apcd air pollution control district
SANTA BARBARA COUNTY

5/27/2021

Mr. David Rose
Freeport-McMoRan Oil & Gas, LLC.
201 S. Broadway
Orcutt, CA 93455

FID: 08013, 08014, 08015
Permit: P7R 09103 R6
P7R 09104 R6
P7R 09105 R6
SSID: 01325

Re: Part 70 Permit Renewal / Reevaluation Applications 09103-R6, 09104-R6, 09105-R6

Dear Mr. Rose:

On May 21, 2021, the Santa Barbara County Air Pollution Control District (District) determined that your applications for Part 70 Permit Renewals / Reevaluations (PT-70/Reevals) No. 09103-R6, 09104-R6 and 09105-R6 for the offshore platforms of the Point Arguello Project was complete. The District will make a decision to either issue or deny a permit for the applications within 180 days from the completeness date or 180 days after lead agency approval of the project, whichever time period is longer.

Please be advised that proceeding with the construction of your project without an PT-70/Reeval permit violates District Rule 201 and may result in penalties.

Please include the Facility Identifications (FIDs) and Permit numbers shown above on all correspondence regarding this permit application. If you have any questions, please contact me at OgdenC@sbcapcd.org.

Sincerely,

Chase Ogden

Chase Ogden, Air Quality Engineer I
Engineering Division

cc: Platform Harvest 08013 Project File
Platform Hermosa 08014 Project File
Platform Hidalgo 08015 Project File
Engr Chron File

\\sbcapcd.org\shares\Groups\ENGR\WP\Oil&Gas\Major Sources\SSID 01325 The Point Arguello Project\08013 Harvest\PT70 9103 R6\PT-70-Reeval 09103 R6 - ATC Completeness - 5-21-2021

FREEPORT-McMoRan

Freeport-McMoRan Oil & Gas
201 S. Broadway
Orcutt, CA 93455

Telephone: 805-535-2060

April 1, 2021

Attn: David Harris
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110-0315

Via Email: permits@sbcapcd.org

Subject: Freeport-McMoRan Oil & Gas, LLC.
Air Permit Renewal Application: PTO 9103; PTO 9104: PTO 9105

Dear Mr. Harris:

Freeport-McMoRan Oil & Gas (FMOG) is submitting the following air permit renewal application package for review. This submittal includes various updates and changes reflecting the on-going decommissioning efforts associated with the Pt. Arguello Project - Platforms Harvest (PTO 9103), Hermosa (PTO 9104) and Hidalgo (PTO 9105). The submittal includes the APCD General Permit (Form -01), Title V Application Forms, updated hazardous air pollutants (HAP) calculations and a comprehensive list of permitted equipment showing those to be de-permitted for each PTO. In summary, the following changes to PTOs 9103, 9104, and 9105 are being made with this application for Part 70 permit renewals:

Harvest - 9103

- De-permitting of the following equipment
  - Sales gas compressors turbines K-200A, K-200B and K-200C
  - Turbine generators G-700A and G-700E
  - Gas lift and injection compressors
  - Vapor recovery compressors
  - Firewater pumps A & B
  - All oil and gas production related equipment
  - Air flotation cell
  - Unicel
  - Skim piles
- All fugitive emission related components (oil and gas service) except those associated with supplying PUC gas from the PANGL and inter-platform gas pipelines to the turbine generators (G-700B, G-700C, and G-700D)
- Reduction of unplanned flaring volume to 2 mmscf per quarter and 2 mmscf per year (all permitted unplanned flaring could occur in a single quarter).

Hermosa - 9104

- De-permitting of the following equipment
  - Turbine generators G-91 and G-93
  - All oil and gas production related equipment
  - Produced water surge tank (T-31)

  - Disposal pile (T-75)
  - Air flotation Cell (M-31)
  - CPI separators (M-32 and M-33)
- All fugitive emission related components (oil and gas service) except those associated with supplying PUC gas from the PANGL and inter-platform gas pipelines to the turbine generators (G-92 and G-94)
- Reduction of unplanned flaring volume to 3 mmscf per quarter and 3 mmscf per year (all permitted unplanned flaring could occur in a single quarter).

Hidalgo - 9105

- De-permitting of the following equipment
  - Turbine generators G-91 and G-94
  - Drilling Emergency Generator
  - All oil and gas production related equipment
  - Produced water surge tank (T-31)
  - Disposal pile (T-75)
  - Air flotation Cell (M-31)
  - CPI separators (M-32 and M-33)
  - Cutting dewater shaker (M-104)
- All fugitive emission related components (oil and gas service) except those associated with supplying PUC gas from the PANGL and inter-platform gas pipelines to the turbine generators (G-92 and G-93)
- Reduction of unplanned flaring volume to 1 mmscf per quarter and 1 mmscf per year (all permitted unplanned flaring could occur in a single quarter).
- Reduction of maximum sulfur content of unplanned and planned flaring to 10,000 ppmv (1% by volume)

If you have any questions or need additional information, please do not hesitate to reach out to me at (805) 535-2060 or via email at wkoester@dcorllc.com

Regards,

Whitney Koester (DCOR, LLC on behalf of Freeport-McMoRan Oil &Gas)
Environmental Specialist
805-535-2060

Attachments (8): APCD General Permit Form -01
Pt. Arguello Title V Application Forms
Harvest PTO 9103, R6 – Updated Equipment List
Hermosa PTO 9104, R6 – Updated Equipment List
Hidalgo PTO 9105, R6 – Updated Equipment List
Part 70 Renewal… Harvest – updated HAP Calcs
Part 70 Renewal… Hermosa – updated HAP Calcs
Part 70 Renewal… Hidalgo – updated HAP Calcs

Print Form

air pollution control district
SANTA BARBARA COUNTY

General Permit Application Form -01

Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110-1315

1. APPLICATION TYPE (check all that apply):

- ☐ Authority to Construct (ATC)
- ☒ Permit to Operate (PTO)
- ☐ ATC Modification
- ☐ PTO Modification
- ☐ Other (Specify)
- ☐ Transfer of Owner/Operator (use Form -01T)
- ☐ Emission Reduction Credits
- ☐ Increase in Production Rate or Throughput
- ☐ Decrease in Production Rate or Throughput

Previous ATC/PTO Number (if known): PTO 9103, PTO 9104, PTO 9105

◉ Yes ○ No Are Title 5 Minor Modification Forms Attached? (this applies to Title 5 sources only and applies to all application types except ATCs and Emission Reduction Credits). Complete Title 5 Form -1302 A1/A2, B, and M. Complete Title 5 Form -1302 C1/C2, D1/D2, E1/E2, F1/F2, G1/G2 as appropriate. http://www.ourair.org/wp-content/uploads/t5-forms.pdf

Mail the completed application to the APCD's Engineering Division at the address listed above.

2. FILING FEE:

A $420 application filing fee must be included with each application. The application filing fee is COLA-adjusted every July 1st. Please ensure you are remitting the correct current fee (the current fee schedule is available on the APCD's webpage at: http://www.ourair.org/district-fees). This filing fee will not be refunded or applied to any subsequent application. Payment may also be made by credit card by using the Credit Card Authorization Form at the end of this application.

3. IS YOUR PROJECT'S PROPERTY BOUNDARY LOCATED OR PROPOSED TO BE LOCATED WITHIN 1,000 FEET FROM THE OUTER BOUNDARY OF A SCHOOL? If yes, and the project results in an emissions increase, submit a completed Form -03 (*School Summary Form*) http://www.ourair.org/wp-content/uploads/apcd-03.pdf ○ Yes ◉ No

If yes, provide the name of school(s):

Address of school(s):

City: Zip Code:

4. DOES YOUR APPLICATION CONTAIN CONFIDENTIAL INFORMATION? ○ Yes ◉ No

If yes, please submit with a redacted duplicate application which shall be a public document. In order to be protected from disclosure to the public, all information claimed as confidential shall be submitted in accordance with APCD Policy & Procedure 6100-020 (*Handling of Confidential Information*): http://www.ourair.org/wp-content/uploads/6100-020.pdf, and meet the criteria of CA Govt Code Sec 6254.7. Failure to follow required procedures for submitting confidential information, or to declare it as confidential at the time of application, shall be deemed a waiver by the applicant of the right to protect such information from public disclosure. *Note: Part 70 permit applications may contain confidential information in accordance with the above procedures, however, the content of the permit documents must be public (no redactions).*

FOR APCD USE ONLY				DATE STAMP
FID	8013	Permit No.	PT-70/Reeval 9103-R6	Rec'vd 4/1/2021
Project Name	Platform Harvest			
Filing Fee	$420		202.E? YES / NO	

Billed DCOR 205406/500000

5. COMPANY/CONTACT INFORMATION:

Owner Info	○ Yes ◉ No	Use as Billing Contact?			
Company Name	Freeport McMoRan Oil & Gas				
Doing Business As					
Contact Name	David Rose	Position/Title	Director, Environmental Health & Safety		
Mailing Address	201 S. Broadway				
City	Orcutt	State	CA	Zip Code	93455
Telephone	(805) 934-8220	Cell	(805) 637-7952	Email	drose@fmi.com

Operator Info	○ Yes ◉ No	Use as Billing Contact?			
Company Name	Freeport McMoRan Oil & Gas				
Doing Business As					
Contact Name	David Rose	Position/Title	Director, Environmental Health & Safety		
Mailing Address	201 S. Broadway				
City	Orcutt	State	CA	Zip Code	93455
Telephone	(805) 934-8220	Cell	(805) 637-7952	Email	drose@fmi.com

*Authorized Agent Info**	◉ Yes ○ No	Use as Billing Contact?			
Company Name	DCOR, LLC.				
Doing Business As	Freeport McMoRan Oil & Gas				
Contact Name	Whitney Koester	Position/Title	Environmental Specialist		
Mailing Address	290 Maple Court, Ste 290				
City	Ventura	State	CA	Zip Code	93003
Telephone	(805) 535-2060	Cell	(520) 404-5921	Email	wkoester@dcorllc.com

*Use this section if the application is not submitted by the owner/operator. Complete APCD Form -01A (http://www.ourair.org/wp-content/uploads/apcd-01a.pdf). Owner/Operator information above is still required.

SEND PERMITTING CORRESPONDENCE TO *(check all that apply)*:

- ☒ Owner
- ☐ Operator
- ☒ Authorized Agent
- ☐ Other (attach mailing information)

6. GENERAL NATURE OF BUSINESS OR AGENCY:

Platforms Harvest, Hermosa, and Hidalgo previously produced natural gas and crude oil. Production ceased in 2015. Platforms will be in caretaker status until decommissioning.

7. EQUIPMENT LOCATION (Address):

Specify the street address of the proposed or actual equipment location. If the location does not have a designated address, please specify the location by cross streets, or lease name, UTM coordinates, or township, range, and section.

Equipment Address

City | State | Zip Code

Work Site Phone

○ Incorporated (within city limits) ○ Unincorporated (outside city limits) ◉ Used at Various Locations

Assessors Parcel No(s):

8. PROJECT DESCRIPTION:

(Describe the equipment to be constructed, modified and/or operated or the desired change in the existing permit. Attach a separate page if needed):

9. DO YOU REQUIRE A LAND USE PERMIT OR OTHER LEAD AGENCY PERMIT FOR THE PROJECT DESCRIBED IN THIS APPLICATION?: ○ Yes ◉ No

A. If **yes,** please provide the following information

Agency Name	Permit #	Phone #	Permit Date

* The lead agency is the public agency that has the principal discretionary authority to approve a project. The lead agency is responsible for determining whether the project will have a significant effect on the environment and determines what environmental review and environmental document will be necessary. The lead agency will normally be a city or county planning agency or similar, rather than the Air Pollution Control District.

B. If **yes,** has the lead agency permit application been deemed complete and is a copy of their completeness letter attached?

○ Yes ○ No

Please note that the APCD will not deem your application complete until the lead agency application is deemed complete.

C. If the lead agency permit application has not been deemed complete, please explain.

D. A copy of the final lead agency permit or other discretionary approval by the lead agency may be requested by the APCD as part of our completeness review process.

10. PROJECT STATUS:

A. Date of Equipment Installation

B. Have you been issued a Notice of Violation (NOV) for not obtaining a permit for this equipment/modification *and/or* have you installed this equipment without the required APCD permit(s)? If yes, the application filing is double per Rule 210. ○ Yes ◉ No

C. Is this application being submitted due to the loss of a Rule 202 exemption? ○ Yes ◉ No

D. Will this project be constructed in multiple phases? If yes, attach a separate description of the nature and extent of each project phase, including the associated timing, equipment and emissions. ○ Yes ◉ No

E. Is this application also for a change of owner/operator? If yes, please also include a completed APCD Form -01T. ○ Yes ◉ No

11. APPLICANT/PREPARER STATEMENT:

The person who prepares the application also must sign the permit application. The preparer may be an employee of the owner/ operator or an authorized agent (contractor/consultant) working on behalf of the owner/operator (an *Authorized Agent Form -01A* is required).

I certify pursuant to H&SC Section 42303.5 that all information contained herein and information submitted with this application is true and correct.

Signature of application preparer	Date
	3/31/2021

Print name of application preparer	Employer name
Whitney Koester	DCOR, LLC.

12. APPLICATION CHECKLIST (*check all that apply*)

☒ Application Filing Fee (Fee = $420. The application filing fee is COLA adjusted every July 1st. Please ensure you are remitting the current fee.) As a convenience to applicants, the APCD will accept credit card payments. If you wish to use this payment option, please complete the attached *Credit Card Authorization Form* and submit it with your application.

☒ Existing permitted sources may request that the filing fee be deducted from their current reimbursable deposits by checking this box. Please deduct the filing fee from my existing reimbursement account.

☐ Form -01T (*Transfer of Owner/Operator*) attached if this application also addresses a change in owner and/or operator status from what is listed on the current permit. http://www.ourair.org/wp-content/uploads/apcd-01t.pdf

☐ Form -03 (*School Summary Form*) attached if the project's property boundary is within 1,000 feet of the outer boundary of a school (k-12) and the project results in an emissions increase. http://www.ourair.org/wp-content/uploads/apcd-03.pdf

☐ Information required by the APCD for processing the application as identified in APCD Rule 204 (*Applications*), the APCD's *General APCD Information Requirements List* (http://www.sbcapcd.org/eng/dl/other/gen-info.pdf), and any of the APCD's Process/Equipment Summary Forms (http://www.ourair.org/permit-applications) that apply to the project.

☐ Form -01A (*Authorized Agent Form*) attached if this application was prepared by and/or if correspondence is requested to be sent to an Authorized Agent (e.g., contractor or consultant). This form must accompany each application. http://www.ourair.org/wp-content/uploads/apcd-01a.pdf

☐ Confidential Information submitted according to APCD Policy & Procedure 6100-020. (*Failure to follow Policy and Procedure 6100-020 is a waiver of right to claim information as confidential.*)

13. NOTICE OF CERTIFICATION:

All applicants must complete the following Notice of Certification. This certification must be signed by the Authorized Company Representative representing the owner/operator. Signatures by Authorized Agents will not be accepted.

NOTICE of CERTIFICATION

I, Todd Cantrall , am employed by or represent

Type or Print Name of Authorized Company Representative

Freeport McMoRan Oil & Gas

Type or Print Name of Business, Corporation, Company, Individual, or Agency

(hereinafter referred to as the applicant), and certify pursuant to H&SC Section 42303.5 that all information contained herein and information submitted with this application is true and correct and the equipment listed herein complies or can be expected to comply with said rules and regulations when operated in the manner and under the circumstances proposed. If the project fees are required to be funded by the cost reimbursement basis, as the responsible person, I agree that I will pay the Santa Barbara County Air Pollution Control District the actual recorded cost, plus administrative cost, incurred by the APCD in the processing of the application within 30 days of the billing date. If I withdraw my application, I further understand that I shall inform the APCD in writing and I will be charged for all costs incurred through closure of the APCD files on the project.

For applications submitted for Authority to Construct, modifications to existing Authority to Construct, and Authority to Construct/Permit to Operate permits, I hereby certify that all major stationary sources in the state and all stationary sources in the air basin which are owned or operated by the applicant, or by an entity controlling, controlled by, or under common control with the applicant, are in compliance, or are on approved schedule for compliance with all applicable emission limitations and standards under the Clean Air Act (42 USC 7401 *et seq.*) and all applicable emission limitations and standards which are part of the State Implementation Plan approved by the Environmental Protection Agency.

Completed By: Todd Cantrall Title: Vice President, Operations

Date: 3/31/2021 Phone: (281) 539-7602

Signature of Authorized Company Representative Todd A Cantrall

PLEASE NOTE THAT FAILURE TO COMPLETELY PROVIDE ALL REQUIRED INFORMATION OR FEES WILL RESULT IN YOUR APPLICATION BEING RETURNED OR DEEMED INCOMPLETE.

Wednesday, March 31, 2021
Santa Barbara County Air Pollution Control District – Equipment List

De-permitted equipment is colored red and with a strike-through. A summary of this equipment list can also be found in the renewal application cover letter from 4/1/2021.

PT-70/Reeval 09103 R6 / FID: 08013 Platform Harvest / SSID: 01325

A PERMITTED EQUIPMENT

1 Internal Combustion Engines

1.1 IC Engine: Crane (800A)

Device ID #	**005000**	***Device Name***	**IC Engine: Crane (800A)**
Rated Heat Input		*Physical Size*	475.00 Brake Horsepower
Manufacturer	Caterpillar	*Operator ID*	HA-330-P-101A
Model	3408 B	*Serial Number*	CR-800A
Location Note	P-101A, Mod 333, +124		
Device Description	This crane engine's rated bhp is at 2100 rpm.		

1.2 IC Engine: Crane (800B)

Device ID #	**005001**	***Device Name***	**IC Engine: Crane (800B)**
Rated Heat Input	3.710 MMBtu/Hour	*Physical Size*	475.00 Brake Horsepower
Manufacturer	Caterpillar	*Operator ID*	HA-330-P-101A
Model	3408 B	*Serial Number*	CR-800B
Location Note	P-101A, Mod 333, +124		
Device Description	Engine's rated bhp is at 2100 rpm.		

~~1.3 IC Engine: Emergency Firewater Pump B~~

~~*Device ID #*~~	~~005006~~	~~*Maximum Rated BHP*~~	~~558.00~~
~~*Device Name*~~	~~IC Engine: Emergency Firewater Pump B~~	~~*Serial Number*~~	~~12VA077381~~
~~*Engine Use*~~	~~Fire Water Pump~~	~~*EPA Engine Family Name*~~	
~~*Manufacturer*~~	~~Detroit Diesel~~	~~*Operator ID*~~	
~~*Model Year*~~	~~1987~~	~~*Fuel Type*~~	
~~*Model*~~	~~12V71~~		
~~*DRP/ISC?*~~	~~No~~	~~*Healthcare Facility?*~~	~~No~~
~~*Daily Hours*~~		~~*Annual Hours*~~	
~~*Location Note*~~	~~P-103A, Mod 331, +60~~		
~~*Device Description*~~	~~Engine's rated bhp is at 1800 rpm.~~		

~~1.4 IC Engine: Emergency Firewater Pump A~~

~~*Device ID #*~~	~~005005~~	~~*Maximum Rated BHP*~~	~~558.00~~
~~*Device Name*~~	~~IC Engine: Emergency Firewater Pump A~~	~~*Serial Number*~~	~~12VA077380~~
~~*Engine Use*~~	~~Fire Water Pump~~	~~*EPA Engine Family Name*~~	
~~*Manufacturer*~~	~~Detriot Diesel~~	~~*Operator ID*~~	~~P-306A~~
~~*Model Year*~~	~~1987~~	~~*Fuel Type*~~	
~~*Model*~~	~~12V71~~		
~~*DRP/ISC?*~~	~~No~~	~~*Healthcare Facility?*~~	~~No~~
~~*Daily Hours*~~		~~*Annual Hours*~~	
~~*Location Note*~~	~~P-103A, Mod 331, +60~~		
~~*Device Description*~~	~~Engine's rated bhp is at 1800 rpm.~~		

1.5 IC Engine: Emergency Generator B

Device ID #	005004	*Maximum Rated BHP*	995.00
Device Name	IC Engine: Emergency Generator B	*Serial Number*	12E00008835
Engine Use	Electrical Power	*EPA Engine Family Name*	
Manufacturer	Detriot Diesel	*Operator ID*	G-701B
Model Year	1987	*Fuel Type*	
Model	12V-149TI		
DRP/ISC?	No	*Healthcare Facility?*	No
Daily Hours		*Annual Hours*	
Location Note	P-103A, Mod 334, +87		
Device Description	Engine's rated bhp is at 1800 rpm.		

