		Length:	15840'
Depth of Burial:		# Crossings:		Product:	Liquids
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

A 100-ft section is removed at each end of the pipeline. The derrick barge that will remove the platform will remove the pipeline sections. The derrick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

### Pipeline Information

#### HI A264 HIOS-A-LIQ (Ver1) Segment#:7364

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#### General Data

Water Depth:	152'
Origin / Terminus:	Origin
Opposite End Name:	WC 167
Opposite End Water Depth:	46'
Pipeline Operator:	El Paso Field Services
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	42"	Wall Thickness:		Length:	347952'
Depth of Burial:		# Crossings:		Product:	Gas/Cond
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

A 100-ft section is removed at each end of the pipeline. The derrick barge that will remove the platform will remove the pipeline sections. The derrick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

### Pipeline Decommission Task Information

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:0001

Task	Note	Contingency	Task Hours		Task Cost	
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	10.08%	\$2,562.50	0.85%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	4.00	8.06%	\$2,050.00	0.68%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	4.03%	\$1,025.00	0.34%
Remove Pipeline	Accounted in segment 7364	<input checked="" type="checkbox"/>	30.00	60.47%	\$227,312.70	75.64%
<b>Task Total</b>			41.00	82.64%	\$232,950.20	77.52%
<b>Misc. Work Provision (15.00%)</b>			6.15	12.40%	\$34,942.53	11.63%
<b>Weather Contingency (6.00%)</b>			2.46	4.96%	\$13,977.01	4.65%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$18,636.02	6.20%
<b>Total:</b>			49.61	100.00%	\$300,505.76	100.00%



## El Paso Field Services

### Pipeline Decommission Task Information

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:0002

Task	Note	Contingency	Task Hours		Task Cost	
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	10.08%	\$2,562.50	0.85%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	4.00	8.06%	\$2,050.00	0.68%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	4.03%	\$1,025.00	0.34%
Remove Pipeline		<input checked="" type="checkbox"/>	30.00	60.47%	\$227,312.70	75.64%
<b>Task Total</b>			41.00	82.64%	\$232,950.20	77.52%
<b>Misc. Work Provision (15.00%)</b>			6.15	12.40%	\$34,942.53	11.63%
<b>Weather Contingency (6.00%)</b>			2.46	4.96%	\$13,977.01	4.65%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$18,636.02	6.20%
<b>Total:</b>			49.61	100.00%	\$300,505.76	100.00%





## El Paso Field Services

### Pipeline Decommission Task Information

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:4593

Task	Note	Contingency	Task Hours		Task Cost	
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	4.92%	\$2,562.50	2.07%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	5.00	4.92%	\$2,562.50	2.07%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.97%	\$1,025.00	0.83%
Mobilize Dive Boat	Accounted in segment 7364	<input type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.95%	\$3,466.77	2.80%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	4.68%	\$5,500.61	4.44%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	4.76	4.68%	\$5,500.61	4.44%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.17	3.12%	\$3,663.23	2.96%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.17	3.12%	\$3,663.23	2.96%
Bury Pipeline		<input checked="" type="checkbox"/>	3.17	3.12%	\$3,663.23	2.96%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	2.95%	\$3,466.77	2.80%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	4.68%	\$5,500.61	4.44%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	4.76	4.68%	\$5,500.61	4.44%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.17	3.12%	\$3,663.23	2.96%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.17	3.12%	\$3,663.23	2.96%
Bury Pipeline		<input checked="" type="checkbox"/>	3.17	3.12%	\$3,663.23	2.96%
Demob Dive Boat	Accounted in segment 7364	<input type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Remove Pipeline		<input checked="" type="checkbox"/>	28.00	27.53%	\$39,006.52	31.47%
<b>Task Total</b>			84.06	82.64%	\$96,071.88	77.52%
<b>Misc. Work Provision (15.00%)</b>			12.61	12.40%	\$14,410.78	11.63%
<b>Weather Contingency (6.00%)</b>			5.04	4.96%	\$5,764.31	4.65%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$7,685.75	6.20%
<b>Total:</b>			101.71	100.00%	\$123,932.72	100.00%



## El Paso Field Services

### Pipeline Decommission Task Information

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:7364

Task	Note	Contingency	Task Hours		Task Cost	
Mobilize Work Boat		<input checked="" type="checkbox"/>	17.20	8.23%	\$8,815.00	2.07%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	2.39%	\$2,562.50	0.60%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	26.00	12.45%	\$13,325.00	3.12%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.96%	\$1,025.00	0.24%
Demob Work Boat		<input checked="" type="checkbox"/>	17.20	8.23%	\$8,815.00	2.07%
Mobilize Dive Boat		<input type="checkbox"/>	17.20	8.23%	\$19,876.15	4.66%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.44%	\$3,466.77	0.81%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	2.28%	\$5,500.61	1.29%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	4.76	2.28%	\$5,500.61	1.29%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.17	1.52%	\$3,663.23	0.86%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.17	1.52%	\$3,663.23	0.86%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	2.28%		
Bury Pipeline		<input checked="" type="checkbox"/>	3.17	1.52%	\$3,663.23	0.86%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.44%	\$3,466.77	0.81%
Expose Pipeline		<input checked="" type="checkbox"/>	4.76	2.28%	\$5,500.61	1.29%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	4.76	2.28%	\$5,500.61	1.29%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	3.17	1.52%	\$3,663.23	0.86%
Remove Tube Turn		<input checked="" type="checkbox"/>	3.17	1.52%	\$3,663.23	0.86%
Bury Pipeline		<input checked="" type="checkbox"/>	3.17	1.52%	\$3,663.23	0.86%
Demob Dive Boat		<input type="checkbox"/>	17.20	8.23%	\$19,876.15	4.66%
Remove Pipeline	Remove 100' of Pipeline from Tube Turn.	<input checked="" type="checkbox"/>	28.00	13.40%	\$212,158.52	49.70%
<b>Task Total</b>			178.62	85.50%	\$337,368.68	79.04%
<b>Misc. Work Provision (15.00%)</b>			21.63	10.36%	\$44,642.46	10.46%
<b>Weather Contingency (6.00%)</b>			8.65	4.14%	\$17,856.98	4.18%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$26,989.49	6.32%
<b>Total:</b>			208.91	100.00%	\$426,857.61	100.00%



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Pipeline Decommission Resources Breakdown

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:0001

**Total Cost: \$300,505.76**

<b>Resource Used</b>	<b>Unit Cost</b>		<b>Cost</b>	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$10,500.00	3.49%
DB 2000	\$6,650.00	per Hour per Barge	\$199,500.00	66.39%
Decommissioning Crew	\$0.00	Calculated from tables	\$1,237.50	0.41%
Dive Serv - Basic	\$0.00	Calculated from tables	\$7,106.40	2.36%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$10,206.30	3.40%
Work Boat	\$0.00	Calculated from tables	\$4,400.00	1.46%



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Pipeline Decommission Resources Breakdown**

#### **HI A264 HIOS-A-LIQ (Ver 1) Segment#:0002**

**Total Cost: \$300,505.76**

<b>Resource Used</b>	<b>Unit Cost</b>		<b>Cost</b>	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$10,500.00	3.49%
DB 2000	\$6,650.00	per Hour per Barge	\$199,500.00	66.39%
Decommissioning Crew	\$0.00	Calculated from tables	\$1,237.50	0.41%
Dive Serv - Basic	\$0.00	Calculated from tables	\$7,106.40	2.36%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$10,206.30	3.40%
Work Boat	\$0.00	Calculated from tables	\$4,400.00	1.46%



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Pipeline Decommission Resources Breakdown**

#### **HI A264 HIOS-A-LIQ (Ver 1) Segment#:4593**

**Total Cost: \$123,932.73**

<b>Resource Used</b>	<b>Unit Cost</b>		<b>Cost</b>	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$9,800.00	7.91%
Decommissioning Crew	\$0.00	Calculated from tables	\$6,306.78	5.09%
Dive Boat	\$0.00	Calculated from tables	\$33,579.96	27.10%
Dive Serv - Basic	\$0.00	Calculated from tables	\$17,069.58	13.77%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$24,515.56	19.78%
Manual Calculation	\$0.00	Independently Calculated	\$0.00	0.00%
Work Boat	\$0.00	Calculated from tables	\$4,800.00	3.87%



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Pipeline Decommission Resources Breakdown

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:7364

**Total Cost: \$423,677.44**

Resource Used	Unit Cost		Cost	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$9,800.00	2.31%
DB 2000	\$6,650.00	per Hour per Barge	\$186,200.00	43.95%
Decommissioning Crew	\$0.00	Calculated from tables	\$16,409.28	3.87%
Dive Boat	\$0.00	Calculated from tables	\$36,562.36	8.63%
Dive Serv - Basic	\$0.00	Calculated from tables	\$25,218.26	5.95%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$36,218.78	8.55%
Manual Calculation	\$0.00	Independently Calculated	\$0.00	0.00%
Work Boat	\$0.00	Calculated from tables	\$26,960.00	6.36%



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:0001

Total Hours: 49.61

Total Cost: \$300,505.76

Task		Task Hours	Task Cost
<b>Rig Up Decomm Equipment</b>		<b>5.00 10.08%</b>	<b>\$2,562.50 0.85%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>4.00 8.06%</b>	<b>\$2,050.00 0.68%</b>
Work Boat	\$1,600.00		
Decommissioning Crew	\$450.00		
<b>Derig Decomm Equipment</b>		<b>2.00 4.03%</b>	<b>\$1,025.00 0.34%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Remove Pipeline</b>		<b>30.00 60.47%</b>	<b>\$227,312.70 75.64%</b>
DB 2000	\$199,500.00		
Dive Serv - Basic	\$7,106.40		
Dive Serv - Suppl	\$10,206.30		
CB 240 & Tug	\$10,500.00		
<b>Total</b>		<b>41.00 82.64%</b>	<b>\$232,950.20 77.52%</b>



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:0002

Total Hours: 49.61

Total Cost: \$300,505.76

Task		Task Hours	Task Cost
<b>Rig Up Decomm Equipment</b>		<b>5.00 10.08%</b>	<b>\$2,562.50 0.85%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>4.00 8.06%</b>	<b>\$2,050.00 0.68%</b>
Work Boat	\$1,600.00		
Decommissioning Crew	\$450.00		
<b>Derig Decomm Equipment</b>		<b>2.00 4.03%</b>	<b>\$1,025.00 0.34%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Remove Pipeline</b>		<b>30.00 60.47%</b>	<b>\$227,312.70 75.64%</b>
DB 2000	\$199,500.00		
Dive Serv - Basic	\$7,106.40		
Dive Serv - Suppl	\$10,206.30		
CB 240 & Tug	\$10,500.00		
<b>Total</b>		<b>41.00 82.64%</b>	<b>\$232,950.20 77.52%</b>





## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:4593

Total Hours: 101.71

Total Cost: \$123,932.73

Task		Task Hours	Task Cost
<b>Rig Up Decomm Equipment</b>		<b>5.00 4.92%</b>	<b>\$2,562.50 2.07%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>5.00 4.92%</b>	<b>\$2,562.50 2.07%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Derig Decomm Equipment</b>		<b>2.00 1.97%</b>	<b>\$1,025.00 0.83%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Mobilize Dive Boat</b>		<b>0.00 0.00%</b>	<b>\$0.00 0.00%</b>
Dive Boat	\$0.00		
Dive Serv - Basic	\$0.00		
Dive Serv - Suppl	\$0.00		
Decommissioning Crew	\$0.00		
<b>Set Up Dive Boat</b>		<b>3.00 2.95%</b>	<b>\$3,466.77 2.80%</b>
Dive Boat	\$1,398.00		
Dive Serv - Basic	\$710.64		
Dive Serv - Suppl	\$1,020.63		
Decommissioning Crew	\$337.50		
<b>Expose Pipeline</b>		<b>4.76 4.68%</b>	<b>\$5,500.61 4.44%</b>
Dive Boat	\$2,218.16		
Dive Serv - Basic	\$1,127.55		
Dive Serv - Suppl	\$1,619.40		
Decommissioning Crew	\$535.50		
<b>Cut &amp; Plug Pipeline</b>		<b>4.76 4.68%</b>	<b>\$5,500.61 4.44%</b>
Dive Boat	\$2,218.16		
Dive Serv - Basic	\$1,127.55		
Dive Serv - Suppl	\$1,619.40		
Decommissioning Crew	\$535.50		



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut Pipeline Riser</b>		<b>3.17</b>	<b>3.12%</b>	<b>\$3,663.23</b>	<b>2.96%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Remove Tube Turn</b>		<b>3.17</b>	<b>3.12%</b>	<b>\$3,663.23</b>	<b>2.96%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
Manual Calculation	\$0.00				
<b>Bury Pipeline</b>		<b>3.17</b>	<b>3.12%</b>	<b>\$3,663.23</b>	<b>2.96%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Set Up Dive Boat</b>		<b>3.00</b>	<b>2.95%</b>	<b>\$3,466.77</b>	<b>2.80%</b>
Dive Boat	\$1,398.00				
Dive Serv - Basic	\$710.64				
Dive Serv - Suppl	\$1,020.63				
Decommissioning Crew	\$337.50				
<b>Expose Pipeline</b>		<b>4.76</b>	<b>4.68%</b>	<b>\$5,500.61</b>	<b>4.44%</b>
Dive Boat	\$2,218.16				
Dive Serv - Basic	\$1,127.55				
Dive Serv - Suppl	\$1,619.40				
Decommissioning Crew	\$535.50				
<b>Cut &amp; Plug Pipeline</b>		<b>4.76</b>	<b>4.68%</b>	<b>\$5,500.61</b>	<b>4.44%</b>
Dive Boat	\$2,218.16				
Dive Serv - Basic	\$1,127.55				
Dive Serv - Suppl	\$1,619.40				
Decommissioning Crew	\$535.50				



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut Pipeline Riser</b>		<b>3.17</b>	<b>3.12%</b>	<b>\$3,663.23</b>	<b>2.96%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Remove Tube Turn</b>		<b>3.17</b>	<b>3.12%</b>	<b>\$3,663.23</b>	<b>2.96%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Bury Pipeline</b>		<b>3.17</b>	<b>3.12%</b>	<b>\$3,663.23</b>	<b>2.96%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Demob Dive Boat</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
Dive Boat	\$0.00				
Dive Serv - Basic	\$0.00				
Dive Serv - Suppl	\$0.00				
Decommissioning Crew	\$0.00				
<b>Remove Pipeline</b>		<b>28.00</b>	<b>27.53%</b>	<b>\$39,006.52</b>	<b>31.47%</b>
Dive Boat	\$13,048.00				
Dive Serv - Basic	\$6,632.64				
Dive Serv - Suppl	\$9,525.88				
CB 240 & Tug	\$9,800.00				
<b>Total</b>		<b>84.06</b>	<b>82.64%</b>	<b>\$96,071.88</b>	<b>77.52%</b>



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A264 HIOS-A-LIQ (Ver 1) Segment#:7364

Total Hours: 208.91

Total Cost: \$423,677.44

Task		Task Hours	Task Cost
<b>Mobilize Work Boat</b>		<b>17.20 8.23%</b>	<b>\$8,815.00 2.08%</b>
Work Boat	\$6,880.00		
Decommissioning Crew	\$1,935.00		
<b>Rig Up Decomm Equipment</b>		<b>5.00 2.39%</b>	<b>\$2,562.50 0.60%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>26.00 12.45%</b>	<b>\$13,325.00 3.15%</b>
Work Boat	\$10,400.00		
Decommissioning Crew	\$2,925.00		
<b>Derig Decomm Equipment</b>		<b>2.00 0.96%</b>	<b>\$1,025.00 0.24%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Demob Work Boat</b>		<b>17.20 8.23%</b>	<b>\$8,815.00 2.08%</b>
Work Boat	\$6,880.00		
Decommissioning Crew	\$1,935.00		
<b>Mobilize Dive Boat</b>		<b>17.20 8.23%</b>	<b>\$19,876.15 4.69%</b>
Dive Boat	\$8,015.20		
Dive Serv - Basic	\$4,074.34		
Dive Serv - Suppl	\$5,851.61		
Decommissioning Crew	\$1,935.00		
<b>Set Up Dive Boat</b>		<b>3.00 1.44%</b>	<b>\$3,466.77 0.82%</b>
Dive Boat	\$1,398.00		
Dive Serv - Basic	\$710.64		
Dive Serv - Suppl	\$1,020.63		
Decommissioning Crew	\$337.50		
<b>Expose Pipeline</b>		<b>4.76 2.28%</b>	<b>\$5,500.61 1.30%</b>
Dive Boat	\$2,218.16		
Dive Serv - Basic	\$1,127.55		
Dive Serv - Suppl	\$1,619.40		
Decommissioning Crew	\$535.50		



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut &amp; Plug Pipeline</b>		<b>4.76</b>	<b>2.28%</b>	<b>\$5,500.61</b>	<b>1.30%</b>
Dive Boat	\$2,218.16				
Dive Serv - Basic	\$1,127.55				
Dive Serv - Suppl	\$1,619.40				
Decommissioning Crew	\$535.50				
<b>Cut Pipeline Riser</b>		<b>3.17</b>	<b>1.52%</b>	<b>\$3,663.23</b>	<b>0.86%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Remove Tube Turn</b>		<b>3.17</b>	<b>1.52%</b>	<b>\$3,663.23</b>	<b>0.86%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
Manual Calculation	\$0.00				
<b>Bury Pipeline</b>		<b>3.17</b>	<b>1.52%</b>	<b>\$3,663.23</b>	<b>0.86%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Set Up Dive Boat</b>		<b>3.00</b>	<b>1.44%</b>	<b>\$3,466.77</b>	<b>0.82%</b>
Dive Boat	\$1,398.00				
Dive Serv - Basic	\$710.64				
Dive Serv - Suppl	\$1,020.63				
Decommissioning Crew	\$337.50				
<b>Expose Pipeline</b>		<b>4.76</b>	<b>2.28%</b>	<b>\$5,500.61</b>	<b>1.30%</b>
Dive Boat	\$2,218.16				
Dive Serv - Basic	\$1,127.55				
Dive Serv - Suppl	\$1,619.40				
Decommissioning Crew	\$535.50				



## El Paso Field Services

## Pipeline Decommission Cost Breakdown

<b>Cut &amp; Plug Pipeline</b>		<b>4.76</b>	<b>2.28%</b>	<b>\$5,500.61</b>	<b>1.30%</b>
Dive Boat	\$2,218.16				
Dive Serv - Basic	\$1,127.55				
Dive Serv - Suppl	\$1,619.40				
Decommissioning Crew	\$535.50				
<b>Cut Pipeline Riser</b>		<b>3.17</b>	<b>1.52%</b>	<b>\$3,663.23</b>	<b>0.86%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Remove Tube Turn</b>		<b>3.17</b>	<b>1.52%</b>	<b>\$3,663.23</b>	<b>0.86%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Bury Pipeline</b>		<b>3.17</b>	<b>1.52%</b>	<b>\$3,663.23</b>	<b>0.86%</b>
Dive Boat	\$1,477.22				
Dive Serv - Basic	\$750.91				
Dive Serv - Suppl	\$1,078.47				
Decommissioning Crew	\$356.63				
<b>Demob Dive Boat</b>		<b>17.20</b>	<b>8.23%</b>	<b>\$19,876.15</b>	<b>4.69%</b>
Dive Boat	\$8,015.20				
Dive Serv - Basic	\$4,074.34				
Dive Serv - Suppl	\$5,851.61				
Decommissioning Crew	\$1,935.00				
<b>Remove Pipeline</b>		<b>28.00</b>	<b>13.40%</b>	<b>\$212,158.52</b>	<b>50.08%</b>
DB 2000	\$186,200.00				
Dive Serv - Basic	\$6,632.64				
Dive Serv - Suppl	\$9,525.88				
CB 240 & Tug	\$9,800.00				
<b>Total</b>		<b>173.86</b>	<b>83.22%</b>	<b>\$337,368.68</b>	<b>79.63%</b>

**HI A264 HIOS-B Flare**



## **El Paso Field Services**

### **Platform Salvage Option**

### **HI A264 HIOS-B Flare (Ver 1)**

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High Island Block A264 has five structures that are operated by El Paso Field Services. The structures will be removed in one mobilization and demobilization of a 2000-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be pigged, flushed, cleaned, plugged and left in-situ. (See #12 below.)

High Island A264 HIOS-B Flare is a bridge supported by two 3-pile structures installed in 1979 in 152' water depth and bridge connected to HI A264 HIOS-B-CMP structure. Since the structures are bridge connected, one 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The walkway will be placed on a 300' x 100' cargo barge. Piles will be explosively severed and the 300' x 100 cargo barge will also be used for the jacket. The decks, facilities and jackets will be taken to shore and scrapped. A 1,400 ft radius will be needed to clear both platform sites of any bottom debris.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.
17. Engineering & Project Management cost 8% (company or other)





**El Paso Field Services**

**Platform Salvage Option**

**HI A264 HIOS-B Flare (Ver 1)**

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18. Work Contingency 15%

19. Weather Contingency 6%

20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.

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Estimated Decommissioning Gross Cost = \$1,089,219

Estimated Decommissioning Net Cost = \$1,089,219



## El Paso Field Services

### Basic Information

#### HI A264 HIOS-B Flare (Ver 1)

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#### General Data

Platform:	HI A264 HIOS-B Flare
Function:	AUXILIARY
Type:	Steel
Water Depth:	152'
Pre 461H?:	Yes
Year Installed:	1979
Estimated Removal Year:	2002
District:	Gulf of Mexico
Lease Number:	
Account Code:	TSB - 22071
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	0
Estimate Complete?:	No

#### Partner Data

Partner	Working Intere
1 El Paso	100.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$1,089,219	\$1,089,219
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$0	\$0
Total Decommissioning Cost:	\$1,089,219	\$1,089,219



## El Paso Field Services

### Platform Information

### HI A264 HIOS-B Flare (Ver 1)

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#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	3	30"	1.5"	No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

#### 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:	230.00		
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	
Number of Padeyes Required:	0
Deck Installation Date:	
Deck Contractor:	



## El Paso Field Services

### Platform Information

### HI A264 HIOS-B Flare (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Bridge	75.00
Flair	12.00

### Members to be Cut Data

Underwater Members	
Size	Qty

### Cargo Descriptions

Cargo Barge Size	Cargo Description	
CB 180 x 54	Equipment	Piles
CB 300 x 100	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%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$70,594.84



**TWACHTMAN SNYDER & BYRD, INC.**

**El Paso Field Services**

**Platform Comments**

**HI A264 HIOS-B Flare (Ver 1)**

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Assumed the following:

Jacket Weights, Deck Weights, Pile Sizes, Equipment Weights



## El Paso Field Services

### Platform Decommission Task Information

#### HI A264 HIOS-B Flare (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$10,501.20	0.96%
Platform Removal Preparation		<input type="checkbox"/>	96.00	6.85%	\$0.00	0.00%
Mobilize Work Boat		<input type="checkbox"/>	17.20	1.23%	\$5,624.40	0.52%
NMFS Marine Observation		<input type="checkbox"/>	48.00	3.43%	\$15,696.00	1.44%
Demob Work Boat		<input type="checkbox"/>	17.20	1.23%	\$4,902.00	0.45%
Mobilize DB 2000	Divided between the HIOS platforms in the field.	<input type="checkbox"/>	5.07	0.36%	\$39,062.91	3.59%
Mobilize CB 300 & Tug		<input type="checkbox"/>	36.40	2.60%	\$31,110.00	2.86%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.48%	\$47,630.57	4.37%
Bring in Cargo Barge		<input checked="" type="checkbox"/>	2.00	0.14%	\$15,162.76	1.39%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	3.46	0.25%	\$26,231.57	2.41%
Remove Equipment		<input checked="" type="checkbox"/>	1.50	0.11%	\$11,372.07	1.04%
Remove Tripod Deck	Bridge to Flare	<input checked="" type="checkbox"/>	3.00	0.21%	\$22,744.14	2.09%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	6.00	0.43%	\$90,976.56	8.35%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.57%	\$60,651.04	5.57%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.07%	\$11,081.38	1.02%
Sever Piles		<input checked="" type="checkbox"/>	2.44	0.17%	\$18,809.67	1.73%
Remove Jacket - Meth 3	Modified	<input checked="" type="checkbox"/>	21.70	1.55%	\$166,371.30	15.27%
Demob CB 300 & Tug		<input type="checkbox"/>	36.40	2.60%	\$19,110.00	1.75%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.48%	\$47,347.07	4.35%
Demob DB 2000	Divided between the HIOS platforms in the field.	<input type="checkbox"/>	5.07	0.36%	\$39,062.91	3.59%
Site Clearance - with Trawler	Divided between the HIOS platforms in the field.	<input checked="" type="checkbox"/>	260.29	18.58%	\$64,963.06	5.96%
Site Clearance Verify	Divided between the HIOS platforms in the field.	<input checked="" type="checkbox"/>	400.57	28.60%	\$65,174.81	5.98%
Offload CB 300		<input type="checkbox"/>	264.00	18.85%	\$68,850.00	6.32%
<b>Task Total</b>			1248.80	89.15%	\$882,435.42	81.02%
<b>Misc. Work Provision (15.00%)</b>			108.52	7.75%	\$97,277.40	8.93%
<b>Weather Contingency (6.00%)</b>			43.41	3.10%	\$38,910.96	3.57%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$70,594.84	6.48%
<b>Total:</b>			1400.73	100.00%	\$1,089,218.62	100.00%



## El Paso Field Services

### Platform Decommission Resources Breakdown

### HI A264 HIOS-B Flare (Ver 1)

**Total Cost: \$1,089,219.00**

Resource Used	Unit Cost		Cost	
Cargo Barge 300	\$5,350.00	per Day per Barge	\$58,850.00	5.40%
CB 300 & Tug	\$525.00	per Hour per Barge/Tug	\$67,147.50	6.16%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$10,000.00	0.92%
Decomm Platform	\$0.00	Calculated from tables	\$0.00	0.00%
Derrick Barge 2000	\$6,650.00	per Hour per barge	\$523,621.00	48.07%
Dive Serv - Basic	\$0.00	Calculated from tables	\$18,651.93	1.71%
Expl Charge - Piling	\$58.34	per Inch of Outside Diam	\$10,501.20	0.96%
Expl Technician	\$62.50	per Hour	\$6,430.02	0.59%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	0.96%
Nets (Heavy Duty, Non-Repairable)	\$4,400.00	ea	\$13,200.00	1.21%
Nets (Heavy Duty, Repairable)	\$2,200.00	ea	\$17,600.00	1.62%
Nets (Non-Repairable)	\$2,000.00	ea	\$6,000.00	0.55%
Nets (Repairable)	\$1,100.00	ea	\$6,600.00	0.61%
NMFS Observers (2)	\$42.00	per Hour	\$4,424.70	0.41%
Pipeline Survey	\$65.00	per Hour	\$6,687.20	0.61%
Rig Up CB 300	\$12,000.00	per Barge	\$12,000.00	1.10%
Trawler	\$131.25	per Hour	\$86,737.87	7.96%
Work Boat	\$285.00	per Hour	\$23,484.00	2.16%



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-B Flare (Ver 1)

Total Hours: 1400.73

Total Cost: \$1,089,219.00

Task Cost

## Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,501.20</b>	<b>0.96%</b>
Expl Charge - Piling	\$10,501.20				
<b>Platform Removal Preparation</b>		<b>96.00</b>	<b>6.85%</b>	<b>\$0.00</b>	<b>0.00%</b>
Decomm Platform	\$0.00				
<b>Mobilize Work Boat</b>		<b>17.20</b>	<b>1.23%</b>	<b>\$5,624.40</b>	<b>0.52%</b>
Work Boat	\$4,902.00				
NMFS Observers (2)	\$722.40				
<b>NMFS Marine Observation</b>		<b>48.00</b>	<b>3.43%</b>	<b>\$15,696.00</b>	<b>1.44%</b>
Work Boat	\$13,680.00				
NMFS Observers (2)	\$2,016.00				
<b>Demob Work Boat</b>		<b>17.20</b>	<b>1.23%</b>	<b>\$4,902.00</b>	<b>0.45%</b>
Work Boat	\$4,902.00				
<b>Mobilize DB 2000</b>		<b>5.07</b>	<b>0.36%</b>	<b>\$39,062.91</b>	<b>3.59%</b>
Derrick Barge 2000	\$33,715.50				
Pipeline Survey	\$329.55				
Expl Technician	\$316.88				
Dive Serv - Basic	\$1,200.98				
Helicopter Trips	\$3,500.00				
<b>Mobilize CB 300 &amp; Tug</b>		<b>36.40</b>	<b>2.60%</b>	<b>\$31,110.00</b>	<b>2.86%</b>
CB 300 & Tug	\$19,110.00				
Rig Up CB 300	\$12,000.00				
<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.48%</b>	<b>\$47,630.57</b>	<b>4.37%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$1,598.94				
Pipeline Survey	\$438.75				
NMFS Observers (2)	\$283.50				
Expl Technician	\$421.88				





## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A264 HIOS-B Flare (Ver 1)

**Total Hours: 1400.73**

**Total Cost: \$1,089,219.00**

**Task Cost**

#### Task

<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.14%</b>	<b>\$15,162.76</b>	<b>1.39%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$473.76				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 300 & Tug	\$1,050.00				
Expl Technician	\$125.00				
<b>Cut Deck/Equip/Misc</b>		<b>3.46</b>	<b>0.25%</b>	<b>\$26,231.57</b>	<b>2.41%</b>
CB 300 & Tug	\$1,816.50				
Derrick Barge 2000	\$23,009.00				
Dive Serv - Basic	\$819.60				
Expl Technician	\$216.25				
Pipeline Survey	\$224.90				
NMFS Observers (2)	\$145.32				
<b>Remove Equipment</b>		<b>1.50</b>	<b>0.11%</b>	<b>\$11,372.07</b>	<b>1.04%</b>
CB 300 & Tug	\$787.50				
Derrick Barge 2000	\$9,975.00				
Dive Serv - Basic	\$355.32				
Pipeline Survey	\$97.50				
NMFS Observers (2)	\$63.00				
Expl Technician	\$93.75				
<b>Remove Tripod Deck</b>		<b>3.00</b>	<b>0.21%</b>	<b>\$22,744.14</b>	<b>2.09%</b>
CB 300 & Tug	\$1,575.00				
Derrick Barge 2000	\$19,950.00				
Dive Serv - Basic	\$710.64				
Expl Technician	\$187.50				
Pipeline Survey	\$195.00				
NMFS Observers (2)	\$126.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-B Flare (Ver 1)