1.6 IC Engine: Emergency Generator A

Device ID #	005003	*Maximum Rated BHP*	1000.00
Device Name	IC Engine: Emergency Generator A	*Serial Number*	12E00008156
Engine Use	Electrical Power	*EPA Engine Family Name*	
Manufacturer	Detroit Diesel	*Operator ID*	G-701A
Model Year	1987	*Fuel Type*	
Model	12V-149TI		
DRP/ISC?	No	*Healthcare Facility?*	No
Daily Hours		*Annual Hours*	
Location Note	P-103A, Mod 334, +87		
Device Description	Engine's rated bhp is at 1800 rpm.		

1.7 IC Engine: Crane (CR801)

Device ID #	**005002**	***Device Name***	**IC Engine: Crane (CR801)**
Rated Heat Input		*Physical Size*	270.00 Brake Horsepower
Manufacturer	Caterpillar	*Operator ID*	HA-330-P-101A
Model	3306 PCT	*Serial Number*	CR-801
Location Note	P-101A, Mod 333, +124		
Device Description	This crane engine's rated bhp is at 2200 rpm.		

2 Turbines

~~2.1 Gas Turbine Generator A~~

~~***Device ID #***~~	~~**005013**~~	~~***Device Name***~~	~~**Gas Turbine Generator A**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~3.58 Megawatts~~
~~*Manufacturer*~~	~~Allison~~	~~*Operator ID*~~	
~~*Model*~~	~~501-KB5~~	~~*Serial Number*~~	~~333-G-700-A~~
~~*Location Note*~~	~~P-015, Mod 333, +87~~		
~~*Device Description*~~	~~Burns PUC-quality natural gas, or diesel.~~ ~~Peak oper design rating (kW) 3,316 / 3,194~~ ~~Engine BSFC (Btu/kW-hr) 12,610 / 12,791~~ ~~Fuel higher heating value: 1,200 / 19,620~~ ~~Units for fuel HHV: BTU/scf / Btu/lb~~ ~~Total sulfur content of fuel: <50 / 0.29~~ ~~Units for sulfur content: ppm / % wt~~ ~~Operating hours per day (max.): 24 / 24~~ ~~Operating hours per quarter (max.): 2,190 / 865~~ ~~Operating hours per year (highest annual average): 8,760 / 1,730~~ ~~Emission controls used?: Yes / Yes~~ ~~Water/fuel injection rate: 0.8:1 / 1:1~~		

2.2 Gas Turbine Generator B

Device ID #	**005014**	***Device Name***	**Gas Turbine Generator B**
Rated Heat Input		*Physical Size*	3.58 Megawatts
Manufacturer	Allison	*Operator ID*	
Model	501-KB5	*Serial Number*	333-G-700-B
Location Note	P-015, Mod 333, +87		
Device Description	Burns PUC-quality natural gas, or diesel. Peak oper design rating (kW) 3,316 / 3,194 Engine BSFC (Btu/kW-hr) 12,610 / 12,791 Fuel higher heating value: 1,200 / 19,620 Units for fuel HHV: BTU/scf / Btu/lb Total sulfur content of fuel: <50 / 0.29 Units for sulfur content: ppm / % wt Operating hours per day (max.): 24 / 24 Operating hours per quarter (max.): 2,190 / 865 Operating hours per year (highest annual average):		

	8,760 / 1,730 Emission controls used?: Yes / Yes Water/fuel injection rate: 0.8:1 / 1:1		

2.3 Gas Turbine Generator C

Device ID #	**005015**	***Device Name***	**Gas Turbine Generator C**
Rated Heat Input		*Physical Size*	3.58 Megawatts
Manufacturer	Allison	*Operator ID*	
Model	501-KB5	*Serial Number*	333-G-700-C
Location Note	P-015, Mod 333, +87		
Device Description	Burns PUC-quality natural gas, or diesel. Peak oper design rating (kW) 3,316 / 3,194 Engine BSFC (Btu/kW-hr) 12,610 / 12,791 Fuel higher heating value: 1,200 / 19,620 Units for fuel HHV: BTU/scf / Btu/lb Total sulfur content of fuel: <50 / 0.29 Units for sulfur content: ppm / % wt Operating hours per day (max.): 24 / 24 Operating hours per quarter (max.): 2,190 / 865 Operating hours per year (highest annual average): 8,760 / 1,730 Emission controls used?: Yes / Yes Water/fuel injection rate: 0.8:1 / 1:1		

~~2.4 Gas Turbine Compressor C~~

~~***Device ID #***~~	~~**005023**~~	~~***Device Name***~~	~~**Gas Turbine Compressor C**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~3.58 Megawatts~~
~~*Manufacturer*~~	~~Allison~~	~~*Operator ID*~~	~~059~~
~~*Model*~~	~~501-KC-5~~	~~*Serial Number*~~	~~336-K-200-C~~
~~*Location Note*~~	~~P-102, Mod 336, +87~~		
~~*Device Description*~~	~~Turbine engine with peak operating design rating of 4,330 shp burning natural gas (HHV 1,200 BTU/scf). Uses water injection (W/F 0.8/1) for emissions control. Operating hours: 24 hr/day, 2190 hr/qtr, 8760 hr/yr.~~		

~~2.5 Gas Turbine Compressor B~~

~~***Device ID #***~~	~~**005022**~~	~~***Device Name***~~	~~**Gas Turbine Compressor B**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~3.58 Megawatts~~
~~*Manufacturer*~~	~~Allison~~	~~*Operator ID*~~	~~053~~
~~*Model*~~	~~501-KC-5~~	~~*Serial Number*~~	~~336-K-200-B~~
~~*Location Note*~~	~~P-102, Mod 336, +87~~		
~~*Device Description*~~	~~Turbine engine with peak operating design rating of 4,330 shp burning natural gas (HHV 1,200 BTU/scf). Uses water injection (W/F 0.8/1) for emissions control. Operating hours: 24 hr/day, 2190 hr/qtr, 8760 hr/yr.~~		

	Emission controls used?: Yes Emission controls description: Water injection.

2.6 Gas Turbine Compressor A

Device ID #	005021	*Device Name*	Gas Turbine Compressor A
Rated Heat Input		*Physical Size*	3.58 Megawatts
Manufacturer	Allison	*Operator ID*	048
Model	501-KC-5	*Serial Number*	336-K-200-A
Location Note	P-102, Mod 336, +87		
Device Description	Turbine engine with peak operating design rating of 4,330 shp burning natural gas (HHV 1,200 BTU/scf). Uses water injection (W/F 0.8/1) for emissions control. Operating hours: 24 hr/day, 2190 hr/qtr, 8760 hr/yr.		

2.7 Gas Turbine Generator E

Device ID #	005017	*Device Name*	Gas Turbine Generator E
Rated Heat Input		*Physical Size*	3.58 Megawatts
Manufacturer	Allison	*Operator ID*	
Model	501-KB5	*Serial Number*	333-G-700-E
Location Note	P-015, Mod 333, +87		
Device Description	Burns PUC-quality natural gas, or diesel. Peak oper design rating (kW) 3,316 / 3,194 Engine BSFC (Btu/kW-hr) 12,610 / 12,791 Fuel higher heating value: 1,200 / 19,620 Units for fuel HHV: BTU/scf / Btu/lb Total sulfur content of fuel: <50 / 0.29 Units for sulfur content: ppm / % wt Operating hours per day (max.): 24 / 24 Operating hours per quarter (max.): 2,190 / 865 Operating hours per year (highest annual average): 8,760 / 1,730 Emission controls used?: Yes / Yes Water/fuel injection rate: 0.8:1 / 1:1		

2.8 Gas Turbine Generator D

Device ID #	**005016**	***Device Name***	**Gas Turbine Generator D**
Rated Heat Input		*Physical Size*	3.58 Megawatts
Manufacturer	Allison	*Operator ID*	
Model	501-KB5	*Serial Number*	333-G-700-D
Location Note	P-015, Mod 333, +87		
Device Description	Burns PUC-quality natural gas, or diesel. Peak oper design rating (kW) 3,316 / 3,194 Engine BSFC (Btu/kW-hr) 12,610 / 12,791 Fuel higher heating value: 1,200 / 19,620 Units for fuel HHV: BTU/scf / Btu/lb		

Total sulfur content of fuel:	<50 / 0.29
Units for sulfur content:	ppm / % wt
Operating hours per day (max.):	24 / 24
Operating hours per quarter (max.):	2,190 / 865
Operating hours per year (highest annual average):	8,760 / 1,730
Emission controls used?:	Yes / Yes
Water/fuel injection rate:	0.8:1 / 1:1

~~**3 Oil and Gas Wellheads**~~

~~***Device ID #***~~	~~**102758**~~	~~***Device Name***~~	~~**Oil and Gas Wellheads**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~18.00 Active Wells~~
~~*Manufacturer*~~		~~*Operator ID*~~	~~020~~
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~	~~Cellar Deck~~		
~~*Device Description*~~	~~No gas injection wells, no water injection wells.~~ ~~The device grouping number is represented by the final number group of a Texaco E&P process flow diagram number.~~ ~~18 producing wells numbers: A-2 through A-19.~~ ~~One plugged and abandoned oil and gas well: A-1.~~		

4 Fugitive Hydrocarbon Components

Device ID #	**391491**	***Device Name***	**Fugitive Hydrocarbon Components**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	New device: 391491		

4.1 Fugitive HC Components - CLP

Device ID #	**102755**	***Device Name***	**Fugitive HC Components - CLP**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

4.2 Gas/Condensate Service Components - Accessible

Device ID #	**005389**	***Device Name***	**Gas/Condensate Service Components - Accessible**
Rated Heat Input		*Physical Size*	3391 Component Leakpaths
Manufacturer		*Operator ID*	200
Model		*Serial Number*	
Location Note	Various locations		
Device Description			

~~**4.3 Oil Service Components - Accessible**~~

~~***Device ID #***~~	~~**005388**~~	~~***Device Name***~~	~~**Oil Service Components - Accessible**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~11656.00 Component Leakpath~~
~~*Manufacturer*~~		~~*Operator ID*~~	~~200~~
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~	~~Various locations~~		
~~*Device Description*~~			

5 Stationary Internal Combustion Engines

6 Fixed Roof Storage Tanks

~~**6.1 Chemical Tank**~~

~~***Device ID #***~~	~~**102776**~~	~~***Device Name***~~	~~**Chemical Tank**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~100.00 Gallons~~
~~*Manufacturer*~~	~~Tote Tank~~	~~*Operator ID*~~	~~100~~
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~	~~60~~		
~~*Device Description*~~	~~Vertical tank stores Chronex 9037; not connected to vapor recovery.~~		

~~**6.2 Chemical Tank**~~

~~***Device ID #***~~	~~**102777**~~	~~***Device Name***~~	~~**Chemical Tank**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~700.00 Gallons~~
~~*Manufacturer*~~	~~Tote Tank~~	~~*Operator ID*~~	~~100~~
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~	~~60~~		
~~*Device Description*~~	~~Vertical tank stores Chronex CT 9086; not connected to vapor recovery.~~		

~~**6.3 Chemical Tank**~~

~~*Device ID #*~~	~~**102778**~~	~~*Device Name*~~	~~**Chemical Tank**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~1900.00 Gallons~~
~~*Manufacturer*~~	~~Steel Baker Tank~~	~~*Operator ID*~~	~~100~~
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~	~~60~~		
~~*Device Description*~~	~~Vertical tank stores Foambrak F-2659; not connected to vapor recovery.~~		

7 Pumps

~~7.1 Pipeline Pump~~

~~*Device ID #*~~	~~**102786**~~	~~*Device Name*~~	~~**Pipeline Pump**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~900.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~United Centrifugal Pump Co.~~	~~*Operator ID*~~	~~040~~
~~*Model*~~	~~A-4X11 MSN-M~~	~~*Serial Number*~~	~~332-P-100-A~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Rated capacity 1200 gpm. Driven by 900 hp electric motor. Fitted with dual seals.~~		

~~7.2 Pipeline Pump~~

~~*Device ID #*~~	~~**102787**~~	~~*Device Name*~~	~~**Pipeline Pump**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~900.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~United Centrifugal Pump Co.~~	~~*Operator ID*~~	~~040~~
~~*Model*~~	~~A-4X11 MSN-M~~	~~*Serial Number*~~	~~332-P-100-B~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Rated capacity is 1200 gpm. Driven by 900 hp electric motor; fitted with dual seals.~~		

~~7.3 Pipeline Pump~~

~~*Device ID #*~~	~~**102788**~~	~~*Device Name*~~	~~**Pipeline Pump**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~900.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~United Centrifugal Pump Co.~~	~~*Operator ID*~~	~~040~~
~~*Model*~~	~~A-4X11 MSN-M~~	~~*Serial Number*~~	~~332-P-100-C~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Rated capacity 1200 gpm. Driven by 900 hp electric motor. Fitted with dual seals.~~		

~~7.4 Pipeline Pump~~

~~*Device ID #*~~	~~**102789**~~	~~*Device Name*~~	~~**Pipeline Pump**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~900.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~United Centrifugal Pump Co.~~	~~*Operator ID*~~	~~040~~
~~*Model*~~	~~A-4X11 MSN-M~~	~~*Serial Number*~~	~~332-P-100-D~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Powered by 1200 hp electric motor. Fitted with dual seals.~~		

~~7.5 LACT Charge Pump~~

~~*Device ID #*~~	~~**102790**~~	~~*Device Name*~~	~~**LACT Charge Pump**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~200.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Ingersoll-Rand~~	~~*Operator ID*~~	~~037~~
~~*Model*~~	~~4X11 W~~	~~*Serial Number*~~	~~332-P-101-A~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Rated capacity is 1200 gpm, powered by 200 hp electric motor. Fitted with dual seals.~~		

~~7.6 LACT Charge Pump~~

~~*Device ID #*~~	~~**102791**~~	~~*Device Name*~~	~~**LACT Charge Pump**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~200.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Ingersoll-Rand~~	~~*Operator ID*~~	~~037~~
~~*Model*~~	~~4X11 W~~	~~*Serial Number*~~	~~332-P-101-B~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Rated capacity is 1200 gpm. Driven by 200 hp electric motor. Fitted with dual seals.~~		

~~7.7 LACT Charge Pump~~

~~*Device ID #*~~	~~**102792**~~	~~*Device Name*~~	~~**LACT Charge Pump**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~200.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Ingersoll-Rand~~	~~*Operator ID*~~	~~037~~
~~*Model*~~	~~4X11 W~~	~~*Serial Number*~~	~~332-P-101-C~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Rated capacity is 1200 gpm; fitted with dual seals. Driven by 200 hp electric motor.~~		

7.8 Flare Condensate Pump A

Device ID #	**102793**	***Device Name***	**Flare Condensate Pump A**

Rated Heat Input		*Physical Size*	7.50 Horsepower (Electric Motor)
Manufacturer	Union Pump Co.	*Operator ID*	150
Model	1½ x 2 x 9 VCM	*Serial Number*	332-P-200
Location Note	P-103A, Mod 332, +60		
Device Description	HP Flare condensate service; 50 gpm rated capacity. Not fitted with dual seals. Driven by 7.5 hp electric motor.		

~~7.9 Flare Condensate Pump B~~

~~*Device ID #*~~	~~102794~~	~~*Device Name*~~	~~Flare Condensate Pump B~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~7.50 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Union Pump Co.~~	~~*Operator ID*~~	~~150~~
~~*Model*~~	~~1½ x 2 x 9 VCM~~	~~*Serial Number*~~	~~332-P-201~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~LP flare condensate service, 25 gpm rated capacity, not fitted with dual seals. Driven by 7.5 hp electric motor.~~		

~~7.10 Flotation Cell Pump A~~

~~*Device ID #*~~	~~102795~~	~~*Device Name*~~	~~Flotation Cell Pump A~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~30.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Union Pump Co.~~	~~*Operator ID*~~	~~133~~
~~*Model*~~	~~6X6X12 VCM~~	~~*Serial Number*~~	~~332-P-309A~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~1460 gpm rated capacity; not fitted with dual seals. Driven by 30 hp electric motor.~~		

~~7.11 Flotation Cell Pump B~~

~~*Device ID #*~~	~~102796~~	~~*Device Name*~~	~~Flotation Cell Pump B~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~30.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Union Pump Co~~	~~*Operator ID*~~	~~133~~
~~*Model*~~	~~6X6X12 VCM~~	~~*Serial Number*~~	~~332-P-309B~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~1460 gpm rated capacity; fitted with dual seals. Driven by 30 hp electric motor.~~		

~~7.12 Glycol Pump A~~

~~*Device ID #*~~	~~102797~~	~~*Device Name*~~	~~Glycol Pump A~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~15.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Wheatley~~	~~*Operator ID*~~	~~076~~

Model		*Serial Number*	332-P-500-1-A
Location Note	P-103A, Mod 332, +60		
Device Description	Glycol circulation service, pumping triethylene glycol, rated at 16 gpm, not fitted with dual seals. Driven by 15 hp electric motor.		

7.13 Glycol Pump B

Device ID #	**102798**	***Device Name***	**Glycol Pump B**
Rated Heat Input		*Physical Size*	15.00 Horsepower (Electric Motor)
Manufacturer	Wheatley	*Operator ID*	076
Model		*Serial Number*	332-P-500-1-B
Location Note	P-103A, Mod 332 +60		
Device Description	Pumps triethylene glycol, not fitted with dual seals; 16 gpm rated capacity. Driven by 15 hp electric motor.		

7.14 Amine Booster Pump A

Device ID #	**102799**	***Device Name***	**Amine Booster Pump A**
Rated Heat Input		*Physical Size*	50.00 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	076
Model	3X2X10 HEC	*Serial Number*	332-P-501-1-A
Location Note	P-103A, Mod 332 +60		
Device Description	Pumps hot lean amine/50% DGA, rated capacity is 180 gpm; fitted with dual seals. Driven by 50 hp electric motor.		

7.15 Amine Booster Pump B

Device ID #	**102800**	***Device Name***	**Amine Booster Pump B**
Rated Heat Input		*Physical Size*	50.00 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	072
Model	3X2X10 HEC	*Serial Number*	332-P-501-1-B
Location Note	P-103A, Mod 332 +60		
Device Description	Pumps hot lean amine/50% DGA, rated capacity 180 gpm; fitted with dual seals. Driven by 50 hp electric motor.		

7.16 Amine Solution Pump A

Device ID #	**102801**	***Device Name***	**Amine Solution Pump A**
Rated Heat Input		*Physical Size*	75.00 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	071B
Model	4X2X12WN	*Serial Number*	332-P-501-2-A

Location Note	P-103A, Mod 332 +60
Device Description	Pumps cold lean amine/50% DGA, rated capacity of 154 gpm; fitted with dual seals. Driven by 75 hp electric motor.

7.17 Amine Solution Pump B

Device ID #	**102802**	***Device Name***	**Amine Solution Pump B**
Rated Heat Input		*Physical Size*	75.00 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	071B
Model	4X2X12WN	*Serial Number*	332-P-501-2-B
Location Note	P-103A, Mod 332 +60		
Device Description	Pumps cold lean amine/50% DGA, rated at 154 gpm, fitted with dual seals. Driven by 75 hp electric motor.		

7.18 Amine Regeneration Reflux Pump A

Device ID #	**102803**	***Device Name***	**Amine Regeneration Reflux Pump A**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	074
Model	1pX1X6 HOC	*Serial Number*	332-P-501-3-A
Location Note	P-103A, Mod 332, +60		
Device Description	Amine regeneration reflux service, pumping H2O/CO2; 17 gpm rated capacity, fitted with dual seals. Driven by 3 hp electric motor.		

7.19 Amine Regeneration Reflux Pump B

Device ID #	**102804**	***Device Name***	**Amine Regeneration Reflux Pump B**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	074
Model	1pX1X6 HOC	*Serial Number*	332-P-501-3-B
Location Note	P-103A, Mod 332, +60		
Device Description	Amine regeneration reflux service, pumping H2O/CO2, 17 gpm rated capacity, fitted with dual seals. Powered by 3 hp electric motor.		

7.20 Amine Charge Pump A

Device ID #	**102805**	***Device Name***	**Amine Charge Pump A**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer	Ingersoll-Rand	*Operator ID*	074

~~*Model*~~	~~1pX1X6 HOC~~	~~*Serial Number*~~	~~332-P-501-4-A~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Pumps 30% DGA, 20 gpm rated capacity, fitted with dual seals. Powered by 3 hp electric motor.~~		

~~7.21 Amine Charge Pump B~~

~~***Device ID #***~~	~~**102806**~~	~~***Device Name***~~	~~**Amine Charge Pump B**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~3.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Ingersoll-Rand~~	~~*Operator ID*~~	
~~*Model*~~	~~1pX1X6 HOC~~	~~*Serial Number*~~	~~332-P-501-4-B~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Pumps 30% DGA, 20 gpm rated capacity, fitted with dual seals. Powered by 3 hp electric motor.~~		

7.22 Production Drain Sump Pump

Device ID #	**102807**	***Device Name***	**Production Drain Sump Pump**
Rated Heat Input		*Physical Size*	15.00 Horsepower (Electric Motor)
Manufacturer	Allweiler	*Operator ID*	143
Model	SEP 750.1	*Serial Number*	332-P-800A
Location Note	P-104A, Mod 332, +47		
Device Description	Pumps sump fluid, 150 gpm rated capacity, not fitted with dual seals. Powered by 15 hp electric motor.		

7.23 Production Drain Sump Pump

Device ID #	**102808**	***Device Name***	**Production Drain Sump Pump**
Rated Heat Input		*Physical Size*	15.00 Horsepower (Electric Motor)
Manufacturer	Allweiler	*Operator ID*	143
Model	SEP 750.1	*Serial Number*	332-P-800B
Location Note	P-104A, Mod 332, +47		
Device Description	Pumps sump fluid, 150 gpm rated capacity, not fitted with dual seals. Powered by 15 hp electric motor.		

~~7.24 LACT Test Water Pump~~

~~***Device ID #***~~	~~**102809**~~	~~***Device Name***~~	~~**LACT Test Water Pump**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~60.00 Horsepower (Electric Motor)~~

Manufacturer	Gould	*Operator ID*	038A
Model	3996	*Serial Number*	332-P-2000
Location Note	P-103A, Mod 332, +60		
Device Description	LACT test water service, pumps sea water or produced water, 270 gpm rated capacity, not fitted with dual seals. Powered by 60 hp electric motor.		

7.25 1st Stage Sales Gas Condensate Pump A

Device ID #	**102810**	***Device Name***	**1st Stage Sales Gas Condensate Pump A**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer	Union Pump Co.	*Operator ID*	047B
Model	1½ x 2 x 9 VCM	*Serial Number*	336-P-203-A
Location Note	P-102A, Mod 336, +87		
Device Description	Pumps condensate, 40 gpm rated capacity, not fitted with dual seals. Powered by 3 hp electric motor.		

7.26 1st Stage Sales Gas Condensate Pump B

Device ID #	**102811**	***Device Name***	**1st Stage Sales Gas Condensate Pump B**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer	Union Pump Co.	*Operator ID*	047B
Model	1½ x 2 x 9 VCM	*Serial Number*	336-P-203-B
Location Note	P-102A, Mod 336, +87		
Device Description	Pumps condensate, 40 gpm rated capacity, not fitted with dual seals. Powered by 3 hp electric motor.		

7.27 1st Stage Sales Gas Condensate Pump C

Device ID #	**102812**	***Device Name***	**1st Stage Sales Gas Condensate Pump C**
Rated Heat Input		*Physical Size*	3.00 Horsepower (Electric Motor)
Manufacturer	Union Pump Co.	*Operator ID*	047B
Model	1½ x 2 x 9 VCM	*Serial Number*	336-P-203-C
Location Note	P-102A, Mod 336, +87		
Device Description	Pumps condensate, 40 gpm rated capacity, not fitted with dual seals. Powered by 3 hp electric motor.		

7.28 Eductor Charge Pump

Device ID #	**111351**	***Device Name***	**Eductor Charge Pump**

~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~		~~*Operator ID*~~	~~P-100 A&B~~
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~			
~~*Device Description*~~	~~Two Pumps: PXP ID Nos. P-100 A&B~~		

8 Pigging Equipment

~~8.1 Oil Pipeline Pig Launcher/Receiver~~

~~***Device ID #***~~	~~**102815**~~	~~***Device Name***~~	~~**Oil Pipeline Pig Launcher/Receiver**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~12304.00 Cubic Feet~~
~~*Manufacturer*~~	~~Progressive Metals~~	~~*Operator ID*~~	~~041~~
~~*Model*~~		~~*Serial Number*~~	~~331-U-101~~
~~*Location Note*~~	~~P-103A, Mod 331, +60~~		
~~*Device Description*~~	~~Connected to gas gathering or vapor recovery.~~		

8.2 Gas Pipeline Pig Launcher/Receiver

Device ID #	**102816**	***Device Name***	**Gas Pipeline Pig Launcher/Receiver**
Rated Heat Input		*Physical Size*	5527.00 Cubic Feet
Manufacturer	Progressive Metals	*Operator ID*	041
Model		*Serial Number*	331-U-201
Location Note	P-103A, Mod 331, +60		
Device Description	Connected to gas gathering or vapor recovery.		

9 Speciality Units and Packages

9.1 Oxidation Catalyst 1

Device ID #	**386447**	***Device Name***	**Oxidation Catalyst 1**
Rated Heat Input		*Physical Size*	
Manufacturer	Clean Emission Products Inc.	*Operator ID*	
Model	P/N IC-10-600	*Serial Number*	
Location Note			
Device Description	Reduces carbon monoxide emissions from crane engine, 8,000 to 12,000 engine hour estimated lifespan		

9.2 Oxidation Catalyst 2

Device ID #	**386448**	***Device Name***	**Oxidation Catalyst 2**

Rated Heat Input		*Physical Size*	
Manufacturer	Clean Emission Products Inc.	*Operator ID*	
Model	P/N IC-10-600	*Serial Number*	
Location Note			
Device Description	Reduces carbon monoxide emissions from crane engine, 8,000 to 12,000 engine hour estimated lifespan		

~~9.3 Unicel Vessel~~

~~*Device ID #*~~	~~111349~~	~~*Device Name*~~	~~Unicel Vessel~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~		~~*Operator ID*~~	
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~			
~~*Device Description*~~	~~PXP ID: V-1000~~		

10 Heat Exchangers

11 Compressors

~~11.1 Gas Lift Compressor~~

~~*Device ID #*~~	~~102780~~	~~*Device Name*~~	~~Gas Lift Compressor~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~700.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Superior~~	~~*Operator ID*~~	~~085~~
~~*Model*~~	~~MW62~~	~~*Serial Number*~~	~~335-K-300~~
~~*Location Note*~~	~~P-102A, Mod 335, +87~~		
~~*Device Description*~~	~~Rated capacity is 14700 scfm.~~		

~~11.2 Vapor Recovery Compressor~~

~~*Device ID #*~~	~~102781~~	~~*Device Name*~~	~~Vapor Recovery Compressor~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~600.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Superior~~	~~*Operator ID*~~	
~~*Model*~~	~~MW64~~	~~*Serial Number*~~	~~336-K-201A~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Compressor rated at 1292 scfm. Housing/seals not connected to vapor recovery. N2 purge.~~		

~~11.3 Vapor Recovery Compressor~~

~~*Device ID #*~~	~~102782~~	~~*Device Name*~~	~~Vapor Recovery Compressor~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~600.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Superior~~	~~*Operator ID*~~	
~~*Model*~~	~~MW64~~	~~*Serial Number*~~	~~336-K-201B~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~1292 scfm rated capacity, not connected to vapor recovery, uses N2 purge. Powered by 600 hp electric motor.~~		

~~11.4 Injection Gas Compressor~~

~~*Device ID #*~~	~~102783~~	~~*Device Name*~~	~~Injection Gas Compressor~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~1750.00 Horsepower (Electric Motor)~~
~~*Manufacturer*~~	~~Superior~~	~~*Operator ID*~~	~~079~~
~~*Model*~~	~~MW64~~	~~*Serial Number*~~	~~336-K-202~~
~~*Location Note*~~	~~P-102A, Mod 336, +87~~		
~~*Device Description*~~	~~13900 scfm rated capacity; N2 purge. Housing /seals not connected to vapor recovery. Powered by 1750 hp electric motor.~~		

12 Pressure Vessels

~~12.1 LACT Crude Strainer A~~

~~*Device ID #*~~	~~102817~~	~~*Device Name*~~	~~LACT Crude Strainer A~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Continental EMESCO~~	~~*Operator ID*~~	~~038~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~332-F-104A~~
~~*Location Note*~~	~~P-104A, Mod 332, +60~~		
~~*Device Description*~~	~~Vertical crude oil strainer, diameter 1.5 feet, length 3.0 feet S/S; not connected to gas gathering or vapor recovery.~~		

~~12.2 LACT Crude Strainer B~~

~~*Device ID #*~~	~~102818~~	~~*Device Name*~~	~~LACT Crude Strainer B~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Continental EMESCO~~	~~*Operator ID*~~	~~038~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~332-F-104B~~
~~*Location Note*~~	~~P-104A, Mod 332, +60~~		
~~*Device Description*~~	~~Vertical crude strainer 1.5 feet dia, 3.0 feet long S/S. Not connected to gas gathering or vapor recovery.~~		

~~12.3 Glycol Charcoal Filter~~

~~*Device ID #*~~	~~**102819**~~	~~*Device Name*~~	~~**Glycol Charcoal Filter**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~PECO~~	~~*Operator ID*~~	~~077~~
~~*Model*~~	~~10-7-44~~	~~*Serial Number*~~	~~332-F-500-1~~
~~*Location Note*~~	~~P-104A, Mod 332, +60~~		
~~*Device Description*~~	~~Vertical type 3 feet diameter, 4.2 feet long S/S. Not connected to gas gathering or vapor recovery.~~		

~~12.4 Glycol Cartridge Filter~~

~~*Device ID #*~~	~~**102820**~~	~~*Device Name*~~	~~**Glycol Cartridge Filter**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~PECO~~	~~*Operator ID*~~	~~077~~
~~*Model*~~	~~55-5-336~~	~~*Serial Number*~~	~~332-F-500-2~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Vertical glycol filter, diamter 0.9 feet, length 3.4 feet S/S, not connected to gas gathering or vapor recovery.~~		

~~12.5 Amine Cartridge Filter~~

~~*Device ID #*~~	~~**102821**~~	~~*Device Name*~~	~~**Amine Cartridge Filter**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~PECO~~	~~*Operator ID*~~	
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~332-F-501-1~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Vertical type, diameter 2.67 feet, length 5.5 feet, not connected to gas gathering or vapor recovery.~~		

~~12.6 Amine Charcoal Filter~~

~~*Device ID #*~~	~~**102822**~~	~~*Device Name*~~	~~**Amine Charcoal Filter**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~PECO~~	~~*Operator ID*~~	~~072~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~332-F-501-2~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Vertical type, diameter 4 feet, 6.25 feet, not connnected to gas gathering or vapor recovery.~~		

~~12.7 Amine Cartridge Filter~~

~~*Device ID #*~~	~~**102823**~~	~~*Device Name*~~	~~**Amine Cartridge Filter**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	

Manufacturer	PECO	*Operator ID*	072
Model	Custom	*Serial Number*	332-F-501-4
Location Note	P-103A, Mod 332, +60		
Device Description	Vertical type, diameter 2.67 feet, length 5.5 feet, not connected to gas gathering or vapor recovery.		

12.8 Oily Water Coalescer A

Device ID #	**102825**	***Device Name***	**Oily Water Coalescer A**
Rated Heat Input		*Physical Size*	
Manufacturer	E.P.I.	*Operator ID*	131
Model	Custom	*Serial Number*	332-U-304A
Location Note	P-103A, Mod 332, +60		
Device Description	Vertical type in oily water service, diameter 7 feet, length 16.0 feet T/T, connected to gas gathering or vapor recovery.		

12.9 Oily Water Coalescer B

Device ID #	**102826**	***Device Name***	**Oily Water Coalescer B**
Rated Heat Input		*Physical Size*	
Manufacturer	E.P.I.	*Operator ID*	131
Model	Custom	*Serial Number*	332-U-304B
Location Note	P-103A, Mod 333, +60		
Device Description	Vertical type in oily water service, diameter 7 feet, length 16.0 T/T, connected to gas gathering or vapor recovery.		

12.10 Test Separator A

Device ID #	**102827**	***Device Name***	**Test Separator A**
Rated Heat Input		*Physical Size*	
Manufacturer	C.E. Natco	*Operator ID*	033
Model	Custom	*Serial Number*	332-V-100A
Location Note	P-103A, Mod 332, +60		
Device Description	Horizontal type in water, oil, gas service. Diameter 6 ft, lenght 15.0 T/T. Connected to gas gathering or vapor recovery.		

12.11 Test Separator B

Device ID #	**102828**	***Device Name***	**Test Separator B**
Rated Heat Input		*Physical Size*	
Manufacturer	C.E. Natco	*Operator ID*	033
Model		*Serial Number*	332-V-100B
Location Note	P-103A, Mod 332, +60		
Device Description	Horizontal type in water, oil and gas service. Diameter 6 ft, 15.0 ft T/T. Connected to gas gathering or vapor recovery.		

~~12.12 Gas Lift Suction Scrubber~~

~~*Device ID #*~~	~~102844~~	~~*Device Name*~~	~~Gas Lift Suction Scrubber~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~C.E.M.I.~~	~~*Operator ID*~~	~~085~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~335-V-300~~
~~*Location Note*~~	~~P-102A, Mod 335, +87~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 2 ft, length 6.5 ft S/S. Connected to gas gathering or vapor recovery.~~		

~~12.13 Production Separator A~~

~~*Device ID #*~~	~~102845~~	~~*Device Name*~~	~~Production Separator A~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~C.E. Natco~~	~~*Operator ID*~~	~~029~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~335-V-102A~~
~~*Location Note*~~	~~P-102A, Mod 335, +87~~		
~~*Device Description*~~	~~Horizontal type in water, oil, gas service, diameter 10 feet, length 30.0 feet T/T, connected to gas gathering or vapor recovery.~~		

~~12.14 Production Separator B~~

~~*Device ID #*~~	~~102846~~	~~*Device Name*~~	~~Production Separator B~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~C.E. Natco~~	~~*Operator ID*~~	~~031~~
~~*Model*~~		~~*Serial Number*~~	~~335-V-102B~~
~~*Location Note*~~	~~P-102A, Mod 335, +87~~		
~~*Device Description*~~	~~Horizontal type in water, oil, gas service, diameter 10 feet, length 30.0 feet T/T, connected to gas gathering or vapor recovery.~~		

12.15 Fuel Gas Filter Separator A

Device ID #	**102849**	***Device Name***	**Fuel Gas Filter Separator A**
Rated Heat Input		*Physical Size*	
Manufacturer	Peerless Mfg.	*Operator ID*	111
Model	13-372	*Serial Number*	335-V-601A
Location Note	P-101A, Mod 335, +107		
Device Description	Vertical type in gas service. Diameter 1.50 ft, length 10.7 ft S/S. Connected to gas gathering or vapor recovery.		

12.16 Fuel Gas Filter Separator B

Device ID #	**102850**	***Device Name***	**Fuel Gas Filter Separator B**
Rated Heat Input		*Physical Size*	
Manufacturer	Peerless Mfg	*Operator ID*	111
Model	13-372	*Serial Number*	335-V-601B
Location Note	P-101A, Mod 335, +107		
Device Description	Vertical type in gas service, diameter 1.50 ft, length 10.7 ft S/S. Connected to gas gathering or vapor recovery.		

~~**12.17 1st Stage Sales Gas Suction Scrubber**~~

~~***Device ID #***~~	~~**102851**~~	~~***Device Name***~~	~~**1st Stage Sales Gas Suction Scrubber**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Peerless Mfg~~	~~*Operator ID*~~	~~047B~~
~~*Model*~~	~~13-372~~	~~*Serial Number*~~	~~336-V-200~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 8 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.~~		

~~**12.18 2nd Stage Sales Gas Suction Scrubber A**~~

~~***Device ID #***~~	~~**102852**~~	~~***Device Name***~~	~~**2nd Stage Sales Gas Suction Scrubber A**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Peerless Mfg.~~	~~*Operator ID*~~	~~049~~
~~*Model*~~	~~130-30~~	~~*Serial Number*~~	~~336-V-201A~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 2.5 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.~~		

~~**12.19 2nd Stage Sales Gas Suction Scrubber B**~~

~~***Device ID #***~~	~~**102853**~~	~~***Device Name***~~	~~**2nd Stage Sales Gas Suction Scrubber B**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Peerless Mfg.~~	~~*Operator ID*~~	~~055~~
~~*Model*~~	~~130-30~~	~~*Serial Number*~~	~~336-V-201B~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 2.5 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.~~		

~~**12.20 2nd Stage Sales Gas Suction Scrubber C**~~

~~*Device ID #*~~	~~**102854**~~	~~*Device Name*~~	~~**2nd Stage Sales Gas Suction Scrubber C**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Peerless Mfg.~~	~~*Operator ID*~~	~~061~~
~~*Model*~~	~~130-30~~	~~*Serial Number*~~	~~336-V-201C~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 2.5 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.~~		

~~12.21 Oil Surge Vessel A~~

~~*Device ID #*~~	~~**102847**~~	~~*Device Name*~~	~~**Oil Surge Vessel A**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~HEF-FAB Inc.~~	~~*Operator ID*~~	~~037~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~335-V-103A~~
~~*Location Note*~~	~~P-101A, Mod 335, +107~~		
~~*Device Description*~~	~~Horizontal type in oil service, diamter 8 ft, length 30.0 ft T/T. Connected to gas gathering or vapor recovery.~~		

~~12.22 Oil Surge Vessel B~~

~~*Device ID #*~~	~~**102848**~~	~~*Device Name*~~	~~**Oil Surge Vessel B**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~HEF-FAB Inc.~~	~~*Operator ID*~~	~~037~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~335-V-103B~~
~~*Location Note*~~	~~P-101A, Mod 335, +107~~		
~~*Device Description*~~	~~Horizontal type in oil service, diameter 8 ft, length 30.0 ft T/T. Connected to gas gathering or vapor recovery.~~		

~~12.23 3rd Stage Sales Gas Suction Scrubber A~~

~~*Device ID #*~~	~~**102855**~~	~~*Device Name*~~	~~**3rd Stage Sales Gas Suction Scrubber A**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Peerless Mfg~~	~~*Operator ID*~~	~~051~~
~~*Model*~~	~~130-20~~	~~*Serial Number*~~	~~336-V-202A~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 1.7 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.~~		

~~12.24 Sweet Gas Separator 1~~

~~*Device ID #*~~	~~**102830**~~	~~*Device Name*~~	~~**Sweet Gas Separator 1**~~

~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~C.E. Natco~~	~~*Operator ID*~~	~~027~~
~~*Model*~~		~~*Serial Number*~~	~~332-V-210~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Horizontal type in gas, condensate service, diameter 3 ft, length 12.0 T/T. Connected to gas gathering or vapor recovery.~~		

~~12.25 3rd Stage Sales Gas Suction Scrubber B~~

~~***Device ID #***~~	~~**102856**~~	~~***Device Name***~~	~~**3rd Stage Sales Gas Suction Scrubber B**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Peerless Mfg.~~	~~*Operator ID*~~	~~057~~
~~*Model*~~	~~130-20~~	~~*Serial Number*~~	~~336-V-202B~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 1.7 ft, length 8.0 S/S. Connected to gas gathering or vapor recovery.~~		

~~12.26 3rd Stage Sales Gas Suction Scrubber C~~

~~***Device ID #***~~	~~**102857**~~	~~***Device Name***~~	~~**3rd Stage Sales Gas Suction Scrubber C**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Peerless Mfg.~~	~~*Operator ID*~~	~~083~~
~~*Model*~~	~~130-20~~	~~*Serial Number*~~	~~336-V-202C~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 1.7 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.~~		

12.27 Fuel Gas Scrubber

Device ID #	**102841**	***Device Name***	**Fuel Gas Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer	HEF-FAB Inc.	*Operator ID*	109
Model	Custom	*Serial Number*	332-V-600
Location Note	P-103A, Mod 332, +60		
Device Description	Vertical type in gas service, diameter 2.5 ft, length 7.5 ft T/T. Connected to gas gathering or vapor recovery.		