Total Hours: 1400.73

Total Cost: \$1,089,219.00

Task Cost

## Task

<b>Jet/Airlift Pile Mud Plug</b>		<b>6.00</b>	<b>0.43%</b>	<b>\$90,976.56</b>	<b>8.35%</b>
CB 300 & Tug	\$6,300.00				
Derrick Barge 2000	\$79,800.00				
Dive Serv - Basic	\$2,842.56				
Expl Technician	\$750.00				
Pipeline Survey	\$780.00				
NMFS Observers (2)	\$504.00				
<b>Standby for Daylight Det.</b>		<b>8.00</b>	<b>0.57%</b>	<b>\$60,651.04</b>	<b>5.57%</b>
Derrick Barge 2000	\$53,200.00				
CB 300 & Tug	\$4,200.00				
Expl Technician	\$500.00				
NMFS Observers (2)	\$336.00				
Pipeline Survey	\$520.00				
Dive Serv - Basic	\$1,895.04				
<b>Pre/Post Detonat'n Survey</b>		<b>1.00</b>	<b>0.07%</b>	<b>\$11,081.38</b>	<b>1.02%</b>
CB 300 & Tug	\$525.00				
Derrick Barge 2000	\$6,650.00				
Dive Serv - Basic	\$236.88				
Expl Technician	\$62.50				
Pipeline Survey	\$65.00				
Helicopter Trips	\$3,500.00				
NMFS Observers (2)	\$42.00				
<b>Sever Piles</b>		<b>2.44</b>	<b>0.17%</b>	<b>\$18,809.67</b>	<b>1.73%</b>
CB 300 & Tug	\$1,281.00				
Derrick Barge 2000	\$16,226.00				
Dive Serv - Basic	\$577.99				
Expl Technician	\$305.00				
Pipeline Survey	\$317.20				
NMFS Observers (2)	\$102.48				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A264 HIOS-B Flare (Ver 1)

**Total Hours: 1400.73**

**Total Cost: \$1,089,219.00**

**Task Cost**

#### Task

<b>Remove Jacket - Meth 3</b>		<b>21.70</b>	<b>1.55%</b>	<b>\$166,371.30</b>	<b>15.27%</b>
CB 300 & Tug	\$11,392.50				
Derrick Barge 2000	\$144,305.00				
Dive Serv - Basic	\$5,140.30				
Pipeline Survey	\$2,821.00				
Expl Technician	\$2,712.50				
<b>Demob CB 300 &amp; Tug</b>		<b>36.40</b>	<b>2.60%</b>	<b>\$19,110.00</b>	<b>1.75%</b>
CB 300 & Tug	\$19,110.00				
<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.48%</b>	<b>\$47,347.07</b>	<b>4.35%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$1,598.94				
Pipeline Survey	\$438.75				
Expl Technician	\$421.88				
<b>Demob DB 2000</b>		<b>5.07</b>	<b>0.36%</b>	<b>\$39,062.91</b>	<b>3.59%</b>
Derrick Barge 2000	\$33,715.50				
Pipeline Survey	\$329.55				
Dive Serv - Basic	\$1,200.98				
Expl Technician	\$316.88				
Helicopter Trips	\$3,500.00				
<b>Site Clearance - with Trawler</b>		<b>260.29</b>	<b>18.58%</b>	<b>\$64,963.06</b>	<b>5.96%</b>
Trawler	\$34,163.06				
Nets (Heavy Duty, Non-Repairable)	\$13,200.00				
Nets (Heavy Duty, Repairable)	\$17,600.00				
<b>Site Clearance Verify</b>		<b>400.57</b>	<b>28.60%</b>	<b>\$65,174.81</b>	<b>5.98%</b>
Trawler	\$52,574.81				
Nets (Non-Repairable)	\$6,000.00				
Nets (Repairable)	\$6,600.00				



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A264 HIOS-B Flare (Ver 1)

**Total Hours: 1400.73**

**Total Cost: \$1,089,219.00**

**Task Cost**

#### Task

<b>Offload CB 300</b>		<b>264.00</b>	<b>18.85%</b>	<b>\$68,850.00</b>	<b>6.32%</b>
Cargo Barge 300	\$58,850.00				
CB Damage Deduct	\$10,000.00				
		<b>Total</b>	<b>1248.80</b>	<b>89.15%</b>	<b>\$882,435.42 81.02%</b>

**HI A264 HIOS-B-CMP**



## **El Paso Field Services**

### **Platform Salvage Option**

### **HI A264 HIOS-B-CMP (Ver 1)**

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High Island Block A264 has five structures that are operated by El Paso Field Services. The structures will be removed in one mobilization and demobilization of a 2000-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be pigged, flushed, cleaned, plugged and left in-situ. (See #12 below.)

High Island A264 HIOS-B-CMP is a 10-pile Compressor Platform installed in 1979 in 152' water depth and bridge connected to the HI A264 HIOS-C-QTR platform and to the HI A264-B Flare structure. Since the platforms are bridge connected, one 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The top deck equipment, and deck will be placed on a 180' x 54' cargo barge. The jacket will be cut vertically underwater into two pieces and the piles will be explosively severed. Each of the two jacket pieces will be placed on a separate 300' x 100' cargo barge. The decks, facilities and jacket will be taken to shore and scrapped. A 1,400 ft radius will be needed to clear both platform sites of any bottom debris.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.



## **El Paso Field Services**

### **Platform Salvage Option**

#### **HI A264 HIOS-B-CMP (Ver 1)**

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- 17. Engineering & Project Management cost 8% (company or other)
  - 18. Work Contingency 15%
  - 19. Weather Contingency 6%
  - 20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.
- 

Estimated Decommissioning Gross Cost = \$2,812,457

Estimated Decommissioning Net Cost = \$2,812,457



## El Paso Field Services

### Basic Information

#### HI A264 HIOS-B-CMP (Ver 1)

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#### General Data

Platform:	HI A264 HIOS-B-CMP
Function:	COMPRESSOR
Type:	Steel
Water Depth:	152'
Pre 461H?:	Yes
Year Installed:	1979
Estimated Removal Year:	2002
District:	Gulf of Mexico
Lease Number:	
Account Code:	TSB - 22071
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	0
Estimate Complete?:	No

#### Partner Data

Partner	Working Intere
1 El Paso	100.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$2,812,457	\$2,812,457
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$0	\$0
Total Decommissioning Cost:	\$2,812,457	\$2,812,457





## El Paso Field Services

### Platform Information

### HI A264 HIOS-B-CMP (Ver 1)

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#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	10	48"	1.5"	No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:	195X80	75
Middle:		
Lower:	99X214	53

#### 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:	1518.00		
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	1300 Tons
Number of Padeyes Required:	0
Deck Installation Date:	3/30/79
Deck Contractor:	



## El Paso Field Services

### Platform Information

### HI A264 HIOS-B-CMP (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Compressor	200.00
Equipment	0.00
Heliport	20.00

### Members to be Cut Data

Top Members		Underwater Members	
Size	Qty	Size	Qty
16.00	5.00	24.00	24.00

### Cargo Descriptions

Cargo Barge Size	Cargo Description		
CB 180 x 54	Deck > 500T	Piles	Equipment
CB 240 x 72	Jkt > 700T		
CB 240 x 72	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%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$180,190.09



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Platform Comments**

#### **HI A264 HIOS-B-CMP (Ver 1)**

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Assumed the following:

Jacket Weights, Deck Weights, Pile Sizes, Equipment Weights, Deck(s) Sizes



## El Paso Field Services

### Platform Decommission Task Information

### HI A264 HIOS-B-CMP (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$28,003.20	1.00%
Platform Removal Preparation		<input type="checkbox"/>	168.00	10.72%	\$59,262.00	2.11%
Mobilize Work Boat		<input type="checkbox"/>	17.20	1.10%	\$5,624.40	0.20%
NMFS Marine Observation		<input type="checkbox"/>	48.00	3.06%	\$15,696.00	0.56%
Demob Work Boat		<input type="checkbox"/>	17.20	1.10%	\$4,902.00	0.17%
Mobilize DB 2000	Divided between the HIOS platforms in the field.	<input type="checkbox"/>	5.07	0.32%	\$39,062.91	1.39%
Mobilize CB 300 & Tug	Deck and Equipment	<input type="checkbox"/>	36.40	2.32%	\$26,560.00	0.94%
Mobilize CB 300 & Tug	Jacket and Piles	<input type="checkbox"/>	36.40	2.32%	\$31,110.00	1.11%
Mobilize CB 300 & Tug	Jacket and Piles	<input type="checkbox"/>	36.40	2.32%		
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.43%	\$47,630.57	1.69%
Bring in Cargo Barge	Deck and Equipment	<input checked="" type="checkbox"/>	2.00	0.13%	\$15,162.76	0.54%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	4.64	0.30%	\$35,177.60	1.25%
Remove Equipment		<input checked="" type="checkbox"/>	2.50	0.16%	\$18,953.45	0.67%
Remove 4 Pile Deck		<input checked="" type="checkbox"/>	9.35	0.60%	\$70,885.91	2.52%
Remove 6 Pile Deck		<input checked="" type="checkbox"/>	9.35	0.60%	\$70,885.91	2.52%
Demob CB 300 & Tug		<input type="checkbox"/>	36.40	2.32%	\$19,110.00	0.68%
Bring in Cargo Barge	1st half of Jacket and Piles	<input checked="" type="checkbox"/>	2.00	0.13%	\$1,050.00	0.04%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	20.00	1.28%	\$151,627.60	5.39%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.51%	\$60,651.04	2.16%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.06%	\$11,081.38	0.39%
Sever Piles		<input checked="" type="checkbox"/>	5.80	0.37%	\$43,972.00	1.56%
Remove Piles from Jackt Legs		<input checked="" type="checkbox"/>	21.94	1.40%	\$166,335.48	5.91%
Cut Jacket		<input checked="" type="checkbox"/>	56.94	3.63%	\$431,683.78	15.35%
Install Closure Plates		<input checked="" type="checkbox"/>	11.00	0.70%	\$83,395.18	2.97%
Deballast Piles or Jkt Lg		<input checked="" type="checkbox"/>	12.50	0.80%	\$94,767.25	3.37%
Remove Jacket - Meth 3	Modified	<input checked="" type="checkbox"/>	21.70	1.38%	\$163,604.55	5.82%
Demob CB 300 & Tug		<input type="checkbox"/>	36.40	2.32%	\$19,110.00	0.68%
Bring in Cargo Barge	2nd half of Jacket	<input checked="" type="checkbox"/>	2.00	0.13%	\$1,050.00	0.04%
Remove Jacket - Meth 3	Modified	<input checked="" type="checkbox"/>	21.70	1.38%	\$163,604.55	5.82%
Demob CB 300 & Tug		<input type="checkbox"/>	36.40	2.32%	\$19,110.00	0.68%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.43%	\$47,347.07	1.68%
Demob DB 2000	Divided between the HIOS platforms in the field.	<input type="checkbox"/>	20.29	1.29%	\$145,821.78	5.18%
Site Clearance - with Trawler		<input checked="" type="checkbox"/>	260.29	16.61%	\$64,963.06	2.31%
Site Clearance Verify		<input checked="" type="checkbox"/>	400.57	25.56%	\$65,174.81	2.32%
Offload CB 300		<input type="checkbox"/>	0.00	0.00%	\$10,000.00	0.36%
Offload CB 300		<input type="checkbox"/>	0.00	0.00%	\$10,000.00	0.36%



## El Paso Field Services

### Platform Decommission Task Information

#### HI A264 HIOS-B-CMP (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Offload CB 300		<input type="checkbox"/>	0.00	0.00%	\$10,000.00	0.36%
<b>Task Total</b>			1380.94	88.12%	\$2,252,376.24	80.09%
<b>Misc. Work Provision (15.00%)</b>			133.02	8.49%	\$271,350.60	9.65%
<b>Weather Contingency (6.00%)</b>			53.21	3.40%	\$108,540.20	3.86%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$180,190.10	6.41%
<b>Total:</b>			1567.17	100.00%	\$2,812,457.14	100.00%



## El Paso Field Services Platform Decommission Resources Breakdown HI A264 HIOS-B-CMP (Ver 1)

**Total Cost: \$2,812,457.00**

Resource Used	Unit Cost		Cost	
Cargo Barge 300	\$5,350.00	per Day per Barge	\$0.00	0.00%
CB 240 & Tug	\$400.00	per Hour per Barge/Tug	\$14,560.00	0.52%
CB 300 & Tug	\$525.00	per Hour per Barge/Tug	\$187,960.50	6.68%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$30,000.00	1.07%
Decomm Platform	\$0.00	Calculated from tables	\$59,262.00	2.11%
Derrick Barge 2000	\$6,650.00	per Hour per barge	\$1,644,412.00	58.47%
Dive Serv - Basic	\$0.00	Calculated from tables	\$58,575.70	2.08%
Expl Charge - Piling	\$58.34	per Inch of Outside Diam	\$28,003.20	1.00%
Expl Technician	\$62.50	per Hour	\$15,455.03	0.55%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	0.37%
Nets (Heavy Duty, Non-Repairable)	\$4,400.00	ea	\$13,200.00	0.47%
Nets (Heavy Duty, Repairable)	\$2,200.00	ea	\$17,600.00	0.63%
Nets (Non-Repairable)	\$2,000.00	ea	\$6,000.00	0.21%
Nets (Repairable)	\$1,100.00	ea	\$6,600.00	0.23%
NMFS Observers (2)	\$42.00	per Hour	\$9,952.74	0.35%
Pipeline Survey	\$65.00	per Hour	\$16,073.20	0.57%
Rig Up CB 240	\$12,000.00	per Barge	\$12,000.00	0.43%
Rig Up CB 300	\$12,000.00	per Barge	\$12,000.00	0.43%
Trawler	\$131.25	per Hour	\$86,737.87	3.08%
Work Boat	\$285.00	per Hour	\$23,484.00	0.83%



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-B-CMP (Ver 1)

Total Hours: 1567.17

Total Cost: \$2,812,457.00

Task Cost

## Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$28,003.20</b>	<b>1.00%</b>
Expl Charge - Piling	\$28,003.20				
<b>Platform Removal Preparation</b>		<b>168.00</b>	<b>10.72%</b>	<b>\$59,262.00</b>	<b>2.11%</b>
Decomm Platform	\$59,262.00				
<b>Mobilize Work Boat</b>		<b>17.20</b>	<b>1.10%</b>	<b>\$5,624.40</b>	<b>0.20%</b>
Work Boat	\$4,902.00				
NMFS Observers (2)	\$722.40				
<b>NMFS Marine Observation</b>		<b>48.00</b>	<b>3.06%</b>	<b>\$15,696.00</b>	<b>0.56%</b>
Work Boat	\$13,680.00				
NMFS Observers (2)	\$2,016.00				
<b>Demob Work Boat</b>		<b>17.20</b>	<b>1.10%</b>	<b>\$4,902.00</b>	<b>0.17%</b>
Work Boat	\$4,902.00				
<b>Mobilize DB 2000</b>		<b>5.07</b>	<b>0.32%</b>	<b>\$39,062.91</b>	<b>1.39%</b>
Derrick Barge 2000	\$33,715.50				
Pipeline Survey	\$329.55				
Expl Technician	\$316.88				
Dive Serv - Basic	\$1,200.98				
Helicopter Trips	\$3,500.00				
<b>Mobilize CB 300 &amp; Tug</b>		<b>36.40</b>	<b>2.32%</b>	<b>\$26,560.00</b>	<b>0.94%</b>
CB 240 & Tug	\$14,560.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 300 &amp; Tug</b>		<b>36.40</b>	<b>2.32%</b>	<b>\$31,110.00</b>	<b>1.11%</b>
CB 300 & Tug	\$19,110.00				
Rig Up CB 300	\$12,000.00				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A264 HIOS-B-CMP (Ver 1)

**Total Hours: 1567.17**

**Total Cost: \$2,812,457.00**

**Task Cost**

#### Task

<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.43%</b>	<b>\$47,630.57</b>	<b>1.69%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$1,598.94				
Pipeline Survey	\$438.75				
NMFS Observers (2)	\$283.50				
Expl Technician	\$421.88				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.13%</b>	<b>\$15,162.76</b>	<b>0.54%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$473.76				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 300 & Tug	\$1,050.00				
Expl Technician	\$125.00				
<b>Cut Deck/Equip/Misc</b>		<b>4.64</b>	<b>0.30%</b>	<b>\$35,177.60</b>	<b>1.25%</b>
CB 300 & Tug	\$2,436.00				
Derrick Barge 2000	\$30,856.00				
Dive Serv - Basic	\$1,099.12				
Expl Technician	\$290.00				
Pipeline Survey	\$301.60				
NMFS Observers (2)	\$194.88				
<b>Remove Equipment</b>		<b>2.50</b>	<b>0.16%</b>	<b>\$18,953.45</b>	<b>0.67%</b>
CB 300 & Tug	\$1,312.50				
Derrick Barge 2000	\$16,625.00				
Dive Serv - Basic	\$592.20				
Pipeline Survey	\$162.50				
NMFS Observers (2)	\$105.00				
Expl Technician	\$156.25				





## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A264 HIOS-B-CMP (Ver 1)

**Total Hours: 1567.17**

**Total Cost: \$2,812,457.00**

**Task Cost**

#### Task

<b>Remove 4 Pile Deck</b>		<b>9.35</b>	<b>0.60%</b>	<b>\$70,885.91</b>	<b>2.52%</b>
CB 300 & Tug	\$4,908.75				
Derrick Barge 2000	\$62,177.50				
Dive Serv - Basic	\$2,214.83				
Expl Technician	\$584.38				
Pipeline Survey	\$607.75				
NMFS Observers (2)	\$392.70				
<b>Remove 6 Pile Deck</b>		<b>9.35</b>	<b>0.60%</b>	<b>\$70,885.91</b>	<b>2.52%</b>
CB 300 & Tug	\$4,908.75				
Derrick Barge 2000	\$62,177.50				
Dive Serv - Basic	\$2,214.83				
Expl Technician	\$584.38				
Pipeline Survey	\$607.75				
NMFS Observers (2)	\$392.70				
<b>Demob CB 300 &amp; Tug</b>		<b>36.40</b>	<b>2.32%</b>	<b>\$19,110.00</b>	<b>0.68%</b>
CB 300 & Tug	\$19,110.00				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.13%</b>	<b>\$1,050.00</b>	<b>0.04%</b>
CB 300 & Tug	\$1,050.00				
<b>Jet/Airlift Pile Mud Plug</b>		<b>20.00</b>	<b>1.28%</b>	<b>\$151,627.60</b>	<b>5.39%</b>
CB 300 & Tug	\$10,500.00				
Derrick Barge 2000	\$133,000.00				
Dive Serv - Basic	\$4,737.60				
Expl Technician	\$1,250.00				
Pipeline Survey	\$1,300.00				
NMFS Observers (2)	\$840.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-B-CMP (Ver 1)

Total Hours: 1567.17

Total Cost: \$2,812,457.00

Task Cost

## Task

<b>Standby for Daylight Det.</b>		<b>8.00</b>	<b>0.51%</b>	<b>\$60,651.04</b>	<b>2.16%</b>
Derrick Barge 2000	\$53,200.00				
CB 300 & Tug	\$4,200.00				
Expl Technician	\$500.00				
NMFS Observers (2)	\$336.00				
Pipeline Survey	\$520.00				
Dive Serv - Basic	\$1,895.04				
<b>Pre/Post Detonat'n Survey</b>		<b>1.00</b>	<b>0.06%</b>	<b>\$11,081.38</b>	<b>0.39%</b>
CB 300 & Tug	\$525.00				
Derrick Barge 2000	\$6,650.00				
Dive Serv - Basic	\$236.88				
Expl Technician	\$62.50				
Pipeline Survey	\$65.00				
Helicopter Trips	\$3,500.00				
NMFS Observers (2)	\$42.00				
<b>Sever Piles</b>		<b>5.80</b>	<b>0.37%</b>	<b>\$43,972.00</b>	<b>1.56%</b>
CB 300 & Tug	\$3,045.00				
Derrick Barge 2000	\$38,570.00				
Dive Serv - Basic	\$1,373.90				
Expl Technician	\$362.50				
Pipeline Survey	\$377.00				
NMFS Observers (2)	\$243.60				
<b>Remove Piles from Jackt Legs</b>		<b>21.94</b>	<b>1.40%</b>	<b>\$166,335.48</b>	<b>5.91%</b>
CB 300 & Tug	\$11,518.50				
Derrick Barge 2000	\$145,901.00				
Dive Serv - Basic	\$5,197.15				
Expl Technician	\$1,371.25				
Pipeline Survey	\$1,426.10				
NMFS Observers (2)	\$921.48				

**El Paso Field Services****Platform Decommission Cost Breakdown****HI A264 HIOS-B-CMP (Ver 1)****Total Hours: 1567.17****Total Cost: \$2,812,457.00****Task Cost****Task**

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**Cut Jacket** **56.94 3.63% \$431,683.78 15.35%**

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Derrick Barge 2000	\$378,651.00
CB 300 & Tug	\$29,893.50
Expl Technician	\$3,558.75
Pipeline Survey	\$3,701.10
NMFS Observers (2)	\$2,391.48
Dive Serv - Basic	\$13,487.95

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**Install Closure Plates** **11.00 0.70% \$83,395.18 2.97%**

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CB 300 & Tug	\$5,775.00
Derrick Barge 2000	\$73,150.00
Dive Serv - Basic	\$2,605.68
Expl Technician	\$687.50
Pipeline Survey	\$715.00
NMFS Observers (2)	\$462.00

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**Deballast Piles or Jkt Lg** **12.50 0.80% \$94,767.25 3.37%**

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CB 300 & Tug	\$6,562.50
Derrick Barge 2000	\$83,125.00
Dive Serv - Basic	\$2,961.00
Expl Technician	\$781.25
Pipeline Survey	\$812.50
NMFS Observers (2)	\$525.00

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**Remove Jacket - Meth 3** **21.70 1.38% \$163,604.55 5.82%**

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CB 300 & Tug	\$11,392.50
Derrick Barge 2000	\$144,305.00
Dive Serv - Basic	\$5,140.30
Pipeline Survey	\$1,410.50
Expl Technician	\$1,356.25

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**Demob CB 300 & Tug** **36.40 2.32% \$19,110.00 0.68%**

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CB 300 & Tug	\$19,110.00
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## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A264 HIOS-B-CMP (Ver 1)

Total Hours: 1567.17

Total Cost: \$2,812,457.00

Task Cost

#### Task

<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.13%</b>	<b>\$1,050.00</b>	<b>0.04%</b>
CB 300 & Tug	\$1,050.00				
<b>Remove Jacket - Meth 3</b>		<b>21.70</b>	<b>1.38%</b>	<b>\$163,604.55</b>	<b>5.82%</b>
CB 300 & Tug	\$11,392.50				
Derrick Barge 2000	\$144,305.00				
Dive Serv - Basic	\$5,140.30				
Pipeline Survey	\$1,410.50				
Expl Technician	\$1,356.25				
<b>Demob CB 300 &amp; Tug</b>		<b>36.40</b>	<b>2.32%</b>	<b>\$19,110.00</b>	<b>0.68%</b>
CB 300 & Tug	\$19,110.00				
<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.43%</b>	<b>\$47,347.07</b>	<b>1.68%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$1,598.94				
Pipeline Survey	\$438.75				
Expl Technician	\$421.88				
<b>Demob DB 2000</b>		<b>20.29</b>	<b>1.29%</b>	<b>\$145,821.78</b>	<b>5.18%</b>
Derrick Barge 2000	\$134,928.50				
Pipeline Survey	\$1,318.85				
Dive Serv - Basic	\$4,806.30				
Expl Technician	\$1,268.13				
Helicopter Trips	\$3,500.00				
<b>Site Clearance - with Trawler</b>		<b>260.29</b>	<b>16.61%</b>	<b>\$64,963.06</b>	<b>2.31%</b>
Trawler	\$34,163.06				
Nets (Heavy Duty, Non-Repairable)	\$13,200.00				
Nets (Heavy Duty, Repairable)	\$17,600.00				
<b>Site Clearance Verify</b>		<b>400.57</b>	<b>25.56%</b>	<b>\$65,174.81</b>	<b>2.32%</b>
Trawler	\$52,574.81				
Nets (Non-Repairable)	\$6,000.00				
Nets (Repairable)	\$6,600.00				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A264 HIOS-B-CMP (Ver 1)

**Total Hours: 1567.17**

**Total Cost: \$2,812,457.00**

**Task Cost**

#### Task

<b>Offload CB 300</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,000.00</b>	<b>0.36%</b>
Cargo Barge 300	\$0.00				
CB Damage Deduct	\$10,000.00				
<b>Offload CB 300</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,000.00</b>	<b>0.36%</b>
Cargo Barge 300	\$0.00				
CB Damage Deduct	\$10,000.00				
<b>Offload CB 300</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,000.00</b>	<b>0.36%</b>
Cargo Barge 300	\$0.00				
CB Damage Deduct	\$10,000.00				
<b>Total</b>		<b>1344.54</b>	<b>85.79%</b>	<b>\$2,252,376.24</b>	<b>80.09%</b>

**HI A264 HIOS-C QTRS**



## **El Paso Field Services**

### **Platform Salvage Option**

#### **HI A264 HIOS-C QTRS (Ver 1)**

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High Island Block A264 has five structures that are operated by El Paso Field Services. The structures will be removed in one mobilization and demobilization of a 2000-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be pigged, flushed, cleaned, plugged and left in-situ. (See #12 below.)

High Island A264 HIOS-C QTRS is an 4-pile Quarters platform installed in 1979 in 152' water depth and bridge connected to the HI A264 HIOS-B Comp platform and HI A264-A-LIQ Platform. Since the A, B and C platforms are bridge connected, one 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The quarters, and deck will be placed on a 240x 70' cargo barge. Piles will be explosively severed and a second 300' x 100' cargo barge will be used for the jacket. The decks, facilities and jacket will be taken to shore and scrapped. A 1,400 ft radius will be needed to clear both platform sites of any bottom debris.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.
17. Engineering & Project Management cost 8% (company or other)



**El Paso Field Services**

**Platform Salvage Option**

**HI A264 HIOS-C QTRS (Ver 1)**

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18. Work Contingency 15%

19. Weather Contingency 6%

20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.