~~12.28 3rd Stage Sales Gas Discharge Scrubber~~

~~***Device ID #***~~	~~**102858**~~	~~***Device Name***~~	~~**3rd Stage Sales Gas Discharge Scrubber**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	

Manufacturer	Peerless Mfg.	*Operator ID*	070
Model	130-050	*Serial Number*	336-V-203
Location Note	P-101A, Mod 336, +107		
Device Description	Vertical type in gas service, diameter 2.5 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.		

12.29 1st Stage Vapor Recovery Suction Scrubber

Device ID #	**102859**	***Device Name***	**1st Stage Vapor Recovery Suction Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer	Peerless Mfg.	*Operator ID*	042
Model	130-24	*Serial Number*	336-V-204
Location Note	P-101A, Mod 336, +107		
Device Description	Vertical type in gas service, diameter 2 ft, length 8.0 S/S. Connected to gas gathering or vapor recovery.		

12.30 2nd Stage Vapor Recovery Suction Scrubber

Device ID #	**102860**	***Device Name***	**2nd Stage Vapor Recovery Suction Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer	Peerless Mfg.	*Operator ID*	044
Model	130-18	*Serial Number*	336-V-205
Location Note	P-101A, Mod 336, +107		
Device Description	Vertical type in gas service, diamter 1.5 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.		

12.31 3rd Stage Vapor Recovery Suction Scrubber

Device ID #	**102861**	***Device Name***	**3rd Stage Vapor Recovery Suction Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer	Peerless Mfg.	*Operator ID*	045
Model	130-14	*Serial Number*	336-V-206
Location Note	P-101A, Mod 336, +107		
Device Description	Vertical type in gas service, diameter 1.2 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.		

12.32 4th Stage Vapor Recovery Suction Scrubber

Device ID #	**102862**	***Device Name***	**4th Stage Vapor Recovery Suction Scrubber**
Rated Heat Input		*Physical Size*	

Manufacturer	Peerless Mfg.	*Operator ID*	046
Model	130-14	*Serial Number*	336-V-207
Location Note	P-101A, Mod 336, +107		
Device Description	Vertical type in gas service, diamter 1.2 ft, length 8.7 ft S/S. Connected to gas gathering or vapor recovery.		

12.33 Injection Gas Suction Scrubber

Device ID #	**102863**	***Device Name***	**Injection Gas Suction Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer	Peerless Mfg.	*Operator ID*	079
Model	130-30	*Serial Number*	336-V-208
Location Note	P-101A, Mod 336, +107		
Device Description	Vertical type in gas service, diameter 2.5 ft, length 8.0 S/S. Connected to gas gathering or vapor recovery.		

12.34 Well Clean-up Vessel

Device ID #	**102843**	***Device Name***	**Well Clean-up Vessel**
Rated Heat Input		*Physical Size*	
Manufacturer	HEF-FAB Inc.	*Operator ID*	144
Model	Custom	*Serial Number*	332-V-801
Location Note	P-103A, Mod 332, +60		
Device Description	Vertical type in water, oil, gas service, diameter 6 feet, length 15.0 feet T/T, connected to gas gathering or vapor recovery.		

12.35 4th Stage Vapor Recovery Discharge Scrubber

Device ID #	**102865**	***Device Name***	**4th Stage Vapor Recovery Discharge Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer	Peerless Mfg.	*Operator ID*	078
Model	130-14	*Serial Number*	336-V-224
Location Note	P-102A, Mod 336, +87		
Device Description	Vertical type in gas service, diameter 1.2 ft, length 8.0 ft S/S. Connected to gas gathering or vapor recovery.		

13 Sumps and Pits

13.1 Skim Pile

Device ID #	**005394**	***Device Name***	**Skim Pile**

~~*Rated Heat Input*~~		~~*Physical Size*~~	~~12.60 Square Feet Surface Area~~
~~*Manufacturer*~~		~~*Operator ID*~~	~~144~~
~~*Model*~~		~~*Serial Number*~~	~~T-303~~
~~*Location Note*~~	~~P-104A, Mod 333, +20~~		
~~*Device Description*~~	~~Tertiary vessel in water service, not covered, not connected to vapor recovery.~~		

~~13.2 Skim Pile~~

~~***Device ID #***~~	~~**005395**~~	~~***Device Name***~~	~~**Skim Pile**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~12.60 Square Feet Surface Area~~
~~*Manufacturer*~~		~~*Operator ID*~~	~~144~~
~~*Model*~~		~~*Serial Number*~~	~~T-801~~
~~*Location Note*~~	~~P-104A, Mod 333, +20~~		
~~*Device Description*~~	~~Tertiary vessel in water service, not covered, not connected to vapor recovery.~~		

~~13.3 Amine Sump Vessel~~

~~***Device ID #***~~	~~**102824**~~	~~***Device Name***~~	~~**Amine Sump Vessel**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~PETROFAC~~	~~*Operator ID*~~	~~074~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~332-T-501-1~~
~~*Location Note*~~	~~P-104A, Mod 332, +47~~		
~~*Device Description*~~	~~Horizontal type, 6 feet diameter, length 9.5 feet S/S, not connected to gas gathering or vapor recovery.~~		

13.4 Production Drain Sump

Device ID #	**102842**	***Device Name***	**Production Drain Sump**
Rated Heat Input		*Physical Size*	
Manufacturer	HEF-FAB Inc.	*Operator ID*	143
Model		*Serial Number*	332-V-800
Location Note	P-104A, Mod 332, +47		
Device Description	Horizontal type in water, oil, gas service, diameter 6 feet, length 25.0 feet T/T, connected to gas gathering or vapor recovery.		

14 Flare

Device ID #	**391490**	***Device Name***	**Flare**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	New device: 391490		

14.1 L.P. Flare Scrubber

Device ID #	**102832**	***Device Name***	**L.P. Flare Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer	HEF-FAB Inc.	*Operator ID*	150
Model		*Serial Number*	332-V-212
Location Note	P-103A, Mod 332, +60		
Device Description	Vertical type in gas condensate service, diameter 4.5 feet, length 12.0 feet T/T, not connected to gas gathering or vapor recovery.		

14.2 H.P. Flare Scrubber

Device ID #	**102831**	***Device Name***	**H.P. Flare Scrubber**
Rated Heat Input		*Physical Size*	
Manufacturer	HEF-FAB Inc.	*Operator ID*	150
Model		*Serial Number*	332-V-211
Location Note	P-103A, Mod 332, +60		
Device Description	Vertical type in gas condensate service, diameter 9 feet, length 16.0 feet T/T, not connected to gas gathering or vapor recovery.		

14.3 Flare Tip

Device ID #	**113462**	***Device Name***	**Flare Tip**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	John Zink Flare Tip		

~~**15 Flotation Cell Skimmers**~~

~~***Device ID #***~~	~~**102813**~~	~~***Device Name***~~	~~**Flotation Cell Skimmers**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~US Electric~~	~~*Operator ID*~~	~~074~~
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~	~~Mod 332~~		
~~*Device Description*~~	~~WEMCO service, pumping produced water, not fitted with dual seals. Powered by 1/4 hp electric motor.~~		

~~**16 Flotation Cell**~~

~~*Device ID #*~~	~~005397~~	~~*Device Name*~~	~~Flotation Cell~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~2.10 MMgal/Day~~
~~*Manufacturer*~~	~~US Filter~~	~~*Operator ID*~~	~~133~~
~~*Model*~~	~~Q-160~~	~~*Serial Number*~~	~~332-U-305~~
~~*Location Note*~~	~~P-103A, Mod 322, +60~~		
~~*Device Description*~~	~~Throughput: 2.1MMgal/day, 191.6 MMgal/qtr, 766.5 MMgal/yr. Covered and connected to vapor recovery, with 95% vapor recovery control efficiency.~~		

~~17 Flotation Cell Agitators~~

~~*Device ID #*~~	~~102814~~	~~*Device Name*~~	~~Flotation Cell Agitators~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~US Electric~~	~~*Operator ID*~~	~~074~~
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~	~~Mod 332~~		
~~*Device Description*~~	~~WEMCO service pumping produced water, not fitted with dual seals. Powered by 15 hp electric motor.~~		

~~18 LACT Air/Gas Eliminator~~

~~*Device ID #*~~	~~102829~~	~~*Device Name*~~	~~LACT Air/Gas Eliminator~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Continental EMESCO~~	~~*Operator ID*~~	~~038~~
~~*Model*~~		~~*Serial Number*~~	~~332-V-104-1~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Horizontal type in water, oil and gas service, diameter 3.5 feet, length 8.0 feet F/F, connected to gas gathering or vapor recovery.~~		

~~19 Gas Dehydration System~~

~~*Device ID #*~~	~~391489~~	~~*Device Name*~~	~~Gas Dehydration System~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~		~~*Operator ID*~~	
~~*Model*~~		~~*Serial Number*~~	
~~*Location Note*~~			
~~*Device Description*~~	~~New device: 391489~~		

~~19.1 Amine Flash Vessel~~

~~*Device ID #*~~	~~102839~~	~~*Device Name*~~	~~Amine Flash Vessel~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~PETROFAC~~	~~*Operator ID*~~	~~071B~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~332-V-501-3~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		

Device Description	Horizontal type, amine service, 4 ft diameter, 12.0 ft S/S, connected to gas gathering or vapor recovery.

19.2 Amine Regenerator Tower

Device ID #	102838	*Device Name*	Amine Regenerator Tower
Rated Heat Input		*Physical Size*	
Manufacturer	PETROFAC	*Operator ID*	73
Model	Custom	*Serial Number*	332-V-501-2
Location Note	P-103A, Mod 332, +60		
Device Description	Trayed column type in amine service, 3 ft diameter, 56.0 ft S/S. Connected to gas gathering or vapor recovery.		

19.3 Amine Contactor

Device ID #	102837	*Device Name*	Amine Contactor
Rated Heat Input		*Physical Size*	
Manufacturer	PETROFAC	*Operator ID*	071A
Model	Custom	*Serial Number*	332-V-501-1
Location Note	P-103A, Mod 332, +60		
Device Description	Trayed column type in amine service, diameter 3 feet, length 60.0 feet S/S, connected to gas gathering or vapor recovery.		

19.4 Glycol Stripper Overhead Stripper

Device ID #	102836	*Device Name*	Glycol Stripper Overhead Stripper
Rated Heat Input		*Physical Size*	
Manufacturer	PETROFAC	*Operator ID*	076
Model		*Serial Number*	332-V-500-4
Location Note	P-103A, Mod 332, +60		
Device Description	Horizontal type in glycol service, diameter 2 feet, length 11.0 feet S/S, connected to gas gathering or vapor recovery.		

19.5 Glycol Flash Vessel

Device ID #	102835	*Device Name*	Glycol Flash Vessel
Rated Heat Input		*Physical Size*	
Manufacturer	PETROFAC	*Operator ID*	077
Model		*Serial Number*	332-V-500-3
Location Note	P-03A, Mod 32, +60		
Device Description	Horizontal type in glycol service, diameter 2 feet, length 11.0 feet S/S, connected to gas gathering or vapor recovery.		

19.6 Glycol Surge Vessel

Device ID #	102834	*Device Name*	Glycol Surge Vessel
Rated Heat Input		*Physical Size*	
Manufacturer	PETROFAC	*Operator ID*	076
Model		*Serial Number*	332-V-500-2
Location Note	P-103A, Mod 332, +60		
Device Description	Horizontal type in glycol service, diameter 3 feet, length 14.0 feet S/S, not connected to gas gathering or vapor recovery.		

19.7 Glycol Contactor

Device ID #	102833	*Device Name*	Glycol Contactor
Rated Heat Input		*Physical Size*	
Manufacturer	PETROFAC	*Operator ID*	0.75
Model		*Serial Number*	332-V-500-1
Location Note	P-103A, Mod 332, +60		
Device Description	Trayed column type in glycol, gas service, diameter 4.5 feet, length 24.0 feet S/S, connected to gas gathering or vapor recovery.		

19.8 Regenerator Reflux Vessel

Device ID #	102840	*Device Name*	Regenerator Reflux Vessel
Rated Heat Input		*Physical Size*	
Manufacturer	PETROFAC	*Operator ID*	74
Model	Custom	*Serial Number*	332-V-501-4
Location Note	P-103A, Mod 332, +60		
Device Description	Horizontal type in amine service, diameter 2.5 feet, length 6.0 feet S/S, connected to gas gathering or vapor recovery.		

19.9 Glycol Stripper Overhead Blower

Device ID #	102779	*Device Name*	Glycol Stripper Overhead Blower
Rated Heat Input		*Physical Size*	5.00 Horsepower (Electric Motor)
Manufacturer	SIHI	*Operator ID*	076
Model	KPH-3408-BN-139-42	*Serial Number*	332-K-500-1
Location Note	P-103, Mod 333, +60		
Device Description	Compressor rated at 5 bhp; capacity 35 scfm. Housing/seals not connected to vapor recovery.		

~~**19.10 Acid Gas Glycol Contactor**~~

~~***Device ID #***~~	~~**102866**~~	~~***Device Name***~~	~~**Acid Gas Glycol Contactor**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~PETROFAC~~	~~*Operator ID*~~	
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~336-V-500-5~~
~~*Location Note*~~	~~P-102A, Mod 336, +87~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 1.1 ft, length 29.5 ft F.F. Connected to gas gathering or vapor recovery.~~		

20 Supply Boat (basis: M/V Adel Elise)

20.1 Emergency Response Boat Engines (basis: Clean Seas III)

Device ID #	**105057**	***Device Name***	**Emergency Response Boat Engines (basis: Clean Seas III)**
Rated Heat Input		*Physical Size*	4400.00 Brake Horsepower
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	A permanently assigned emergency response boat (i.e., the Clean Seas III) is associated with Platform Harvest. The engines on this vessel are uncontrolled. The approximate total engine horsepower, including auxiliary engines, is 4,400 bhp. Emissions liability is assigned in a prorated fashion among the four OCS platforms that utilize the vessel off the Santa Barbara coast. Emission factors, calculations and compliance procedures are the same as for the spot-charter supply vessels.		

20.2 Spot Charter Boat Engines

Device ID #	**105056**	***Device Name***	**Spot Charter Boat Engines**
Rated Heat Input		*Physical Size*	5000.00 Brake Horsepower
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Spot-charter vessels are normally uncontrolled for NOx. Spot-charter usage is limited to a maximum of 10-percent of the total support vessel usage in any one year (i.e., allowable usage is based on actual trips).		

21 Helicopters

Device ID #	**005573**	***Device Name***	**Helicopters**
Rated Heat Input		*Physical Size*	Tons of Solvent In Coating
Manufacturer	Sykorski Helicopter	*Operator ID*	

Model	SK-76	*Serial Number*	
Location Note	SMA to Platforms		
Device Description	See permit for trip details.		

22 Maintenance Activities

22.1 Maintenance Supply

Device ID #	**102917**	***Device Name***	**Maintenance Supply**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note	Platform Harvest		
Device Description	Coating/solvent brand name	Ameron T-5 Thinner	
	Application Paint thinner		
	Annual usage (gal per year)	120	
	Regulatory VOC content (g/l)		
	ROC emission factor (lb/gal)	7.0	
	Emission controls used? Yes		
	Emission controls description Overspary tarps		

22.2 Maintenance Supply

Device ID #	**102918**	***Device Name***	**Maintenance Supply**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note	Platform Harvest		
Device Description	MEK cleaning solvent. Usage 150 gal/year.		
	ROC emission factor 6.7 lb/gal; emission controls used.		

22.3 Maintenance Supply

Device ID #	**102919**	***Device Name***	**Maintenance Supply**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note	Platform Harvest		
Device Description	Coating/solvent brand name	140 HT Thinner	
	Application Cleaning solvent		
	Annual usage (gal per year)	60	
	Regulatory VOC content (g/l)		
	ROC emission factor (lb/gal)	6.7	
	Emission controls used? Yes		
	Emission controls description Tank lid kept closed		

23 Vapor Recovery Blowcase

Device ID #	102864	*Device Name*	Vapor Recovery Blowcase
Rated Heat Input		*Physical Size*	
Manufacturer	HEF-FAB Inc.	*Operator ID*	042
Model	Custom	*Serial Number*	336-V-209
Location Note	P-101A, Mod 336, +107		
Device Description	Vertical type in gas service, diameter 1.3 feet, length 4.0 feet S/S, connected to gas gathering or vapor recovery.		

24 Production Heaters

Device ID #	391492	*Device Name*	Production Heaters
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	New device: 391492		

24.1 Production Heater A

Device ID #	113884	*Device Name*	Production Heater A
Rated Heat Input		*Physical Size*	
Manufacturer	Harris Thermal Transfer Products	*Operator ID*	
Model	Custom	*Serial Number*	
Location Note			
Device Description	Shell & tube type in crude service; heat medium is glycol.		

24.2 Production Heater B

Device ID #	113885	*Device Name*	Production Heater B
Rated Heat Input		*Physical Size*	
Manufacturer	Harris Thermal Transfer Products	*Operator ID*	
Model	Custom	*Serial Number*	
Location Note			
Device Description	Shell & tube type in crude service; heat medium is glycol.		

25 Stabilizer

Device ID #	102868	*Device Name*	Stabilizer
Rated Heat Input		*Physical Size*	

Manufacturer	Houston Steel Products, Inc.	*Operator ID*	092
Model	Custom	*Serial Number*	336-V-812
Location Note	P-102A, Mod. 336, +87		
Device Description	Trayed column type in gas service, diameter 2.5 and 3.5 feet, length 25.4 feet S/S, connected to gas gathering or vapor recovery.		

26 LACT Unit Meter Prover

Device ID #	**102869**	***Device Name***	**LACT Unit Meter Prover**
Rated Heat Input		*Physical Size*	
Manufacturer	Continental Emsco	*Operator ID*	039
Model		*Serial Number*	MP-104
Location Note	Cellar Deck		
Device Description	In crude service, capacity 5.8 bbls/hr, powered by 60 hp electric motor.		

27 Eductor Water Cooling Exchangers

Device ID #	**111352**	***Device Name***	**Eductor Water Cooling Exchangers**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	E-100 A&B
Model		*Serial Number*	
Location Note			
Device Description	Two Heat Exchangers:E-100 A&B		

28 Condensate Stabilizer

Device ID #	**386627**	***Device Name***	**Condensate Stabilizer**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

29 Coolers

Device ID #	**391488**	***Device Name***	**Coolers**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	New device: 391488		

~~29.1 Chiller Knock-out Drum~~

~~*Device ID #*~~	~~102867~~	~~*Device Name*~~	~~Chiller Knock-out Drum~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Houston Steel Products, Inc.~~	~~*Operator ID*~~	~~091~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~336-V-810~~
~~*Location Note*~~	~~P-102A, Mod 336, +87~~		
~~*Device Description*~~	~~Vertical type in gas service, diameter 5 ft, length 12.0 ft T/T. Connected to gas gathering or vapor recovery.~~		

B EXEMPT EQUIPMENT

~~1 Heat Exchanger~~

~~*Device ID #*~~	~~102900~~	~~*Device Name*~~	~~Heat Exchanger~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~		~~*Operator ID*~~	~~102A~~
~~*Model*~~		~~*Serial Number*~~	~~336-X-810~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:* 202.L.1 Heat Exchangers~~	
~~*Location Note*~~	~~090-A-Mod 336, +100~~		
~~*Device Description*~~	~~Shell & tube type in gas service, heat medium refrigerant.~~		

~~2 Discharge Cooler~~

~~*Device ID #*~~	~~102891~~	~~*Device Name*~~	~~Discharge Cooler~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex Corp.~~	~~*Operator ID*~~	~~078~~
~~*Model*~~	~~55-1B990-024~~	~~*Serial Number*~~	~~336-X-209~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:* 202.L.1 Heat Exchangers~~	
~~*Location Note*~~	~~P-101, Mod 335, + 87~~		
~~*Device Description*~~	~~Shell & tube type in gas service; heat medium seawater.~~		

~~3 Heat Exchanger~~

~~*Device ID #*~~	~~102899~~	~~*Device Name*~~	~~Heat Exchanger~~

Rated Heat Input		*Physical Size*	
Manufacturer	Petrofac	*Operator ID*	072
Model	25-144-BES	*Serial Number*	332-X-501-5
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	P-103A, Mod 332, +60		
Device Description	Shell & tube in amine service, heat medium seawater.		

4 Emergency Response Boat Engines SMALL

Device ID #	**102772**	***Device Name***	**Emergency Response Boat Engines SMALL**
Rated Heat Input		*Physical Size*	300.00 Brake Horsepower
Manufacturer	Johnson	*Operator ID*	
Model	OMC	*Serial Number*	
Part 70 Insig?	No	*District Rule Exemption:*	202.F.1.b. Engines Propelling Marine Vessels
Location Note	Mod 332, +60		
Device Description	Two gasoline-powered outboard engines of 150 hp each.		

5 Discharge Cooler

Device ID #	**102889**	***Device Name***	**Discharge Cooler**
Rated Heat Input		*Physical Size*	
Manufacturer	Bas-Tex	*Operator ID*	045
Model	55-1A990-020	*Serial Number*	336-X-205
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	P-101A, Mod 336, +107		
Device Description	Shell & tube type in vapor recovery service; heat medium seawater.		

6 Heat Exchanger

Device ID #	**102898**	***Device Name***	**Heat Exchanger**
Rated Heat Input		*Physical Size*	
Manufacturer	Superchanger	*Operator ID*	072
Model	UX-296-SP-101	*Serial Number*	332-X-501-4
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	P-103A, Mod 332, +60		

~~*Device Description*~~	~~Plate & frame type in amine service, heat medium lean amine.~~

7 Marine Survival Craft

Device ID #	**102771**	***Device Name***	**Marine Survival Craft**
Rated Heat Input		*Physical Size*	36.00 Brake Horsepower
Manufacturer	Perkins	*Operator ID*	
Model	4-154	*Serial Number*	
Part 70 Insig?	No	*District Rule Exemption:*	202.F.1.b. Engines Propelling Marine Vessels
Location Note	Mod 333, +124		
Device Description	Less than 200 operating hours per quarter and per year. No emissions controls.		

~~8 Discharge Cooler~~

~~***Device ID #***~~	~~**102888**~~	~~***Device Name***~~	~~**Discharge Cooler**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex~~	~~*Operator ID*~~	~~045~~
~~*Model*~~	~~1A990-025~~	~~*Serial Number*~~	~~336-X-204~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~	~~202.L.1 Heat Exchangers~~
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Shell & tube type in vapor recovery service; heat medium seawater.~~		

~~9 Test Heater A~~

~~***Device ID #***~~	~~**102877**~~	~~***Device Name***~~	~~**Test Heater A**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex Corp.~~	~~*Operator ID*~~	~~033~~
~~*Model*~~	~~6.66.1A040.010~~	~~*Serial Number*~~	~~332-X-101 A~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~	~~202.G.1 Combustion Equipment <= 2 MMBtu/hr~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Shell & tube type in well test service, heat medium Therminol.~~		

10 Diesel Storage Tank

Device ID #	**102773**	***Device Name***	**Diesel Storage Tank**
Rated Heat Input		*Physical Size*	10400.00 Gallons
Manufacturer	Hyundai Heavy Ind. Co.	*Operator ID*	HA-330-F-113
Model		*Serial Number*	336-T-600
Part 70 Insig?	No	*District Rule Exemption:*	202.V.2 Storage Of Refined Fuel Oil W/Grav <=40 Api
Location Note	P-102A, Mod 336, +87		
Device Description	Vertical tank 6 feet diameter, shell height 50 feet, roof height 50 feet, average liquid height 22 feet.		

~~**11 Heat Exchanger**~~

~~***Device ID #***~~	~~**102897**~~	~~***Device Name***~~	~~**Heat Exchanger**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Petrofac~~	~~*Operator ID*~~	~~073~~
~~*Model*~~		~~*Serial Number*~~	~~332-X-501-3~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~	~~202.L.1 Heat Exchangers~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Shell & tube type in amine service, heat medium seawater.~~		

~~**12 Marine Survival Craft**~~

~~***Device ID #***~~	~~**102770**~~	~~***Device Name***~~	~~**Marine Survival Craft**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~62.00 Brake Horsepower~~
~~*Manufacturer*~~	~~Perkins~~	~~*Operator ID*~~	
~~*Model*~~	~~4-154~~	~~*Serial Number*~~	
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~	~~202.F.1.b. Engines Propelling Marine Vessels~~
~~*Location Note*~~	~~Mod 334, +107~~		
~~*Device Description*~~	~~Less than 200 operating hours per quarter and per year. No emissions controls.~~		

~~**13 Discharge Cooler**~~

~~***Device ID #***~~	~~**102887**~~	~~***Device Name***~~	~~**Discharge Cooler**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex~~	~~*Operator ID*~~	~~044~~
~~*Model*~~	~~6-67-14990-017~~	~~*Serial Number*~~	~~336-X-203~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~	~~202.L.1 Heat Exchangers~~

~~*Location Note*~~	~~P-101A, Mod 336, +107~~
~~*Device Description*~~	~~Shell & tube type in vapor recovery service; heat medium seawater.~~

~~14 Test Heater B~~

~~***Device ID #***~~	~~**102878**~~	~~***Device Name***~~	~~**Test Heater B**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex Corp.~~	~~*Operator ID*~~	~~035~~
~~*Model*~~	~~6.66.1A040.010~~	~~*Serial Number*~~	~~332-X-101-B~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~	~~202.G.1 Combustion Equipment <= 2 MMBtu/hr~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Shell & tube type in well test service, heat medium Therminol.~~		

15 Diesel Storage Tank

Device ID #	**102774**	***Device Name***	**Diesel Storage Tank**
Rated Heat Input		*Physical Size*	10400.00 Gallons
Manufacturer	Hyundai Heavy Ind. Co.	*Operator ID*	HA-330-F-113
Model		*Serial Number*	336-T-602
Part 70 Insig?	No	*District Rule Exemption:*	202.V.2 Storage Of Refined Fuel Oil W/Grav <=40 Api
Location Note	P-102A, Mod 333 +87		
Device Description	Vertical tank 6 feet diameter, shell height 50 feet, roof height 50 feet, average liquid height 22 feet.		

16 Freon Compressor

Device ID #	**102784**	***Device Name***	**Freon Compressor**
Rated Heat Input		*Physical Size*	250.00 Horsepower (Electric Motor)
Manufacturer	Vilter	*Operator ID*	94
Model	VRS 700	*Serial Number*	336-K-810A
Part 70 Insig?	No	*District Rule Exemption:*	202.202 Unspecified Exemption
Location Note	P-102A, Mod 336, +100		
Device Description	In refrigeration service, 250 Bhp rated compressor, 3408 rated scfm, powered by 250 hp electric motor. Housing/seals connected to vapor recovery? No		

~~17 Heat Exchanger~~

~~*Device ID #*~~	~~**102896**~~	~~*Device Name*~~	~~**Heat Exchanger**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex Corp.~~	~~*Operator ID*~~	~~077~~
~~*Model*~~	~~12150-M.T~~	~~*Serial Number*~~	~~332-X-500-5~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~ ~~202.L.1 Heat Exchangers~~	
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Shell & tube type in glycol service, heat medium glycol.~~		

~~**18 Marine Survival Craft**~~

~~*Device ID #*~~	~~**102769**~~	~~*Device Name*~~	~~**Marine Survival Craft**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	~~62.00 Brake Horsepower~~
~~*Manufacturer*~~	~~Perkins~~	~~*Operator ID*~~	
~~*Model*~~	~~4-154~~	~~*Serial Number*~~	
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~ ~~202.F.1.b. Engines Propelling Marine Vessels~~	
~~*Location Note*~~	~~Mod 331, +60~~		
~~*Device Description*~~	~~Less than 200 operating hours per quarter and per year. No emissions controls.~~		

~~**19 Discharge Cooler**~~

~~*Device ID #*~~	~~**102886**~~	~~*Device Name*~~	~~**Discharge Cooler**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Poly Metals~~	~~*Operator ID*~~	~~070~~
~~*Model*~~		~~*Serial Number*~~	~~336-X-202~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~ ~~202.L.1 Heat Exchangers~~	
~~*Location Note*~~	~~P-101A, Mod 336, +107~~		
~~*Device Description*~~	~~Shell & tube type in gas service; heat medium seawater.~~		

20 Diesel Storage Tank

Device ID #	**102775**	***Device Name***	**Diesel Storage Tank**
Rated Heat Input		*Physical Size*	5625.00 Gallons
Manufacturer	Hyundai Heavy Ind. Co.	*Operator ID*	HA-330-F-112
Model		*Serial Number*	336-T-601
Part 70 Insig?	No	*District Rule Exemption:*	

	202.V.2 Storage Of Refined Fuel Oil W/Grav <=40 Api		
Location Note	P-102A, Mod 333 +87		
Device Description	Vertical tank 4.5 feet diameter, shell height 50 feet, roof height 50 feet, average liquid height 22 feet.		

21 Freon Compressor

Device ID #	**102785**	***Device Name***	**Freon Compressor**
Rated Heat Input		*Physical Size*	250.00 Horsepower (Electric Motor)
Manufacturer	Vilter	*Operator ID*	94
Model	VRS 700	*Serial Number*	336-K-810B
Part 70 Insig?	No	*District Rule Exemption:*	202.202 Unspecified Exemption
Location Note	P-102A, Mod 336, +100		
Device Description	In refrigeration service, compressor rated at 3408 scfm. Powered by 250 hp electric motor.		

~~22 Heat Exchanger~~

~~***Device ID #***~~	~~**102895**~~	~~***Device Name***~~	~~**Heat Exchanger**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex Corp.~~	~~*Operator ID*~~	~~077~~
~~*Model*~~	~~12150-M.T.~~	~~*Serial Number*~~	~~332-X-500-4~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~	~~202.L.1 Heat Exchangers~~
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Shell & tube type in glycol service, heat medium glycol.~~		

~~23 Discharge Cooler~~

~~***Device ID #***~~	~~**102885**~~	~~***Device Name***~~	~~**Discharge Cooler**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex Corp.~~	~~*Operator ID*~~	~~061~~
~~*Model*~~	~~10-61-1A09-20~~	~~*Serial Number*~~	~~336-X-201C~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~	~~202.L.1 Heat Exchangers~~
~~*Location Note*~~	~~P-101A, Mod 330, +107~~		
~~*Device Description*~~	~~Shell & tube type in gas service; heat medium seawater.~~		

~~24 Heat Exchanger~~

~~*Device ID #*~~	~~**102894**~~	~~*Device Name*~~	~~**Heat Exchanger**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Petrofac~~	~~*Operator ID*~~	~~076~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~332-X-500-2~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~ ~~202.L.1 Heat Exchangers~~	
~~*Location Note*~~	~~P-103A, Mod 332, +60~~		
~~*Device Description*~~	~~Shell & tube type in glycol service, heat medium glycol.~~		

~~**25 Discharge Cooler**~~

~~*Device ID #*~~	~~**102884**~~	~~*Device Name*~~	~~**Discharge Cooler**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex Corp.~~	~~*Operator ID*~~	~~055~~
~~*Model*~~	~~10-61-1A09-20~~	~~*Serial Number*~~	~~336-X-201B~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~ ~~202.L.1 Heat Exchangers~~	
~~*Location Note*~~	~~P-101A, Mod 330, +107~~		
~~*Device Description*~~	~~Shell & tube type in gas service; heat medium seawater.~~		

~~**26 Heat Exchanger**~~

~~*Device ID #*~~	~~**102893**~~	~~*Device Name*~~	~~**Heat Exchanger**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Petrofac~~	~~*Operator ID*~~	~~075~~
~~*Model*~~	~~Custom~~	~~*Serial Number*~~	~~332-X-500-1~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~ ~~202.L.1 Heat Exchangers~~	
~~*Location Note*~~	~~P-101, Mod 335, + 60~~		
~~*Device Description*~~	~~Shell & tube type in gas/glycol service, heat medium glycol.~~		

~~**27 Discharge Cooler**~~

~~*Device ID #*~~	~~**102883**~~	~~*Device Name*~~	~~**Discharge Cooler**~~
~~*Rated Heat Input*~~		~~*Physical Size*~~	
~~*Manufacturer*~~	~~Bas-Tex Corp.~~	~~*Operator ID*~~	~~049~~
~~*Model*~~	~~10-61-1A09-023~~	~~*Serial Number*~~	~~336-X-201 A~~
~~*Part 70 Insig?*~~	~~No~~	~~*District Rule Exemption:*~~ ~~202.L.1 Heat Exchangers~~	
~~*Location Note*~~	~~P-101A, Mod 330, +107~~		

Device Description	Shell & tube type in gas service; heat medium – seawater.

28 Glycol Regenerator

Device ID #	**102870**	***Device Name***	**Glycol Regenerator**
Rated Heat Input		*Physical Size*	
Manufacturer	Energy Exchanger	*Operator ID*	076
Model	Custom	*Serial Number*	332-X-500-3
Part 70 Insig?	No	*District Rule Exemption:*	202.202 Unspecified Exemption
Location Note	P-103A, Mod 332, +60		
Device Description	Shell & tube type in glycol service; heat medium Therminol.		

29 Heat Exchanger

Device ID #	**102892**	***Device Name***	**Heat Exchanger**
Rated Heat Input		*Physical Size*	
Manufacturer	Air-X-changer	*Operator ID*	085
Model	48EHS	*Serial Number*	335-X-300
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	P-101, Mod 335, + 87		
Device Description	Fin fan type in gas lift service, heat medium – forced air.		

30 Discharge Cooler

Device ID #	**102882**	***Device Name***	**Discharge Cooler**
Rated Heat Input		*Physical Size*	
Manufacturer	Bas-Tex Corp.	*Operator ID*	059
Model	10-61-1A09-023	*Serial Number*	336-X-200 C
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	P-101A, Mod 330, +107		
Device Description	Shell & tube type in gas service; heat medium – seawater.		

31 Amine Reboiler

Device ID #	**102871**	***Device Name***	**Amine Reboiler**

Rated Heat Input		*Physical Size*	
Manufacturer	Petrofac	*Operator ID*	
Model	Custom	*Serial Number*	332-X-501-1
Part 70 Insig?	No	*District Rule Exemption:*	202.G.1 Combustion Equipment <= 2 MMBtu/hr
Location Note	P-103A, Mod 332, +60		
Device Description	Shell & tube type in amine service; heat medium Therminol.		

32 Heat Exchanger

Device ID #	**102901**	***Device Name***	**Heat Exchanger**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	092
Model		*Serial Number*	336-X-812
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	090-A-Mod 336, +100		
Device Description	Shell & tube type in gas service, heat medium refrigerant.		

33 Discharge Cooler

Device ID #	**102881**	***Device Name***	**Discharge Cooler**
Rated Heat Input		*Physical Size*	
Manufacturer	Bas-Tex Corp.	*Operator ID*	059
Model	10-61-1A09-023	*Serial Number*	336-X-200 B
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	P-101A, Mod 330, +107		
Device Description	Shell & tube type in gas service; heat medium seawater.		

34 Amine Reclaimer

Device ID #	**102872**	***Device Name***	**Amine Reclaimer**
Rated Heat Input		*Physical Size*	
Manufacturer	Petrofac	*Operator ID*	073
Model	Custom	*Serial Number*	332-X-501-2
Part 70 Insig?	No	*District Rule Exemption:*	202.G.1 Combustion Equipment <= 2 MMBtu/hr
Location Note	P-103A, Mod 332, +60		
Device Description	Shell & tube type in amine service; heat medium Therminol.		

35 Heat Exchanger

Device ID #	102890	Device Name	Heat Exchanger
Rated Heat Input		Physical Size	
Manufacturer	Poly Metals	Operator ID	047
Model		Serial Number	335-X-208
Part 70 Insig?	No	District Rule Exemption:	202.L.1 Heat Exchangers
Location Note	P-101, Mod 335, + 107		
Device Description	Shell & tube type in gas service; heat medium seawater.		

36 Discharge Cooler

Device ID #	102880	Device Name	Discharge Cooler
Rated Heat Input		Physical Size	
Manufacturer	Bas-Tex Corp.	Operator ID	048
Model	10-61-1A09-023	Serial Number	336-X-200 A
Part 70 Insig?	No	District Rule Exemption:	202.L.1 Heat Exchangers
Location Note	P-101A, Mod 330, +107		
Device Description	Shell & tube type in gas service; heat medium seawater.		

37 Heat Exchanger

Device ID #	102902	Device Name	Heat Exchanger
Rated Heat Input		Physical Size	
Manufacturer		Operator ID	092
Model		Serial Number	336-X-813
Part 70 Insig?	No	District Rule Exemption:	202.L.1 Heat Exchangers
Location Note	090-A-Mod336, +100		
Device Description	Shell & tube type in gas service, heat medium refrigerant.		

38 Gas Chiller A

Device ID #	102873	Device Name	Gas Chiller A
Rated Heat Input		Physical Size	
Manufacturer	Worsham	Operator ID	090

Model	Custom	*Serial Number*	336-X-811A
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	P-101A, Mod 336, +87		
Device Description	Shell & tube type in cooler service; heat medium refrigerant.		

39 Heat Exchanger

Device ID #	**102903**	***Device Name***	**Heat Exchanger**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	093
Model		*Serial Number*	336-X-814A
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	090-A-Mod336, +100		
Device Description	Shell & tube type in gas service, heat medium refrigerant.		

40 Gas Chiller B

Device ID #	**102874**	***Device Name***	**Gas Chiller B**
Rated Heat Input		*Physical Size*	
Manufacturer	Worsham	*Operator ID*	090
Model	Custom	*Serial Number*	336-X-811B
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	P-101A, mod 336, +87		
Device Description	Shell & tube type in cooler service; heat medium refrigerant.		

41 Heat Exchanger

Device ID #	**102904**	***Device Name***	**Heat Exchanger**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	093
Model		*Serial Number*	336-X-814B
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	090-A-Mod336, +100		
Device Description	Shell & tube type in gas service, heat medium refrigerant.		

42 Recycle Cooler

Device ID #	102879	*Device Name*	Recycle Cooler
Rated Heat Input		*Physical Size*	
Manufacturer	Bas-Tex Corp.	*Operator ID*	040
Model	12-15-1A090-020	*Serial Number*	331-X-103
Part 70 Insig?	No	*District Rule Exemption:*	202.L.1 Heat Exchangers
Location Note	P-103, Mod 331, +60		
Device Description	Shell & tube type in crude pipeline service. Heat medium seawater.		