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Estimated Decommissioning Gross Cost = \$1,212,326

Estimated Decommissioning Net Cost = \$1,212,326





## El Paso Field Services

### Basic Information

#### HI A264 HIOS-C QTRS (Ver 1)

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#### General Data

Platform:	HI A264 HIOS-C QTRS
Function:	QUARTERS
Type:	Steel
Water Depth:	152'
Pre 461H?:	Yes
Year Installed:	1979
Estimated Removal Year:	2002
District:	Gulf of Mexico
Lease Number:	
Account Code:	TSB - 22071
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	0
Estimate Complete?:	No

#### Partner Data

Partner	Working Intere
1 El Paso	100.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$1,212,326	\$1,212,326
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$0	\$0
Total Decommissioning Cost:	\$1,212,326	\$1,212,326



## El Paso Field Services

### Platform Information

### HI A264 HIOS-C QTRS (Ver 1)

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#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	4	36"	1.5"	No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:	50X50	73
Middle:		
Lower:	40X40	53

#### 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:	600.00		
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	300 Tons
Number of Padeyes Required:	0
Deck Installation Date:	
Deck Contractor:	



## El Paso Field Services

### Platform Information

### HI A264 HIOS-C QTRS (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Bridge 200'	75.00
Equipment	0.00
Heliport	20.00

### Members to be Cut Data

#### Underwater Members

Size	Qty
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### Cargo Descriptions

Cargo Barge Size	Cargo Description
CB 180 x 54	Deck 100-500T
CB 300 x 100	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%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$79,178.61



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Platform Comments**

#### **HI A264 HIOS-C QTRS (Ver 1)**

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Assumed the following:

Jacket Weights, Deck Weights, Pile Sizes, Equipment Weights



## El Paso Field Services

### Platform Decommission Task Information

#### HI A264 HIOS-C QTRS (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$8,400.96	0.69%
Platform Removal Preparation		<input type="checkbox"/>	96.00	6.46%	\$23,868.00	1.97%
Mobilize Work Boat		<input type="checkbox"/>	17.20	1.16%	\$5,624.40	0.46%
NMFS Marine Observation		<input type="checkbox"/>	48.00	3.23%	\$15,696.00	1.29%
Demob Work Boat		<input type="checkbox"/>	17.20	1.16%	\$4,902.00	0.40%
Mobilize DB 2000	Divided between the HIOS platforms in the field.	<input type="checkbox"/>	5.07	0.34%	\$39,062.91	3.22%
Mobilize CB 240 & Tug	For Deck and Equipment and Bridge	<input type="checkbox"/>	36.40	2.45%	\$26,560.00	2.19%
Mobilize CB 300 & Tug	For Jacket and Piles	<input type="checkbox"/>	36.40	2.45%	\$31,110.00	2.57%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.45%	\$47,630.57	3.93%
Bring in Cargo Barge		<input checked="" type="checkbox"/>	2.00	0.13%	\$14,912.76	1.23%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	3.85	0.26%	\$28,707.07	2.37%
Remove Equipment		<input checked="" type="checkbox"/>	1.50	0.10%	\$11,184.57	0.92%
Remove 4 Pile Deck		<input checked="" type="checkbox"/>	9.35	0.63%	\$69,717.16	5.75%
Demob CB 240 & Tug		<input type="checkbox"/>	36.40	2.45%	\$14,560.00	1.20%
Bring in Cargo Barge		<input checked="" type="checkbox"/>	2.00	0.13%	\$15,162.76	1.25%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	8.00	0.54%	\$60,651.04	5.00%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.54%	\$60,651.04	5.00%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.07%	\$11,081.38	0.91%
Sever Piles		<input checked="" type="checkbox"/>	2.92	0.20%	\$22,137.63	1.83%
Remove Jacket - Meth 3	Modified	<input checked="" type="checkbox"/>	21.70	1.46%	\$163,604.55	13.50%
Demob CB 300 & Tug		<input type="checkbox"/>	36.40	2.45%	\$19,110.00	1.58%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.45%	\$47,347.07	3.91%
Demob DB 2000	Divided between the HIOS platforms in the field.	<input type="checkbox"/>	5.07	0.34%	\$39,062.91	3.22%
Site Clearance - with Trawler		<input checked="" type="checkbox"/>	260.29	17.50%	\$64,963.06	5.36%
Site Clearance Verify		<input checked="" type="checkbox"/>	400.57	26.94%	\$65,174.81	5.38%
Offload CB 240		<input type="checkbox"/>	0.00	0.00%	\$10,000.00	0.82%
Offload CB 300		<input type="checkbox"/>	264.00	17.75%	\$68,850.00	5.68%
<b>Task Total</b>			1332.82	89.63%	\$989,732.65	81.64%
<b>Misc. Work Provision (15.00%)</b>			110.2	7.41%	\$102,438.80	8.45%
<b>Weather Contingency (6.00%)</b>			44.08	2.96%	\$40,975.53	3.38%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Platform Decommission Task Information

#### HI A264 HIOS-C QTRS (Ver 1)

Task	Note	Contingency	Task Hours	Task Cost
		Reef Donation		\$0.00 0.00%
		Cost of Engineering (8.00%)		\$79,178.61 6.53%
		<b>Total:</b>	1487.10 100.00%	\$1,212,325.59 100.00%



## El Paso Field Services

### Platform Decommission Resources Breakdown

#### HI A264 HIOS-C QTRS (Ver 1)

**Total Cost: \$1,212,326.00**

Resource Used	Unit Cost		Cost	
Cargo Barge 240	\$2,880.00	per Day per Barge	\$0.00	0.00%
Cargo Barge 300	\$5,350.00	per Day per Barge	\$58,850.00	4.85%
CB 240 & Tug	\$400.00	per Hour per Barge/Tug	\$35,800.00	2.95%
CB 300 & Tug	\$525.00	per Hour per Barge/Tug	\$61,120.50	5.04%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$20,000.00	1.65%
Decomm Platform	\$0.00	Calculated from tables	\$23,868.00	1.97%
Derrick Barge 2000	\$6,650.00	per Hour per barge	\$558,334.00	46.05%
Dive Serv - Basic	\$0.00	Calculated from tables	\$19,888.45	1.64%
Expl Charge - Piling	\$58.34	per Inch of Outside Diam	\$8,400.96	0.69%
Expl Technician	\$62.50	per Hour	\$5,247.53	0.43%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	0.87%
Nets (Heavy Duty, Non-Repairable)	\$4,400.00	ea	\$13,200.00	1.09%
Nets (Heavy Duty, Repairable)	\$2,200.00	ea	\$17,600.00	1.45%
Nets (Non-Repairable)	\$2,000.00	ea	\$6,000.00	0.49%
Nets (Repairable)	\$1,100.00	ea	\$6,600.00	0.54%
NMFS Observers (2)	\$42.00	per Hour	\$4,643.94	0.38%
Pipeline Survey	\$65.00	per Hour	\$5,457.40	0.45%
Rig Up CB 240	\$12,000.00	per Barge	\$12,000.00	0.99%
Rig Up CB 300	\$12,000.00	per Barge	\$12,000.00	0.99%
Trawler	\$131.25	per Hour	\$86,737.87	7.15%
Work Boat	\$285.00	per Hour	\$23,484.00	1.94%



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-C QTRS (Ver 1)

Total Hours: 1487.10

Total Cost: \$1,212,326.00

Task Cost

## Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$8,400.96</b>	<b>0.69%</b>
Expl Charge - Piling	\$8,400.96				
<b>Platform Removal Preparation</b>		<b>96.00</b>	<b>6.46%</b>	<b>\$23,868.00</b>	<b>1.97%</b>
Decomm Platform	\$23,868.00				
<b>Mobilize Work Boat</b>		<b>17.20</b>	<b>1.16%</b>	<b>\$5,624.40</b>	<b>0.46%</b>
Work Boat	\$4,902.00				
NMFS Observers (2)	\$722.40				
<b>NMFS Marine Observation</b>		<b>48.00</b>	<b>3.23%</b>	<b>\$15,696.00</b>	<b>1.29%</b>
Work Boat	\$13,680.00				
NMFS Observers (2)	\$2,016.00				
<b>Demob Work Boat</b>		<b>17.20</b>	<b>1.16%</b>	<b>\$4,902.00</b>	<b>0.40%</b>
Work Boat	\$4,902.00				
<b>Mobilize DB 2000</b>		<b>5.07</b>	<b>0.34%</b>	<b>\$39,062.91</b>	<b>3.22%</b>
Derrick Barge 2000	\$33,715.50				
Pipeline Survey	\$329.55				
Expl Technician	\$316.88				
Dive Serv - Basic	\$1,200.98				
Helicopter Trips	\$3,500.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>36.40</b>	<b>2.45%</b>	<b>\$26,560.00</b>	<b>2.19%</b>
CB 240 & Tug	\$14,560.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 300 &amp; Tug</b>		<b>36.40</b>	<b>2.45%</b>	<b>\$31,110.00</b>	<b>2.57%</b>
CB 300 & Tug	\$19,110.00				
Rig Up CB 300	\$12,000.00				



**El Paso Field Services****Platform Decommission Cost Breakdown****HI A264 HIOS-C QTRS (Ver 1)****Total Hours: 1487.10****Total Cost: \$1,212,326.00****Task Cost****Task**

<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.45%</b>	<b>\$47,630.57</b>	<b>3.93%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$1,598.94				
Pipeline Survey	\$438.75				
NMFS Observers (2)	\$283.50				
Expl Technician	\$421.88				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.13%</b>	<b>\$14,912.76</b>	<b>1.23%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$473.76				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 240 & Tug	\$800.00				
Expl Technician	\$125.00				
<b>Cut Deck/Equip/Misc</b>		<b>3.85</b>	<b>0.26%</b>	<b>\$28,707.07</b>	<b>2.37%</b>
CB 240 & Tug	\$1,540.00				
Derrick Barge 2000	\$25,602.50				
Dive Serv - Basic	\$911.99				
Expl Technician	\$240.63				
Pipeline Survey	\$250.25				
NMFS Observers (2)	\$161.70				
<b>Remove Equipment</b>		<b>1.50</b>	<b>0.10%</b>	<b>\$11,184.57</b>	<b>0.92%</b>
CB 240 & Tug	\$600.00				
Derrick Barge 2000	\$9,975.00				
Dive Serv - Basic	\$355.32				
Pipeline Survey	\$97.50				
NMFS Observers (2)	\$63.00				
Expl Technician	\$93.75				

**El Paso Field Services****Platform Decommission Cost Breakdown****HI A264 HIOS-C QTRS (Ver 1)****Total Hours: 1487.10****Total Cost: \$1,212,326.00****Task Cost****Task**

<b>Remove 4 Pile Deck</b>		<b>9.35</b>	<b>0.63%</b>	<b>\$69,717.16</b>	<b>5.75%</b>
CB 240 & Tug	\$3,740.00				
Derrick Barge 2000	\$62,177.50				
Dive Serv - Basic	\$2,214.83				
Expl Technician	\$584.38				
Pipeline Survey	\$607.75				
NMFS Observers (2)	\$392.70				
<b>Demob CB 240 &amp; Tug</b>		<b>36.40</b>	<b>2.45%</b>	<b>\$14,560.00</b>	<b>1.20%</b>
CB 240 & Tug	\$14,560.00				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.13%</b>	<b>\$15,162.76</b>	<b>1.25%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$473.76				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 300 & Tug	\$1,050.00				
Expl Technician	\$125.00				
<b>Jet/Airlift Pile Mud Plug</b>		<b>8.00</b>	<b>0.54%</b>	<b>\$60,651.04</b>	<b>5.00%</b>
CB 300 & Tug	\$4,200.00				
Derrick Barge 2000	\$53,200.00				
Dive Serv - Basic	\$1,895.04				
Expl Technician	\$500.00				
Pipeline Survey	\$520.00				
NMFS Observers (2)	\$336.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A264 HIOS-C QTRS (Ver 1)

Total Hours: 1487.10

Total Cost: \$1,212,326.00

Task Cost

## Task

<b>Standby for Daylight Det.</b>		<b>8.00</b>	<b>0.54%</b>	<b>\$60,651.04</b>	<b>5.00%</b>
Derrick Barge 2000	\$53,200.00				
CB 300 & Tug	\$4,200.00				
Expl Technician	\$500.00				
NMFS Observers (2)	\$336.00				
Pipeline Survey	\$520.00				
Dive Serv - Basic	\$1,895.04				
<b>Pre/Post Detonat'n Survey</b>		<b>1.00</b>	<b>0.07%</b>	<b>\$11,081.38</b>	<b>0.91%</b>
CB 300 & Tug	\$525.00				
Derrick Barge 2000	\$6,650.00				
Dive Serv - Basic	\$236.88				
Expl Technician	\$62.50				
Pipeline Survey	\$65.00				
Helicopter Trips	\$3,500.00				
NMFS Observers (2)	\$42.00				
<b>Sever Piles</b>		<b>2.92</b>	<b>0.20%</b>	<b>\$22,137.63</b>	<b>1.83%</b>
CB 300 & Tug	\$1,533.00				
Derrick Barge 2000	\$19,418.00				
Dive Serv - Basic	\$691.69				
Expl Technician	\$182.50				
Pipeline Survey	\$189.80				
NMFS Observers (2)	\$122.64				
<b>Remove Jacket - Meth 3</b>		<b>21.70</b>	<b>1.46%</b>	<b>\$163,604.55</b>	<b>13.50%</b>
CB 300 & Tug	\$11,392.50				
Derrick Barge 2000	\$144,305.00				
Dive Serv - Basic	\$5,140.30				
Pipeline Survey	\$1,410.50				
Expl Technician	\$1,356.25				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A264 HIOS-C QTRS (Ver 1)

**Total Hours: 1487.10**

**Total Cost: \$1,212,326.00**

**Task Cost**

#### Task

<b>Demob CB 300 &amp; Tug</b>		<b>36.40</b>	<b>2.45%</b>	<b>\$19,110.00</b>	<b>1.58%</b>
CB 300 & Tug	\$19,110.00				
<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.45%</b>	<b>\$47,347.07</b>	<b>3.91%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$1,598.94				
Pipeline Survey	\$438.75				
Expl Technician	\$421.88				
<b>Demob DB 2000</b>		<b>5.07</b>	<b>0.34%</b>	<b>\$39,062.91</b>	<b>3.22%</b>
Derrick Barge 2000	\$33,715.50				
Pipeline Survey	\$329.55				
Dive Serv - Basic	\$1,200.98				
Expl Technician	\$316.88				
Helicopter Trips	\$3,500.00				
<b>Site Clearance - with Trawler</b>		<b>260.29</b>	<b>17.50%</b>	<b>\$64,963.06</b>	<b>5.36%</b>
Trawler	\$34,163.06				
Nets (Heavy Duty, Non-Repairable)	\$13,200.00				
Nets (Heavy Duty, Repairable)	\$17,600.00				
<b>Site Clearance Verify</b>		<b>400.57</b>	<b>26.94%</b>	<b>\$65,174.81</b>	<b>5.38%</b>
Trawler	\$52,574.81				
Nets (Non-Repairable)	\$6,000.00				
Nets (Repairable)	\$6,600.00				
<b>Offload CB 240</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,000.00</b>	<b>0.82%</b>
Cargo Barge 240	\$0.00				
CB Damage Deduct	\$10,000.00				
<b>Offload CB 300</b>		<b>264.00</b>	<b>17.75%</b>	<b>\$68,850.00</b>	<b>5.68%</b>
Cargo Barge 300	\$58,850.00				
CB Damage Deduct	\$10,000.00				
<b>Total</b>		<b>1332.82</b>	<b>89.63%</b>	<b>\$989,732.65</b>	<b>81.64%</b>

**HI A330 HIOS**



## **El Paso Field Services**

### **Platform Salvage Option**

### **HI A330 HIOS (Ver 1)**

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High Island Block A330 has 1 structure that is operated by El Paso Field Services. The structure will be removed in one mobilization and demobilization of a 2000-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be pigged, flushed, cleaned, plugged and left in-situ. (See #12 below.)

High Island A330 HIOS is a 4-pile Manifold platform installed in 1979 in 255' water depth. A 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The deck equipment and deck will be placed on a 180' x 54' cargo barge. Piles will be explosively severed and a 300' x 100' cargo barge will be used for the jacket. The deck, facilities and jacket will be taken to shore and scrapped. A 1,400 ft radius will be needed to clear both platform sites of any bottom debris.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.
17. Engineering & Project Management cost 8% (company or other)
18. Work Contingency 15%
19. Weather Contingency 6%



**El Paso Field Services**  
**Platform Salvage Option**  
**HI A330 HIOS (Ver 1)**

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20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.

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Estimated Decommissioning Gross Cost = \$2,881,829

Estimated Decommissioning Net Cost = \$1,440,914



## El Paso Field Services

### Basic Information

#### HI A330 HIOS (Ver 1)

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#### General Data

Platform: HI A330 HIOS  
Function: DRILL/MANIFOLD  
Type: Steel  
Water Depth: 255'  
Pre 461H?: Yes  
Year Installed: 1979  
Estimated Removal Year:  
District: Gulf of Mexico  
Lease Number:  
Account Code: TSB - 22071  
Amortization: 1.00  
# Wells to P & A: 0  
# Pipelines to Abandon: 1  
Estimate Complete?: No

#### Partner Data

Partner	Working Intere
1 El Paso	50.00%
2 Others	50.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$2,233,962	\$1,116,981
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$647,867	\$323,933
Total Decommissioning Cost:	\$2,881,829	\$1,440,914





## El Paso Field Services

### Platform Information

### HI A330 HIOS (Ver 1)

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#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	4	48"	1.5"	No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:	41X41	67
Middle:		
Lower:	70x70	48

#### 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:	1100.00		
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	300 Tons
Number of Padeyes Required:	0
Deck Installation Date:	3/3/79
Deck Contractor:	



## El Paso Field Services Platform Information HI A330 HIOS (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Heliport	0.00

### Members to be Cut Data

Underwater Members	
Size	Qty

### Cargo Descriptions

Cargo Barge Size	Cargo Description		
CB 300 x 100	Jkt > 700T	Piles	Equipment
CB 240 x 72	Deck 100-500T		

### Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	15.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$148,088.41



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Platform Comments**

#### **HI A330 HIOS (Ver 1)**

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Assumed the following:

Jacket Weights, Deck Weights, Pile Sizes, Equipment Weights



## El Paso Field Services

### Platform Decommission Task Information

#### HI A330 HIOS (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$11,201.28	0.50%
Platform Removal Preparation		<input type="checkbox"/>	504.00	23.17%	\$177,786.00	7.96%
Mobilize Work Boat		<input type="checkbox"/>	17.10	0.79%	\$5,591.70	0.25%
NMFS Marine Observation		<input type="checkbox"/>	48.00	2.21%	\$15,696.00	0.70%
Demob Work Boat		<input type="checkbox"/>	17.10	0.79%	\$4,873.50	0.22%
Mobilize DB 2000		<input type="checkbox"/>	20.14	0.93%	\$164,523.53	7.36%
Mobilize CB 180 & Tug	For Deck and Equipment	<input type="checkbox"/>	36.20	1.66%	\$22,679.00	1.02%
Mobilize CB 300 & Tug	For Jacket and Piles	<input type="checkbox"/>	36.20	1.66%	\$31,005.00	1.39%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.31%	\$54,251.17	2.43%
Bring in Cargo Barge	Deck and Equipment	<input checked="" type="checkbox"/>	2.00	0.09%	\$16,664.42	0.75%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	4.64	0.21%	\$38,661.45	1.73%
Remove Equipment		<input checked="" type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Remove 4 Pile Deck		<input checked="" type="checkbox"/>	9.35	0.43%	\$77,906.17	3.49%
Demob CB 180 & Tug		<input type="checkbox"/>	36.20	1.66%	\$10,679.00	0.48%
Bring in Cargo Barge	Jacket	<input checked="" type="checkbox"/>	2.00	0.09%	\$17,124.42	0.77%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	8.00	0.37%	\$68,497.68	3.07%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.37%	\$68,497.68	3.07%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.05%	\$12,062.21	0.54%
Sever Piles		<input checked="" type="checkbox"/>	2.92	0.13%	\$25,001.65	1.12%
Install Closure Plates		<input checked="" type="checkbox"/>	5.00	0.23%	\$48,689.60	2.18%
Deballast Piles or Jkt Lg		<input checked="" type="checkbox"/>	5.00	0.23%	\$48,689.60	2.18%
Remove Piles from Jackt Legs		<input checked="" type="checkbox"/>	27.06	1.24%	\$263,508.11	11.80%
Remove Jacket - Meth 3	Modified	<input checked="" type="checkbox"/>	21.70	1.00%	\$184,888.56	8.28%
Demob CB 300 & Tug		<input type="checkbox"/>	36.20	1.66%	\$19,005.00	0.85%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.31%	\$53,967.67	2.42%
Demob DB 2000		<input type="checkbox"/>	20.14	0.93%	\$164,523.53	7.36%
Site Clearance - with Trawler		<input checked="" type="checkbox"/>	284.14	13.06%	\$68,093.38	3.05%
Site Clearance Verify		<input checked="" type="checkbox"/>	448.29	20.61%	\$71,438.06	3.20%
Offload CB 180		<input type="checkbox"/>	0.00	0.00%	\$10,000.00	0.45%
Offload CB 300		<input type="checkbox"/>	384.00	17.66%	\$95,600.00	4.28%
<b>Task Total</b>			1997.88	91.86%	\$1,851,105.37	82.86%
<b>Misc. Work Provision (15.00%)</b>			126.39	5.81%	\$167,691.30	7.51%
<b>Weather Contingency (6.00%)</b>			50.56	2.32%	\$67,076.51	3.00%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%



## El Paso Field Services

### Platform Decommission Task Information

#### HI A330 HIOS (Ver 1)

Task	Note	Contingency	Task Hours	Task Cost
		<b>Storage / Scrapping</b>		\$0.00 0.00%
		<b>Reef Donation</b>		\$0.00 0.00%
		<b>Cost of Engineering (8.00%)</b>		\$148,088.40 6.63%
		<b>Total:</b>	2174.83 100.00%	\$2,233,961.58 100.00%



## El Paso Field Services

### Platform Decommission Resources Breakdown

#### HI A330 HIOS (Ver 1)

**Total Cost: \$2,233,962.00**

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$1,200.00	per Day per Barge	\$0.00	0.00%
Cargo Barge 300	\$5,350.00	per Day per Barge	\$85,600.00	3.83%
CB 180 & Tug	\$295.00	per Hour per Barge/Tug	\$26,075.05	1.17%
CB 300 & Tug	\$525.00	per Hour per Barge/Tug	\$80,367.00	3.60%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$20,000.00	0.90%
Decomm Platform	\$0.00	Calculated from tables	\$177,786.00	7.96%
Derrick Barge 2000	\$6,650.00	per Hour per barge	\$1,000,492.50	44.79%
Dive Serv - Basic	\$0.00	Calculated from tables	\$228,332.79	10.22%
Expl Charge - Piling	\$58.34	per Inch of Outside Diam	\$11,201.28	0.50%
Expl Technician	\$62.50	per Hour	\$9,403.14	0.42%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	0.47%
Nets (Heavy Duty, Non-Repairable)	\$4,400.00	ea	\$13,200.00	0.59%
Nets (Heavy Duty, Repairable)	\$2,200.00	ea	\$17,600.00	0.79%
Nets (Non-Repairable)	\$2,000.00	ea	\$6,000.00	0.27%
Nets (Repairable)	\$1,100.00	ea	\$6,600.00	0.30%
NMFS Observers (2)	\$42.00	per Hour	\$4,609.92	0.21%
Pipeline Survey	\$65.00	per Hour	\$9,779.25	0.44%
Rig Up CB 240	\$12,000.00	per Barge	\$12,000.00	0.54%
Rig Up CB 300	\$12,000.00	per Barge	\$12,000.00	0.54%
Trawler	\$131.25	per Hour	\$96,131.44	4.30%
Work Boat	\$285.00	per Hour	\$23,427.00	1.05%



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A330 HIOS (Ver 1)

Total Hours: 2174.83

Total Cost: \$2,233,962.00

Task Cost

## Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$11,201.28</b>	<b>0.50%</b>
Expl Charge - Piling	\$11,201.28				
<b>Platform Removal Preparation</b>		<b>504.00</b>	<b>23.17%</b>	<b>\$177,786.00</b>	<b>7.96%</b>
Decomm Platform	\$177,786.00				
<b>Mobilize Work Boat</b>		<b>17.10</b>	<b>0.79%</b>	<b>\$5,591.70</b>	<b>0.25%</b>
Work Boat	\$4,873.50				
NMFS Observers (2)	\$718.20				
<b>NMFS Marine Observation</b>		<b>48.00</b>	<b>2.21%</b>	<b>\$15,696.00</b>	<b>0.70%</b>
Work Boat	\$13,680.00				
NMFS Observers (2)	\$2,016.00				
<b>Demob Work Boat</b>		<b>17.10</b>	<b>0.79%</b>	<b>\$4,873.50</b>	<b>0.22%</b>
Work Boat	\$4,873.50				
<b>Mobilize DB 2000</b>		<b>20.14</b>	<b>0.93%</b>	<b>\$164,523.53</b>	<b>7.36%</b>
Derrick Barge 2000	\$133,931.00				
Pipeline Survey	\$1,309.10				
Expl Technician	\$1,258.75				
Dive Serv - Basic	\$24,524.68				
Helicopter Trips	\$3,500.00				
<b>Mobilize CB 180 &amp; Tug</b>		<b>36.20</b>	<b>1.66%</b>	<b>\$22,679.00</b>	<b>1.02%</b>
CB 180 & Tug	\$10,679.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 300 &amp; Tug</b>		<b>36.20</b>	<b>1.66%</b>	<b>\$31,005.00</b>	<b>1.39%</b>
CB 300 & Tug	\$19,005.00				
Rig Up CB 300	\$12,000.00				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A330 HIOS (Ver 1)

**Total Hours: 2174.83**

**Total Cost: \$2,233,962.00**

**Task Cost**

#### Task

<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.31%</b>	<b>\$54,251.17</b>	<b>2.43%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
NMFS Observers (2)	\$283.50				
Expl Technician	\$421.88				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.09%</b>	<b>\$16,664.42</b>	<b>0.75%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$2,435.42				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 180 & Tug	\$590.00				
Expl Technician	\$125.00				
<b>Cut Deck/Equip/Misc</b>		<b>4.64</b>	<b>0.21%</b>	<b>\$38,661.45</b>	<b>1.73%</b>
CB 180 & Tug	\$1,368.80				
Derrick Barge 2000	\$30,856.00				
Dive Serv - Basic	\$5,650.17				
Expl Technician	\$290.00				
Pipeline Survey	\$301.60				
NMFS Observers (2)	\$194.88				
<b>Remove Equipment</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
CB 180 & Tug	\$0.00				
Derrick Barge 2000	\$0.00				
Dive Serv - Basic	\$0.00				
Pipeline Survey	\$0.00				
NMFS Observers (2)	\$0.00				
Expl Technician	\$0.00				





## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A330 HIOS (Ver 1)

**Total Hours: 2174.83**

**Total Cost: \$2,233,962.00**

**Task Cost**

#### Task

<b>Remove 4 Pile Deck</b>		<b>9.35</b>	<b>0.43%</b>	<b>\$77,906.17</b>	<b>3.49%</b>
CB 180 & Tug	\$2,758.25				
Derrick Barge 2000	\$62,177.50				
Dive Serv - Basic	\$11,385.59				
Expl Technician	\$584.38				
Pipeline Survey	\$607.75				
NMFS Observers (2)	\$392.70				
<b>Demob CB 180 &amp; Tug</b>		<b>36.20</b>	<b>1.66%</b>	<b>\$10,679.00</b>	<b>0.48%</b>
CB 180 & Tug	\$10,679.00				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.09%</b>	<b>\$17,124.42</b>	<b>0.77%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$2,435.42				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 300 & Tug	\$1,050.00				
Expl Technician	\$125.00				
<b>Jet/Airlift Pile Mud Plug</b>		<b>8.00</b>	<b>0.37%</b>	<b>\$68,497.68</b>	<b>3.07%</b>
CB 300 & Tug	\$4,200.00				
Derrick Barge 2000	\$53,200.00				
Dive Serv - Basic	\$9,741.68				
Expl Technician	\$500.00				
Pipeline Survey	\$520.00				
NMFS Observers (2)	\$336.00				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A330 HIOS (Ver 1)

**Total Hours: 2174.83**

**Total Cost: \$2,233,962.00**

**Task Cost**

#### Task

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<b>Standby for Daylight Det.</b>	<b>8.00</b>	<b>0.37%</b>	<b>\$68,497.68</b>	<b>3.07%</b>
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Derrick Barge 2000	\$53,200.00
CB 300 & Tug	\$4,200.00
Expl Technician	\$500.00
NMFS Observers (2)	\$336.00
Pipeline Survey	\$520.00
Dive Serv - Basic	\$9,741.68

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<b>Pre/Post Detonat'n Survey</b>	<b>1.00</b>	<b>0.05%</b>	<b>\$12,062.21</b>	<b>0.54%</b>
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CB 300 & Tug	\$525.00
Derrick Barge 2000	\$6,650.00
Dive Serv - Basic	\$1,217.71
Expl Technician	\$62.50
Pipeline Survey	\$65.00
Helicopter Trips	\$3,500.00
NMFS Observers (2)	\$42.00

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<b>Sever Piles</b>	<b>2.92</b>	<b>0.13%</b>	<b>\$25,001.65</b>	<b>1.12%</b>
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CB 300 & Tug	\$1,533.00
Derrick Barge 2000	\$19,418.00
Dive Serv - Basic	\$3,555.71
Expl Technician	\$182.50
Pipeline Survey	\$189.80
NMFS Observers (2)	\$122.64

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<b>Install Closure Plates</b>	<b>5.00</b>	<b>0.23%</b>	<b>\$48,689.60</b>	<b>2.18%</b>
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CB 300 & Tug	\$2,625.00
Derrick Barge 2000	\$33,250.00
Dive Serv - Basic	\$6,088.55
Expl Technician	\$312.50
Pipeline Survey	\$325.00
Dive Serv - Basic	\$6,088.55

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## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A330 HIOS (Ver 1)

**Total Hours: 2174.83**

**Total Cost: \$2,233,962.00**

**Task Cost**

#### Task

<b>Deballast Piles or Jkt Lg</b>		<b>5.00</b>	<b>0.23%</b>	<b>\$48,689.60</b>	<b>2.18%</b>
CB 300 & Tug	\$2,625.00				
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Expl Technician	\$312.50				
Pipeline Survey	\$325.00				
Dive Serv - Basic	\$6,088.55				
<b>Remove Piles from Jackt Legs</b>		<b>27.06</b>	<b>1.24%</b>	<b>\$263,508.11</b>	<b>11.80%</b>
CB 300 & Tug	\$14,206.50				
Derrick Barge 2000	\$179,949.00				
Dive Serv - Basic	\$32,951.23				
Expl Technician	\$1,691.25				
Pipeline Survey	\$1,758.90				
Dive Serv - Basic	\$32,951.23				
<b>Remove Jacket - Meth 3</b>		<b>21.70</b>	<b>1.00%</b>	<b>\$184,888.56</b>	<b>8.28%</b>
CB 300 & Tug	\$11,392.50				
Derrick Barge 2000	\$144,305.00				
Dive Serv - Basic	\$26,424.31				
Pipeline Survey	\$1,410.50				
Expl Technician	\$1,356.25				
<b>Demob CB 300 &amp; Tug</b>		<b>36.20</b>	<b>1.66%</b>	<b>\$19,005.00</b>	<b>0.85%</b>
CB 300 & Tug	\$19,005.00				
<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.31%</b>	<b>\$53,967.67</b>	<b>2.42%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
Expl Technician	\$421.88				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A330 HIOS (Ver 1)

**Total Hours: 2174.83**

**Total Cost: \$2,233,962.00**

**Task Cost**

#### Task

<b>Demob DB 2000</b>		<b>20.14</b>	<b>0.93%</b>	<b>\$164,523.53</b>	<b>7.36%</b>
Derrick Barge 2000	\$133,931.00				
Pipeline Survey	\$1,309.10				
Dive Serv - Basic	\$24,524.68				
Expl Technician	\$1,258.75				
Helicopter Trips	\$3,500.00				
<b>Site Clearance - with Trawler</b>		<b>284.14</b>	<b>13.06%</b>	<b>\$68,093.38</b>	<b>3.05%</b>
Trawler	\$37,293.38				
Nets (Heavy Duty, Non-Repairable)	\$13,200.00				
Nets (Heavy Duty, Repairable)	\$17,600.00				
<b>Site Clearance Verify</b>		<b>448.29</b>	<b>20.61%</b>	<b>\$71,438.06</b>	<b>3.20%</b>
Trawler	\$58,838.06				
Nets (Non-Repairable)	\$6,000.00				
Nets (Repairable)	\$6,600.00				
<b>Offload CB 180</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,000.00</b>	<b>0.45%</b>
Cargo Barge 180	\$0.00				
CB Damage Deduct	\$10,000.00				
<b>Offload CB 300</b>		<b>384.00</b>	<b>17.66%</b>	<b>\$95,600.00</b>	<b>4.28%</b>
Cargo Barge 300	\$85,600.00				
CB Damage Deduct	\$10,000.00				
<b>Total</b>		<b>1997.88</b>	<b>91.86%</b>	<b>\$1,851,105.37</b>	<b>82.86%</b>



## El Paso Field Services

### Pipeline Information

#### HI A330 HIOS (Ver1) Segment#:4087

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#### General Data

Water Depth:	255'
Origin / Terminus:	Origin
Opposite End Name:	HIA 343
Opposite End Water Depth:	235'
Pipeline Operator:	El Paso
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	30"	Wall Thickness:		Length:	76560'
Depth of Burial:		# Crossings:		Product:	Gas/Cond
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

A 100-ft section is removed at each end of the pipeline. The derrick barge that will remove the platform will remove the pipeline sections. The derrick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