Table 5.1-1
Point Arguello Project Platform Harvest: PTO 9103-R6
Operating Equipment Description

		Device Specifications				Usage Data		Maximum Operating Schedule					
Equipment Category	**Description**	**Fuel**	**% S**	**Size**	**Units**	**Capacity**	**Units**	**Load**	**hr**	**day**	**qtr**	**year**	**References**
Combustion - Engines	Crane CR-800A	D2	0.0015	475	bhp	6,962	Btu/bhp-hr	--	1.0	24	1,365	2,080	A
	Crane CR-800B	D2	0.0015	475	bhp	6,962	Btu/bhp-hr	--	1.0	24	1,365	2,080	
	Crane CR-801	D2	0.0015	270	bhp	7,446	Btu/bhp-hr	--	1.0	24	1,365	2,080	
	Emergency Generator	D2	0.0015	1300	bhp	--	--	--	1.0	2	200	200	
	Emergency Generator	D2	0.0015	1300	bhp	--	--	--	1.0	2	200	200	
Combustion - LP/HP Flare	Purge and Pilot	PG	0.0165	2,550	scfh	3.060	MMBtu/hr	--	1.0	24	2,190	8,760	B
	Planned - continuous	SG	1.000	0	scfh	0.000	MMscf/yr	--	1.0	24	0.25	1	
	Planned - other	SG	1.000	1,200	MMBtu/hr	11.070	MMscf/yr	--	--	--	0.25	1	
	Unplanned	SG	1.000	1,200	MMBtu/hr	2.000	MMscf/yr	--	--	--	1.00	1	
Fugitive Components	Gas - controlled	--	--	3,391	comp-lp	--	--	--	1.0	24	2,190	8,760	
	Gas - unsafe	--	--	0	comp-lp	--	--	--	1.0	24	2,190	8,760	
Supply Boat	Main Engines - con	D2	0.0015	5,000	bhp-total	0.055	gal/bhp-hr	0.65	1.0	11	459	1,837	D
	Main Engines - uncon	D2	0.0015	5,000	bhp-total	0.055	gal/bhp-hr	0.65	1.0	11	46	184	
	Generator Engines	D2	0.0015	600	bhp-total	0.055	gal/bhp-hr	0.50	1.0	11	459	1,837	
	Bow Thruster	D2	0.0015	515	bhp	0.055	gal/bhp-hr	1.00	1.0	2	78	312	
	Emergency Generator	D2	0.0015	115	bhp	0.055	gal/bhp-hr	1.00	1.0	2	78	312	
	Emergency response	D2	0.0015	4,400	bhp-total	--	--	0.65	--	--	32	127	
	Survival Craft	D2	0.0015	62	bhp-total	--	--	0.65	--	--	50	200	
Pigging Equipment	Gas Launcher	--	--	6	acf	1	psig	--	1	4	91	365	
Sumps/Tanks/Separators	Skim Pile	--	--	12.6	ft2	--	--	--	1.0	24	2,190	8,760	F
	Skim Pile	--	--	12.6	ft2	--	--	--	1.0	24	2,190	8,760	
Solvent Usage	Cleaning/degreasing	--	--	various		various	--	--	1.0	24	2,190	8,760	G

Table 5.1-1 (Continued)
Point Arguello Project Platform Harvest: PTO 9103-R6
Operating Equipment Description

		Device Specifications				Usage Data		Maximum Operating Schedule					
Equipment Category	**Description**	**Fuel**	**% S**	**Size**	**Units**	**Capacity**	**Units**	**Load**	**hr**	**day**	**qtr**	**year**	**References**
Combustion-Turbines	300-G-700-B	PG	0.005	3,695	kw	12,010	Btu/kw-hr	--	1.0	24	2,190	8,760	
	300-G-700-B	D2	0.290	3,584	kw	11,849	Btu/kw-hr	--	1.0	24	865	1,730	
	300-G-700-C	PG	0.005	3,695	kw	12,010	Btu/kw-hr	--	1.0	24	2,190	8,760	
	300-G-700-C	D2	0.290	3,584	kw	11,849	Btu/kw-hr	--	1.0	24	865	1,730	
	300-G-700-D	PG	0.005	3,695	kw	12,010	Btu/kw-hr	--	1.0	24	2,190	8,760	
	300-G-700-D	D2	0.290	3,584	kw	11,849	Btu/kw-hr	--	1.0	24	865	1,730	

Table 5.1-2
Point Arguello Project Platform Harvest: PTO 9103-R6
Equipment Emission Factors

		Emission Factors								
Equipment Category	**Description**	**NOx**	**ROC**	**CO**	**SOx**	**PM**	**$PM_{2.5/10}$**	**GHG[1]**	**Units**	**References**
Combustion-Engines	Crane CR-800A	2.660	0.30	0.285	0.002	0.31	0.30	556.60	lb/MMBtu	A
	Crane CR-800B	2.660	0.30	0.285	0.002	0.31	0.30	556.60	lb/MMBtu	
	Crane CR-801	2.487	0.30	0.95	0.002	0.31	0.30	556.60	lb/MMBtu	
	Emergency Generator	14.06	1.12	3.03	0.180	0.98	0.98	556.60	g/bhp-hr	
	Emergency Generator	14.06	1.12	3.03	0.180	0.98	0.98	556.60	g/bhp-hr	
Combustion - LP/HP Flare	Purge and Pilot	0.068	0.12	0.37	0.023	0.02	0.02	117.1	lb/MMBtu	B
	Planned - continuous	0.068	0.12	0.37	0.931	0.02	0.02	117.1	lb/MMBtu	
	Planned - other	0.068	0.12	0.37	0.931	0.02	0.02	117.1	lb/MMBtu	
	Unplanned	0.068	0.12	0.37	0.931	0.02	0.02	117.1	lb/MMBtu	
Fugitive Components	Gas - controlled	--	0.0147	--	--	--	--	--	lb/day-clp	
	Gas - unsafe	--	0.0736	--	--	--	--	--	lb/day-clp	
Supply Boats	Main Engines - con	337.00	16.80	78.30	0.21	33.00	31.68	556.60	lb/1000 gal	D
	Main Engines - uncon	561.17	16.80	78.30	0.21	33.00	31.68	556.60	lb/1000 gal	
	Generator Engines	600.00	48.98	129.26	0.21	42.18	40.49	556.60	lb/1000 gal	
	Bow Thruster	600.00	48.98	129.26	0.21	42.18	40.49	556.60	lb/1000 gal	
	Emergency Generator	179.00	48.98	129.26	0.21	42.18	40.49	556.60	lb/1000 gal	
	Emergency Response	561.17	16.80	78.30	0.21	33.00	31.68	556.60	lb/1000 gal	
	Survival Craft	1.08	90.40	212.00	0.27	24.00	24.00	556.60	g/bhp-hr	
Pigging Equipment	Gas Launcher	--	0.0001	--	--	--	--	--	lb/acf-evnt	
Sumps/Tanks/Separators	Skim Pile	--	0.013	--	--	--	--	--	lb/ft2-day	F
	Skim Pile	--	0.013	--	--	--	--	--	lb/ft2-day	
Solvent Usage	Cleaning/degreasing	--	various	--	--	--	--	--	lb/gal	G

[1] GHG emission factors for all ICEs are based on g/bhp-hr. For external combustion equipment, GHG emission factors are based on lb/MMbtu. Fot turbines, GHG emission factors are lb/hr.

Table 5.1-2 (Continued)
Point Arguello Project Platform Harvest: PTO 9103-R6
Equipment Emission Factors

		Emission Factors								
Equipment Category	**Description**	**NOx**	**ROC**	**CO**	**SOx**	**PM**	**$PM_{2.5/10}$**	**GHG**	**Units**	**References**
Combustion-Turbines	300-G-700-B (PG)	11.53	0.22	3.07	0.37	0.13	0.13	5188.00	lb/hr	
	300-G-700-B (D2)	9.02	4.09	12.59	1.04	2.54	2.54	6755.00	lb/hr	
	300-G-700-C (PG)	11.53	0.22	3.07	0.37	0.13	0.13	5188.00	lb/hr	
	300-G-700-C (D2)	9.02	4.09	12.59	1.04	2.54	2.54	6755.00	lb/hr	
	300-G-700-D (PG)	11.53	0.22	3.07	0.37	0.13	0.13	5188.00	lb/hr	
	300-G-700-D (D2)	9.02	4.09	12.59	1.04	2.54	2.54	6755.00	lb/hr	

Table 5.1-3
Point Arguello Project Platform Harvest: PTO 9103-R6
Hourly and Daily Emissions

		NOx		ROC		CO		SOx		PM		$PM_{2.5/10}$		GHG	
Equipment Category	**Description**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**
Combustion - Engines	Crane CR-800A	9.32	223.78	1.05	25.24	1.00	0.13	0.01	0.13	1.09	26.08	1.04	25.04	582.86	13,988.62
	Crane CR-800B	9.32	223.78	1.05	25.24	1.00	0.13	0.01	0.13	1.09	26.08	1.04	25.04	582.86	13,988.62
	Crane CR-801	5.30	127.20	0.64	15.34	2.02	0.08	0.00	0.08	0.66	15.85	0.63	15.22	331.31	7,951.43
	Emergency Generator	--	80.52	--	6.41	--	17.35	--	1.03	--	5.61	--	5.61	1,595.19	38,284.66
	Emergency Generator	--	80.52	--	6.41	--	17.35	--	1.03	--	5.61	--	5.61	1,595.19	38,284.66
Combustion - LP/HP Flare	Purge and Pilot	0.21	4.99	0.37	8.81	1.13	27.17	0.07	1.71	0.06	1.47	0.06	1.47	358.33	8,599.82
	Planned - continuous	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Planned - other	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Unplanned	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fugitive Components	Gas - controlled	--	--	2.08	49.91	--	--	--	--	--	--	--	--	--	--
	Gas - unsafe	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--
Supply Boat	Main Engines - con	60.24	662.63	3.00	33.03	14.00	153.96	0.04	0.42	5.90	64.89	5.66	62.29	6,135.36	67,488.98
	Main Engines - uncon	100.31	1,103.40	3.00	33.03	14.00	153.96	0.04	0.42	5.90	64.89	5.66	62.29	6,135.36	67,488.98
	Generator Engines	9.90	108.90	0.81	8.89	2.13	23.46	0.00	0.04	0.70	7.66	0.67	7.35	736.24	8,098.68
	Bow Thruster	17.00	33.99	1.39	2.77	3.66	7.32	0.01	0.01	1.19	2.39	1.15	2.29	631.94	1,263.88
	Emergency Generator	1.13	2.26	0.31	0.62	0.82	1.64	0.00	0.00	0.27	0.53	0.26	0.51	141.11	282.23
	Emergency Response	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Survival Craft	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pigging Equipment	Gas Launcher	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--
Sumps/Tanks/Separators	Skim Pile	--	--	0.01	0.16	--	--	--	--	--	--	--	--	--	--
	Skim Pile	--	--	0.01	0.16	--	--	--	--	--	--	--	--	--	--
Solvent Usage	Cleaning/degreasing	--	--	2.29	55.07	--	--	--	--	--	--	--	--	--	--

Note: 0.00 indicates emissions are less than 0.01. "--" indicates that emissions were not calculated for this category.

Table 5.1-3 (Continued)
Point Arguello Project Platform Harvest: PTO 9103-R6
Hourly and Daily Emissions

		NOx		ROC		CO		SOx		PM		$PM_{2.5/10}$		GHG	
Equipment Category	**Description**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**	**lb/hr**	**lb/day**
Combustion - Turbines	300-G-700-B(PG)	11.53	276.81	0.22	5.28	3.07	73.66	0.37	8.87	0.13	3.19	0.13	3.19	5,188.00	124,512.00
	300-G-700-B(D2)	9.02	216.48	4.09	98.19	12.59	302.05	1.04	24.94	2.54	61.07	2.54	61.07	6,755.00	162,120.00
	300-G-700-C(PG)	11.53	276.81	0.22	5.28	3.07	73.66	0.37	8.87	0.13	3.19	0.13	3.19	5,188.00	124,512.00
	300-G-700-C(D2)	9.02	216.48	4.09	98.19	12.59	302.05	1.04	24.94	2.54	61.07	2.54	61.07	6,755.00	162,120.00
	300-G-700-D(PG)	11.53	276.81	0.22	5.28	3.07	73.66	0.37	8.87	0.13	3.19	0.13	3.19	5,188.00	124,512.00
	300-G-700-D(D2)	9.02	216.48	4.09	98.19	12.59	302.05	1.04	24.94	2.54	61.07	2.54	61.07	6,755.00	162,120.00

Table 5.1-4
Point Arguello Project Platform Harvest: PTO 9103-R6
Quarterly and Annual Emissions

		NOx		ROC		CO		SOx		PM		$PM_{2.5/10}$		GHG	
Equipment Category	**Description**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**
Combustion - Engines	Crane CR-800A	6.36	9.70	0.72	1.09	0.68	1.04	0.00	0.01	0.74	1.13	0.71	1.08	1331.62	2029.14
	Crane CR-800B	6.36	9.70	0.72	1.09	0.68	1.04	0.00	0.01	0.74	1.13	0.71	1.08	1331.62	2029.14
	Crane CR-801	3.62	5.51	0.44	0.66	1.38	2.11	0.00	0.00	0.45	0.69	0.43	0.66	809.51	1233.54
	Emergency Generator	--	4.03	--	0.32	--	0.87	--	0.05	--	0.28	--	0.28	159.38	159.38
	Emergency Generator	--	4.03	--	0.32	--	0.87	--	0.05	--	0.28	--	0.28	159.38	159.38
Combustion - LP/HP Flare	Purge and Pilot	0.23	0.91	0.40	1.61	1.24	4.96	0.08	0.31	0.07	0.27	0.07	0.27	392.37	1569.47
	Planned - continuous	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Planned - other	0.17	0.68	0.30	1.21	0.93	3.72	2.34	9.35	0.05	0.20	0.05	0.20	81.34	325.36
	Unplanned	0.03	0.12	0.05	0.22	0.17	0.67	0.42	1.69	0.01	0.04	0.01	0.04	53.16	212.65
Fugitive Components	Gas - controlled	--	--	2.28	9.11	--	--	--	--	--	--	--	--	--	--
	Gas - unsafe	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--
Supply Boat	Main Engines - con	13.82	55.33	0.69	2.76	3.21	12.86	0.01	0.03	1.35	5.42	1.30	5.20	1406.82	5630.36
	Main Engines - uncon	2.31	9.23	0.07	0.28	0.32	1.29	0.00	0.00	0.14	0.54	0.13	0.52	140.99	563.96
	Generator Engines	2.27	9.09	0.19	0.74	0.49	1.96	0.00	0.00	0.16	0.64	0.15	0.61	168.82	675.64
	Bow Thruster	0.66	2.65	0.05	0.22	0.14	0.57	0.00	0.00	0.05	0.19	0.04	0.18	24.62	98.50
	Emergency Generator	0.04	0.18	0.01	0.05	0.03	0.13	0.00	0.00	0.01	0.04	0.01	0.04	5.50	21.99
	Emergency Response	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.64	342.54
	Survival Craft	0.00	0.01	0.20	0.80	0.47	1.88	0.00	0.00	0.05	0.21	0.05	0.21	1.90	7.60
Pigging Equipment	Gas Launcher	--	--	0.00	0.0	--	--	--	--	--	--	--	--	--	--
Sumps/Tanks/Separators	Skim Pile	--	--	0.01	0.03	--	--	--	--	--	--	--	--	--	--
	Skim Pile	--	--	0.01	0.03	--	--	--	--	--	--	--	--	--	--
Solvent Usage	Cleaning/degreasing	--	--	0.62	2.47	--	--	--	--	--	--	--	--	--	--

Note: 0.00 indicates emissions are less than 0.01. "--" indicates that emissions were not calculated for this category.

Table 5.1-4 (Continued)
Point Arguello Project Platform Harvest: PTO 9103-R6
Quarterly and Annual Emissions

		NOx		ROC		CO		SOx		PM		$PM_{2.5/10}$		GHG	
Equipment Category	**Description**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**	**TPQ**	**TPY**
Combustion - Turbines	300-G-700-B(PG)	12.63	50.52	0.24	0.96	3.36	13.44	0.40	1.62	0.15	0.58	0.15	0.58	5680.86	22723.44
	300-G-700-B(D2)	3.90	7.80	1.77	3.54	5.44	10.89	0.45	0.90	1.10	2.20	1.10	2.20	2921.54	5843.08
	300-G-700-C(PG)	12.63	50.52	0.24	0.96	3.36	13.44	0.40	1.62	0.15	0.58	0.15	0.58	5680.86	22723.44
	300-G-700-C(D2)	3.90	7.80	1.77	3.54	5.44	10.89	0.45	0.90	1.10	2.20	1.10	2.20	2921.54	5843.08
	300-G-700-D(PG)	12.63	50.52	0.24	0.96	3.36	13.44	0.40	1.62	0.15	0.58	0.15	0.58	5680.86	22723.44
	300-G-700-D(D2)	3.90	7.80	1.77	3.54	5.44	10.89	0.45	0.90	1.10	2.20	1.10	2.20	2921.54	5843.08

Table 5.2
Point Arguello Project Platform Harvest: PTO 9103-R6
Total Permitted Facility Emissions

A. PEAK HOURLY (lb/hr)

Equipment Category	NOx	ROC	CO	SOx	PM	$PM_{2.5/10}$	GHG
Combustion - Engines	23.95	2.74	4.02	0.01	2.83	2.72	1,497.03
Combustion - Flare	0.21	0.37	1.13	0.07	0.06	0.06	358.33
Turbine Generators	34.60	12.27	37.76	3.12	7.63	7.63	20,265.00
Fugitive Components	--	2.08	--	--	--	--	--
Supply Boat	128.34	5.20	19.79	0.05	7.79	7.48	7,503.55
Emergency Response	--	--	--	--	--	--	--
Pigging	--	0.00	--	--	--	--	--
Sumps/Tanks/Separators	--	0.01	--	--	--	--	--
Solvent Usage	--	2.29	--	--	--	--	--
	187.09	24.97	62.70	3.25	18.32	17.89	29,623.90

B. PEAK DAILY (lb/day)

Equipment Category	NOx	ROC	CO	SOx	PM	$PM_{2.5/10}$	GHG
Combustion - Engines	735.80	78.65	35.04	2.40	79.24	76.52	112,497.99
Combustion - Flare	4.99	8.81	27.17	1.71	1.47	1.47	8,599.82
Turbine Generators	830.44	294.56	906.16	74.83	183.21	183.21	486,360.00
Fugitive Components	--	49.91	--	--	--	--	--
Supply Boat	1,248.55	44.70	184.74	0.47	74.93	71.93	76,851.54
Emergency Response	--	--	--	--	--	--	--
Pigging	--	0.00	--	--	--	--	--
Sumps/Tanks/Separators	--	0.32	--	--	--	--	--
Solvent Usage	--	55.07	--	--	--	--	--
	2,819.78	532.02	1,153.12	79.40	338.85	333.14	684,309.35

C. PEAK QUARTERLY (tpq)

Equipment Category	NOx	ROC	CO	SOx	PM	$PM_{2.5/10}$	GHG
Combustion - Engines	16.34	1.87	2.75	0.01	1.93	1.86	3,472.76
Combustion - Flare	0.43	0.76	2.34	2.84	0.13	0.13	526.87
Turbine Generators	34.63	5.75	22.43	2.08	3.57	3.57	8,764.61
Fugitive Components	--	2.28	--	--	--	--	--
Supply Boat	19.07	1.00	4.17	0.01	1.70	1.63	1,741.26
Emergency Response	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Survival Craft	0.00	0.20	0.47	0.00	0.05	0.05	1.90
Pigging	--	0.00	--	--	--	--	--
Sumps/Tanks/Separators	--	0.01	--	--	--	--	--
Solvent Usage	--	0.62	--	--	--	--	--
	70.47	12.48	32.15	4.94	7.38	7.23	14,507.40

D. PEAK ANNUAL (tpy)

Equipment Category	NOx	ROC	CO	SOx	PM	$PM_{2.5/10}$	GHG
Combustion - Engines	32.96	3.49	5.92	0.12	3.51	3.39	5,610.58
Combustion - Flare	1.72	3.03	9.35	11.36	0.51	0.51	2,107.48
Turbine Generators	145.03	12.94	65.02	6.59	8.01	8.01	72236.69
Fugitive Components	--	9.11	--	--	--	--	--
Supply Boat	76.30	3.99	16.67	0.04	6.79	6.51	1,741.26
Emergency Response	0.00	0.00	0.00	0.00	0.00	0.00	85.64
Survival Craft	0.01	0.80	1.88	0.00	0.21	0.21	1.90
Pigging	--	0.00	--	--	--	--	--
Sumps/Tanks/Separators	--	0.06	--	--	--	--	--
Solvent Usage	--	2.47	--	--	--	--	--
	256.02	35.90	98.85	18.11	19.02	18.63	81,783.54

Table 5.3
Point Arguello Project Platform Harvest: PTO 9103-R(
Federal Potential to Emi

A. PEAK HOURLY (lb/hr)

Equipment Category	NOx	ROC	CO	SOx	PM	$PM_{2.5/10}$	GHG
Combustion - Engines	23.95	2.74	4.02	0.01	2.83	2.72	1,497.03
Combustion - Flare	0.21	0.37	1.13	0.07	0.06	0.06	358.33
Turbine Generators	34.60	12.27	37.76	3.12	7.63	7.63	20,265.00
Supply Boat	127.20	5.20	19.79	0.05	7.79	7.48	7,503.55
Emergency Response	--	--	--	--	--	--	--
Pigging	--	0.00	--	--	--	--	--
Sumps/Tanks/Separators	--	0.01	--	--	--	--	--
Solvent Usage	--	2.29	--	--	--	--	--
Exempt Emissions	0.35	0.71	0.08	0.00	0.03	0.03	--
	186.31	23.60	62.78	3.25	18.34	17.92	29,623.90