### Pipeline Decommission Task Information

#### HI A330 HIOS (Ver 1) Segment#:4087

Task	Note	Contingency	Task Hours		Task Cost	
Mobilize Work Boat		<input checked="" type="checkbox"/>	17.10	7.63%	\$8,763.75	1.35%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	2.23%	\$2,562.50	0.40%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	9.00	4.01%	\$4,612.50	0.71%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.89%	\$1,025.00	0.16%
Demob Work Boat		<input checked="" type="checkbox"/>	17.10	7.63%	\$8,763.75	1.35%
Mobilize Dive Boat		<input type="checkbox"/>	17.10	7.63%	\$37,455.50	5.78%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.34%	\$6,571.14	1.01%
Expose Pipeline		<input checked="" type="checkbox"/>	9.10	4.06%	\$19,932.46	3.08%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	9.10	4.06%	\$19,932.46	3.08%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	6.07	2.71%	\$13,295.61	2.05%
Remove Tube Turn		<input checked="" type="checkbox"/>	6.07	2.71%	\$13,295.61	2.05%
Bury Pipeline		<input checked="" type="checkbox"/>	6.07	2.71%	\$13,295.61	2.05%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.34%	\$6,571.14	1.01%
Expose Pipeline		<input checked="" type="checkbox"/>	9.10	4.06%	\$19,932.46	3.08%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	9.10	4.06%	\$19,932.46	3.08%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	6.07	2.71%	\$13,295.61	2.05%
Remove Tube Turn		<input checked="" type="checkbox"/>	6.07	2.71%	\$13,295.61	2.05%
Bury Pipeline		<input checked="" type="checkbox"/>	6.07	2.71%	\$13,295.61	2.05%
Demob Dive Boat		<input type="checkbox"/>	17.10	7.63%	\$37,455.50	5.78%
Remove Pipeline		<input checked="" type="checkbox"/>	28.00	12.49%	\$241,132.64	37.22%
<b>Task Total</b>			191.22	85.29%	\$514,416.92	79.40%
<b>Misc. Work Provision (15.00%)</b>			23.55	10.51%	\$65,925.89	10.18%
<b>Weather Contingency (6.00%)</b>			9.42	4.20%	\$26,370.35	4.07%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$41,153.35	6.35%
<b>Total:</b>			224.19	100.00%	\$647,866.52	100.00%



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Pipeline Decommission Resources Breakdown

#### HI A330 HIOS (Ver 1) Segment#:4087

**Total Cost: \$641,873.65**

<b>Resource Used</b>	<b>Unit Cost</b>		<b>Cost</b>	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$9,800.00	1.53%
DB 2000	\$6,650.00	per Hour per Barge	\$186,200.00	29.01%
Decommissioning Crew	\$0.00	Calculated from tables	\$18,362.28	2.86%
Dive Boat	\$0.00	Calculated from tables	\$52,667.32	8.21%
Dive Serv - Basic	\$0.00	Calculated from tables	\$171,721.46	26.75%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$55,585.86	8.66%
Manual Calculation	\$0.00	Independently Calculated	\$0.00	0.00%
Work Boat	\$0.00	Calculated from tables	\$20,080.00	3.13%



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A330 HIOS (Ver 1) Segment#:4087

Total Hours: 224.19

Total Cost: \$641,873.65

Task		Task Hours	Task Cost
<b>Mobilize Work Boat</b>		<b>17.10 7.63%</b>	<b>\$8,763.75 1.37%</b>
Work Boat	\$6,840.00		
Decommissioning Crew	\$1,923.75		
<b>Rig Up Decomm Equipment</b>		<b>5.00 2.23%</b>	<b>\$2,562.50 0.40%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>9.00 4.01%</b>	<b>\$4,612.50 0.72%</b>
Work Boat	\$3,600.00		
Decommissioning Crew	\$1,012.50		
<b>Derig Decomm Equipment</b>		<b>2.00 0.89%</b>	<b>\$1,025.00 0.16%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Demob Work Boat</b>		<b>17.10 7.63%</b>	<b>\$8,763.75 1.37%</b>
Work Boat	\$6,840.00		
Decommissioning Crew	\$1,923.75		
<b>Mobilize Dive Boat</b>		<b>17.10 7.63%</b>	<b>\$37,455.50 5.84%</b>
Dive Boat	\$7,968.60		
Dive Serv - Basic	\$20,822.84		
Dive Serv - Suppl	\$6,740.31		
Decommissioning Crew	\$1,923.75		
<b>Set Up Dive Boat</b>		<b>3.00 1.34%</b>	<b>\$6,571.14 1.02%</b>
Dive Boat	\$1,398.00		
Dive Serv - Basic	\$3,653.13		
Dive Serv - Suppl	\$1,182.51		
Decommissioning Crew	\$337.50		
<b>Expose Pipeline</b>		<b>9.10 4.06%</b>	<b>\$19,932.46 3.11%</b>
Dive Boat	\$4,240.60		
Dive Serv - Basic	\$11,081.16		
Dive Serv - Suppl	\$3,586.95		
Decommissioning Crew	\$1,023.75		





## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut &amp; Plug Pipeline</b>		<b>9.10</b>	<b>4.06%</b>	<b>\$19,932.46</b>	<b>3.11%</b>
Dive Boat	\$4,240.60				
Dive Serv - Basic	\$11,081.16				
Dive Serv - Suppl	\$3,586.95				
Decommissioning Crew	\$1,023.75				
<b>Cut Pipeline Riser</b>		<b>6.07</b>	<b>2.71%</b>	<b>\$13,295.61</b>	<b>2.07%</b>
Dive Boat	\$2,828.62				
Dive Serv - Basic	\$7,391.50				
Dive Serv - Suppl	\$2,392.61				
Decommissioning Crew	\$682.88				
<b>Remove Tube Turn</b>		<b>6.07</b>	<b>2.71%</b>	<b>\$13,295.61</b>	<b>2.07%</b>
Dive Boat	\$2,828.62				
Dive Serv - Basic	\$7,391.50				
Dive Serv - Suppl	\$2,392.61				
Decommissioning Crew	\$682.88				
Manual Calculation	\$0.00				
<b>Bury Pipeline</b>		<b>6.07</b>	<b>2.71%</b>	<b>\$13,295.61</b>	<b>2.07%</b>
Dive Boat	\$2,828.62				
Dive Serv - Basic	\$7,391.50				
Dive Serv - Suppl	\$2,392.61				
Decommissioning Crew	\$682.88				
<b>Set Up Dive Boat</b>		<b>3.00</b>	<b>1.34%</b>	<b>\$6,571.14</b>	<b>1.02%</b>
Dive Boat	\$1,398.00				
Dive Serv - Basic	\$3,653.13				
Dive Serv - Suppl	\$1,182.51				
Decommissioning Crew	\$337.50				
<b>Expose Pipeline</b>		<b>9.10</b>	<b>4.06%</b>	<b>\$19,932.46</b>	<b>3.11%</b>
Dive Boat	\$4,240.60				
Dive Serv - Basic	\$11,081.16				
Dive Serv - Suppl	\$3,586.95				
Decommissioning Crew	\$1,023.75				

**El Paso Field Services****Pipeline Decommission Cost Breakdown**

<b>Cut &amp; Plug Pipeline</b>		<b>9.10</b>	<b>4.06%</b>	<b>\$19,932.46</b>	<b>3.11%</b>
Dive Boat	\$4,240.60				
Dive Serv - Basic	\$11,081.16				
Dive Serv - Suppl	\$3,586.95				
Decommissioning Crew	\$1,023.75				
<b>Cut Pipeline Riser</b>		<b>6.07</b>	<b>2.71%</b>	<b>\$13,295.61</b>	<b>2.07%</b>
Dive Boat	\$2,828.62				
Dive Serv - Basic	\$7,391.50				
Dive Serv - Suppl	\$2,392.61				
Decommissioning Crew	\$682.88				
<b>Remove Tube Turn</b>		<b>6.07</b>	<b>2.71%</b>	<b>\$13,295.61</b>	<b>2.07%</b>
Dive Boat	\$2,828.62				
Dive Serv - Basic	\$7,391.50				
Dive Serv - Suppl	\$2,392.61				
Decommissioning Crew	\$682.88				
<b>Bury Pipeline</b>		<b>6.07</b>	<b>2.71%</b>	<b>\$13,295.61</b>	<b>2.07%</b>
Dive Boat	\$2,828.62				
Dive Serv - Basic	\$7,391.50				
Dive Serv - Suppl	\$2,392.61				
Decommissioning Crew	\$682.88				
<b>Demob Dive Boat</b>		<b>17.10</b>	<b>7.63%</b>	<b>\$37,455.50</b>	<b>5.84%</b>
Dive Boat	\$7,968.60				
Dive Serv - Basic	\$20,822.84				
Dive Serv - Suppl	\$6,740.31				
Decommissioning Crew	\$1,923.75				
<b>Remove Pipeline</b>		<b>28.00</b>	<b>12.49%</b>	<b>\$241,132.64</b>	<b>37.57%</b>
DB 2000	\$186,200.00				
Dive Serv - Basic	\$34,095.88				
Dive Serv - Suppl	\$11,036.76				
CB 240 & Tug	\$9,800.00				
<b>Total</b>		<b>191.22</b>	<b>85.29%</b>	<b>\$514,416.92</b>	<b>80.14%</b>

**HI A343 HIOS**



## **El Paso Field Services**

### **Platform Salvage Option**

### **HI A343 HIOS (Ver 1)**

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High Island Block A343 has 1 structure that is operated by El Paso Field Services. The structure will be removed in one mobilization and demobilization of a 2000-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be pigged, flushed, cleaned, plugged and left in-situ. (See #12 below.)

High Island A343 HIOS is a 4-pile Manifold platform installed in 1979 in 235' water depth. A 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The deck equipment and deck will be placed on a 180' x 54' cargo barge. Piles will be explosively severed and a 300' x 100' cargo barge will be used for the jacket. The deck, facilities and jacket will be taken to shore and scrapped. A 1,400 ft radius will be needed to clear both platform sites of any bottom debris.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.
17. Engineering & Project Management cost 8% (company or other)
18. Work Contingency 15%
19. Weather Contingency 6%



**El Paso Field Services**  
**Platform Salvage Option**  
**HI A343 HIOS (Ver 1)**

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20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.

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Estimated Decommissioning Gross Cost = \$2,638,156

Estimated Decommissioning Net Cost = \$2,638,156



## El Paso Field Services

### Basic Information

#### HI A343 HIOS (Ver 1)

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#### General Data

Platform:	HI A343 HIOS
Function:	DRILL/MANIFOLD
Type:	Steel
Water Depth:	235'
Pre 461H?:	Yes
Year Installed:	1979
Estimated Removal Year:	2002
District:	Gulf of Mexico
Lease Number:	
Account Code:	TSB - 22071
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	1
Estimate Complete?:	No

#### Partner Data

Partner	Working Intere
1 El Paso	100.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$2,012,419	\$2,012,419
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$625,737	\$625,737
Total Decommissioning Cost:	\$2,638,156	\$2,638,156



## El Paso Field Services

### Platform Information

### HI A343 HIOS (Ver 1)

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#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	4	48"	1.5"	No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:	70X70	70
Middle:		
Lower:		

#### 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:	800.00		
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	550 Tons
Number of Padeyes Required:	0
Deck Installation Date:	3/30/79
Deck Contractor:	



## El Paso Field Services Platform Information HI A343 HIOS (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Heliport	20.00

### Members to be Cut Data

Underwater Members	
Size	Qty

### Cargo Descriptions

Cargo Barge Size	Cargo Description		
CB 180 x 54	Deck 100-500T	Piles	Equipment
CB 240 x 72	Jkt > 700T		

### Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	4.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$133,847.00





**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Platform Comments**

#### **HI A343 HIOS (Ver 1)**

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Assumed the following:

Jacket Weights, Deck Weights, Pile Sizes, Equipment Weights



## El Paso Field Services

### Platform Decommission Task Information

#### HI A343 HIOS (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$11,201.28	0.56%
Platform Removal Preparation		<input type="checkbox"/>	504.00	25.35%	\$177,786.00	8.83%
Mobilize Work Boat		<input type="checkbox"/>	18.30	0.92%	\$5,984.10	0.30%
NMFS Marine Observation		<input type="checkbox"/>	48.00	2.41%	\$15,696.00	0.78%
Demob Work Boat		<input type="checkbox"/>	18.30	0.92%	\$5,215.50	0.26%
Mobilize DB 2000		<input type="checkbox"/>	21.86	1.10%	\$178,275.29	8.86%
Mobilize CB 180 & Tug	Deck, Equipment and Piles	<input type="checkbox"/>	38.60	1.94%	\$27,440.00	1.36%
Mobilize CB 300 & Tug	Jacket	<input type="checkbox"/>	38.60	1.94%	\$32,265.00	1.60%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.34%	\$54,251.17	2.70%
Bring in Cargo Barge	Deck, Equipment and Piles	<input checked="" type="checkbox"/>	2.00	0.10%	\$16,664.42	0.83%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	4.64	0.23%	\$38,661.45	1.92%
Remove Equipment		<input checked="" type="checkbox"/>	0.50	0.03%	\$4,166.11	0.21%
Remove 4 Pile Deck		<input checked="" type="checkbox"/>	9.35	0.47%	\$77,906.17	3.87%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	8.00	0.40%	\$66,657.68	3.31%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.40%	\$66,657.68	3.31%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.05%	\$11,832.21	0.59%
Sever Piles		<input checked="" type="checkbox"/>	2.92	0.15%	\$24,330.05	1.21%
Remove Piles from Jackt Legs		<input checked="" type="checkbox"/>	27.06	1.36%	\$224,333.08	11.15%
Demob CB 180 & Tug		<input type="checkbox"/>	38.60	1.94%	\$11,387.00	0.57%
Bring in Cargo Barge	Jacket	<input checked="" type="checkbox"/>	2.00	0.10%	\$17,124.42	0.85%
Remove Jacket - Meth 3	Modified	<input checked="" type="checkbox"/>	21.70	1.09%	\$184,888.56	9.19%
Demob CB 300 & Tug		<input type="checkbox"/>	38.60	1.94%	\$20,265.00	1.01%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.34%	\$53,967.67	2.68%
Demob DB 2000		<input type="checkbox"/>	21.86	1.10%	\$178,275.29	8.86%
Site Clearance - with Trawler		<input checked="" type="checkbox"/>	285.86	14.38%	\$68,319.13	3.39%
Site Clearance Verify		<input checked="" type="checkbox"/>	427.71	21.52%	\$68,736.94	3.42%
Offload CB 180		<input type="checkbox"/>	216.00	10.87%	\$20,800.00	1.03%
Offload CB 300		<input type="checkbox"/>	0.00	0.00%	\$10,000.00	0.50%
<b>Task Total</b>			1816.96	91.40%	\$1,673,087.20	83.14%
<b>Misc. Work Provision (15.00%)</b>			122.14	6.14%	\$146,774.50	7.29%
<b>Weather Contingency (6.00%)</b>			48.85	2.46%	\$58,709.80	2.92%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Platform Decommission Task Information

#### HI A343 HIOS (Ver 1)

Task	Note	Contingency	Task Hours	Task Cost
<b>Cost of Engineering (8.00%)</b>			\$133,847.00	6.65%
<b>Total:</b>			1987.95 100.00%	\$2,012,418.50 100.00%



## El Paso Field Services

### Platform Decommission Resources Breakdown

#### HI A343 HIOS (Ver 1)

**Total Cost: \$2,012,419.00**

Resource Used	Unit Cost		Cost	
Cargo Barge 180	\$1,200.00	per Day per Barge	\$10,800.00	0.54%
Cargo Barge 300	\$5,350.00	per Day per Barge	\$0.00	0.00%
CB 180 & Tug	\$295.00	per Hour per Barge/Tug	\$30,110.65	1.50%
CB 240 & Tug	\$400.00	per Hour per Barge/Tug	\$15,440.00	0.77%
CB 300 & Tug	\$525.00	per Hour per Barge/Tug	\$52,972.50	2.63%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$20,000.00	0.99%
Decomm Platform	\$0.00	Calculated from tables	\$177,786.00	8.83%
Derrick Barge 2000	\$6,650.00	per Hour per barge	\$960,193.50	47.71%
Dive Serv - Basic	\$0.00	Calculated from tables	\$175,825.14	8.74%
Expl Charge - Piling	\$58.34	per Inch of Outside Diam	\$11,201.28	0.56%
Expl Technician	\$62.50	per Hour	\$9,024.39	0.45%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	0.52%
Nets (Heavy Duty, Non-Repairable)	\$4,400.00	ea	\$13,200.00	0.66%
Nets (Heavy Duty, Repairable)	\$2,200.00	ea	\$17,600.00	0.87%
Nets (Non-Repairable)	\$2,000.00	ea	\$6,000.00	0.30%
Nets (Repairable)	\$1,100.00	ea	\$6,600.00	0.33%
NMFS Observers (2)	\$42.00	per Hour	\$4,681.32	0.23%
Pipeline Survey	\$65.00	per Hour	\$9,385.35	0.47%
Rig Up CB 240	\$12,000.00	per Barge	\$12,000.00	0.60%
Rig Up CB 300	\$12,000.00	per Barge	\$12,000.00	0.60%
Trawler	\$131.25	per Hour	\$93,656.07	4.65%
Work Boat	\$285.00	per Hour	\$24,111.00	1.20%



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A343 HIOS (Ver 1)

Total Hours: 1987.95

Total Cost: \$2,012,419.00

Task Cost

## Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$11,201.28</b>	<b>0.56%</b>
Expl Charge - Piling	\$11,201.28				
<b>Platform Removal Preparation</b>		<b>504.00</b>	<b>25.35%</b>	<b>\$177,786.00</b>	<b>8.83%</b>
Decomm Platform	\$177,786.00				
<b>Mobilize Work Boat</b>		<b>18.30</b>	<b>0.92%</b>	<b>\$5,984.10</b>	<b>0.30%</b>
Work Boat	\$5,215.50				
NMFS Observers (2)	\$768.60				
<b>NMFS Marine Observation</b>		<b>48.00</b>	<b>2.41%</b>	<b>\$15,696.00</b>	<b>0.78%</b>
Work Boat	\$13,680.00				
NMFS Observers (2)	\$2,016.00				
<b>Demob Work Boat</b>		<b>18.30</b>	<b>0.92%</b>	<b>\$5,215.50</b>	<b>0.26%</b>
Work Boat	\$5,215.50				
<b>Mobilize DB 2000</b>		<b>21.86</b>	<b>1.10%</b>	<b>\$178,275.29</b>	<b>8.86%</b>
Derrick Barge 2000	\$145,369.00				
Pipeline Survey	\$1,420.90				
Expl Technician	\$1,366.25				
Dive Serv - Basic	\$26,619.14				
Helicopter Trips	\$3,500.00				
<b>Mobilize CB 180 &amp; Tug</b>		<b>38.60</b>	<b>1.94%</b>	<b>\$27,440.00</b>	<b>1.36%</b>
CB 240 & Tug	\$15,440.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 300 &amp; Tug</b>		<b>38.60</b>	<b>1.94%</b>	<b>\$32,265.00</b>	<b>1.60%</b>
CB 300 & Tug	\$20,265.00				
Rig Up CB 300	\$12,000.00				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A343 HIOS (Ver 1)

**Total Hours: 1987.95**

**Total Cost: \$2,012,419.00**

**Task Cost**

#### Task

<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.34%</b>	<b>\$54,251.17</b>	<b>2.70%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
NMFS Observers (2)	\$283.50				
Expl Technician	\$421.88				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.10%</b>	<b>\$16,664.42</b>	<b>0.83%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$2,435.42				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 180 & Tug	\$590.00				
Expl Technician	\$125.00				
<b>Cut Deck/Equip/Misc</b>		<b>4.64</b>	<b>0.23%</b>	<b>\$38,661.45</b>	<b>1.92%</b>
CB 180 & Tug	\$1,368.80				
Derrick Barge 2000	\$30,856.00				
Dive Serv - Basic	\$5,650.17				
Expl Technician	\$290.00				
Pipeline Survey	\$301.60				
NMFS Observers (2)	\$194.88				
<b>Remove Equipment</b>		<b>0.50</b>	<b>0.03%</b>	<b>\$4,166.11</b>	<b>0.21%</b>
CB 180 & Tug	\$147.50				
Derrick Barge 2000	\$3,325.00				
Dive Serv - Basic	\$608.86				
Pipeline Survey	\$32.50				
NMFS Observers (2)	\$21.00				
Expl Technician	\$31.25				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A343 HIOS (Ver 1)

Total Hours: 1987.95

Total Cost: \$2,012,419.00

Task Cost

## Task

<b>Remove 4 Pile Deck</b>		<b>9.35</b>	<b>0.47%</b>	<b>\$77,906.17</b>	<b>3.87%</b>
CB 180 & Tug	\$2,758.25				
Derrick Barge 2000	\$62,177.50				
Dive Serv - Basic	\$11,385.59				
Expl Technician	\$584.38				
Pipeline Survey	\$607.75				
NMFS Observers (2)	\$392.70				
<b>Jet/Airlift Pile Mud Plug</b>		<b>8.00</b>	<b>0.40%</b>	<b>\$66,657.68</b>	<b>3.31%</b>
CB 180 & Tug	\$2,360.00				
Derrick Barge 2000	\$53,200.00				
Dive Serv - Basic	\$9,741.68				
Expl Technician	\$500.00				
Pipeline Survey	\$520.00				
NMFS Observers (2)	\$336.00				
<b>Standby for Daylight Det.</b>		<b>8.00</b>	<b>0.40%</b>	<b>\$66,657.68</b>	<b>3.31%</b>
Derrick Barge 2000	\$53,200.00				
CB 180 & Tug	\$2,360.00				
Expl Technician	\$500.00				
NMFS Observers (2)	\$336.00				
Pipeline Survey	\$520.00				
Dive Serv - Basic	\$9,741.68				
<b>Pre/Post Detonat'n Survey</b>		<b>1.00</b>	<b>0.05%</b>	<b>\$11,832.21</b>	<b>0.59%</b>
CB 180 & Tug	\$295.00				
Derrick Barge 2000	\$6,650.00				
Dive Serv - Basic	\$1,217.71				
Expl Technician	\$62.50				
Pipeline Survey	\$65.00				
Helicopter Trips	\$3,500.00				
NMFS Observers (2)	\$42.00				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A343 HIOS (Ver 1)

**Total Hours: 1987.95**

**Total Cost: \$2,012,419.00**

**Task Cost**

#### Task

<b>Sever Piles</b>		<b>2.92</b>	<b>0.15%</b>	<b>\$24,330.05</b>	<b>1.21%</b>
CB 180 & Tug	\$861.40				
Derrick Barge 2000	\$19,418.00				
Dive Serv - Basic	\$3,555.71				
Expl Technician	\$182.50				
Pipeline Survey	\$189.80				
NMFS Observers (2)	\$122.64				
<b>Remove Piles from Jackt Legs</b>		<b>27.06</b>	<b>1.36%</b>	<b>\$224,333.08</b>	<b>11.15%</b>
CB 180 & Tug	\$7,982.70				
Derrick Barge 2000	\$179,949.00				
Dive Serv - Basic	\$32,951.23				
Expl Technician	\$1,691.25				
Pipeline Survey	\$1,758.90				
<b>Demob CB 180 &amp; Tug</b>		<b>38.60</b>	<b>1.94%</b>	<b>\$11,387.00</b>	<b>0.57%</b>
CB 180 & Tug	\$11,387.00				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.10%</b>	<b>\$17,124.42</b>	<b>0.85%</b>
Derrick Barge 2000	\$13,300.00				
Dive Serv - Basic	\$2,435.42				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 300 & Tug	\$1,050.00				
Expl Technician	\$125.00				
<b>Remove Jacket - Meth 3</b>		<b>21.70</b>	<b>1.09%</b>	<b>\$184,888.56</b>	<b>9.19%</b>
CB 300 & Tug	\$11,392.50				
Derrick Barge 2000	\$144,305.00				
Dive Serv - Basic	\$26,424.31				
Pipeline Survey	\$1,410.50				
Expl Technician	\$1,356.25				





## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A343 HIOS (Ver 1)

Total Hours: 1987.95

Total Cost: \$2,012,419.00

Task Cost

## Task

<b>Demob CB 300 &amp; Tug</b>		<b>38.60</b>	<b>1.94%</b>	<b>\$20,265.00</b>	<b>1.01%</b>
CB 300 & Tug	\$20,265.00				
<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.34%</b>	<b>\$53,967.67</b>	<b>2.68%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
Expl Technician	\$421.88				
<b>Demob DB 2000</b>		<b>21.86</b>	<b>1.10%</b>	<b>\$178,275.29</b>	<b>8.86%</b>
Derrick Barge 2000	\$145,369.00				
Pipeline Survey	\$1,420.90				
Dive Serv - Basic	\$26,619.14				
Expl Technician	\$1,366.25				
Helicopter Trips	\$3,500.00				
<b>Site Clearance - with Trawler</b>		<b>285.86</b>	<b>14.38%</b>	<b>\$68,319.13</b>	<b>3.39%</b>
Trawler	\$37,519.13				
Nets (Heavy Duty, Non-Repairable)	\$13,200.00				
Nets (Heavy Duty, Repairable)	\$17,600.00				
<b>Site Clearance Verify</b>		<b>427.71</b>	<b>21.52%</b>	<b>\$68,736.94</b>	<b>3.42%</b>
Trawler	\$56,136.94				
Nets (Non-Repairable)	\$6,000.00				
Nets (Repairable)	\$6,600.00				
<b>Offload CB 180</b>		<b>216.00</b>	<b>10.87%</b>	<b>\$20,800.00</b>	<b>1.03%</b>
Cargo Barge 180	\$10,800.00				
CB Damage Deduct	\$10,000.00				
<b>Offload CB 300</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,000.00</b>	<b>0.50%</b>
Cargo Barge 300	\$0.00				
CB Damage Deduct	\$10,000.00				
<b>Total</b>		<b>1816.96</b>	<b>91.40%</b>	<b>\$1,673,087.20</b>	<b>83.14%</b>



## El Paso Field Services

### Pipeline Information

#### HI A343 HIOS (Ver1) Segment#:4088

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#### General Data

Water Depth:	235'
Origin / Terminus:	Origin
Opposite End Name:	HI A264
Opposite End Water Depth:	152'
Pipeline Operator:	El Paso
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	36.25"	Wall Thickness:		Length:	138336'
Depth of Burial:		# Crossings:		Product:	Gas/Cond
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

A 100-ft section is removed at each end of the pipeline. The derrick barge that will remove the platform will remove the pipeline sections. The derrick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

### Pipeline Decommission Task Information

#### HI A343 HIOS (Ver 1) Segment#:4088

Task	Note	Contingency	Task Hours		Task Cost	
Mobilize Work Boat		<input checked="" type="checkbox"/>	18.30	8.30%	\$9,378.75	1.50%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	2.27%	\$2,562.50	0.41%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	12.75	5.79%	\$6,534.38	1.04%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.91%	\$1,025.00	0.16%
Demob Work Boat		<input checked="" type="checkbox"/>	18.30	8.30%	\$9,378.75	1.50%
Mobilize Dive Boat		<input type="checkbox"/>	18.30	8.30%	\$40,083.95	6.41%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.36%	\$6,571.14	1.05%
Expose Pipeline		<input checked="" type="checkbox"/>	7.69	3.49%	\$16,844.03	2.69%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	7.69	3.49%	\$16,844.03	2.69%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	5.13	2.33%	\$11,236.65	1.80%
Remove Tube Turn		<input checked="" type="checkbox"/>	5.13	2.33%	\$11,236.65	1.80%
Bury Pipeline		<input checked="" type="checkbox"/>	5.13	2.33%	\$11,236.65	1.80%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.36%	\$6,571.14	1.05%
Expose Pipeline		<input checked="" type="checkbox"/>	7.69	3.49%	\$16,844.03	2.69%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	7.69	3.49%	\$16,844.03	2.69%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	5.13	2.33%	\$11,236.65	1.80%
Remove Tube Turn		<input checked="" type="checkbox"/>	5.13	2.33%	\$11,236.65	1.80%
Bury Pipeline		<input checked="" type="checkbox"/>	5.13	2.33%	\$11,236.65	1.80%
Demob Dive Boat		<input type="checkbox"/>	18.30	8.30%	\$40,083.95	6.41%
Remove Pipeline		<input checked="" type="checkbox"/>	28.00	12.70%	\$241,132.64	38.54%
<b>Task Total</b>			188.49	85.53%	\$498,118.22	79.61%
<b>Misc. Work Provision (15.00%)</b>			22.78	10.34%	\$62,692.55	10.02%
<b>Weather Contingency (6.00%)</b>			9.11	4.14%	\$25,077.02	4.01%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$39,849.46	6.37%
<b>Total:</b>			220.39	100.00%	\$625,737.25	100.00%



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Pipeline Decommission Resources Breakdown

#### HI A343 HIOS (Ver 1) Segment#:4088

**Total Cost: \$619,323.82**

Resource Used	Unit Cost		Cost	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$9,800.00	1.58%
DB 2000	\$6,650.00	per Hour per Barge	\$186,200.00	30.07%
Decommissioning Crew	\$0.00	Calculated from tables	\$18,055.18	2.92%
Dive Boat	\$0.00	Calculated from tables	\$48,529.24	7.84%
Dive Serv - Basic	\$0.00	Calculated from tables	\$160,908.18	25.98%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$52,085.62	8.41%
Manual Calculation	\$0.00	Independently Calculated	\$0.00	0.00%
Work Boat	\$0.00	Calculated from tables	\$22,540.00	3.64%



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A343 HIOS (Ver 1) Segment#:4088

Total Hours: 220.39

Total Cost: \$619,323.82

Task		Task Hours	Task Cost
<b>Mobilize Work Boat</b>		<b>18.30 8.30%</b>	<b>\$9,378.75 1.51%</b>
Work Boat	\$7,320.00		
Decommissioning Crew	\$2,058.75		
<b>Rig Up Decomm Equipment</b>		<b>5.00 2.27%</b>	<b>\$2,562.50 0.41%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>12.75 5.79%</b>	<b>\$6,534.38 1.06%</b>
Work Boat	\$5,100.00		
Decommissioning Crew	\$1,434.38		
<b>Derig Decomm Equipment</b>		<b>2.00 0.91%</b>	<b>\$1,025.00 0.17%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Demob Work Boat</b>		<b>18.30 8.30%</b>	<b>\$9,378.75 1.51%</b>
Work Boat	\$7,320.00		
Decommissioning Crew	\$2,058.75		
<b>Mobilize Dive Boat</b>		<b>18.30 8.30%</b>	<b>\$40,083.95 6.47%</b>
Dive Boat	\$8,527.80		
Dive Serv - Basic	\$22,284.09		
Dive Serv - Suppl	\$7,213.31		
Decommissioning Crew	\$2,058.75		
<b>Set Up Dive Boat</b>		<b>3.00 1.36%</b>	<b>\$6,571.14 1.06%</b>
Dive Boat	\$1,398.00		
Dive Serv - Basic	\$3,653.13		
Dive Serv - Suppl	\$1,182.51		
Decommissioning Crew	\$337.50		
<b>Expose Pipeline</b>		<b>7.69 3.49%</b>	<b>\$16,844.03 2.72%</b>
Dive Boat	\$3,583.54		
Dive Serv - Basic	\$9,364.19		
Dive Serv - Suppl	\$3,031.17		
Decommissioning Crew	\$865.13		