B. PEAK DAILY (lb/day)

Equipment Category	NOx	ROC	CO	SOx	PM	$PM_{2.5/10}$	GHG
Combustion - Engines	735.80	78.65	35.04	2.40	79.24	76.52	112,497.99
Combustion - Flare	4.99	8.81	27.17	1.71	1.47	1.47	8,599.82
Turbine Generators	830.44	294.56	906.16	74.83	183.21	183.21	486,360.00
Supply Boat	1,246.29	44.70	184.74	0.47	74.93	71.93	76,851.54
Emergency Response	--	--	--	--	--	--	--
Pigging	--	0.00	--	--	--	--	--
Sumps/Tanks/Separators	--	0.32	--	--	--	--	--
Solvent Usage	--	55.07	--	--	--	--	--
Exempt Emissions	8.44	17.15	1.81	0.11	0.60	0.60	--
	2,825.95	499.26	1,154.93	79.51	339.46	333.74	684,309.35

C. PEAK QUARTERLY (tpq)

Equipment Category	NOx	ROC	CO	SOx	PM	$PM_{2.5/10}$	GHG
Combustion - Engines	16.34	1.87	2.75	0.01	1.93	1.86	3,472.76
Combustion - Flare	0.43	0.76	2.34	2.84	0.13	0.13	526.87
Turbine Generators	34.63	5.75	22.43	2.08	3.57	3.57	17,042.58
Supply Boat	19.07	1.00	4.17	0.01	1.70	1.63	1,741.26
Emergency Response	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Survival Craft	0.00	0.20	0.47	0.00	0.05	0.05	1.90
Pigging	--	0.00	--	--	--	--	--
Sumps/Tanks/Separators	--	0.01	--	--	--	--	--
Solvent Usage	--	0.62	--	--	--	--	--
Exempt Emissions	0.39	0.78	0.08	0.01	0.03	0.03	--
	70.86	10.99	32.23	4.95	7.41	7.26	22,785.36

D. PEAK ANNUAL (tpy)

Equipment Category	NOx	ROC	CO	SOx	PM	$PM_{2.5/10}$	GHG
Combustion - Engines	32.96	3.49	5.92	0.11	3.51	3.39	5,610.58
Combustion - Flare	1.72	3.03	9.35	11.36	0.51	0.51	2,107.48
Turbine Generators	145.03	12.94	65.02	6.59	8.01	8.01	68170.32
Supply Boat	76.30	3.99	16.67	0.04	6.79	6.51	1,741.26
Emergency Response	0.00	0.00	0.00	0.00	0.00	0.00	85.64
Survival Craft	0.01	0.80	1.88	0.00	0.21	0.21	1.90
Pigging	--	0.00	--	--	--	--	--
Sumps/Tanks/Separators	--	0.06	--	--	--	--	--
Solvent Usage	--	2.47	--	--	--	--	--
Exempt Emissions	1.54	3.13	0.33	0.02	0.11	0.11	--
	257.56	29.92	99.18	18.13	19.13	18.74	77,717.17

Table 5.4
Point Arguello Project Platform Harvest: PTO 9103-R6
Exempt Emissions

A. Quarterly (tpq)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Miscellaneous Portable ICEs	0.39	0.03	0.08	0.01	0.03	0.03
Diesel Storage Tanks	--	0.25	--	--	--	--
Surface Coatings - Maintenance	--	0.50	--	--	--	--
TOTALS (ton/qtr)	**0.39**	**0.78**	**0.08**	**0.01**	**0.03**	**0.03**

B. Annual (tpy)

Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Miscellaneous Portable ICEs	1.54	0.13	0.33	0.02	0.11	0.11
Diesel Storage Tanks	--	1.00	--	--	--	--
Surface Coatings - Maintenance	--	2.00	--	--	--	--
TOTALS (ton/yr)	**1.54**	**3.13**	**0.33**	**0.02**	**0.11**	**0.11**

Table 5.5-1
Point Arguello Platform Harvest: Permit to Operate 9103-R6
Equipment Hazardous Air Pollutant Factors

		Emission Factors																								
Equipment Category	**Description**	Hexane	Benzene	Toluene	Xylene	Iso-Octane[1]	Formaldehyde	PAHs (not incl. napthalene)	Naphthalene	Acetaldehyde	Acrolein	1,3-Butadiene	Chlorobenzene	Ethylbenzene	Hydrogen Chloride	Arsenic	Beryllium	Cadmium	Total Chromium	Cobalt	Lead	Manganese	Mercury	Nickel	Selenium	**Units**	**References**
Combustion - Engines	Crane CR-800A	2.69E-02	1.86E-01	1.05E-01	4.24E-02	--	1.73E+00	3.62E-02	1.97E-02	7.83E-01	3.39E-02	2.17E-01	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	A
	Crane CR-800B	2.69E-02	1.86E-01	1.05E-01	4.24E-02	--	1.73E+00	3.62E-02	1.97E-02	7.83E-01	3.39E-02	2.17E-01	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	A
	Crane CR-801	2.69E-02	1.86E-01	1.05E-01	4.24E-02	--	1.73E+00	3.62E-02	1.97E-02	7.83E-01	3.39E-02	2.17E-01	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	A
	Emergency Generator	2.69E-02	1.86E-01	1.05E-01	4.24E-02	--	1.73E+00	3.62E-02	1.97E-02	7.83E-01	3.39E-02	2.17E-01	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	A
	Emergency Generator	2.69E-02	1.86E-01	1.05E-01	4.24E-02	--	1.73E+00	3.62E-02	1.97E-02	7.83E-01	3.39E-02	2.17E-01	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	A
Combustion - LP/HP Flare	Purge and Pilot	2.90E-02	1.59E-01	5.80E-02	2.90E-02	--	1.17E+00	3.00E-03	1.10E-02	4.30E-02	1.00E-02	--	--	1.44E+00	--	2.00E-04	1.20E-05	1.10E-03	1.40E-03	8.40E-05	--	3.80E-04	2.60E-04	2.10E-03	2.40E-05	lb/MMcf	B
	Planned - continuous	2.90E-02	1.59E-01	5.80E-02	2.90E-02	--	1.17E+00	3.00E-03	1.10E-02	4.30E-02	1.00E-02	--	--	1.44E+00	--	2.00E-04	1.20E-05	1.10E-03	1.40E-03	8.40E-05	--	3.80E-04	2.60E-04	2.10E-03	2.40E-05	lb/MMcf	B
	Planned - other	2.90E-02	1.59E-01	5.80E-02	2.90E-02	--	1.17E+00	3.00E-03	1.10E-02	4.30E-02	1.00E-02	--	--	1.44E+00	--	2.00E-04	1.20E-05	1.10E-03	1.40E-03	8.40E-05	--	3.80E-04	2.60E-04	2.10E-03	2.40E-05	lb/MMcf	B
	Unplanned	2.90E-02	1.59E-01	5.80E-02	2.90E-02	--	1.17E+00	3.00E-03	1.10E-02	4.30E-02	1.00E-02	--	--	1.44E+00	--	2.00E-04	1.20E-05	1.10E-03	1.40E-03	8.40E-05	--	3.80E-04	2.60E-04	2.10E-03	2.40E-05	lb/MMcf	B
Fugitive Components	Gas - controlled	1.69E-01	3.25E-03	--	--	1.49E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC	D
	Gas - unsafe	1.69E-01	3.25E-03	--	--	1.49E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC	D
Supply Boat	Main Engines - con	2.69E-02	1.28E-01	5.60E-02	3.90E-02	--	1.62E-01	1.14E-02	1.16E-02	1.05E-01	1.27E-02	5.36E-03	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	E
	Main Engines - uncon	2.69E-02	1.28E-01	5.60E-02	3.90E-02	--	1.62E-01	1.14E-02	1.16E-02	1.05E-01	1.27E-02	5.36E-03	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	E
	Generator Engines	2.69E-02	1.28E-01	5.60E-02	3.90E-02	--	1.62E-01	1.14E-02	1.16E-02	1.05E-01	1.27E-02	5.36E-03	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	E
	Bow Thruster	2.69E-02	1.28E-01	5.60E-02	3.90E-02	--	1.62E-01	1.14E-02	1.16E-02	1.05E-01	1.27E-02	5.36E-03	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	E
	Emergency Generator	2.69E-02	1.28E-01	5.60E-02	3.90E-02	--	1.62E-01	1.14E-02	1.16E-02	1.05E-01	1.27E-02	5.36E-03	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	E
	Emergency Response	2.69E-02	1.28E-01	5.60E-02	3.90E-02	--	1.62E-01	1.14E-02	1.16E-02	1.05E-01	1.27E-02	5.36E-03	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	E
	Survival Craft	2.69E-02	1.28E-01	5.60E-02	3.90E-02	--	1.62E-01	1.14E-02	1.16E-02	1.05E-01	1.27E-02	5.36E-03	2.00E-04	1.09E-02	1.86E-01	1.60E-03	--	1.50E-03	6.00E-04	--	8.30E-03	3.10E-03	2.00E-03	3.90E-03	2.20E-03	lb/1000 gal	E
Pigging Equipment	Oil Launcher	1.77E-01	1.79E-03	--	--	1.55E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC	C
	Gas Launcher	1.69E-01	3.25E-03	--	--	1.49E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC	D
Sumps/Tanks/Separators	Skim Pile	5.28E-02	2.64E-02	1.65E-02	--	4.95E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC	F
	Skim Pile	5.28E-02	2.64E-02	1.65E-02	--	4.95E-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC	F
Solvent Usage	Cleaning/degreasing	--	5.00E-02	5.00E-02	5.00E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC	G
Combustion - Turbines	300-G-700-B(PG)	4.60E-03	5.80E-03	2.65E-02	1.97E-02	--	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	--	--	6.90E-03	--	2.00E-04	1.20E-05	1.10E-03	1.40E-03	8.40E-05	--	3.80E-04	2.60E-04	2.10E-03	2.40E-05	lb/MMcf	H
	300-G-700-B(D2)	--	5.50E-05	--	--	--	2.80E-04	5.00E-06	3.50E-05	--	--	1.60E-05	--	--	--	1.10E-05	3.10E-07	4.80E-06	1.10E-05	--	1.40E-05	7.90E-04	1.20E-06	4.60E-06	2.50E-05	lb/MMBtu	I
	300-G-700-C(PG)	4.60E-03	5.80E-03	2.65E-02	1.97E-02	--	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	--	--	6.90E-03	--	2.00E-04	1.20E-05	1.10E-03	1.40E-03	8.40E-05	--	3.80E-04	2.60E-04	2.10E-03	2.40E-05	lb/MMcf	H
	300-G-700-C(D2)	--	5.50E-05	--	--	--	2.80E-04	5.00E-06	3.50E-05	--	--	1.60E-05	--	--	--	1.10E-05	3.10E-07	4.80E-06	1.10E-05	--	1.40E-05	7.90E-04	1.20E-06	4.60E-06	2.50E-05	lb/MMBtu	I
	300-G-700-D(PG)	4.60E-03	5.80E-03	2.65E-02	1.97E-02	--	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	--	--	6.90E-03	--	2.00E-04	1.20E-05	1.10E-03	1.40E-03	8.40E-05	--	3.80E-04	2.60E-04	2.10E-03	2.40E-05	lb/MMcf	H
	300-G-700-D(D2)	--	5.50E-05	--	--	--	2.80E-04	5.00E-06	3.50E-05	--	--	1.60E-05	--	--	--	1.10E-05	3.10E-07	4.80E-06	1.10E-05	--	1.40E-05	7.90E-04	1.20E-06	4.60E-06	2.50E-05	lb/MMBtu	I

References:
A - VCAPCD AB 2588 Combustion Emission Factors (2001) - Diesel Combustion Factors (internal combustion)
B1 - VCAPCD AB 2588 Combustion Emission Factors (2001) - Natural Gas Fired External Combustion Equipment (flare)
B2 - USEPA, AP-42 Table 1.4-4. Emission Factors for Metals from Natural Gas Combustion
C - CARB Speciation Manual Second Edition (1991) Profile Number 756 - Oil & Gas Production Fugitives - Liquid Service
D - CARB Speciation Manual Second Edition (1991), Profile Number 757 - Oil & Gas Production Fugitives - Gas Service
E1 - USEPA, AP-42 Table 3.3-2. Speciated Organic Compound Emission Factors for Uncontrolled Diesel Engines
E2 - VCAPCD AB 2588 Combustion Emissions Factors (2001) - Diesel Combustion Factors (internal combustion) - Used to supplement USEPA's AP-42 Table 3.3-2. VCAPCD's factors were used for HAPs not included in AP-42
F - CARB Speciation Manual Second Edition (1991) Profile Number 532 - Oil & Gas Extraction - Well Heads & Cellars/Oil & Water Separators
G - APCD: Solvents assumed to contain 5% benzene, 5% toluene, 5% xylene
H1 - VCAPCD AB 2588 Combustion Emission Factors (2001) - Natural Gas Fired External Combustion Equipment (10-100 MMBTUh)
H2 - USEPA, AP-42 Table 1.4-4. Emission Factors for Metals from Natural Gas Combustion
I1 - USEPA, AP-42 Table 3.1-4. Emission Factors for Hazardous Air Pollutants from Distillate Oil-Fired Stationary Gas Turbines
I2 - USEPA, AP-42 Table 3.1-5. Emission Factors for Metallic Hazardous Air Pollutants from Distillate Oil-Fired Stationary Gas Turbines

Notes:
1. The weight fraction for iso-Octane (i.e., 2,2,4-Trimethylpentane) is based on the conservative assumption that all isomers of octane are iso-Octane.

Table 5.5-2
Point Arguello Platform Harvest: Permit to Operate 9103-R6
Annual Hazardous Air Pollution Emissions (TPY)

Equipment Category	Description	Hexane	Benzene	Toluene	Xylene	Iso-Octane	Formaldehyde	PAHs (not incl. napthalene)	Naphthalene	Acetaldehyde	Acrolein	1,3-Butadiene	Chlorobenzene	Ethylbenzene	Hydrogen Chloride	Arsenic	Beryllium	Cadmium	Total Chromium	Cobalt	Lead	Manganese	Mercury	Nickel	Selenium
Combustion - Engines	Crane CR-800A	6.75E-04	4.68E-03	2.65E-03	1.06E-03	--	4.33E-02	9.09E-04	4.95E-04	1.97E-02	8.51E-04	5.46E-03	5.02E-06	2.74E-04	4.68E-03	4.02E-05	--	3.77E-05	1.51E-05	--	2.08E-04	7.78E-05	5.02E-05	9.79E-05	5.52E-05
	Crane CR-800B	6.75E-04	4.68E-03	2.65E-03	1.06E-03	--	4.33E-02	9.09E-04	4.95E-04	1.97E-02	8.51E-04	5.46E-03	5.02E-06	2.74E-04	4.68E-03	4.02E-05	--	3.77E-05	1.51E-05	--	2.08E-04	7.78E-05	5.02E-05	9.79E-05	5.52E-05
	Crane CR-801	4.11E-04	2.84E-03	1.61E-03	6.47E-04	--	2.63E-02	5.52E-04	3.01E-04	1.20E-02	5.17E-04	3.32E-03	3.05E-06	1.66E-04	2.84E-03	2.44E-05	--	2.29E-05	9.16E-06	--	1.27E-04	4.73E-05	3.05E-05	5.95E-05	3.36E-05
	Emergency Generator	1.99E-04	1.38E-03	7.80E-04	3.14E-04	--	1.28E-02	2.68E-04	1.46E-04	5.80E-03	2.51E-04	1.61E-03	1.48E-06	8.07E-05	1.38E-03	1.18E-05	--	1.11E-05	4.44E-06	--	6.14E-05	2.29E-05	1.48E-05	2.89E-05	1.63E-05
	Emergency Generator	1.99E-04	1.38E-03	7.80E-04	3.14E-04	--	1.28E-02	2.68E-04	1.46E-04	5.80E-03	2.51E-04	1.61E-03	1.48E-06	8.07E-05	1.38E-03	1.18E-05	--	1.11E-05	4.44E-06	--	6.14E-05	2.29E-05	1.48E-05	2.89E-05	1.63E-05
Combustion - LP/HP Flare	Purge and Pilot	3.24E-04	1.78E-03	6.48E-04	3.24E-04	--	1.31E-02	3.35E-05	1.23E-04	4.80E-04	1.12E-04	--	--	1.61E-02	--	2.23E-06	1.34E-07	1.23E-05	1.56E-05	9.38E-07	--	4.24E-06	2.90E-06	2.35E-05	2.68E-07
	Planned - continuous	0.00E+00	0.00E+00	0.00E+00	0.00E+00	--	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	--	--	0.00E+00	--	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	--	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Planned - other	1.61E-04	8.80E-04	3.21E-04	1.61E-04	--	6.47E-03	1.66E-05	6.09E-05	2.38E-04	5.54E-05	--	--	7.99E-03	--	1.11E-06	6.64E-08	6.09E-06	7.75E-06	4.65E-07	--	2.10E-06	1.44E-06	1.16E-05	1.33E-07
	Unplanned	2.90E-05	1.59E-04	5.80E-05	2.90E-05	--	1.17E-03	3.00E-06	1.10E-05	4.30E-05	1.00E-05	--	--	1.44E-03	--	2.00E-07	1.20E-08	1.10E-06	1.40E-06	8.40E-08	--	3.80E-07	2.60E-07	2.10E-06	2.40E-08
Fugitive Components	Gas - controlled	1.54E+00	2.96E-02	--	--	1.36E+00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Gas - unsafe	0.00E+00	0.00E+00	--	--	0.00E+00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Supply Boat	Main Engines - con	4.42E-03	2.10E-02	9.20E-03	6.41E-03	--	2.65E-02	1.87E-03	1.91E-03	1.73E-02	2.08E-03	8.79E-04	3.28E-05	1.79E-03	3.06E-02	2.63E-04	--	2.46E-04	9.85E-05	--	1.36E-03	5.09E-04	3.28E-04	6.40E-04	3.61E-04
	Main Engines - uncon	4.42E-04	2.10E-03	9.21E-04	6.42E-04	--	2.66E-03	1.87E-04	1.91E-04	1.73E-03	2.08E-04	8.81E-05	3.29E-06	1.79E-04	3.06E-03	2.63E-05	--	2.47E-05	9.87E-06	--	1.36E-04	5.10E-05	3.29E-05	6.41E-05	3.62E-05
	Generator Engines	4.08E-04	1.94E-03	8.49E-04	5.92E-04	--	2.45E-03	1.73E-04	1.76E-04	1.59E-03	1.92E-04	8.12E-05	3.03E-06	1.65E-04	2.82E-03	2.42E-05	--	2.27E-05	9.09E-06	--	1.26E-04	4.70E-05	3.03E-05	5.91E-05	3.33E-05
	Bow Thruster	1.19E-04	5.65E-04	2.48E-04	1.73E-04	--	7.14E-04	5.04E-05	5.13E-05	4.64E-04	5.60E-05	2.37E-05	8.84E-07	4.82E-05	8.23E-04	7.07E-06	--	6.63E-06	2.65E-06	--	3.67E-05	1.37E-05	8.84E-06	1.72E-05	9.72E-06
	Emergency Generator	2.65E-05	1.26E-04	5.53E-05	3.85E-05	--	1.60E-04	1.12E-05	1.15E-05	1.04E-04	1.25E-05	5.29E-06	1.97E-07	1.08E-05	1.84E-04	1.58E-06	--	1.48E-06	5.92E-07	--	8.19E-06	3.06E-06	1.97E-06	3.85E-06	2.17E-06
	Emergency Response	2.78E-04	1.32E-03	5.79E-04	4.04E-04	--	1.67E-03	1.18E-04	1.20E-04	1.09E-03	1.31E-04	5.54E-05	2.07E-06	1.13E-04	1.93E-03	1.65E-05	--	1.55E-05	6.20E-06	--	8.58E-05	3.21E-05	2.07E-05	4.03E-05	2.27E-05
	Survival Craft	6.17E-06	2.93E-05	1.29E-05	8.96E-06	--	3.71E-05	2.62E-06	2.67E-06	2.41E-05	2.91E-06	1.23E-06	4.59E-08	2.50E-06	4.27E-05	3.67E-07	--	3.44E-07	1.38E-07	--	1.90E-06	7.11E-07	4.59E-07	8.95E-07	5.05E-07
Pigging Equipment	Gas Launcher	1.85E-05	3.56E-07	--	--	1.64E-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sumps/Tanks/Separators	Skim Pile	1.53E-03	7.65E-04	4.78E-04	--	1.43E-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Skim Pile	1.53E-03	7.65E-04	4.78E-04	--	1.43E-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Solvent Usage	Cleaning/degreasing	--	1.24E-01	1.24E-01	1.24E-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Combustion - Turbines	300-G-700-B(PG) 8760 hr/yr	8.52E-04	1.07E-03	4.91E-03	3.65E-03	0.00E+00	2.28E-03	1.85E-05	5.55E-05	5.74E-04	5.00E-04	0.00E+00	0.00E+00	1.28E-03	0.00E+00	3.70E-05	2.22E-06	2.04E-04	2.59E-04	1.55E-05	0.00E+00	7.03E-05	4.81E-05	3.89E-04	4.44E-06
	300-G-700-B(PG) 7030 hr/yr	6.83E-04	8.62E-04	3.94E-03	2.93E-03	0.00E+00	1.83E-03	1.49E-05	4.46E-05	4.61E-04	4.01E-04	0.00E+00	0.00E+00	1.03E-03	0.00E+00	2.97E-05	1.78E-06	1.63E-04	2.08E-04	1.25E-05	0.00E+00	5.65E-05	3.86E-05	3.12E-04	3.57E-06
	300-G-700-B(D2)	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	1.03E-02	1.84E-04	1.29E-03	0.00E+00	0.00E+00	5.88E-04	0.00E+00	0.00E+00	0.00E+00	4.04E-04	1.14E-05	1.76E-04	4.04E-04	0.00E+00	5.14E-04	2.90E-02	4.41E-05	1.69E-04	9.18E-04
	300-G-700-B Total[5]	**8.52E-04**	**2.88E-03**	**4.91E-03**	**3.65E-03**	**0.00E+00**	**1.21E-02**	**1.99E-04**	**1.33E-03**	**5.74E-04**	**5.00E-04**	**5.88E-04**	**0.00E+00**	**1.28E-03**	**0.00E+00**	**4.34E-04**	**1.32E-05**	**3.40E-04**	**6.12E-04**	**1.55E-05**	**5.14E-04**	**2.91E-02**	**8.27E-05**	**4.81E-04**	**9.22E-04**
	300-G-700-C(PG) 8760 hr/yr	8.52E-04	1.07E-03	4.91E-03	3.65E-03	0.00E+00	2.28E-03	1.85E-05	5.55E-05	5.74E-04	5.00E-04	0.00E+00	0.00E+00	1.28E-03	0.00E+00	3.70E-05	2.22E-06	2.04E-04	2.59E-04	1.55E-05	0.00E+00	7.03E-05	4.81E-05	3.89E-04	4.44E-06
	300-G-700-C(PG) 7030 hr/yr	6.83E-04	8.62E-04	3.94E-03	2.93E-03	0.00E+00	1.83E-03	1.49E-05	4.46E-05	4.61E-04	4.01E-04	0.00E+00	0.00E+00	1.03E-03	0.00E+00	2.97E-05	1.78E-06	1.63E-04	2.08E-04	1.25E-05	0.00E+00	5.65E-05	3.86E-05	3.12E-04	3.57E-06
	300-G-700-C(D2)	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	1.03E-02	1.84E-04	1.29E-03	0.00E+00	0.00E+00	5.88E-04	0.00E+00	0.00E+00	0.00E+00	4.04E-04	1.14E-05	1.76E-04	4.04E-04	0.00E+00	5.14E-04	2.90E-02	4.41E-05	1.69E-04	9.18E-04
	300-G-700-C Total[5]	**8.52E-04**	**2.88E-03**	**4.91E-03**	**3.65E-03**	**0.00E+00**	**1.21E-02**	**1.99E-04**	**1.33E-03**	**5.74E-04**	**5.00E-04**	**5.88E-04**	**0.00E+00**	**1.28E-03**	**0.00E+00**	**4.34E-04**	**1.32E-05**	**3.40E-04**	**6.12E-04**	**1.55E-05**	**5.14E-04**	**2.91E-02**	**8.27E-05**	**4.81E-04**	**9.22E-04**
	300-G-700-D(PG) 8760 hr/yr	8.52E-04	1.07E-03	4.91E-03	3.65E-03	0.00E+00	2.28E-03	1.85E-05	5.55E-05	5.74E-04	5.00E-04	0.00E+00	0.00E+00	1.28E-03	0.00E+00	3.70E-05	2.22E-06	2.04E-04	2.59E-04	1.55E-05	0.00E+00	7.03E-05	4.81E-05	3.89E-04	4.44E-06
	300-G-700-D(PG) 7030 hr/yr	6.83E-04	8.62E-04	3.94E-03	2.93E-03	0.00E+00	1.83E-03	1.49E-05	4.46E-05	4.61E-04	4.01E-04	0.00E+00	0.00E+00	1.03E-03	0.00E+00	2.97E-05	1.78E-06	1.63E-04	2.08E-04	1.25E-05	0.00E+00	5.65E-05	3.86E-05	3.12E-04	3.57E-06
	300-G-700-D(D2)	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00	1.03E-02	1.84E-04	1.29E-03	0.00E+00	0.00E+00	5.88E-04	0.00E+00	0.00E+00	0.00E+00	4.04E-04	1.14E-05	1.76E-04	4.04E-04	0.00E+00	5.14E-04	2.90E-02	4.41E-05	1.69E-04	9.18E-04
	300-G-700-D Total[5]	**8.52E-04**	**2.88E-03**	**4.91E-03**	**3.65E-03**	**0.00E+00**	**1.21E-02**	**1.99E-04**	**1.33E-03**	**5.74E-04**	**5.00E-04**	**5.88E-04**	**0.00E+00**	**1.28E-03**	**0.00E+00**	**4.34E-04**	**1.32E-05**	**3.40E-04**	**6.12E-04**	**1.55E-05**	**5.14E-04**	**2.91E-02**	**8.27E-05**	**4.81E-04**	**9.22E-04**
	Total Facility HAPs (TPY):	**1.55E+00**	**2.10E-01**	**1.60E-01**	**1.50E-01**	**1.36E+00**	**2.30E-01**	**1.00E-02**	**1.00E-02**	**9.00E-02**	**1.00E-02**	**2.00E-02**	**0.00E+00**	**3.00E-02**	**5.00E-02**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**9.00E-02**	**0.00E+00**	**0.00E+00**	**0.00E+00**