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut &amp; Plug Pipeline</b>		<b>7.69</b>	<b>3.49%</b>	<b>\$16,844.03</b>	<b>2.72%</b>
Dive Boat	\$3,583.54				
Dive Serv - Basic	\$9,364.19				
Dive Serv - Suppl	\$3,031.17				
Decommissioning Crew	\$865.13				
<b>Cut Pipeline Riser</b>		<b>5.13</b>	<b>2.33%</b>	<b>\$11,236.65</b>	<b>1.81%</b>
Dive Boat	\$2,390.58				
Dive Serv - Basic	\$6,246.85				
Dive Serv - Suppl	\$2,022.09				
Decommissioning Crew	\$577.13				
<b>Remove Tube Turn</b>		<b>5.13</b>	<b>2.33%</b>	<b>\$11,236.65</b>	<b>1.81%</b>
Dive Boat	\$2,390.58				
Dive Serv - Basic	\$6,246.85				
Dive Serv - Suppl	\$2,022.09				
Decommissioning Crew	\$577.13				
Manual Calculation	\$0.00				
<b>Bury Pipeline</b>		<b>5.13</b>	<b>2.33%</b>	<b>\$11,236.65</b>	<b>1.81%</b>
Dive Boat	\$2,390.58				
Dive Serv - Basic	\$6,246.85				
Dive Serv - Suppl	\$2,022.09				
Decommissioning Crew	\$577.13				
<b>Set Up Dive Boat</b>		<b>3.00</b>	<b>1.36%</b>	<b>\$6,571.14</b>	<b>1.06%</b>
Dive Boat	\$1,398.00				
Dive Serv - Basic	\$3,653.13				
Dive Serv - Suppl	\$1,182.51				
Decommissioning Crew	\$337.50				
<b>Expose Pipeline</b>		<b>7.69</b>	<b>3.49%</b>	<b>\$16,844.03</b>	<b>2.72%</b>
Dive Boat	\$3,583.54				
Dive Serv - Basic	\$9,364.19				
Dive Serv - Suppl	\$3,031.17				
Decommissioning Crew	\$865.13				



## El Paso Field Services

## Pipeline Decommission Cost Breakdown

<b>Cut &amp; Plug Pipeline</b>		<b>7.69</b>	<b>3.49%</b>	<b>\$16,844.03</b>	<b>2.72%</b>
Dive Boat	\$3,583.54				
Dive Serv - Basic	\$9,364.19				
Dive Serv - Suppl	\$3,031.17				
Decommissioning Crew	\$865.13				
<b>Cut Pipeline Riser</b>		<b>5.13</b>	<b>2.33%</b>	<b>\$11,236.65</b>	<b>1.81%</b>
Dive Boat	\$2,390.58				
Dive Serv - Basic	\$6,246.85				
Dive Serv - Suppl	\$2,022.09				
Decommissioning Crew	\$577.13				
<b>Remove Tube Turn</b>		<b>5.13</b>	<b>2.33%</b>	<b>\$11,236.65</b>	<b>1.81%</b>
Dive Boat	\$2,390.58				
Dive Serv - Basic	\$6,246.85				
Dive Serv - Suppl	\$2,022.09				
Decommissioning Crew	\$577.13				
<b>Bury Pipeline</b>		<b>5.13</b>	<b>2.33%</b>	<b>\$11,236.65</b>	<b>1.81%</b>
Dive Boat	\$2,390.58				
Dive Serv - Basic	\$6,246.85				
Dive Serv - Suppl	\$2,022.09				
Decommissioning Crew	\$577.13				
<b>Demob Dive Boat</b>		<b>18.30</b>	<b>8.30%</b>	<b>\$40,083.95</b>	<b>6.47%</b>
Dive Boat	\$8,527.80				
Dive Serv - Basic	\$22,284.09				
Dive Serv - Suppl	\$7,213.31				
Decommissioning Crew	\$2,058.75				
<b>Remove Pipeline</b>		<b>28.00</b>	<b>12.70%</b>	<b>\$241,132.64</b>	<b>38.93%</b>
DB 2000	\$186,200.00				
Dive Serv - Basic	\$34,095.88				
Dive Serv - Suppl	\$11,036.76				
CB 240 & Tug	\$9,800.00				
<b>Total</b>		<b>188.49</b>	<b>85.53%</b>	<b>\$498,118.22</b>	<b>80.43%</b>

## **HI A350 Pipeline**





**El Paso Field Services**  
**Platform Salvage Option**  
**HI A350 Pipeline (Ver 1)**

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This estimate include only pipeline abandonment costs.

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Estimated Decommissioning Gross Cost =	\$520,398
Estimated Decommissioning Net Cost =	\$263,425



## El Paso Field Services

### Basic Information

#### HI A350 Pipeline (Ver 1)

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#### General Data

Platform: HI A350 Pipeline  
Function:  
Type:  
Water Depth:  
Pre 461H?: No  
Year Installed:  
Estimated Removal Year:  
District:  
Lease Number:  
Account Code: TSB - 22071  
Amortization: 1.00  
# Wells to P & A: 0  
# Pipelines to Abandon: 1  
Estimate Complete?: No

#### Partner Data

Partner	Working Intere
1 El Paso Field Service	50.62%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$0	\$0
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$520,398	\$263,425
Total Decommissioning Cost:	\$520,398	\$263,425



## El Paso Field Services

### Platform Information

### HI A350 Pipeline (Ver 1)

---

#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	0			No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

#### 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:			
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	
Number of Padeyes Required:	0
Deck Installation Date:	
Deck Contractor:	



**El Paso Field Services**  
**Platform Information**  
**HI A350 Pipeline (Ver 1)**

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**Equipment Lift Weights**

**Members to be Cut Data**

**Cargo Descriptions**

<b>Cargo Barge Size</b>	<b>Cargo Description</b>
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**Miscellaneous Data**

Derrick Barge Anchors:	0
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	6.00%
Engineering%:	8.00%

**Miscellaneous Cost**

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



**TWACHTMAN SNYDER & BYRD, INC.**

**El Paso Field Services**

**Platform Comments**

**HI A350 Pipeline (Ver 1)**

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## El Paso Field Services

### Pipeline Information

#### HI A350 Pipeline (Ver1) Segment#:4679

---

#### General Data

Water Depth:	305'
Origin / Terminus:	Origin
Opposite End Name:	24 SSTI
Opposite End Water Depth:	305'
Pipeline Operator:	El Paso Field Services
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	20"	Wall Thickness:		Length:	350'
Depth of Burial:		# Crossings:		Product:	
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

This pipeline will be removed with the derrick barge that removes the platform. The derrick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

## Pipeline Decommission Task Information

## HI A350 Pipeline (Ver 1) Segment#:4679

Task	Note	Contingency	Task Hours		Task Cost	
Mobilize Dive Boat		<input type="checkbox"/>	17.10	18.06%	\$37,455.50	7.20%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	3.17%	\$6,571.14	1.26%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	5.28%	\$10,951.90	2.10%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	4.00	4.22%	\$8,761.52	1.68%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.11%	\$4,380.76	0.84%
Demob Dive Boat		<input type="checkbox"/>	17.10	18.06%	\$37,455.50	7.20%
Remove Pipeline		<input checked="" type="checkbox"/>	36.00	38.01%	\$310,027.68	59.58%
<b>Task Total</b>			84.20	88.91%	\$415,604.00	79.86%
<b>Misc. Work Provision (15.00%)</b>			7.50	7.92%	\$51,103.95	9.82%
<b>Weather Contingency (6.00%)</b>			3.00	3.17%	\$20,441.58	3.93%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$33,248.32	6.39%
<b>Total:</b>			94.70	100.00%	\$520,397.85	100.00%



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Pipeline Decommission Resources Breakdown

#### HI A350 Pipeline (Ver 1) Segment#:4679

**Total Cost: \$514,404.98**

Resource Used	Unit Cost		Cost	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$12,600.00	2.45%
DB 2000	\$6,650.00	per Hour per Barge	\$239,400.00	46.54%
Decommissioning Crew	\$0.00	Calculated from tables	\$5,422.50	1.05%
Dive Boat	\$0.00	Calculated from tables	\$22,461.20	4.37%
Dive Serv - Basic	\$0.00	Calculated from tables	\$102,531.18	19.93%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$33,189.12	6.45%





## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A350 Pipeline (Ver 1) Segment#:4679

Total Hours: 94.70

Total Cost: \$514,404.98

Task		Task Hours		Task Cost	
<b>Mobilize Dive Boat</b>		<b>17.10</b>	<b>18.06%</b>	<b>\$37,455.50</b>	<b>7.28%</b>
Dive Boat	\$7,968.60				
Dive Serv - Basic	\$20,822.84				
Dive Serv - Suppl	\$6,740.31				
Decommissioning Crew	\$1,923.75				
<b>Set Up Dive Boat</b>		<b>3.00</b>	<b>3.17%</b>	<b>\$6,571.14</b>	<b>1.28%</b>
Dive Boat	\$1,398.00				
Dive Serv - Basic	\$3,653.13				
Dive Serv - Suppl	\$1,182.51				
Decommissioning Crew	\$337.50				
<b>Rig Up Decomm Equipment</b>		<b>5.00</b>	<b>5.28%</b>	<b>\$10,951.90</b>	<b>2.13%</b>
Dive Boat	\$2,330.00				
Dive Serv - Basic	\$6,088.55				
Dive Serv - Suppl	\$1,970.85				
Decommissioning Crew	\$562.50				
<b>Pig &amp; Flush Pipeline</b>		<b>4.00</b>	<b>4.22%</b>	<b>\$8,761.52</b>	<b>1.70%</b>
Dive Serv - Basic	\$4,870.84				
Dive Serv - Suppl	\$1,576.68				
Dive Boat	\$1,864.00				
Decommissioning Crew	\$450.00				
<b>Derig Decomm Equipment</b>		<b>2.00</b>	<b>2.11%</b>	<b>\$4,380.76</b>	<b>0.85%</b>
Dive Boat	\$932.00				
Dive Serv - Basic	\$2,435.42				
Dive Serv - Suppl	\$788.34				
Decommissioning Crew	\$225.00				
<b>Demob Dive Boat</b>		<b>17.10</b>	<b>18.06%</b>	<b>\$37,455.50</b>	<b>7.28%</b>
Dive Boat	\$7,968.60				
Dive Serv - Basic	\$20,822.84				
Dive Serv - Suppl	\$6,740.31				
Decommissioning Crew	\$1,923.75				



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Remove Pipeline</b>		<b>36.00</b>	<b>38.01%</b>	<b>\$310,027.68</b>	<b>60.27%</b>
DB 2000	\$239,400.00				
Dive Serv - Basic	\$43,837.56				
Dive Serv - Suppl	\$14,190.12				
CB 240 & Tug	\$12,600.00				
<b>Total</b>		<b>84.20</b>	<b>88.91%</b>	<b>\$415,604.00</b>	<b>80.79%</b>

## **HI A370 Pipeline**



**El Paso Field Services**  
**Platform Salvage Option**  
**HI A370 Pipeline (Ver 1)**

---

This estimate include only pipeline abandonment costs.

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Estimated Decommissioning Gross Cost =	\$409,698
Estimated Decommissioning Net Cost =	\$270,441



## El Paso Field Services

### Basic Information

#### HI A370 Pipeline (Ver 1)

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#### General Data

Platform: HI A370 Pipeline  
Function:  
Type:  
Water Depth:  
Pre 461H?: No  
Year Installed:  
Estimated Removal Year:  
District:  
Lease Number:  
Account Code: TSB - 22071  
Amortization: 1.00  
# Wells to P & A: 0  
# Pipelines to Abandon: 1  
Estimate Complete?: No

#### Partner Data

Partner	Working Intere
1 El Paso Field Services	66.01%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$0	\$0
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$409,698	\$270,441
Total Decommissioning Cost:	\$409,698	\$270,441



## El Paso Field Services

### Platform Information

### HI A370 Pipeline (Ver 1)

---

#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	0			No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

#### 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:			
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	
Number of Padeyes Required:	0
Deck Installation Date:	
Deck Contractor:	



## El Paso Field Services

## Platform Information

## HI A370 Pipeline (Ver 1)

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## Equipment Lift Weights

## Members to be Cut Data

## Cargo Descriptions

Cargo Barge Size	Cargo Description
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## Miscellaneous Data

Derrick Barge Anchors:	0
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	6.00%
Engineering%:	8.00%

## Miscellaneous Cost

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



TWACHTMAN SNYDER & BYRD, INC.

**El Paso Field Services**

**Platform Comments**

**HI A370 Pipeline (Ver 1)**

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## El Paso Field Services

### Pipeline Information

#### HI A370 Pipeline (Ver1) Segment#:4680

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#### General Data

Water Depth:	350'
Origin / Terminus:	Origin
Opposite End Name:	HI A 330
Opposite End Water Depth:	255'
Pipeline Operator:	El Paso Field Services
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	24"	Wall Thickness:		Length:	43975'
Depth of Burial:		# Crossings:		Product:	
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

This pipeline will be removed with the derrick barge that removes the platform. The derrick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

## Pipeline Decommission Task Information

## HI A370 Pipeline (Ver 1) Segment#:4680

Task	Note	Contingency	Task Hours		Task Cost	
Mobilize Dive Boat		<input type="checkbox"/>	17.10	19.29%	\$37,455.50	9.14%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	3.38%	\$6,571.14	1.60%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	5.64%	\$2,562.50	0.63%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	7.00	7.90%	\$3,587.50	0.88%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	2.26%	\$1,025.00	0.25%
Demob Dive Boat		<input type="checkbox"/>	17.10	19.29%	\$37,455.50	9.14%
Remove Pipeline		<input checked="" type="checkbox"/>	28.00	31.58%	\$241,132.64	58.86%
<b>Task Total</b>			79.20	89.34%	\$329,789.78	80.50%
<b>Misc. Work Provision (15.00%)</b>			6.75	7.61%	\$38,231.82	9.33%
<b>Weather Contingency (6.00%)</b>			2.70	3.05%	\$15,292.73	3.73%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$26,383.18	6.44%
<b>Total:</b>			88.65	100.00%	\$409,697.50	100.00%



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Pipeline Decommission Resources Breakdown**

#### **HI A370 Pipeline (Ver 1) Segment#:4680**

**Total Cost: \$403,704.63**

<b>Resource Used</b>	<b>Unit Cost</b>		<b>Cost</b>	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$9,800.00	2.43%
DB 2000	\$6,650.00	per Hour per Barge	\$186,200.00	46.12%
Decommissioning Crew	\$0.00	Calculated from tables	\$5,760.00	1.43%
Dive Boat	\$0.00	Calculated from tables	\$17,335.20	4.29%
Dive Serv - Basic	\$0.00	Calculated from tables	\$79,394.69	19.67%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$25,699.89	6.37%
Work Boat	\$0.00	Calculated from tables	\$5,600.00	1.39%



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A370 Pipeline (Ver 1) Segment#:4680

Total Hours: 88.65

Total Cost: \$403,704.63

Task		Task Hours	Task Cost
<b>Mobilize Dive Boat</b>		<b>17.10 19.29%</b>	<b>\$37,455.50 9.28%</b>
Dive Boat	\$7,968.60		
Dive Serv - Basic	\$20,822.84		
Dive Serv - Suppl	\$6,740.31		
Decommissioning Crew	\$1,923.75		
<b>Set Up Dive Boat</b>		<b>3.00 3.38%</b>	<b>\$6,571.14 1.63%</b>
Dive Boat	\$1,398.00		
Dive Serv - Basic	\$3,653.13		
Dive Serv - Suppl	\$1,182.51		
Decommissioning Crew	\$337.50		
<b>Rig Up Decomm Equipment</b>		<b>5.00 5.64%</b>	<b>\$2,562.50 0.63%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>7.00 7.90%</b>	<b>\$3,587.50 0.89%</b>
Work Boat	\$2,800.00		
Decommissioning Crew	\$787.50		
<b>Derig Decomm Equipment</b>		<b>2.00 2.26%</b>	<b>\$1,025.00 0.25%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Demob Dive Boat</b>		<b>17.10 19.29%</b>	<b>\$37,455.50 9.28%</b>
Dive Boat	\$7,968.60		
Dive Serv - Basic	\$20,822.84		
Dive Serv - Suppl	\$6,740.31		
Decommissioning Crew	\$1,923.75		
<b>Remove Pipeline</b>		<b>28.00 31.58%</b>	<b>\$241,132.64 59.73%</b>
DB 2000	\$186,200.00		
Dive Serv - Basic	\$34,095.88		
Dive Serv - Suppl	\$11,036.76		
CB 240 & Tug	\$9,800.00		
<b>Total</b>		<b>79.20 89.34%</b>	<b>\$329,789.78 81.69%</b>

**HI A573 HIOS**



## **El Paso Field Services**

### **Platform Salvage Option**

### **HI A573 HIOS (Ver 1)**

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High Island Block A573 has one platform that is operated by El Paso Field Services. The platform will be removed with a 2000-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be flushed, cleaned, plugged and left in-situ. (See #12 below.)

High Island A573 HIOS is a 4-pile manifold platform installed in 1979 in 340' water depth. One 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The top deck equipment, and deck will be placed on a 240' x 72' cargo barge. Piles will be explosively severed and the jacket will be towed to shallow water, cut into manageable pieces and placed on additional 240' x 72' cargo barges. The decks, facilities and jacket will be taken to shore and scrapped. Side Scan Sonar and Divers will perform a bottom sweep to verify the site is clear.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26. No allowances have been made for debris removal.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.
17. Engineering & Project Management cost 8% (company or other)
18. Work Contingency 15%



## **El Paso Field Services**

### **Platform Salvage Option**

#### **HI A573 HIOS (Ver 1)**

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19. Weather Contingency 6%

20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.

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Estimated Decommissioning Gross Cost = \$5,798,276

Estimated Decommissioning Net Cost = \$5,798,276



## El Paso Field Services

### Basic Information

#### HI A573 HIOS (Ver 1)

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#### General Data

Platform:	HI A573 HIOS
Function:	DRILL/MANIFOLD
Type:	Steel
Water Depth:	340'
Pre 461H?:	Yes
Year Installed:	1979
Estimated Removal Year:	2002
District:	Gulf of Mexico
Lease Number:	
Account Code:	TSB - 22071
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	1
Estimate Complete?:	No

#### Partner Data

Partner	Working Intere
1 El Paso	100.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$5,070,974	\$5,070,974
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$727,302	\$727,302
Total Decommissioning Cost:	\$5,798,276	\$5,798,276





## El Paso Field Services

### Platform Information

### HI A573 HIOS (Ver 1)

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#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	4	36"	1.5"	No	No	
Skirt:	4	36"	1.5"	No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:	60X60	92
Middle:	60X30	73
Lower:	80X80	48

#### 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:	1901.00	✓	✓
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	300 Tons
Number of Padeyes Required:	0
Deck Installation Date:	3/3/97
Deck Contractor:	



## El Paso Field Services

### Platform Information

### HI A573 HIOS (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Boom	10.00
Equipment	0.00
Heliport	20.00

### Members to be Cut Data

#### Top Members

Size	Qty
16.00	32.00
40.00	16.00

### Cargo Descriptions

#### Cargo Barge Size      Cargo Description

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CB 240 x 72	Deck > 500T
CB 240 x 72	Jkt 300-700T
CB 240 x 72	Jkt 300-700T
CB 240 x 72	Jkt 300-700T
CB 240 x 72	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%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$328,681.31



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Platform Comments**

#### **HI A573 HIOS (Ver 1)**

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Assumed the following:

Jacket Weights, Deck Weights, Pile Sizes, Grout Weights, Equipment Weights, Deck(s) Sizes



## El Paso Field Services

### Platform Decommission Task Information

#### HI A573 HIOS (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$16,801.92	0.33%
Platform Removal Preparation		<input type="checkbox"/>	504.00	16.83%	\$177,786.00	3.51%
Mobilize Work Boat		<input type="checkbox"/>	20.10	0.67%	\$6,572.70	0.13%
NMFS Marine Observation		<input type="checkbox"/>	48.00	1.60%	\$15,696.00	0.31%
Mobilize DB 2000		<input type="checkbox"/>	24.43	0.82%	\$198,822.99	3.92%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Route Survey		<input type="checkbox"/>	48.00	1.60%	\$19,800.00	0.39%
Demob Work Boat		<input type="checkbox"/>	20.10	0.67%	\$5,728.50	0.11%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.23%	\$54,251.17	1.07%
Bring in Cargo Barge		<input checked="" type="checkbox"/>	2.00	0.07%	\$16,874.42	0.33%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	3.85	0.13%	\$32,483.26	0.64%
Remove Equipment		<input checked="" type="checkbox"/>	1.00	0.03%	\$8,437.21	0.17%
Remove 4 Pile Deck		<input checked="" type="checkbox"/>	9.35	0.31%	\$78,887.92	1.56%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.27%	\$64,297.68	1.27%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.03%	\$11,537.21	0.23%
Sever Piles		<input checked="" type="checkbox"/>	2.92	0.10%	\$23,468.65	0.46%
Install Closure Plates		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,976.05	0.79%
Deballast Piles or Jkt Lg		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%
Lift/Secure Jkt for Tow		<input checked="" type="checkbox"/>	6.00	0.20%	\$49,996.26	0.99%
Tow Jckt to Shallow Water	Tow to 232' water depth	<input checked="" type="checkbox"/>	10.00	0.33%	\$83,327.10	1.64%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.23%	\$56,245.79	1.11%
Cut Jacket	Cut at -88' elev.	<input checked="" type="checkbox"/>	49.33	1.65%	\$411,052.59	8.11%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	13.75	0.46%	\$114,574.76	2.26%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Install Closure Plates		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%
Deballast Piles or Jkt Lg		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%
Lift/Secure Jkt for Tow		<input checked="" type="checkbox"/>	6.00	0.20%	\$49,996.26	0.99%
Tow Jckt to Shallow Water	Tow to 158' water depth	<input checked="" type="checkbox"/>	8.00	0.27%	\$66,661.68	1.31%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.23%	\$56,245.79	1.11%
Cut Jacket	Cut at -168' elev.	<input checked="" type="checkbox"/>	49.33	1.65%	\$411,052.59	8.11%
Remove Jacket - Meth 2		<input checked="" type="checkbox"/>	26.50	0.88%	\$220,816.82	4.35%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Install Closure Plates		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%



## El Paso Field Services

### Platform Decommission Task Information

#### HI A573 HIOS (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Deballast Piles or Jkt Lg		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%
Lift/Secure Jkt for Tow		<input checked="" type="checkbox"/>	6.00	0.20%	\$49,996.26	0.99%
Tow Jckt to Shallow Water	Tow to 70' water depth	<input checked="" type="checkbox"/>	6.00	0.20%	\$49,996.26	0.99%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.23%	\$56,245.79	1.11%
Cut Jacket	Cut at -252' elev.	<input checked="" type="checkbox"/>	49.33	1.65%	\$411,052.59	8.11%
Remove Jacket - Meth 2		<input checked="" type="checkbox"/>	26.50	0.88%	\$224,129.32	4.42%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Remove Jacket - Meth 1	Removal of base section	<input checked="" type="checkbox"/>	13.75	0.46%	\$116,293.51	2.29%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.23%	\$61,765.33	1.22%
Demob DB 2000		<input type="checkbox"/>	24.43	0.82%	\$198,822.99	3.92%
Offload CB 240		<input type="checkbox"/>	1440.00	48.07%	\$182,800.00	3.60%
Site Clearance - with Divers	Does not include debris removal	<input type="checkbox"/>	6.00	0.20%	\$38,904.90	0.77%
<b>Task Total</b>			2919.42	97.46%	\$4,108,516.02	81.02%
<b>Misc. Work Provision (15.00%)</b>			54.35	1.81%	\$452,697.00	8.93%
<b>Weather Contingency (6.00%)</b>			21.74	0.73%	\$181,078.80	3.57%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$328,681.30	6.48%
<b>Total:</b>			2995.51	100.00%	\$5,070,973.12	100.00%



## El Paso Field Services

### Platform Decommission Resources Breakdown

### HI A573 HIOS (Ver 1)

**Total Cost: \$5,070,974.00**

Resource Used	Unit Cost		Cost	
Cargo Barge 240	\$2,880.00	per Day per Barge	\$172,800.00	3.41%
CB 240 & Tug	\$400.00	per Hour per Barge/Tug	\$275,476.00	5.43%
CB 300 & Tug	\$525.00	per Hour per Barge/Tug	\$21,131.25	0.42%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$10,000.00	0.20%
Decomm Platform	\$0.00	Calculated from tables	\$177,786.00	3.51%
Derrick Barge 2000	\$6,650.00	per Hour per barge	\$2,734,613.00	53.93%
Dive Boat	\$466.00	per Hour	\$2,796.00	0.06%
Dive Serv - Basic	\$0.00	Calculated from tables	\$530,885.04	10.47%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$14,190.12	0.28%
Expl Charge - Piling	\$58.34	per Inch of Outside Diam	\$16,801.92	0.33%
Expl Technician	\$62.50	per Hour	\$5,545.65	0.11%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	0.21%
NMFS Observers (2)	\$42.00	per Hour	\$4,324.74	0.09%
Pipeline Survey	\$65.00	per Hour	\$29,849.30	0.59%
Rig Up CB 240	\$12,000.00	per Barge	\$60,000.00	1.18%
Side Scan Sonar	\$62.50	per Hour	\$3,000.00	0.06%
Work Boat	\$285.00	per Hour	\$38,817.00	0.77%



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A573 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$16,801.92</b>	<b>0.33%</b>
Expl Charge - Piling	\$16,801.92				
<b>Platform Removal Preparation</b>		<b>504.00</b>	<b>16.83%</b>	<b>\$177,786.00</b>	<b>3.51%</b>
Decomm Platform	\$177,786.00				
<b>Mobilize Work Boat</b>		<b>20.10</b>	<b>0.67%</b>	<b>\$6,572.70</b>	<b>0.13%</b>
Work Boat	\$5,728.50				
NMFS Observers (2)	\$844.20				
<b>NMFS Marine Observation</b>		<b>48.00</b>	<b>1.60%</b>	<b>\$15,696.00</b>	<b>0.31%</b>
Work Boat	\$13,680.00				
NMFS Observers (2)	\$2,016.00				
<b>Mobilize DB 2000</b>		<b>24.43</b>	<b>0.82%</b>	<b>\$198,822.99</b>	<b>3.92%</b>
Derrick Barge 2000	\$162,459.50				
Dive Serv - Basic	\$29,748.66				
Expl Technician	\$1,526.88				
Helicopter Trips	\$3,500.00				
Pipeline Survey	\$1,587.95				
<b>Mobilize CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug	\$16,880.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug	\$16,880.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug	\$16,880.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug	\$16,880.00				
Rig Up CB 240	\$12,000.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A573 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Mobilize CB 240 &amp; Tug</b>	<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug			\$16,880.00	
Rig Up CB 240			\$12,000.00	
<b>Route Survey</b>	<b>48.00</b>	<b>1.60%</b>	<b>\$19,800.00</b>	<b>0.39%</b>
Pipeline Survey			\$3,120.00	
Side Scan Sonar			\$3,000.00	
Work Boat			\$13,680.00	
<b>Demob Work Boat</b>	<b>20.10</b>	<b>0.67%</b>	<b>\$5,728.50</b>	<b>0.11%</b>
Work Boat			\$5,728.50	
<b>Setup Derrick Barge</b>	<b>6.75</b>	<b>0.23%</b>	<b>\$54,251.17</b>	<b>1.07%</b>
Derrick Barge 2000			\$44,887.50	
Dive Serv - Basic			\$8,219.54	
Pipeline Survey			\$438.75	
NMFS Observers (2)			\$283.50	
Expl Technician			\$421.88	
<b>Bring in Cargo Barge</b>	<b>2.00</b>	<b>0.07%</b>	<b>\$16,874.42</b>	<b>0.33%</b>
Derrick Barge 2000			\$13,300.00	
Dive Serv - Basic			\$2,435.42	
Pipeline Survey			\$130.00	
NMFS Observers (2)			\$84.00	
Expl Technician			\$125.00	
CB 240 & Tug			\$800.00	
<b>Cut Deck/Equip/Misc</b>	<b>3.85</b>	<b>0.13%</b>	<b>\$32,483.26</b>	<b>0.64%</b>
CB 240 & Tug			\$1,540.00	
Derrick Barge 2000			\$25,602.50	
Dive Serv - Basic			\$4,688.18	
Expl Technician			\$240.63	
Pipeline Survey			\$250.25	
NMFS Observers (2)			\$161.70	





## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A573 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Remove Equipment</b>		<b>1.00</b>	<b>0.03%</b>	<b>\$8,437.21</b>	<b>0.17%</b>
CB 240 & Tug	\$400.00				
Derrick Barge 2000	\$6,650.00				
Dive Serv - Basic	\$1,217.71				
Expl Technician	\$62.50				
Pipeline Survey	\$65.00				
NMFS Observers (2)	\$42.00				
<b>Remove 4 Pile Deck</b>		<b>9.35</b>	<b>0.31%</b>	<b>\$78,887.92</b>	<b>1.56%</b>
CB 240 & Tug	\$3,740.00				
Derrick Barge 2000	\$62,177.50				
Dive Serv - Basic	\$11,385.59				
Expl Technician	\$584.38				
Pipeline Survey	\$607.75				
NMFS Observers (2)	\$392.70				
<b>Demob CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
CB 240 & Tug	\$16,880.00				
<b>Standby for Daylight Det.</b>		<b>8.00</b>	<b>0.27%</b>	<b>\$64,297.68</b>	<b>1.27%</b>
Derrick Barge 2000	\$53,200.00				
Dive Serv - Basic	\$9,741.68				
Expl Technician	\$500.00				
Pipeline Survey	\$520.00				
NMFS Observers (2)	\$336.00				
<b>Pre/Post Detonat'n Survey</b>		<b>1.00</b>	<b>0.03%</b>	<b>\$11,537.21</b>	<b>0.23%</b>
Derrick Barge 2000	\$6,650.00				
Dive Serv - Basic	\$1,217.71				
Expl Technician	\$62.50				
Pipeline Survey	\$65.00				
NMFS Observers (2)	\$42.00				
Helicopter Trips	\$3,500.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A573 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Sever Piles</b>		<b>2.92</b>	<b>0.10%</b>	<b>\$23,468.65</b>	<b>0.46%</b>
Derrick Barge 2000	\$19,418.00				
Dive Serv - Basic	\$3,555.71				
Expl Technician	\$182.50				
Pipeline Survey	\$189.80				
NMFS Observers (2)	\$122.64				
<b>Install Closure Plates</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,976.05</b>	<b>0.79%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Expl Technician	\$312.50				
Pipeline Survey	\$325.00				
<b>Deballast Piles or Jkt Lg</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				
<b>Lift/Secure Jkt for Tow</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$49,996.26</b>	<b>0.99%</b>
Derrick Barge 2000	\$39,900.00				
Dive Serv - Basic	\$7,306.26				
Pipeline Survey	\$390.00				
CB 240 & Tug	\$2,400.00				
<b>Tow Jkt to Shallow Water</b>		<b>10.00</b>	<b>0.33%</b>	<b>\$83,327.10</b>	<b>1.64%</b>
CB 240 & Tug	\$4,000.00				
Derrick Barge 2000	\$66,500.00				
Dive Serv - Basic	\$12,177.10				
Pipeline Survey	\$650.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A573 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.23%</b>	<b>\$56,245.79</b>	<b>1.11%</b>
CB 240 & Tug	\$2,700.00				
Derrick Barge 2000	\$44,887.50				
Pipeline Survey	\$438.75				
Dive Serv - Basic	\$8,219.54				
<b>Cut Jacket</b>		<b>49.33</b>	<b>1.65%</b>	<b>\$411,052.59</b>	<b>8.11%</b>
CB 240 & Tug	\$19,732.00				
Derrick Barge 2000	\$328,044.50				
Dive Serv - Basic	\$60,069.64				
Pipeline Survey	\$3,206.45				
<b>Remove Jacket - Meth 1</b>		<b>13.75</b>	<b>0.46%</b>	<b>\$114,574.76</b>	<b>2.26%</b>
CB 240 & Tug	\$5,500.00				
Derrick Barge 2000	\$91,437.50				
Dive Serv - Basic	\$16,743.51				
Pipeline Survey	\$893.75				
<b>Demob CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
CB 240 & Tug	\$16,880.00				
<b>Install Closure Plates</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				
<b>Deballast Piles or Jkt Lg</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A573 HIOS (Ver 1)

**Total Hours: 2995.51**

**Total Cost: \$5,070,974.00**

**Task Cost**

#### Task

<b>Lift/Secure Jkt for Tow</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$49,996.26</b>	<b>0.99%</b>
CB 240 & Tug	\$2,400.00				
Derrick Barge 2000	\$39,900.00				
Dive Serv - Basic	\$7,306.26				
Pipeline Survey	\$390.00				
<b>Tow Jckt to Shallow Water</b>		<b>8.00</b>	<b>0.27%</b>	<b>\$66,661.68</b>	<b>1.31%</b>
CB 240 & Tug	\$3,200.00				
Derrick Barge 2000	\$53,200.00				
Dive Serv - Basic	\$9,741.68				
Pipeline Survey	\$520.00				
<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.23%</b>	<b>\$56,245.79</b>	<b>1.11%</b>
CB 240 & Tug	\$2,700.00				
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
<b>Cut Jacket</b>		<b>49.33</b>	<b>1.65%</b>	<b>\$411,052.59</b>	<b>8.11%</b>
CB 240 & Tug	\$19,732.00				
Derrick Barge 2000	\$328,044.50				
Dive Serv - Basic	\$60,069.64				
Pipeline Survey	\$3,206.45				
<b>Remove Jacket - Meth 2</b>		<b>26.50</b>	<b>0.88%</b>	<b>\$220,816.82</b>	<b>4.35%</b>
CB 240 & Tug	\$10,600.00				
Derrick Barge 2000	\$176,225.00				
Dive Serv - Basic	\$32,269.32				
Pipeline Survey	\$1,722.50				
<b>Demob CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
CB 240 & Tug	\$16,880.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A573 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Install Closure Plates</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				
<b>Deballast Piles or Jkt Lg</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				
<b>Lift/Secure Jkt for Tow</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$49,996.26</b>	<b>0.99%</b>
CB 240 & Tug	\$2,400.00				
Derrick Barge 2000	\$39,900.00				
Dive Serv - Basic	\$7,306.26				
Pipeline Survey	\$390.00				
<b>Tow Jckt to Shallow Water</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$49,996.26</b>	<b>0.99%</b>
CB 240 & Tug	\$2,400.00				
Derrick Barge 2000	\$39,900.00				
Dive Serv - Basic	\$7,306.26				
Pipeline Survey	\$390.00				
<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.23%</b>	<b>\$56,245.79</b>	<b>1.11%</b>
CB 240 & Tug	\$2,700.00				
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
<b>Cut Jacket</b>		<b>49.33</b>	<b>1.65%</b>	<b>\$411,052.59</b>	<b>8.11%</b>
CB 240 & Tug	\$19,732.00				
Derrick Barge 2000	\$328,044.50				
Dive Serv - Basic	\$60,069.64				
Pipeline Survey	\$3,206.45				



# El Paso Field Services

## Platform Decommission Cost Breakdown

### HI A573 HIOS (Ver 1)

**Total Hours: 2995.51**

**Total Cost: \$5,070,974.00**

**Task Cost**

#### Task

<b>Remove Jacket - Meth 2</b>		<b>26.50</b>	<b>0.88%</b>	<b>\$224,129.32</b>	<b>4.42%</b>
CB 300 & Tug	\$13,912.50				
Derrick Barge 2000	\$176,225.00				
Dive Serv - Basic	\$32,269.32				
Pipeline Survey	\$1,722.50				
<b>Demob CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
CB 240 & Tug	\$16,880.00				
<b>Remove Jacket - Meth 1</b>		<b>13.75</b>	<b>0.46%</b>	<b>\$116,293.51</b>	<b>2.29%</b>
CB 300 & Tug	\$7,218.75				
Derrick Barge 2000	\$91,437.50				
Dive Serv - Basic	\$16,743.51				
Pipeline Survey	\$893.75				
<b>Demob CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
CB 240 & Tug	\$16,880.00				
<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.23%</b>	<b>\$61,765.33</b>	<b>1.22%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
Dive Serv - Basic	\$8,219.54				
<b>Demob DB 2000</b>		<b>24.43</b>	<b>0.82%</b>	<b>\$198,822.99</b>	<b>3.92%</b>
Derrick Barge 2000	\$162,459.50				
Dive Serv - Basic	\$29,748.66				
Expl Technician	\$1,526.88				
Pipeline Survey	\$1,587.95				
Helicopter Trips	\$3,500.00				
<b>Offload CB 240</b>		<b>1440.00</b>	<b>48.07%</b>	<b>\$182,800.00</b>	<b>3.60%</b>
Cargo Barge 240	\$172,800.00				
CB Damage Deduct	\$10,000.00				



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A573 HIOS (Ver 1)

**Total Hours: 2995.51**

**Total Cost: \$5,070,974.00**

**Task Cost**

#### Task

<b>Site Clearance - with Divers</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$38,904.90</b>	<b>0.77%</b>
Dive Boat	\$2,796.00				
Dive Serv - Basic	\$21,918.78				
Dive Serv - Suppl	\$14,190.12				
<b>Total</b>		<b>2919.42</b>	<b>97.46%</b>	<b>\$4,108,516.02</b>	<b>81.02%</b>



## El Paso Field Services

### Pipeline Information

#### HI A573 HIOS (Ver1) Segment#:4591

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#### General Data

Water Depth:	340'
Origin / Terminus:	Origin
Opposite End Name:	HI 264
Opposite End Water Depth:	152'
Pipeline Operator:	El Paso
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	30"	Wall Thickness:		Length:	216480'
Depth of Burial:		# Crossings:		Product:	Gas/Cond
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

A 100-ft section is removed at each end of the pipeline. The derrick barge that will remove the platform will remove the pipeline sections. The derrick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.





## El Paso Field Services

### Pipeline Decommission Task Information

#### HI A573 HIOS (Ver 1) Segment#:4591

Task	Note	Contingency	Task Hours		Task Cost	
Mobilize Work Boat		<input checked="" type="checkbox"/>	20.10	7.39%	\$10,301.25	1.42%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.84%	\$2,562.50	0.35%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	18.00	6.62%	\$9,225.00	1.27%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.74%	\$1,025.00	0.14%
Demob Work Boat		<input checked="" type="checkbox"/>	20.10	7.39%	\$10,301.25	1.42%
Mobilize Dive Boat		<input type="checkbox"/>	20.10	7.39%	\$44,026.64	6.05%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.10%	\$6,571.14	0.90%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	4.25%	\$25,298.89	3.48%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	11.55	4.25%	\$25,298.89	3.48%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	2.83%	\$16,865.93	2.32%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	2.83%	\$16,865.93	2.32%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	2.83%	\$16,865.93	2.32%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.10%	\$6,571.14	0.90%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	4.25%	\$25,298.89	3.48%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	11.55	4.25%	\$25,298.89	3.48%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	2.83%	\$16,865.93	2.32%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	2.83%	\$16,865.93	2.32%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	2.83%	\$16,865.93	2.32%
Demob Dive Boat		<input type="checkbox"/>	20.10	7.39%	\$44,026.64	6.05%
Remove Pipeline		<input checked="" type="checkbox"/>	28.00	10.29%	\$241,132.64	33.15%
<b>Task Total</b>			231.80	85.21%	\$578,134.34	79.49%
<b>Misc. Work Provision (15.00%)</b>			28.74	10.56%	\$73,512.16	10.11%
<b>Weather Contingency (6.00%)</b>			11.50	4.23%	\$29,404.86	4.04%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$46,250.75	6.36%
<b>Total:</b>			272.04	100.00%	\$727,302.11	100.00%



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Pipeline Decommission Resources Breakdown

#### HI A573 HIOS (Ver 1) Segment#:4591

**Total Cost: \$720,257.86**

Resource Used	Unit Cost		Cost	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$9,800.00	1.36%
DB 2000	\$6,650.00	per Hour per Barge	\$186,200.00	25.85%
Decommissioning Crew	\$0.00	Calculated from tables	\$22,927.52	3.18%
Dive Boat	\$0.00	Calculated from tables	\$64,587.60	8.97%
Dive Serv - Basic	\$0.00	Calculated from tables	\$202,870.50	28.17%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$65,668.72	9.12%
Manual Calculation	\$0.00	Independently Calculated	\$0.00	0.00%
Work Boat	\$0.00	Calculated from tables	\$26,080.00	3.62%



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A573 HIOS (Ver 1) Segment#:4591

Total Hours: 272.04

Total Cost: \$720,257.86

Task		Task Hours	Task Cost
<b>Mobilize Work Boat</b>		<b>20.10 7.39%</b>	<b>\$10,301.25 1.43%</b>
Work Boat	\$8,040.00		
Decommissioning Crew	\$2,261.25		
<b>Rig Up Decomm Equipment</b>		<b>5.00 1.84%</b>	<b>\$2,562.50 0.36%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>18.00 6.62%</b>	<b>\$9,225.00 1.28%</b>
Work Boat	\$7,200.00		
Decommissioning Crew	\$2,025.00		
<b>Derig Decomm Equipment</b>		<b>2.00 0.74%</b>	<b>\$1,025.00 0.14%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Demob Work Boat</b>		<b>20.10 7.39%</b>	<b>\$10,301.25 1.43%</b>
Work Boat	\$8,040.00		
Decommissioning Crew	\$2,261.25		
<b>Mobilize Dive Boat</b>		<b>20.10 7.39%</b>	<b>\$44,026.64 6.11%</b>
Dive Boat	\$9,366.60		
Dive Serv - Basic	\$24,475.97		
Dive Serv - Suppl	\$7,922.82		
Decommissioning Crew	\$2,261.25		
<b>Set Up Dive Boat</b>		<b>3.00 1.10%</b>	<b>\$6,571.14 0.91%</b>
Dive Boat	\$1,398.00		
Dive Serv - Basic	\$3,653.13		
Dive Serv - Suppl	\$1,182.51		
Decommissioning Crew	\$337.50		
<b>Expose Pipeline</b>		<b>11.55 4.25%</b>	<b>\$25,298.89 3.51%</b>
Dive Boat	\$5,382.30		
Dive Serv - Basic	\$14,064.55		
Dive Serv - Suppl	\$4,552.66		
Decommissioning Crew	\$1,299.38		



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut &amp; Plug Pipeline</b>		<b>11.55</b>	<b>4.25%</b>	<b>\$25,298.89</b>	<b>3.51%</b>
Dive Boat	\$5,382.30				
Dive Serv - Basic	\$14,064.55				
Dive Serv - Suppl	\$4,552.66				
Decommissioning Crew	\$1,299.38				
<b>Cut Pipeline Riser</b>		<b>7.70</b>	<b>2.83%</b>	<b>\$16,865.93</b>	<b>2.34%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Remove Tube Turn</b>		<b>7.70</b>	<b>2.83%</b>	<b>\$16,865.93</b>	<b>2.34%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
Manual Calculation	\$0.00				
<b>Bury Pipeline</b>		<b>7.70</b>	<b>2.83%</b>	<b>\$16,865.93</b>	<b>2.34%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Set Up Dive Boat</b>		<b>3.00</b>	<b>1.10%</b>	<b>\$6,571.14</b>	<b>0.91%</b>
Dive Boat	\$1,398.00				
Dive Serv - Basic	\$3,653.13				
Dive Serv - Suppl	\$1,182.51				
Decommissioning Crew	\$337.50				
<b>Expose Pipeline</b>		<b>11.55</b>	<b>4.25%</b>	<b>\$25,298.89</b>	<b>3.51%</b>
Dive Boat	\$5,382.30				
Dive Serv - Basic	\$14,064.55				
Dive Serv - Suppl	\$4,552.66				
Decommissioning Crew	\$1,299.38				



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut &amp; Plug Pipeline</b>		<b>11.55</b>	<b>4.25%</b>	<b>\$25,298.89</b>	<b>3.51%</b>
Dive Boat	\$5,382.30				
Dive Serv - Basic	\$14,064.55				
Dive Serv - Suppl	\$4,552.66				
Decommissioning Crew	\$1,299.38				
<b>Cut Pipeline Riser</b>		<b>7.70</b>	<b>2.83%</b>	<b>\$16,865.93</b>	<b>2.34%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Remove Tube Turn</b>		<b>7.70</b>	<b>2.83%</b>	<b>\$16,865.93</b>	<b>2.34%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Bury Pipeline</b>		<b>7.70</b>	<b>2.83%</b>	<b>\$16,865.93</b>	<b>2.34%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Demob Dive Boat</b>		<b>20.10</b>	<b>7.39%</b>	<b>\$44,026.64</b>	<b>6.11%</b>
Dive Boat	\$9,366.60				
Dive Serv - Basic	\$24,475.97				
Dive Serv - Suppl	\$7,922.82				
Decommissioning Crew	\$2,261.25				
<b>Remove Pipeline</b>		<b>28.00</b>	<b>10.29%</b>	<b>\$241,132.64</b>	<b>33.48%</b>
DB 2000	\$186,200.00				
Dive Serv - Basic	\$34,095.88				
Dive Serv - Suppl	\$11,036.76				
CB 240 & Tug	\$9,800.00				
<b>Total</b>		<b>231.80</b>	<b>85.21%</b>	<b>\$578,134.34</b>	<b>80.27%</b>

**HI A582 HIOS**



## **El Paso Field Services**

### **Platform Salvage Option**

### **HI A582 HIOS (Ver 1)**

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High Island Block A582 has one platform that is operated by El Paso Field Services. The platform will be with a 2000-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be flushed, cleaned, plugged and left in-situ. (See #12 below.)

High Island A582 HIOS is a 4-pile manifold platform installed in 1979 in 330' water depth. One 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The top deck equipment, and deck will be placed on a 240' x 72' cargo barge. Piles will be explosively severed and the jacket will be towed to shallow water, cut into manageable pieces and placed on additional 240' x 72' cargo barges. The decks, facilities and jacket will be taken to shore and scrapped. Side Scan Sonar and Divers (if necessary) will perform a bottom sweep to verify the site is clear.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26. No allowances have been made for debris removal.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.
17. Engineering & Project Management cost 8% (company or other)
18. Work Contingency 15%



## **El Paso Field Services**

### **Platform Salvage Option**

#### **HI A582 HIOS (Ver 1)**

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19. Weather Contingency 6%

20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.

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Estimated Decommissioning Gross Cost = \$6,397,292

Estimated Decommissioning Net Cost = \$6,397,292





## El Paso Field Services

### Basic Information

#### HI A582 HIOS (Ver 1)

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#### General Data

Platform:	HI A582 HIOS
Function:	DRILL/MANIFOLD
Type:	Steel
Water Depth:	330'
Pre 461H?:	Yes
Year Installed:	1979
Estimated Removal Year:	2002
District:	Gulf of Mexico
Lease Number:	
Account Code:	TSB - 22071
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	2
Estimate Complete?:	No

#### Partner Data

Partner	Working Intere
1 El Paso	100.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$5,070,974	\$5,070,974
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$1,326,318	\$1,326,318
Total Decommissioning Cost:	\$6,397,292	\$6,397,292



## El Paso Field Services

### Platform Information

### HI A582 HIOS (Ver 1)

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#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	4	36"	1.5"	No	No	
Skirt:	4	36"	1.5"	No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:	60X60	92
Middle:	60X30	73
Lower:	80X80	48

#### 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:	1701.00	✓	✓
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	300 Tons
Number of Padeyes Required:	0
Deck Installation Date:	3/3/97
Deck Contractor:	



## El Paso Field Services

### Platform Information

### HI A582 HIOS (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Boom	10.00
Equipment	0.00
Heliport	20.00

### Members to be Cut Data

#### Top Members

Size	Qty
16.00	8.00
20.00	8.00
22.00	8.00
40.00	12.00

### Cargo Descriptions

#### Cargo Barge Size      Cargo Description

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CB 240 x 72	Deck > 500T	Equipment
CB 240 x 72	Jkt 300-700T	
CB 240 x 72	Jkt 300-700T	
CB 240 x 72	Jkt 300-700T	
CB 240 x 72	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%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$328,681.31



**TWACHTMAN SNYDER & BYRD, INC.**

**El Paso Field Services**

**Platform Comments**

**HI A582 HIOS (Ver 1)**

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Assumed the following:

Jacket Weights, Deck Weights, Pile Sizes, Grout Weights, Equipment Weights



## El Paso Field Services

### Platform Decommission Task Information

#### HI A582 HIOS (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$16,801.92	0.33%
Platform Removal Preparation		<input type="checkbox"/>	504.00	16.83%	\$177,786.00	3.51%
Mobilize Work Boat		<input type="checkbox"/>	20.10	0.67%	\$6,572.70	0.13%
NMFS Marine Observation		<input type="checkbox"/>	48.00	1.60%	\$15,696.00	0.31%
Mobilize DB 2000		<input type="checkbox"/>	24.43	0.82%	\$198,822.99	3.92%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Mobilize CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$28,880.00	0.57%
Route Survey		<input type="checkbox"/>	48.00	1.60%	\$19,800.00	0.39%
Demob Work Boat		<input type="checkbox"/>	20.10	0.67%	\$5,728.50	0.11%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.23%	\$54,251.17	1.07%
Bring in Cargo Barge		<input checked="" type="checkbox"/>	2.00	0.07%	\$16,874.42	0.33%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	3.85	0.13%	\$32,483.26	0.64%
Remove Equipment		<input checked="" type="checkbox"/>	1.00	0.03%	\$8,437.21	0.17%
Remove 4 Pile Deck		<input checked="" type="checkbox"/>	9.35	0.31%	\$78,887.92	1.56%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.27%	\$64,297.68	1.27%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.03%	\$11,537.21	0.23%
Sever Piles		<input checked="" type="checkbox"/>	2.92	0.10%	\$23,468.65	0.46%
Install Closure Plates		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,976.05	0.79%
Deballast Piles or Jkt Lg		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%
Lift/Secure Jkt for Tow		<input checked="" type="checkbox"/>	6.00	0.20%	\$49,996.26	0.99%
Tow Jckt to Shallow Water	Tow to 232' water depth	<input checked="" type="checkbox"/>	10.00	0.33%	\$83,327.10	1.64%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.23%	\$56,245.79	1.11%
Cut Jacket	Cut at -88' elev.	<input checked="" type="checkbox"/>	49.33	1.65%	\$411,052.59	8.11%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	13.75	0.46%	\$114,574.76	2.26%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Install Closure Plates		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%
Deballast Piles or Jkt Lg		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%
Lift/Secure Jkt for Tow		<input checked="" type="checkbox"/>	6.00	0.20%	\$49,996.26	0.99%
Tow Jckt to Shallow Water	Tow to 158' water depth	<input checked="" type="checkbox"/>	8.00	0.27%	\$66,661.68	1.31%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.23%	\$56,245.79	1.11%
Cut Jacket	Cut at -168' elevation.	<input checked="" type="checkbox"/>	49.33	1.65%	\$411,052.59	8.11%
Remove Jacket - Meth 2		<input checked="" type="checkbox"/>	26.50	0.88%	\$220,816.82	4.35%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Install Closure Plates		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%



## El Paso Field Services

### Platform Decommission Task Information

#### HI A582 HIOS (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Deballast Piles or Jkt Lg		<input checked="" type="checkbox"/>	5.00	0.17%	\$39,663.55	0.78%
Lift/Secure Jkt for Tow		<input checked="" type="checkbox"/>	6.00	0.20%	\$49,996.26	0.99%
Tow Jckt to Shallow Water	Tow to 70' water depth.	<input checked="" type="checkbox"/>	6.00	0.20%	\$49,996.26	0.99%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.23%	\$56,245.79	1.11%
Cut Jacket	Cut at -252' elevation	<input checked="" type="checkbox"/>	49.33	1.65%	\$411,052.59	8.11%
Remove Jacket - Meth 2		<input checked="" type="checkbox"/>	26.50	0.88%	\$224,129.32	4.42%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Remove Jacket - Meth 1	Remove base section	<input checked="" type="checkbox"/>	13.75	0.46%	\$116,293.51	2.29%
Demob CB 240 & Tug		<input type="checkbox"/>	42.20	1.41%	\$16,880.00	0.33%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.23%	\$61,765.33	1.22%
Demob DB 2000		<input type="checkbox"/>	24.43	0.82%	\$198,822.99	3.92%
Offload CB 240		<input type="checkbox"/>	1440.00	48.07%	\$182,800.00	3.60%
Site Clearance - with Divers	Does not include debris removal	<input type="checkbox"/>	6.00	0.20%	\$38,904.90	0.77%
<b>Task Total</b>			2919.42	97.46%	\$4,108,516.02	81.02%
<b>Misc. Work Provision (15.00%)</b>			54.35	1.81%	\$452,697.00	8.93%
<b>Weather Contingency (6.00%)</b>			21.74	0.73%	\$181,078.80	3.57%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$328,681.30	6.48%
<b>Total:</b>			2995.51	100.00%	\$5,070,973.12	100.00%



**El Paso Field Services**  
**Platform Decommission Resources Breakdown**  
**HI A582 HIOS (Ver 1)**

**Total Cost: \$5,070,974.00**

<b>Resource Used</b>	<b>Unit Cost</b>		<b>Cost</b>	
Cargo Barge 240	\$2,880.00	per Day per Barge	\$172,800.00	3.41%
CB 240 & Tug	\$400.00	per Hour per Barge/Tug	\$275,476.00	5.43%
CB 300 & Tug	\$525.00	per Hour per Barge/Tug	\$21,131.25	0.42%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$10,000.00	0.20%
Decomm Platform	\$0.00	Calculated from tables	\$177,786.00	3.51%
Derrick Barge 2000	\$6,650.00	per Hour per barge	\$2,734,613.00	53.93%
Dive Boat	\$466.00	per Hour	\$2,796.00	0.06%
Dive Serv - Basic	\$0.00	Calculated from tables	\$530,885.04	10.47%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$14,190.12	0.28%
Expl Charge - Piling	\$58.34	per Inch of Outside Diam	\$16,801.92	0.33%
Expl Technician	\$62.50	per Hour	\$5,545.65	0.11%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	0.21%
NMFS Observers (2)	\$42.00	per Hour	\$4,324.74	0.09%
Pipeline Survey	\$65.00	per Hour	\$29,849.30	0.59%
Rig Up CB 240	\$12,000.00	per Barge	\$60,000.00	1.18%
Side Scan Sonar	\$62.50	per Hour	\$3,000.00	0.06%
Work Boat	\$285.00	per Hour	\$38,817.00	0.77%



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A582 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$16,801.92</b>	<b>0.33%</b>
Expl Charge - Piling	\$16,801.92				
<b>Platform Removal Preparation</b>		<b>504.00</b>	<b>16.83%</b>	<b>\$177,786.00</b>	<b>3.51%</b>
Decomm Platform	\$177,786.00				
<b>Mobilize Work Boat</b>		<b>20.10</b>	<b>0.67%</b>	<b>\$6,572.70</b>	<b>0.13%</b>
Work Boat	\$5,728.50				
NMFS Observers (2)	\$844.20				
<b>NMFS Marine Observation</b>		<b>48.00</b>	<b>1.60%</b>	<b>\$15,696.00</b>	<b>0.31%</b>
Work Boat	\$13,680.00				
NMFS Observers (2)	\$2,016.00				
<b>Mobilize DB 2000</b>		<b>24.43</b>	<b>0.82%</b>	<b>\$198,822.99</b>	<b>3.92%</b>
Derrick Barge 2000	\$162,459.50				
Dive Serv - Basic	\$29,748.66				
Expl Technician	\$1,526.88				
Helicopter Trips	\$3,500.00				
Pipeline Survey	\$1,587.95				
<b>Mobilize CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug	\$16,880.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug	\$16,880.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug	\$16,880.00				
Rig Up CB 240	\$12,000.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug	\$16,880.00				
Rig Up CB 240	\$12,000.00				





## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A582 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Mobilize CB 240 &amp; Tug</b>	<b>42.20</b>	<b>1.41%</b>	<b>\$28,880.00</b>	<b>0.57%</b>
CB 240 & Tug			\$16,880.00	
Rig Up CB 240			\$12,000.00	
<b>Route Survey</b>	<b>48.00</b>	<b>1.60%</b>	<b>\$19,800.00</b>	<b>0.39%</b>
Pipeline Survey			\$3,120.00	
Side Scan Sonar			\$3,000.00	
Work Boat			\$13,680.00	
<b>Demob Work Boat</b>	<b>20.10</b>	<b>0.67%</b>	<b>\$5,728.50</b>	<b>0.11%</b>
Work Boat			\$5,728.50	
<b>Setup Derrick Barge</b>	<b>6.75</b>	<b>0.23%</b>	<b>\$54,251.17</b>	<b>1.07%</b>
Derrick Barge 2000			\$44,887.50	
Dive Serv - Basic			\$8,219.54	
Pipeline Survey			\$438.75	
NMFS Observers (2)			\$283.50	
Expl Technician			\$421.88	
<b>Bring in Cargo Barge</b>	<b>2.00</b>	<b>0.07%</b>	<b>\$16,874.42</b>	<b>0.33%</b>
Derrick Barge 2000			\$13,300.00	
Dive Serv - Basic			\$2,435.42	
Pipeline Survey			\$130.00	
NMFS Observers (2)			\$84.00	
Expl Technician			\$125.00	
CB 240 & Tug			\$800.00	
<b>Cut Deck/Equip/Misc</b>	<b>3.85</b>	<b>0.13%</b>	<b>\$32,483.26</b>	<b>0.64%</b>
CB 240 & Tug			\$1,540.00	
Derrick Barge 2000			\$25,602.50	
Dive Serv - Basic			\$4,688.18	
Expl Technician			\$240.63	
Pipeline Survey			\$250.25	
NMFS Observers (2)			\$161.70	



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A582 HIOS (Ver 1)

**Total Hours: 2995.51**

**Total Cost: \$5,070,974.00**

**Task Cost**

#### Task

<b>Remove Equipment</b>	<b>1.00</b>	<b>0.03%</b>	<b>\$8,437.21</b>	<b>0.17%</b>
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CB 240 & Tug	\$400.00
Derrick Barge 2000	\$6,650.00
Dive Serv - Basic	\$1,217.71
Expl Technician	\$62.50
Pipeline Survey	\$65.00
NMFS Observers (2)	\$42.00

<b>Remove 4 Pile Deck</b>	<b>9.35</b>	<b>0.31%</b>	<b>\$78,887.92</b>	<b>1.56%</b>
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CB 240 & Tug	\$3,740.00
Derrick Barge 2000	\$62,177.50
Dive Serv - Basic	\$11,385.59
Expl Technician	\$584.38
Pipeline Survey	\$607.75
NMFS Observers (2)	\$392.70

<b>Demob CB 240 &amp; Tug</b>	<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
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CB 240 & Tug	\$16,880.00
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<b>Standby for Daylight Det.</b>	<b>8.00</b>	<b>0.27%</b>	<b>\$64,297.68</b>	<b>1.27%</b>
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Derrick Barge 2000	\$53,200.00
Dive Serv - Basic	\$9,741.68
Expl Technician	\$500.00
Pipeline Survey	\$520.00
NMFS Observers (2)	\$336.00

<b>Pre/Post Detonat'n Survey</b>	<b>1.00</b>	<b>0.03%</b>	<b>\$11,537.21</b>	<b>0.23%</b>
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Derrick Barge 2000	\$6,650.00
Dive Serv - Basic	\$1,217.71
Expl Technician	\$62.50
Pipeline Survey	\$65.00
NMFS Observers (2)	\$42.00
Helicopter Trips	\$3,500.00



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A582 HIOS (Ver 1)

**Total Hours: 2995.51**

**Total Cost: \$5,070,974.00**

**Task Cost**

#### Task

<b>Sever Piles</b>		<b>2.92</b>	<b>0.10%</b>	<b>\$23,468.65</b>	<b>0.46%</b>
Derrick Barge 2000	\$19,418.00				
Dive Serv - Basic	\$3,555.71				
Expl Technician	\$182.50				
Pipeline Survey	\$189.80				
NMFS Observers (2)	\$122.64				
<b>Install Closure Plates</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,976.05</b>	<b>0.79%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Expl Technician	\$312.50				
Pipeline Survey	\$325.00				
<b>Deballast Piles or Jkt Lg</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				
<b>Lift/Secure Jkt for Tow</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$49,996.26</b>	<b>0.99%</b>
Derrick Barge 2000	\$39,900.00				
Dive Serv - Basic	\$7,306.26				
Pipeline Survey	\$390.00				
CB 240 & Tug	\$2,400.00				
<b>Tow Jkt to Shallow Water</b>		<b>10.00</b>	<b>0.33%</b>	<b>\$83,327.10</b>	<b>1.64%</b>
CB 240 & Tug	\$4,000.00				
Derrick Barge 2000	\$66,500.00				
Dive Serv - Basic	\$12,177.10				
Pipeline Survey	\$650.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A582 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.23%</b>	<b>\$56,245.79</b>	<b>1.11%</b>
CB 240 & Tug	\$2,700.00				
Derrick Barge 2000	\$44,887.50				
Pipeline Survey	\$438.75				
Dive Serv - Basic	\$8,219.54				
<b>Cut Jacket</b>		<b>49.33</b>	<b>1.65%</b>	<b>\$411,052.59</b>	<b>8.11%</b>
CB 240 & Tug	\$19,732.00				
Derrick Barge 2000	\$328,044.50				
Dive Serv - Basic	\$60,069.64				
Pipeline Survey	\$3,206.45				
<b>Remove Jacket - Meth 1</b>		<b>13.75</b>	<b>0.46%</b>	<b>\$114,574.76</b>	<b>2.26%</b>
CB 240 & Tug	\$5,500.00				
Derrick Barge 2000	\$91,437.50				
Dive Serv - Basic	\$16,743.51				
Pipeline Survey	\$893.75				
<b>Demob CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
CB 240 & Tug	\$16,880.00				
<b>Install Closure Plates</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				
<b>Deballast Piles or Jkt Lg</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A582 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Lift/Secure Jkt for Tow</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$49,996.26</b>	<b>0.99%</b>
CB 240 & Tug	\$2,400.00				
Derrick Barge 2000	\$39,900.00				
Dive Serv - Basic	\$7,306.26				
Pipeline Survey	\$390.00				
<b>Tow Jckt to Shallow Water</b>		<b>8.00</b>	<b>0.27%</b>	<b>\$66,661.68</b>	<b>1.31%</b>
CB 240 & Tug	\$3,200.00				
Derrick Barge 2000	\$53,200.00				
Dive Serv - Basic	\$9,741.68				
Pipeline Survey	\$520.00				
<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.23%</b>	<b>\$56,245.79</b>	<b>1.11%</b>
CB 240 & Tug	\$2,700.00				
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
<b>Cut Jacket</b>		<b>49.33</b>	<b>1.65%</b>	<b>\$411,052.59</b>	<b>8.11%</b>
CB 240 & Tug	\$19,732.00				
Derrick Barge 2000	\$328,044.50				
Dive Serv - Basic	\$60,069.64				
Pipeline Survey	\$3,206.45				
<b>Remove Jacket - Meth 2</b>		<b>26.50</b>	<b>0.88%</b>	<b>\$220,816.82</b>	<b>4.35%</b>
CB 240 & Tug	\$10,600.00				
Derrick Barge 2000	\$176,225.00				
Dive Serv - Basic	\$32,269.32				
Pipeline Survey	\$1,722.50				
<b>Demob CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
CB 240 & Tug	\$16,880.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## HI A582 HIOS (Ver 1)

Total Hours: 2995.51

Total Cost: \$5,070,974.00

Task Cost

## Task

<b>Install Closure Plates</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				
<b>Deballast Piles or Jkt Lg</b>		<b>5.00</b>	<b>0.17%</b>	<b>\$39,663.55</b>	<b>0.78%</b>
Derrick Barge 2000	\$33,250.00				
Dive Serv - Basic	\$6,088.55				
Pipeline Survey	\$325.00				
<b>Lift/Secure Jkt for Tow</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$49,996.26</b>	<b>0.99%</b>
CB 240 & Tug	\$2,400.00				
Derrick Barge 2000	\$39,900.00				
Dive Serv - Basic	\$7,306.26				
Pipeline Survey	\$390.00				
<b>Tow Jckt to Shallow Water</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$49,996.26</b>	<b>0.99%</b>
CB 240 & Tug	\$2,400.00				
Derrick Barge 2000	\$39,900.00				
Dive Serv - Basic	\$7,306.26				
Pipeline Survey	\$390.00				
<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.23%</b>	<b>\$56,245.79</b>	<b>1.11%</b>
CB 240 & Tug	\$2,700.00				
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
<b>Cut Jacket</b>		<b>49.33</b>	<b>1.65%</b>	<b>\$411,052.59</b>	<b>8.11%</b>
CB 240 & Tug	\$19,732.00				
Derrick Barge 2000	\$328,044.50				
Dive Serv - Basic	\$60,069.64				
Pipeline Survey	\$3,206.45				



# El Paso Field Services

## Platform Decommission Cost Breakdown

### HI A582 HIOS (Ver 1)

**Total Hours: 2995.51**

**Total Cost: \$5,070,974.00**

**Task Cost**

#### Task

<b>Remove Jacket - Meth 2</b>		<b>26.50</b>	<b>0.88%</b>	<b>\$224,129.32</b>	<b>4.42%</b>
CB 300 & Tug	\$13,912.50				
Derrick Barge 2000	\$176,225.00				
Dive Serv - Basic	\$32,269.32				
Pipeline Survey	\$1,722.50				
<b>Demob CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
CB 240 & Tug	\$16,880.00				
<b>Remove Jacket - Meth 1</b>		<b>13.75</b>	<b>0.46%</b>	<b>\$116,293.51</b>	<b>2.29%</b>
CB 300 & Tug	\$7,218.75				
Derrick Barge 2000	\$91,437.50				
Dive Serv - Basic	\$16,743.51				
Pipeline Survey	\$893.75				
<b>Demob CB 240 &amp; Tug</b>		<b>42.20</b>	<b>1.41%</b>	<b>\$16,880.00</b>	<b>0.33%</b>
CB 240 & Tug	\$16,880.00				
<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.23%</b>	<b>\$61,765.33</b>	<b>1.22%</b>
Derrick Barge 2000	\$44,887.50				
Dive Serv - Basic	\$8,219.54				
Pipeline Survey	\$438.75				
Dive Serv - Basic	\$8,219.54				
<b>Demob DB 2000</b>		<b>24.43</b>	<b>0.82%</b>	<b>\$198,822.99</b>	<b>3.92%</b>
Derrick Barge 2000	\$162,459.50				
Dive Serv - Basic	\$29,748.66				
Expl Technician	\$1,526.88				
Pipeline Survey	\$1,587.95				
Helicopter Trips	\$3,500.00				
<b>Offload CB 240</b>		<b>1440.00</b>	<b>48.07%</b>	<b>\$182,800.00</b>	<b>3.60%</b>
Cargo Barge 240	\$172,800.00				
CB Damage Deduct	\$10,000.00				



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Platform Decommission Cost Breakdown

#### HI A582 HIOS (Ver 1)

**Total Hours: 2995.51**

**Total Cost: \$5,070,974.00**

**Task Cost**

#### Task

<b>Site Clearance - with Divers</b>		<b>6.00</b>	<b>0.20%</b>	<b>\$38,904.90</b>	<b>0.77%</b>
Dive Boat	\$2,796.00				
Dive Serv - Basic	\$21,918.78				
Dive Serv - Suppl	\$14,190.12				
<b>Total</b>		<b>2919.42</b>	<b>97.46%</b>	<b>\$4,108,516.02</b>	<b>81.02%</b>





## El Paso Field Services

### Pipeline Information

#### HI A582 HIOS (Ver1) Segment#:4592

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#### General Data

Water Depth:	330'
Origin / Terminus:	Origin
Opposite End Name:	HI 264
Opposite End Water Depth:	152'
Pipeline Operator:	El Paso
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	30"	Wall Thickness:		Length:	281424'
Depth of Burial:		# Crossings:		Product:	Gas/Cond
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

A 100-ft section is removed at each end of the pipeline. The derrick barge that will remove the platform will remove the pipeline sections. The derick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

### Pipeline Information

#### HI A582 HIOS (Ver1) Segment#:7869

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#### General Data

Water Depth:	330'
Origin / Terminus:	Origin
Opposite End Name:	HI A582
Opposite End Water Depth:	330'
Pipeline Operator:	El Paso
Provision for Misc. Work%:	15.00%
Weather Contingency %:	6.00%

#### Pipeline Data

Outside Diameter:	30"	Wall Thickness:		Length:	4488'
Depth of Burial:		# Crossings:		Product:	Gas/Cond
Installation Date:		Weight Coating:	No	J Tube:	No
Riser?:	No	Riser Guard?:	No		

#### Comments

A 100-ft section is removed at each end of the pipeline. The derrick barge that will remove the platform will remove the pipeline sections. The derick barge and cargo barge mobilization/demobilization costs are included in the platform removal phase.



## El Paso Field Services

### Pipeline Decommission Task Information

#### HI A582 HIOS (Ver 1) Segment#:4592

Task	Note	Contingency	Task Hours		Task Cost	
Mobilize Work Boat		<input checked="" type="checkbox"/>	20.10	7.26%	\$10,301.25	1.41%
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	1.81%	\$2,562.50	0.35%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	22.00	7.95%	\$11,275.00	1.54%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	0.72%	\$1,025.00	0.14%
Demob Work Boat		<input checked="" type="checkbox"/>	20.10	7.26%	\$10,301.25	1.41%
Mobilize Dive Boat		<input type="checkbox"/>	20.10	7.26%	\$44,026.64	6.03%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.08%	\$6,571.14	0.90%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	4.17%	\$25,298.89	3.47%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	11.55	4.17%	\$25,298.89	3.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	2.78%	\$16,865.93	2.31%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	2.78%	\$16,865.93	2.31%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	2.78%	\$16,865.93	2.31%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.08%	\$6,571.14	0.90%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	4.17%	\$25,298.89	3.47%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	11.55	4.17%	\$25,298.89	3.47%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	2.78%	\$16,865.93	2.31%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	2.78%	\$16,865.93	2.31%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	2.78%	\$16,865.93	2.31%
Demob Dive Boat		<input type="checkbox"/>	20.10	7.26%	\$44,026.64	6.03%
Remove Pipeline		<input checked="" type="checkbox"/>	28.00	10.11%	\$241,132.64	33.03%
<b>Task Total</b>			235.80	85.16%	\$580,184.34	79.48%
<b>Misc. Work Provision (15.00%)</b>			29.34	10.60%	\$73,819.66	10.11%
<b>Weather Contingency (6.00%)</b>			11.74	4.24%	\$29,527.86	4.05%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$46,414.75	6.36%
<b>Total:</b>			276.88	100.00%	\$729,946.61	100.00%



## El Paso Field Services

### Pipeline Decommission Task Information

#### HI A582 HIOS (Ver 1) Segment#:7869

Task	Note	Contingency	Task Hours		Task Cost	
Rig Up Decomm Equipment		<input checked="" type="checkbox"/>	5.00	3.01%	\$2,562.50	0.43%
Pig & Flush Pipeline		<input checked="" type="checkbox"/>	4.00	2.41%	\$2,050.00	0.34%
Derig Decomm Equipment		<input checked="" type="checkbox"/>	2.00	1.20%	\$1,025.00	0.17%
Mobilize Dive Boat	Accounted in Segment 4592	<input type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.80%	\$6,571.14	1.10%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	6.95%	\$25,298.89	4.24%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	11.55	6.95%	\$25,298.89	4.24%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	4.63%	\$16,865.93	2.83%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	4.63%	\$16,865.93	2.83%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	4.63%	\$16,865.93	2.83%
Set Up Dive Boat		<input checked="" type="checkbox"/>	3.00	1.80%	\$6,571.14	1.10%
Expose Pipeline		<input checked="" type="checkbox"/>	11.55	6.95%	\$25,298.89	4.24%
Cut & Plug Pipeline		<input checked="" type="checkbox"/>	11.55	6.95%	\$25,298.89	4.24%
Cut Pipeline Riser		<input checked="" type="checkbox"/>	7.70	4.63%	\$16,865.93	2.83%
Remove Tube Turn		<input checked="" type="checkbox"/>	7.70	4.63%	\$16,865.93	2.83%
Bury Pipeline		<input checked="" type="checkbox"/>	7.70	4.63%	\$16,865.93	2.83%
Demob Dive Boat	Accounted in Segment 4592	<input type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Remove Pipeline		<input checked="" type="checkbox"/>	28.00	16.84%	\$241,132.64	40.43%
<b>Task Total</b>			137.40	82.64%	\$462,303.56	77.52%
<b>Misc. Work Provision (15.00%)</b>			20.61	12.40%	\$69,345.54	11.63%
<b>Weather Contingency (6.00%)</b>			8.24	4.96%	\$27,738.21	4.65%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$36,984.28	6.20%
<b>Total:</b>			166.25	100.00%	\$596,371.59	100.00%



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Pipeline Decommission Resources Breakdown**

#### **HI A582 HIOS (Ver 1) Segment#:4592**

**Total Cost: \$722,902.36**

<b>Resource Used</b>	<b>Unit Cost</b>		<b>Cost</b>	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$9,800.00	1.36%
DB 2000	\$6,650.00	per Hour per Barge	\$186,200.00	25.76%
Decommissioning Crew	\$0.00	Calculated from tables	\$23,377.52	3.23%
Dive Boat	\$0.00	Calculated from tables	\$64,587.60	8.93%
Dive Serv - Basic	\$0.00	Calculated from tables	\$202,870.50	28.06%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$65,668.72	9.08%
Manual Calculation	\$0.00	Independently Calculated	\$0.00	0.00%
Work Boat	\$0.00	Calculated from tables	\$27,680.00	3.83%



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Pipeline Decommission Resources Breakdown**

#### **HI A582 HIOS (Ver 1) Segment#:7869**

**Total Cost: \$596,371.60**

<b>Resource Used</b>	<b>Unit Cost</b>		<b>Cost</b>	
CB 240 & Tug	\$350.00	per Hour per Barge/Tug	\$9,800.00	1.64%
DB 2000	\$6,650.00	per Hour per Barge	\$186,200.00	31.22%
Decommissioning Crew	\$0.00	Calculated from tables	\$12,307.52	2.06%
Dive Boat	\$0.00	Calculated from tables	\$45,854.40	7.69%
Dive Serv - Basic	\$0.00	Calculated from tables	\$153,918.56	25.81%
Dive Serv - Suppl	\$0.00	Calculated from tables	\$49,823.08	8.35%
Manual Calculation	\$0.00	Independently Calculated	\$0.00	0.00%
Work Boat	\$0.00	Calculated from tables	\$4,400.00	0.74%



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A582 HIOS (Ver 1) Segment#:4592

Total Hours: 276.88

Total Cost: \$722,902.36

Task		Task Hours	Task Cost
<b>Mobilize Work Boat</b>		<b>20.10 7.26%</b>	<b>\$10,301.25 1.42%</b>
Work Boat	\$8,040.00		
Decommissioning Crew	\$2,261.25		
<b>Rig Up Decomm Equipment</b>		<b>5.00 1.81%</b>	<b>\$2,562.50 0.35%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>22.00 7.95%</b>	<b>\$11,275.00 1.56%</b>
Work Boat	\$8,800.00		
Decommissioning Crew	\$2,475.00		
<b>Derig Decomm Equipment</b>		<b>2.00 0.72%</b>	<b>\$1,025.00 0.14%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Demob Work Boat</b>		<b>20.10 7.26%</b>	<b>\$10,301.25 1.42%</b>
Work Boat	\$8,040.00		
Decommissioning Crew	\$2,261.25		
<b>Mobilize Dive Boat</b>		<b>20.10 7.26%</b>	<b>\$44,026.64 6.09%</b>
Dive Boat	\$9,366.60		
Dive Serv - Basic	\$24,475.97		
Dive Serv - Suppl	\$7,922.82		
Decommissioning Crew	\$2,261.25		
<b>Set Up Dive Boat</b>		<b>3.00 1.08%</b>	<b>\$6,571.14 0.91%</b>
Dive Boat	\$1,398.00		
Dive Serv - Basic	\$3,653.13		
Dive Serv - Suppl	\$1,182.51		
Decommissioning Crew	\$337.50		
<b>Expose Pipeline</b>		<b>11.55 4.17%</b>	<b>\$25,298.89 3.50%</b>
Dive Boat	\$5,382.30		
Dive Serv - Basic	\$14,064.55		
Dive Serv - Suppl	\$4,552.66		
Decommissioning Crew	\$1,299.38		



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut &amp; Plug Pipeline</b>		<b>11.55</b>	<b>4.17%</b>	<b>\$25,298.89</b>	<b>3.50%</b>
Dive Boat	\$5,382.30				
Dive Serv - Basic	\$14,064.55				
Dive Serv - Suppl	\$4,552.66				
Decommissioning Crew	\$1,299.38				
<b>Cut Pipeline Riser</b>		<b>7.70</b>	<b>2.78%</b>	<b>\$16,865.93</b>	<b>2.33%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Remove Tube Turn</b>		<b>7.70</b>	<b>2.78%</b>	<b>\$16,865.93</b>	<b>2.33%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
Manual Calculation	\$0.00				
<b>Bury Pipeline</b>		<b>7.70</b>	<b>2.78%</b>	<b>\$16,865.93</b>	<b>2.33%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Set Up Dive Boat</b>		<b>3.00</b>	<b>1.08%</b>	<b>\$6,571.14</b>	<b>0.91%</b>
Dive Boat	\$1,398.00				
Dive Serv - Basic	\$3,653.13				
Dive Serv - Suppl	\$1,182.51				
Decommissioning Crew	\$337.50				
<b>Expose Pipeline</b>		<b>11.55</b>	<b>4.17%</b>	<b>\$25,298.89</b>	<b>3.50%</b>
Dive Boat	\$5,382.30				
Dive Serv - Basic	\$14,064.55				
Dive Serv - Suppl	\$4,552.66				
Decommissioning Crew	\$1,299.38				



**El Paso Field Services****Pipeline Decommission Cost Breakdown**

<b>Cut &amp; Plug Pipeline</b>		<b>11.55</b>	<b>4.17%</b>	<b>\$25,298.89</b>	<b>3.50%</b>
Dive Boat	\$5,382.30				
Dive Serv - Basic	\$14,064.55				
Dive Serv - Suppl	\$4,552.66				
Decommissioning Crew	\$1,299.38				
<b>Cut Pipeline Riser</b>		<b>7.70</b>	<b>2.78%</b>	<b>\$16,865.93</b>	<b>2.33%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Remove Tube Turn</b>		<b>7.70</b>	<b>2.78%</b>	<b>\$16,865.93</b>	<b>2.33%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Bury Pipeline</b>		<b>7.70</b>	<b>2.78%</b>	<b>\$16,865.93</b>	<b>2.33%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Demob Dive Boat</b>		<b>20.10</b>	<b>7.26%</b>	<b>\$44,026.64</b>	<b>6.09%</b>
Dive Boat	\$9,366.60				
Dive Serv - Basic	\$24,475.97				
Dive Serv - Suppl	\$7,922.82				
Decommissioning Crew	\$2,261.25				
<b>Remove Pipeline</b>		<b>28.00</b>	<b>10.11%</b>	<b>\$241,132.64</b>	<b>33.36%</b>
DB 2000	\$186,200.00				
Dive Serv - Basic	\$34,095.88				
Dive Serv - Suppl	\$11,036.76				
CB 240 & Tug	\$9,800.00				
<b>Total</b>		<b>235.80</b>	<b>85.16%</b>	<b>\$580,184.34</b>	<b>80.26%</b>



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

#### HI A582 HIOS (Ver 1) Segment#:7869

Total Hours: 166.25

Total Cost: \$596,371.60

Task		Task Hours	Task Cost
<b>Rig Up Decomm Equipment</b>		<b>5.00 3.01%</b>	<b>\$2,562.50 0.43%</b>
Work Boat	\$2,000.00		
Decommissioning Crew	\$562.50		
<b>Pig &amp; Flush Pipeline</b>		<b>4.00 2.41%</b>	<b>\$2,050.00 0.34%</b>
Work Boat	\$1,600.00		
Decommissioning Crew	\$450.00		
<b>Derig Decomm Equipment</b>		<b>2.00 1.20%</b>	<b>\$1,025.00 0.17%</b>
Work Boat	\$800.00		
Decommissioning Crew	\$225.00		
<b>Mobilize Dive Boat</b>		<b>0.00 0.00%</b>	<b>\$0.00 0.00%</b>
Dive Boat	\$0.00		
Dive Serv - Basic	\$0.00		
Dive Serv - Suppl	\$0.00		
Decommissioning Crew	\$0.00		
<b>Set Up Dive Boat</b>		<b>3.00 1.80%</b>	<b>\$6,571.14 1.10%</b>
Dive Boat	\$1,398.00		
Dive Serv - Basic	\$3,653.13		
Dive Serv - Suppl	\$1,182.51		
Decommissioning Crew	\$337.50		
<b>Expose Pipeline</b>		<b>11.55 6.95%</b>	<b>\$25,298.89 4.24%</b>
Dive Boat	\$5,382.30		
Dive Serv - Basic	\$14,064.55		
Dive Serv - Suppl	\$4,552.66		
Decommissioning Crew	\$1,299.38		
<b>Cut &amp; Plug Pipeline</b>		<b>11.55 6.95%</b>	<b>\$25,298.89 4.24%</b>
Dive Boat	\$5,382.30		
Dive Serv - Basic	\$14,064.55		
Dive Serv - Suppl	\$4,552.66		
Decommissioning Crew	\$1,299.38		



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut Pipeline Riser</b>		<b>7.70</b>	<b>4.63%</b>	<b>\$16,865.93</b>	<b>2.83%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Remove Tube Turn</b>		<b>7.70</b>	<b>4.63%</b>	<b>\$16,865.93</b>	<b>2.83%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
Manual Calculation	\$0.00				
<b>Bury Pipeline</b>		<b>7.70</b>	<b>4.63%</b>	<b>\$16,865.93</b>	<b>2.83%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Set Up Dive Boat</b>		<b>3.00</b>	<b>1.80%</b>	<b>\$6,571.14</b>	<b>1.10%</b>
Dive Boat	\$1,398.00				
Dive Serv - Basic	\$3,653.13				
Dive Serv - Suppl	\$1,182.51				
Decommissioning Crew	\$337.50				
<b>Expose Pipeline</b>		<b>11.55</b>	<b>6.95%</b>	<b>\$25,298.89</b>	<b>4.24%</b>
Dive Boat	\$5,382.30				
Dive Serv - Basic	\$14,064.55				
Dive Serv - Suppl	\$4,552.66				
Decommissioning Crew	\$1,299.38				
<b>Cut &amp; Plug Pipeline</b>		<b>11.55</b>	<b>6.95%</b>	<b>\$25,298.89</b>	<b>4.24%</b>
Dive Boat	\$5,382.30				
Dive Serv - Basic	\$14,064.55				
Dive Serv - Suppl	\$4,552.66				
Decommissioning Crew	\$1,299.38				



## El Paso Field Services

### Pipeline Decommission Cost Breakdown

<b>Cut Pipeline Riser</b>		<b>7.70</b>	<b>4.63%</b>	<b>\$16,865.93</b>	<b>2.83%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Remove Tube Turn</b>		<b>7.70</b>	<b>4.63%</b>	<b>\$16,865.93</b>	<b>2.83%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Bury Pipeline</b>		<b>7.70</b>	<b>4.63%</b>	<b>\$16,865.93</b>	<b>2.83%</b>
Dive Boat	\$3,588.20				
Dive Serv - Basic	\$9,376.37				
Dive Serv - Suppl	\$3,035.11				
Decommissioning Crew	\$866.25				
<b>Demob Dive Boat</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
Dive Boat	\$0.00				
Dive Serv - Basic	\$0.00				
Dive Serv - Suppl	\$0.00				
Decommissioning Crew	\$0.00				
<b>Remove Pipeline</b>		<b>28.00</b>	<b>16.84%</b>	<b>\$241,132.64</b>	<b>40.43%</b>
DB 2000	\$186,200.00				
Dive Serv - Basic	\$34,095.88				
Dive Serv - Suppl	\$11,036.76				
CB 240 & Tug	\$9,800.00				
<b>Total</b>		<b>137.40</b>	<b>82.64%</b>	<b>\$462,303.56</b>	<b>77.52%</b>

**WC 167 HIOS**



## **El Paso Field Services**

### **Platform Salvage Option**

### **WC 167 HIOS (Ver 1)**

---

West Cameron Block 167 has 3 structures that are operated by El Paso Field Services. The structures will be removed in one mobilization and demobilization of a 600-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be flushed, cleaned, plugged and left in-situ. (See #12 below.)

West Cameron Block 167 HIOS is an 8-pile Manifold platform installed in 1979 in 46' water depth and bridge connected to two Flare support structures. Since the structures are bridge connected, one 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The top deck equipment (of WC 167 HIOS) and deck will be placed on a 240' x 70' cargo barge. Piles will be explosively severed and a second 240' x 70' cargo barge will be used for the jacket. The decks, facilities and jacket will be taken to shore and scrapped. A 1,400 ft radius will be needed to clear both platform sites of any bottom debris.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.
17. Engineering & Project Management cost 8% (company or other)
18. Work Contingency 15%



**El Paso Field Services**

**Platform Salvage Option**

**WC 167 HIOS (Ver 1)**

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19. Weather Contingency 6%

20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.

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Estimated Decommissioning Gross Cost = \$1,364,044

Estimated Decommissioning Net Cost = \$1,364,044



## El Paso Field Services

### Basic Information

#### WC 167 HIOS (Ver 1)

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#### General Data

Platform:	WC 167 HIOS
Function:	DRILL/MANIFOLD
Type:	Steel
Water Depth:	46'
Pre 461H?:	Yes
Year Installed:	1979
Estimated Removal Year:	2002
District:	Gulf of Mexico
Lease Number:	
Account Code:	TSB - 22071
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	0
Estimate Complete?:	No

#### Partner Data

Partner	Working Intere
1 El Paso	100.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$1,364,044	\$1,364,044
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$0	\$0
Total Decommissioning Cost:	\$1,364,044	\$1,364,044





## El Paso Field Services

### Platform Information

### WC 167 HIOS (Ver 1)

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### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	8	36"	1.5"	No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

### Deck Dimensions

	Dimensions	Elevation
Upper:	166X56	
Middle:		
Lower:		

### 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:	389.00		
Jacket Installation Date:			
Jacket Contractor:			

### Deck Data

Deck Lift Weight with Equipment:	311 Tons
Number of Padeyes Required:	0
Deck Installation Date:	3/3/79
Deck Contractor:	



## El Paso Field Services Platform Information WC 167 HIOS (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Heliport	20.00

### Members to be Cut Data

Underwater Members	
Size	Qty

### Cargo Descriptions

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

### Miscellaneous Data

Derrick Barge Anchors:	8
Assist Derrick Barge Anchors:	0
Tow Distance:	0.00
Provision for Misc. Work%:	15.00%
Weather Contingency%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$94,035.72



**TWACHTMAN SNYDER & BYRD, INC.**

## **El Paso Field Services**

### **Platform Comments**

#### **WC 167 HIOS (Ver 1)**

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Assumed the following:

Jacket Weights, Deck Weights, Pile Sizes, Grout Weights, Equipment Weights, Deck(s) Sizes



## El Paso Field Services

## Platform Decommission Task Information

## WC 167 HIOS (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Platform Removal Preparation		<input type="checkbox"/>	504.00	23.10%	\$177,786.00	13.03%
Mobilize Work Boat		<input type="checkbox"/>	14.70	0.67%	\$4,806.90	0.35%
NMFS Marine Observation		<input type="checkbox"/>	48.00	2.20%	\$15,696.00	1.15%
Demob Work Boat		<input type="checkbox"/>	14.70	0.67%	\$4,189.50	0.31%
Mobilize DB 600	Share with Flare Removal	<input type="checkbox"/>	38.00	1.74%	\$145,376.04	10.66%
Mobilize CB 240 & Tug		<input checked="" type="checkbox"/>	31.40	1.44%		
Mobilize CB 240 & Tug		<input type="checkbox"/>	31.40	1.44%	\$24,560.00	1.80%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.31%	\$25,485.17	1.87%
Bring in Cargo Barge		<input checked="" type="checkbox"/>	2.00	0.09%	\$8,351.16	0.61%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	3.85	0.18%	\$16,075.99	1.18%
Remove Equipment		<input checked="" type="checkbox"/>	0.50	0.02%	\$2,087.79	0.15%
Remove 8 Pile Deck		<input checked="" type="checkbox"/>	9.35	0.43%	\$39,041.68	2.86%
Demob CB 240 & Tug		<input type="checkbox"/>	31.40	1.44%	\$12,560.00	0.92%
Bring in Cargo Barge		<input checked="" type="checkbox"/>	2.00	0.09%	\$8,226.16	0.60%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	15.00	0.69%	\$62,633.70	4.59%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.37%	\$33,404.64	2.45%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.05%	\$7,675.58	0.56%
Sever Piles		<input checked="" type="checkbox"/>	4.84	0.22%	\$20,209.81	1.48%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	20.75	0.95%	\$85,771.79	6.29%
Demob CB 240 & Tug		<input type="checkbox"/>	31.40	1.44%	\$12,560.00	0.92%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.31%	\$25,201.67	1.85%
Demob DB 600	Share with Flare Removal	<input type="checkbox"/>	38.00	1.74%	\$145,376.04	10.66%
Site Clearance - with Trawler		<input checked="" type="checkbox"/>	232.71	10.67%	\$61,343.19	4.50%
Site Clearance Verify		<input checked="" type="checkbox"/>	321.43	14.73%	\$54,787.69	4.02%
Offload CB 240		<input type="checkbox"/>	312.00	14.30%	\$47,440.00	3.48%
Offload CB 240		<input type="checkbox"/>	312.00	14.30%	\$134,800.00	9.88%
<b>Task Total</b>			2041.93	93.59%	\$1,175,446.50	86.17%
<b>Misc. Work Provision (15.00%)</b>			99.95	4.58%	\$67,544.41	4.95%
<b>Weather Contingency (6.00%)</b>			39.98	1.83%	\$27,017.76	1.98%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$94,035.72	6.89%



TWACHTMAN SNYDER & BYRD, INC.

## El Paso Field Services

### Platform Decommission Task Information

#### WC 167 HIOS (Ver 1)

Task	Note	Contingency	Task Hours	Task Cost
		<b>Total:</b>	2181.86	100.00% \$1,364,044.39 100.00%



# El Paso Field Services

## Platform Decommission Resources Breakdown

### WC 167 HIOS (Ver 1)

**Total Cost: \$1,364,044.00**

Resource Used	Unit Cost		Cost	
Cargo Barge 240	\$2,880.00	per Day per Barge	\$37,440.00	2.74%
CB 240 & Tug	\$400.00	per Hour per Barge/Tug	\$189,396.00	13.88%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$20,000.00	1.47%
Decomm Platform	\$0.00	Calculated from tables	\$177,786.00	13.03%
Derrick Barge 600	\$3,434.00	per Hour per barge	\$538,416.86	39.47%
Dive Serv - Basic	\$0.00	Calculated from tables	\$26,980.43	1.98%
Expl Charge - Cond	\$58.34	per Inch of Outside Diam	\$0.00	0.00%
Expl Technician	\$62.50	per Hour	\$9,674.40	0.71%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	0.77%
Nets (Heavy Duty, Non-Repairable)	\$4,400.00	ea	\$13,200.00	0.97%
Nets (Heavy Duty, Repairable)	\$2,200.00	ea	\$17,600.00	1.29%
Nets (Non-Repairable)	\$2,000.00	ea	\$6,000.00	0.44%
Nets (Repairable)	\$1,100.00	ea	\$6,600.00	0.48%
NMFS Observers (2)	\$42.00	per Hour	\$4,871.58	0.36%
Pipeline Survey	\$65.00	per Hour	\$10,191.35	0.75%
Rig Up CB 240	\$12,000.00	per Barge	\$12,000.00	0.88%
Trawler	\$131.25	per Hour	\$72,730.88	5.33%
Work Boat	\$285.00	per Hour	\$22,059.00	1.62%



## El Paso Field Services

## Platform Decommission Cost Breakdown

## WC 167 HIOS (Ver 1)

Total Hours: 2181.86

Total Cost: \$1,364,044.00

Task Cost

## Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
Expl Charge - Cond	\$0.00				
<b>Platform Removal Preparation</b>		<b>504.00</b>	<b>23.10%</b>	<b>\$177,786.00</b>	<b>13.03%</b>
Decomm Platform	\$177,786.00				
<b>Mobilize Work Boat</b>		<b>14.70</b>	<b>0.67%</b>	<b>\$4,806.90</b>	<b>0.35%</b>
Work Boat	\$4,189.50				
NMFS Observers (2)	\$617.40				
<b>NMFS Marine Observation</b>		<b>48.00</b>	<b>2.20%</b>	<b>\$15,696.00</b>	<b>1.15%</b>
Work Boat	\$13,680.00				
NMFS Observers (2)	\$2,016.00				
<b>Demob Work Boat</b>		<b>14.70</b>	<b>0.67%</b>	<b>\$4,189.50</b>	<b>0.31%</b>
Work Boat	\$4,189.50				
<b>Mobilize DB 600</b>		<b>38.00</b>	<b>1.74%</b>	<b>\$145,376.04</b>	<b>10.66%</b>
Derrick Barge 600	\$130,492.00				
Dive Serv - Basic	\$6,539.04				
Expl Technician	\$2,375.00				
Pipeline Survey	\$2,470.00				
Helicopter Trips	\$3,500.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>31.40</b>	<b>1.44%</b>	<b>\$24,560.00</b>	<b>1.80%</b>
CB 240 & Tug	\$12,560.00				
Rig Up CB 240	\$12,000.00				
<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.31%</b>	<b>\$25,485.17</b>	<b>1.87%</b>
Derrick Barge 600	\$23,179.50				
Dive Serv - Basic	\$1,161.54				
Pipeline Survey	\$438.75				
NMFS Observers (2)	\$283.50				
Expl Technician	\$421.88				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## WC 167 HIOS (Ver 1)

Total Hours: 2181.86

Total Cost: \$1,364,044.00

Task Cost

## Task

<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.09%</b>	<b>\$8,351.16</b>	<b>0.61%</b>
Derrick Barge 600	\$6,868.00				
Dive Serv - Basic	\$344.16				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 240 & Tug	\$800.00				
Expl Technician	\$125.00				
<b>Cut Deck/Equip/Misc</b>		<b>3.85</b>	<b>0.18%</b>	<b>\$16,075.99</b>	<b>1.18%</b>
CB 240 & Tug	\$1,540.00				
Derrick Barge 600	\$13,220.90				
Dive Serv - Basic	\$662.51				
Expl Technician	\$240.63				
Pipeline Survey	\$250.25				
NMFS Observers (2)	\$161.70				
<b>Remove Equipment</b>		<b>0.50</b>	<b>0.02%</b>	<b>\$2,087.79</b>	<b>0.15%</b>
CB 240 & Tug	\$200.00				
Derrick Barge 600	\$1,717.00				
Dive Serv - Basic	\$86.04				
Expl Technician	\$31.25				
Pipeline Survey	\$32.50				
NMFS Observers (2)	\$21.00				
<b>Remove 8 Pile Deck</b>		<b>9.35</b>	<b>0.43%</b>	<b>\$39,041.68</b>	<b>2.86%</b>
CB 240 & Tug	\$3,740.00				
Derrick Barge 600	\$32,107.90				
Dive Serv - Basic	\$1,608.95				
Expl Technician	\$584.38				
Pipeline Survey	\$607.75				
NMFS Observers (2)	\$392.70				





## El Paso Field Services

### Platform Decommission Cost Breakdown

#### WC 167 HIOS (Ver 1)

**Total Hours: 2181.86**

**Total Cost: \$1,364,044.00**

**Task Cost**

#### Task

<b>Demob CB 240 &amp; Tug</b>		<b>31.40</b>	<b>1.44%</b>	<b>\$12,560.00</b>	<b>0.92%</b>
CB 240 & Tug	\$12,560.00				
<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.09%</b>	<b>\$8,226.16</b>	<b>0.60%</b>
Derrick Barge 600	\$6,868.00				
Dive Serv - Basic	\$344.16				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 240 & Tug	\$800.00				
<b>Jet/Airlift Pile Mud Plug</b>		<b>15.00</b>	<b>0.69%</b>	<b>\$62,633.70</b>	<b>4.59%</b>
CB 240 & Tug	\$6,000.00				
Derrick Barge 600	\$51,510.00				
Dive Serv - Basic	\$2,581.20				
Expl Technician	\$937.50				
Pipeline Survey	\$975.00				
NMFS Observers (2)	\$630.00				
<b>Standby for Daylight Det.</b>		<b>8.00</b>	<b>0.37%</b>	<b>\$33,404.64</b>	<b>2.45%</b>
Derrick Barge 600	\$27,472.00				
Pipeline Survey	\$520.00				
Expl Technician	\$500.00				
NMFS Observers (2)	\$336.00				
Dive Serv - Basic	\$1,376.64				
CB 240 & Tug	\$3,200.00				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## WC 167 HIOS (Ver 1)

Total Hours: 2181.86

Total Cost: \$1,364,044.00

Task Cost

## Task

<b>Pre/Post Detonat'n Survey</b>		<b>1.00</b>	<b>0.05%</b>	<b>\$7,675.58</b>	<b>0.56%</b>
CB 240 & Tug	\$400.00				
Derrick Barge 600	\$3,434.00				
Dive Serv - Basic	\$172.08				
Expl Technician	\$62.50				
Pipeline Survey	\$65.00				
NMFS Observers (2)	\$42.00				
Helicopter Trips	\$3,500.00				
<b>Sever Piles</b>		<b>4.84</b>	<b>0.22%</b>	<b>\$20,209.81</b>	<b>1.48%</b>
CB 240 & Tug	\$1,936.00				
Derrick Barge 600	\$16,620.56				
Dive Serv - Basic	\$832.87				
Expl Technician	\$302.50				
Pipeline Survey	\$314.60				
NMFS Observers (2)	\$203.28				
<b>Remove Jacket - Meth 1</b>		<b>20.75</b>	<b>0.95%</b>	<b>\$85,771.79</b>	<b>6.29%</b>
CB 240 & Tug	\$8,300.00				
Derrick Barge 600	\$71,255.50				
Dive Serv - Basic	\$3,570.66				
Pipeline Survey	\$1,348.75				
Expl Technician	\$1,296.88				
<b>Demob CB 240 &amp; Tug</b>		<b>31.40</b>	<b>1.44%</b>	<b>\$12,560.00</b>	<b>0.92%</b>
CB 240 & Tug	\$12,560.00				
<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.31%</b>	<b>\$25,201.67</b>	<b>1.85%</b>
Derrick Barge 600	\$23,179.50				
Dive Serv - Basic	\$1,161.54				
Pipeline Survey	\$438.75				
Expl Technician	\$421.88				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### WC 167 HIOS (Ver 1)

**Total Hours: 2181.86**

**Total Cost: \$1,364,044.00**

**Task Cost**

#### Task

<b>Demob DB 600</b>		<b>38.00</b>	<b>1.74%</b>	<b>\$145,376.04</b>	<b>10.66%</b>
Derrick Barge 600	\$130,492.00				
Dive Serv - Basic	\$6,539.04				
Expl Technician	\$2,375.00				
Pipeline Survey	\$2,470.00				
Helicopter Trips	\$3,500.00				
<b>Site Clearance - with Trawler</b>		<b>232.71</b>	<b>10.67%</b>	<b>\$61,343.19</b>	<b>4.50%</b>
Trawler	\$30,543.19				
Nets (Heavy Duty, Non-Repairable)	\$13,200.00				
Nets (Heavy Duty, Repairable)	\$17,600.00				
<b>Site Clearance Verify</b>		<b>321.43</b>	<b>14.73%</b>	<b>\$54,787.69</b>	<b>4.02%</b>
Trawler	\$42,187.69				
Nets (Non-Repairable)	\$6,000.00				
Nets (Repairable)	\$6,600.00				
<b>Offload CB 240</b>		<b>312.00</b>	<b>14.30%</b>	<b>\$47,440.00</b>	<b>3.48%</b>
Cargo Barge 240	\$37,440.00				
CB Damage Deduct	\$10,000.00				
<b>Offload CB 240</b>		<b>312.00</b>	<b>14.30%</b>	<b>\$134,800.00</b>	<b>9.88%</b>
CB 240 & Tug	\$124,800.00				
CB Damage Deduct	\$10,000.00				
<b>Total</b>		<b>2010.53</b>	<b>92.15%</b>	<b>\$1,175,446.50</b>	<b>86.17%</b>

**WC 167 HIOS-Flare**



## **El Paso Field Services**

### **Platform Salvage Option**

### **WC 167 HIOS-Flare (Ver 1)**

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West Cameron Block 167 has 3 structures that are operated by El Paso Field Services. The structure will be removed in one mobilization and demobilization of a 600-ton derrick barge. All production equipment will be flushed and purged of any hydrocarbons. The equipment that will be removed by the derrick barge will be cut free of the platform. Also the pipelines will be pigged, flushed, cleaned, plugged and left in-situ. (See #12 below.)

West Cameron 167 HIOS-Flare is a bridge supported by two 3-pile structures, installed in 1979 in 46' water depth, and bridge connected to the WC 167 HIOS structure. Since the structures is bridge connected, one 48-hour turtle watch operation conducted by the National Marine Fisheries service will be needed. The bridge will be placed on a 240' x 70' cargo barge. Piles will be explosively severed and the 240' x 70' cargo barge will also be used for the jacket. The bridge and jackets will be taken to shore and scrapped. A 1,400 ft radius will be needed to clear both platform sites of any bottom debris.

This estimate is based on the following assumptions:

1. All Deck and Jackets are taken to shore and scrapped.
2. Removal Contractor is responsible for transport and disposal of Decks, Jackets, and associated equipment.
3. No salvage or resale value has been considered for the structure or equipment.
4. One derrick mobilization/demobilization cost is included for each block.
5. Mobilization times are estimated from the Eugene Island sea buoy.
6. No dockside mobilization or demobilization is included, construction barge spreads are assumed to be readily available in the Gulf of Mexico.
7. All work will be performed during the summer work season.
8. No allowances have been made for named tropical storm downtime.
9. The current guidelines for the use of explosives are assumed.
10. No allowances have been made for the presence of sea turtles or marine mammals.
11. All NORM, NOW, and industrial waste are removed from the platforms prior to decommissioning.
12. All pipelines are abandoned-in-place. Tube Turns and 100' of pipeline are removed at each end of pipelines.
13. Tube Turns and pipelines are buried a minimum of 5ft. at the base of the platforms.
14. All pipeline ends can be sealed using mechanical-type plugs. No provisions are made for more stringent environmental or safety regulations.
15. Site clearance and verification is in accordance with NTL 98-26.
16. Hourly rates for construction and diving spreads are developed from offshore contractors published rates.
17. Engineering & Project Management cost 8% (company or other)
18. Work Contingency 15%



**El Paso Field Services**

**Platform Salvage Option**

**WC 167 HIOS-Flare (Ver 1)**

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19. Weather Contingency 6%

20. Ownership of all properties is assumed to be 100% High Island Offshore Systems, except where noted.

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Estimated Decommissioning Gross Cost =	\$652,946
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Estimated Decommissioning Net Cost =	\$652,946
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## El Paso Field Services

### Basic Information

#### WC 167 HIOS-Flare (Ver 1)

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#### General Data

Platform:	WC 167 HIOS-Flare
Function:	AUXILIARY
Type:	Steel
Water Depth:	46'
Pre 461H?:	Yes
Year Installed:	1979
Estimated Removal Year:	2002
District:	Gulf of Mexico
Lease Number:	
Account Code:	TSB - 22071
Amortization:	1.00
# Wells to P & A:	0
# Pipelines to Abandon:	0
Estimate Complete?:	No

#### Partner Data

Partner	Working Intere
1 El Paso	100.00%

#### Estimated Costs

	Gross Cost	Net Cost
Platform Removal:	\$652,946	\$652,946
Well Plugging & Abandonment:	\$0	\$0
Pipeline Abandonment:	\$0	\$0
Total Decommissioning Cost:	\$652,946	\$652,946



## El Paso Field Services

### Platform Information

### WC 167 HIOS-Flare (Ver 1)

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#### Pile Data

	Number	Outside Diameter	Wall Thickness	Grout Annulus	Grout Internal	Depth Below
Main:	3	30"	1.5"	No	No	
Skirt:	0			No	No	
Anchor:	0					
Dolphin:	0					

#### Deck Dimensions

	Dimensions	Elevation
Upper:		
Middle:		
Lower:		

#### 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:	100.00		
Jacket Installation Date:			
Jacket Contractor:			

#### Deck Data

Deck Lift Weight with Equipment:	
Number of Padeyes Required:	0
Deck Installation Date:	
Deck Contractor:	





## El Paso Field Services

### Platform Information

### WC 167 HIOS-Flare (Ver 1)

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### Equipment Lift Weights

Equipmen	Weight (Tons)
Bridge	75.00
Flair	12.00

### Members to be Cut Data

Underwater Members	
Size	Qty

### Cargo Descriptions

Cargo Barge Size	Cargo Description	
CB 180 x 54	Equipment	Piles
CB 300 x 100	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%:	6.00%
Engineering%:	8.00%

### Miscellaneous Cost

Consumables:	\$0.00
Waste Disposal:	\$0.00
Structure & Equipment Disposal:	\$0.00
Reef Donation:	\$0.00
Cost of Engineering:	\$41,334.36



**TWACHTMAN SNYDER & BYRD, INC.**

**El Paso Field Services**

**Platform Comments**

**WC 167 HIOS-Flare (Ver 1)**

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## El Paso Field Services

### Platform Decommission Task Information

#### WC 167 HIOS-Flare (Ver 1)

Task	Note	Contingency	Task Hours		Task Cost	
Fab Explosive Charges		<input type="checkbox"/>	0.00	0.00%	\$10,501.20	1.61%
Platform Removal Preparation		<input type="checkbox"/>	96.00	10.43%	\$0.00	0.00%
Mobilize Work Boat	Share with WC 167 HIOS PLTF	<input type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
NMFS Marine Observation	Share with WC 167 HIOS PLTF	<input type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Demob Work Boat	Share with WC 167 HIOS PLTF	<input type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Mobilize DB 600	Share with WC 167 HIOS PLTF	<input type="checkbox"/>	0.00	0.00%	\$3,500.00	0.54%
Mobilize CB 240 & Tug		<input type="checkbox"/>	31.40	3.41%	\$24,560.00	3.76%
Setup Derrick Barge		<input checked="" type="checkbox"/>	6.75	0.73%	\$25,485.17	3.90%
Bring in Cargo Barge		<input checked="" type="checkbox"/>	2.00	0.22%	\$8,351.16	1.28%
Cut Deck/Equip/Misc		<input checked="" type="checkbox"/>	3.46	0.38%	\$14,447.51	2.21%
Remove Equipment		<input checked="" type="checkbox"/>	1.50	0.16%	\$6,263.37	0.96%
Remove 4 Pile Deck		<input checked="" type="checkbox"/>	9.35	1.02%	\$39,041.68	5.98%
Jet/Airlift Pile Mud Plug		<input checked="" type="checkbox"/>	6.25	0.68%	\$52,194.75	7.99%
Standby for Daylight Det.		<input checked="" type="checkbox"/>	8.00	0.87%	\$33,404.64	5.12%
Pre/Post Detonat'n Survey		<input checked="" type="checkbox"/>	1.00	0.11%	\$7,675.58	1.18%
Sever Piles		<input checked="" type="checkbox"/>	2.44	0.27%	\$10,188.42	1.56%
Sever Conductors		<input checked="" type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Remove Conductors		<input checked="" type="checkbox"/>	0.00	0.00%	\$0.00	0.00%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	13.75	1.49%	\$56,836.73	8.70%
Remove Jacket - Meth 1		<input checked="" type="checkbox"/>	13.75	1.49%	\$56,836.73	8.70%
Demob CB 240 & Tug		<input type="checkbox"/>	31.40	3.41%	\$12,560.00	1.92%
Pick Up DB Anchors		<input checked="" type="checkbox"/>	6.75	0.73%	\$25,201.67	3.86%
Demob DB 600	Share with WC 167 HIOS PLTF	<input type="checkbox"/>	0.00	0.00%	\$3,500.00	0.54%
Site Clearance - with Trawler		<input checked="" type="checkbox"/>	232.71	25.29%	\$61,343.19	9.39%
Site Clearance Verify		<input checked="" type="checkbox"/>	321.43	34.94%	\$54,787.69	8.39%
Offload CB 240		<input type="checkbox"/>	0.00	0.00%	\$10,000.00	1.53%
<b>Task Total</b>			787.94	85.64%	\$516,679.49	79.13%
<b>Misc. Work Provision (15.00%)</b>			94.37	10.26%	\$67,808.75	10.39%
<b>Weather Contingency (6.00%)</b>			37.75	4.10%	\$27,123.50	4.15%
<b>Consumables</b>					\$0.00	0.00%
<b>Waste Disposal</b>					\$0.00	0.00%
<b>Structure &amp; Equipment Disposal</b>					\$0.00	0.00%
<b>Offloading</b>					\$0.00	0.00%
<b>Storage / Scrapping</b>					\$0.00	0.00%
<b>Reef Donation</b>					\$0.00	0.00%
<b>Cost of Engineering (8.00%)</b>					\$41,334.36	6.33%
<b>Total:</b>			920.06	100.00%	\$652,946.10	100.00%



## El Paso Field Services

### Platform Decommission Resources Breakdown

### WC 167 HIOS-Flare (Ver 1)

**Total Cost: \$652,946.10**

Resource Used	Unit Cost		Cost	
Cargo Barge 240	\$2,880.00	per Day per Barge	\$0.00	0.00%
CB 240 & Tug	\$400.00	per Hour per Barge/Tug	\$52,220.00	8.00%
CB Damage Deduct	\$10,000.00	per Cargo Barge	\$10,000.00	1.53%
Decomm Platform	\$0.00	Calculated from tables	\$0.00	0.00%
Derrick Barge 600	\$3,434.00	per Hour per barge	\$279,012.50	42.73%
Dive Serv - Basic	\$0.00	Calculated from tables	\$13,981.51	2.14%
Expl Charge - Piling	\$58.34	per Inch of Outside Diam	\$10,501.20	1.61%
Expl Technician	\$62.50	per Hour	\$5,078.15	0.78%
Helicopter Trips	\$3,500.00	per Round Trip	\$10,500.00	1.61%
Nets (Heavy Duty, Non-Repairable)	\$4,400.00	ea	\$13,200.00	2.02%
Nets (Heavy Duty, Repairable)	\$2,200.00	ea	\$17,600.00	2.70%
Nets (Non-Repairable)	\$2,000.00	ea	\$6,000.00	0.92%
Nets (Repairable)	\$1,100.00	ea	\$6,600.00	1.01%
NMFS Observers (2)	\$42.00	per Hour	\$1,974.00	0.30%
Pipeline Survey	\$65.00	per Hour	\$5,281.25	0.81%
Rig Up CB 240	\$12,000.00	per Barge	\$12,000.00	1.84%
Trawler	\$131.25	per Hour	\$72,730.88	11.14%
Work Boat	\$285.00	per Hour	\$0.00	0.00%



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### WC 167 HIOS-Flare (Ver 1)

**Total Hours: 920.06**

**Total Cost: \$652,946.10**

**Task Cost**

#### Task

<b>Fab Explosive Charges</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,501.20</b>	<b>1.61%</b>
Expl Charge - Piling	\$10,501.20				
<b>Platform Removal Preparation</b>		<b>96.00</b>	<b>10.43%</b>	<b>\$0.00</b>	<b>0.00%</b>
Decomm Platform	\$0.00				
<b>Mobilize Work Boat</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
Work Boat	\$0.00				
NMFS Observers (2)	\$0.00				
<b>NMFS Marine Observation</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
Work Boat	\$0.00				
NMFS Observers (2)	\$0.00				
<b>Demob Work Boat</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
Work Boat	\$0.00				
<b>Mobilize DB 600</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$3,500.00</b>	<b>0.54%</b>
Derrick Barge 600	\$0.00				
Dive Serv - Basic	\$0.00				
Expl Technician	\$0.00				
Pipeline Survey	\$0.00				
Helicopter Trips	\$3,500.00				
<b>Mobilize CB 240 &amp; Tug</b>		<b>31.40</b>	<b>3.41%</b>	<b>\$24,560.00</b>	<b>3.76%</b>
CB 240 & Tug	\$12,560.00				
Rig Up CB 240	\$12,000.00				
<b>Setup Derrick Barge</b>		<b>6.75</b>	<b>0.73%</b>	<b>\$25,485.17</b>	<b>3.90%</b>
Derrick Barge 600	\$23,179.50				
Dive Serv - Basic	\$1,161.54				
Pipeline Survey	\$438.75				
NMFS Observers (2)	\$283.50				
Expl Technician	\$421.88				



## El Paso Field Services

## Platform Decommission Cost Breakdown

## WC 167 HIOS-Flare (Ver 1)

Total Hours: 920.06

Total Cost: \$652,946.10

Task Cost

## Task

<b>Bring in Cargo Barge</b>		<b>2.00</b>	<b>0.22%</b>	<b>\$8,351.16</b>	<b>1.28%</b>
Derrick Barge 600	\$6,868.00				
Dive Serv - Basic	\$344.16				
Pipeline Survey	\$130.00				
NMFS Observers (2)	\$84.00				
CB 240 & Tug	\$800.00				
Expl Technician	\$125.00				
<b>Cut Deck/Equip/Misc</b>		<b>3.46</b>	<b>0.38%</b>	<b>\$14,447.51</b>	<b>2.21%</b>
CB 240 & Tug	\$1,384.00				
Derrick Barge 600	\$11,881.64				
Dive Serv - Basic	\$595.40				
Expl Technician	\$216.25				
Pipeline Survey	\$224.90				
NMFS Observers (2)	\$145.32				
<b>Remove Equipment</b>		<b>1.50</b>	<b>0.16%</b>	<b>\$6,263.37</b>	<b>0.96%</b>
CB 240 & Tug	\$600.00				
Derrick Barge 600	\$5,151.00				
Dive Serv - Basic	\$258.12				
Expl Technician	\$93.75				
Pipeline Survey	\$97.50				
NMFS Observers (2)	\$63.00				
<b>Remove 4 Pile Deck</b>		<b>9.35</b>	<b>1.02%</b>	<b>\$39,041.68</b>	<b>5.98%</b>
CB 240 & Tug	\$3,740.00				
Derrick Barge 600	\$32,107.90				
Dive Serv - Basic	\$1,608.95				
Expl Technician	\$584.38				
Pipeline Survey	\$607.75				
NMFS Observers (2)	\$392.70				



## El Paso Field Services

### Platform Decommission Cost Breakdown

#### WC 167 HIOS-Flare (Ver 1)

**Total Hours: 920.06**

**Total Cost: \$652,946.10**

**Task Cost**

#### Task

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<b>Jet/Airlift Pile Mud Plug</b>	<b>6.25</b>	<b>0.68%</b>	<b>\$52,194.75</b>	<b>7.99%</b>
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CB 240 & Tug	\$5,000.00
Derrick Barge 600	\$42,925.00
Dive Serv - Basic	\$2,151.00
Expl Technician	\$781.25
Pipeline Survey	\$812.50
NMFS Observers (2)	\$525.00

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<b>Standby for Daylight Det.</b>	<b>8.00</b>	<b>0.87%</b>	<b>\$33,404.64</b>	<b>5.12%</b>
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Derrick Barge 600	\$27,472.00
Pipeline Survey	\$520.00
Expl Technician	\$500.00
NMFS Observers (2)	\$336.00
Dive Serv - Basic	\$1,376.64
CB 240 & Tug	\$3,200.00

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<b>Pre/Post Detonat'n Survey</b>	<b>1.00</b>	<b>0.11%</b>	<b>\$7,675.58</b>	<b>1.18%</b>
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CB 240 & Tug	\$400.00
Derrick Barge 600	\$3,434.00
Dive Serv - Basic	\$172.08
Expl Technician	\$62.50
Pipeline Survey	\$65.00
NMFS Observers (2)	\$42.00
Helicopter Trips	\$3,500.00

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<b>Sever Piles</b>	<b>2.44</b>	<b>0.27%</b>	<b>\$10,188.42</b>	<b>1.56%</b>
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CB 240 & Tug	\$976.00
Derrick Barge 600	\$8,378.96
Dive Serv - Basic	\$419.88
Expl Technician	\$152.50
Pipeline Survey	\$158.60
NMFS Observers (2)	\$102.48

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## El Paso Field Services

## Platform Decommission Cost Breakdown

## WC 167 HIOS-Flare (Ver 1)

Total Hours: 920.06

Total Cost: \$652,946.10

Task Cost

## Task

<b>Sever Conductors</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
CB 240 & Tug	\$0.00				
Derrick Barge 600	\$0.00				
Dive Serv - Basic	\$0.00				
Expl Technician	\$0.00				
Pipeline Survey	\$0.00				
NMFS Observers (2)	\$0.00				
<b>Remove Conductors</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>
CB 240 & Tug	\$0.00				
Derrick Barge 600	\$0.00				
Dive Serv - Basic	\$0.00				
Expl Technician	\$0.00				
Pipeline Survey	\$0.00				
<b>Remove Jacket - Meth 1</b>		<b>13.75</b>	<b>1.49%</b>	<b>\$56,836.73</b>	<b>8.70%</b>
CB 240 & Tug	\$5,500.00				
Derrick Barge 600	\$47,217.50				
Dive Serv - Basic	\$2,366.10				
Pipeline Survey	\$893.75				
Expl Technician	\$859.38				
<b>Remove Jacket - Meth 1</b>		<b>13.75</b>	<b>1.49%</b>	<b>\$56,836.73</b>	<b>8.70%</b>
CB 240 & Tug	\$5,500.00				
Derrick Barge 600	\$47,217.50				
Dive Serv - Basic	\$2,366.10				
Pipeline Survey	\$893.75				
Expl Technician	\$859.38				
<b>Demob CB 240 &amp; Tug</b>		<b>31.40</b>	<b>3.41%</b>	<b>\$12,560.00</b>	<b>1.92%</b>
CB 240 & Tug	\$12,560.00				





## El Paso Field Services

## Platform Decommission Cost Breakdown

## WC 167 HIOS-Flare (Ver 1)

Total Hours: 920.06

Total Cost: \$652,946.10

Task Cost

## Task

<b>Pick Up DB Anchors</b>		<b>6.75</b>	<b>0.73%</b>	<b>\$25,201.67</b>	<b>3.86%</b>
Derrick Barge 600	\$23,179.50				
Dive Serv - Basic	\$1,161.54				
Pipeline Survey	\$438.75				
Expl Technician	\$421.88				
<b>Demob DB 600</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$3,500.00</b>	<b>0.54%</b>
Derrick Barge 600	\$0.00				
Dive Serv - Basic	\$0.00				
Expl Technician	\$0.00				
Pipeline Survey	\$0.00				
Helicopter Trips	\$3,500.00				
<b>Site Clearance - with Trawler</b>		<b>232.71</b>	<b>25.29%</b>	<b>\$61,343.19</b>	<b>9.39%</b>
Trawler	\$30,543.19				
Nets (Heavy Duty, Non-Repairable)	\$13,200.00				
Nets (Heavy Duty, Repairable)	\$17,600.00				
<b>Site Clearance Verify</b>		<b>321.43</b>	<b>34.94%</b>	<b>\$54,787.69</b>	<b>8.39%</b>
Trawler	\$42,187.69				
Nets (Non-Repairable)	\$6,000.00				
Nets (Repairable)	\$6,600.00				
<b>Offload CB 240</b>		<b>0.00</b>	<b>0.00%</b>	<b>\$10,000.00</b>	<b>1.53%</b>
Cargo Barge 240	\$0.00				
CB Damage Deduct	\$10,000.00				
<b>Total</b>		<b>787.94</b>	<b>85.64%</b>	<b>\$516,679.49</b>	<b>79.13%</b>