Notes:
1. These are estimates only, and are not intended to represent emission limits.
2. Based on CAAA, Section 112 (n) (4) stipulations, the HAP emissions listed above can not be aggregated at the source for any purpose, including determination of HAP major source status for MACT applicability.
3. Default fuel properties for diesel come from the SBCAPCD's Piston IC Engine Technical Reference Document (2002) - Table 5 Default Fuel Properties & Table 6 Default Engine Specifications.
4. Natural gas emission calculations are based on a standard value of 1050 BTU/scf.
5. These turbines are permitted to operate using diesel fuel for a total of 1730 hours per year, with no restrictions on the annual usage of PUC natural gas. The emissions were calculated for each turbine for two scenarios: (1) assuming they operate the entire year using natural gas, and (2) assuming they operate for the maximum permitted number of hours using diesel fuel, using natural ga
The total emissions for each turbine are equal to the emissions for the scenario with the higher emissions for each individual pollutant.

Table 5.5-3
Point Arguello Project: Permit to Operate 9103-R6
Stationary Source Hazardous Air Pollutant Emissions (TPY)

Facility	Permit #	Hexane	Benzene	Toluene	Xylene	Iso-Octane	Formaldehyde	PAHs (not incl. napthalene)	Naphthalene	Acetaldehyde	Acrolein	1,3-Butadiene	Chlorobenzene	Ethylbenzene	Hydrogen Chloride	Arsenic	Beryllium	Cadmium	Total Chromium	Cobalt	Lead	Manganese	Mercury	Nickel	Selenium	Total - All HA
08013 - Platform Harvest	**PTO 9103-R6**	1.55E+00	2.10E-01	1.60E-01	1.50E-01	1.36E+00	2.30E-01	1.00E-02	1.00E-02	9.00E-02	1.00E-02	2.00E-02	0.00E+00	3.00E-02	5.00E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.00E-02	0.00E+00	0.00E+00	0.00E+00	3.97E+00
08014 - Platform Hermosa	**PTO 9104-R6**	1.80E+00	7.10E-01	6.60E-01	6.50E-01	1.58E+00	2.00E-01	1.00E-02	1.00E-02	8.00E-02	1.00E-02	2.00E-02	0.00E+00	2.00E-02	5.00E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E-02	0.00E+00	0.00E+00	0.00E+00	5.86E+00
08015 - Platform Hidalgo	**PTO 9105-R6**	4.40E-01	6.90E-01	6.60E-01	6.50E-01	3.80E-01	2.10E-01	1.00E-02	1.00E-02	9.00E-02	1.00E-02	2.00E-02	0.00E+00	2.00E-02	5.00E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E-02	0.00E+00	0.00E+00	0.00E+00	3.32E+00
Total Stationary Source - By Pollutant		**3.79E+00**	**1.61E+00**	**1.48E+00**	**1.45E+00**	**3.32E+00**	**6.40E-01**	**3.00E-02**	**3.00E-02**	**2.60E-01**	**3.00E-02**	**6.00E-02**	**0.00E+00**	**7.00E-02**	**1.50E-01**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**2.30E-01**	**0.00E+00**	**0.00E+00**	**0.00E+00**	**1.32E+01**

Notes:

1. These are estimates only, and are not intended to represent emission limits.
2. Based on CAAA, Section 112 (n) (4) stipulations, the HAP emissions listed above can not be aggregated at the source for any purpose, including determination of HAP major source status for MACT applicability.

STATIONARY SOURCE SUMMARY
(Form 1302-A1)

APCD: Santa Barbara County Air Pollution Control District
COMPANY NAME: Freeport-McMoRan Oil and Gas

➢ APCD USE ONLY ≺

APCD IDS Processing ID:

Application #: **Date Application Received:**

Application Filing Fee*: **Date Application Deemed Complete:**

I. SOURCE IDENTIFICATION

1. Source Name: Point Arguello Project Stationary Source
2. Four digit SIC Code: 1311 USEPA AIRS Plant ID (for APCD use only):
3. Parent Company (if different than Source Name): The Point Arguello Companies
4. Mailing Address of Responsible Official: Freeport-McMoRan Oil and Gas, 201 South Broadway, Orcutt, CA 93455
5. Street Address of Source Location (include Zip Code): 201 South Broadway, Orcutt, CA 93455
6. UTM Coordinates (if required) (see instructions):
7. Source located within: 50 miles of the state line [ ] Yes [X] No
   50 miles of a Native American Nation [ ] Yes [X] No [ ] Not Applicable
8. Type of Organization: [ ] Corporation [ ] Sole Ownership [ ] Government [X] Partnership [ ] Utility Company
9. Legal Owner's Name: The Point Arguello Companies
10. Owner's Agent Name (if any): Title: Telephone #:
11. Responsible Official: Todd Cantrall Title: Vice President, Operations Telephone #: (281) 539-7602
12. Plant Site Manager/Contact: David Rose Title: Director, Environmental, Health & Safety Telephone #: (805) 934-8221
13. Type of facility: Oil and Gas Production
14. General description of processes/products: Platforms Harvest, Hermosa, and Hidalgo previously produced natural gas and crude oil. Production ceased in 2015. Platforms will be in caretaker status until decommissioning.
15. Does your facility store, or otherwise handle, greater than threshold quantities of any substance on the Section 112(r) List of Substances and their Thresholds (see Attachment A)? [ ] Yes [X] No
16. Is a Federal Risk Management Plan [pursuant to Section 112(r)] required? [ ] Not Applicable [ ] Yes [X] No
    (If yes, attach verification that Risk Management Plan is registered with appropriate agency or description of status of Risk Management Plan submittal.)

* Applications submitted without a filing fee will be returned to the applicant immediately as "improper" submittals

STATIONARY SOURCE SUMMARY
(Form 1302-A2)

APCD: **Santa Barbara County Air Pollution Control District**	**➢ APCD USE ONLY ➣** **APCD IDS Processing ID:**
COMPANY NAME: Freeport-McMoRan Oil and Gas	**SOURCE NAME: Point Arguello Project Stationary Source**

II. TYPE OF PERMIT ACTION

	CURRENT PERMIT (permit number)	EXPIRATION (date)
☐ **Initial SBCAPCD's Regulation XIII Application**		
☒ **Permit Renewal**	**Platform Harvest** PTO 9103	October 2021
	Platform Hermosa PTO 9104	October 2021
	Platform Hidalgo PTO 9105	October 2021
☒ **Significant Permit Revision***		
☐ **Minor Permit Revision***		
☐ **Administrative Amendment**		

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action requested involve:
   a: [ ] Portable Source [ ] Voluntary Emissions Caps
   [ ] Acid Rain Source [ ] Alternative Operating Scenarios
   [ ] Source Subject to MACT Requirements [Section 112]
   b: [X] None of the options in 1.a. are applicable
2. Is source operating under a Title V Program Compliance Schedule? [ ] Yes [X] No
3. For permit modifications, provide a general description of the proposed permit modification:

   Significant reductions in PTE due to equipment removal.

TOTAL STATIONARY SOURCE EMISSIONS (Form 1302-B)

APCD: Santa Barbara County Air Pollution Control District	➢ APCD USE ONLY ➣ APCD IDS Processing ID:
COMPANY NAME: Freeport-McMoRan Oil and Gas	SOURCE NAME: Point Arguello Project Stationary Source

I. TOTAL STATIONARY SOURCE EMISSIONS

Provide a brief description of operating scenario: See attached Point Arguello Project Stationary Source operating scenario.

POLLUTANT* (name)	EMISSIONS (tons per year)	PRE-MODIFICATION EMISSIONS (tons per year)	EMISSIONS CHANGE (tons per year)
NOx	**611.05**	**774.45**	**-163.40**
ROC	**107.20**	**169.90**	**-62.70**
CO	**252.99**	**411.00**	**-158.01**
SOx	**39.14**	**121.34**	**-82.20**
PM	**50.51**	**61.51**	**-11.00**
PM10	**49.24**	**60.20**	**-10.96**
CO2e	**266476**	**485471**	**-218995**
Benzene	**1.61**	**2.71**	**-1.10**
Toluene	**1.48**	**1.96**	**-0.48**
Xylene	**1.45**	**1.48**	**-0.03**
Formaldehyde	**0.64**	**0.74**	**-0.10**
Acetaldehyde	**0.26**	**0.26**	**0.00**
PAH	**0.03**	**0.03**	**0.00**
Iso-Octane	**3.32**	**21.36**	**-18.04**
Hexane	**0.46**	**6.41**	-5.95

* Emissions for all pollutants for which the source is major and for all NSPS/MACT-regulated air pollutants must be reported. HAP emissions must be determined, and those exceeding one ton per year from any emission unit category must also be quantified; if less than one ton per year, just list the HAPs emitted by name.

TOTAL STATIONARY SOURCE EMISSIONS (Form 1302-B)

APCD: **Santa Barbara County Air Pollution Control District**	**➢ APCD USE ONLY ≺** **APCD IDS Processing ID:**
COMPANY NAME: Freeport-McMoRan Oil and Gas	**SOURCE NAME: Point Arguello Project Stationary Source, Platform Harvest**

I. TOTAL STATIONARY SOURCE EMISSIONS

Provide a brief description of operating scenario: See attached Point Arguello Project Stationary Source operating scenario.

POLLUTANT* (name)	EMISSIONS (tons per year)	PRE-MODIFICATION EMISSIONS (tons per year)	EMISSIONS CHANGE (tons per year)
NOx	**257.56**	**372.32**	-114.76
ROC	**29.92**	**62.42**	-32.5
CO	**99.18**	**201.7**	-102.52
SOx	**18.13**	**43.55**	-25.42
PM	**19.13**	**26.27**	-7.14
PM10	**18.74**	**25.88**	-7.14
CO2e	**77717.17**	**227888.79**	-150171.62
Benzene	**0.21**	**0.62**	-0.41
Toluene	**0.16**	**0.31**	-0.15
Xylene	**0.15**	**0.18**	-0.03
Formaldehyde	**0.23**	**0.28**	-0.05
Acetaldehyde	**0.09**	**0.09**	0
PAH	**0.01**	**0.01**	0
Iso-Octane	**1.36**	**11.1**	-9.74
Hexane	**1.55**	**12.8**	-11.25

* Emissions for all pollutants for which the source is major and for all NSPS/MACT-regulated air pollutants must be reported. HAP emissions must be determined, and those exceeding one ton per year from any emission unit category must also be quantified; if less than one ton per year, just list the HAPs emitted by name.

TOTAL STATIONARY SOURCE EMISSIONS (Form 1302-B)

APCD: Santa Barbara County Air Pollution Control District	➢ APCD USE ONLY ➢ APCD IDS Processing ID:
COMPANY NAME: Freeport-McMoRan Oil and Gas	SOURCE NAME: Point Arguello Project Stationary Source, Platform Hermosa

I. TOTAL STATIONARY SOURCE EMISSIONS

Provide a brief description of operating scenario: See attached Point Arguello Project Stationary Source operating scenario.

POLLUTANT* (name)	EMISSIONS (tons per year)	PRE-MODIFICATION EMISSIONS (tons per year)	EMISSIONS CHANGE (tons per year)
NOx	**170.98**	**192.2**	-21.22
ROC	**37.92**	**55.3**	-17.38
CO	**79.52**	**109.69**	-30.17
SOx	**11.23**	**37.13**	-25.9
PM	**14.99**	**16.94**	-1.95
PM10	**14.55**	**16.48**	-1.93
CO2e	**91681**	**129667**	-37986
Benzene	**0.71**	**1.1**	-0.39
Toluene	**0.66**	**0.85**	-0.19
Xylene	**0.65**	**0.65**	0
Formaldehyde	**0.2**	**0.22**	-0.02
Acetaldehyde	**0.08**	**0.08**	0
PAH	**0.01**	**0.01**	0
Iso-Octane	**1.58**	**5.83**	-4.25
Hexane	**1.8**	**7.12**	-5.32

* Emissions for all pollutants for which the source is major and for all NSPS/MACT-regulated air pollutants must be reported. HAP emissions must be determined, and those exceeding one ton per year from any emission unit category must also be quantified; if less than one ton per year, just list the HAPs emitted by name.

TOTAL STATIONARY SOURCE EMISSIONS (Form 1302-B)

APCD: **Santa Barbara County Air Pollution Control District**	**➢ APCD USE ONLY ≺** **APCD IDS Processing ID:**
COMPANY NAME: Freeport-McMoRan Oil and Gas	**SOURCE NAME: Point Arguello Project Stationary Source, Platform Hidalgo**

I. TOTAL STATIONARY SOURCE EMISSIONS

Provide a brief description of operating scenario: See attached Point Arguello Project Stationary Source operating scenario.

POLLUTANT* (name)	**EMISSIONS** (tons per year)	**PRE-MODIFICATION EMISSIONS** (tons per year)	**EMISSIONS CHANGE** (tons per year)
NOx	**182.51**	**209.93**	-27.42
ROC	**39.36**	**52.18**	-12.82
CO	**74.29**	**99.61**	-25.32
SOx	**9.78**	**40.66**	-30.88
PM	**16.39**	**18.3**	-1.91
PM10	**15.95**	**17.84**	-1.89
CO2e	**97078**	**127915**	-30837
Benzene	**0.69**	**0.99**	-0.3
Toluene	**0.66**	**0.8**	-0.14
Xylene	**0.65**	**0.65**	0
Formaldehyde	**0.21**	**0.24**	-0.03
Acetaldehyde	**0.09**	**0.09**	0
PAH	**0.01**	**0.01**	0
Iso-Octane	**0.38**	**4.43**	-4.05
Hexane	**0.44**	**6.41**	-5.97

* Emissions for all pollutants for which the source is major and for all NSPS/MACT-regulated air pollutants must be reported. HAP emissions must be determined, and those exceeding one ton per year from any emission unit category must also be quantified; if less than one ton per year, just list the HAPs emitted by name.

Point Arguello Project Stationary Source – Operating Scenario

The Point Arguello Project Stationary Source, owned by The Point Arguello Companies, is operated by Freeport-McMoRan Oil and Gas (FM O&G). This source consists of the three OCS platforms, Platforms Harvest, Hermosa, and Hidalgo.

Platforms Harvest, Hermosa, and Hidalgo previously produced natural gas and crude oil. All production ceased in 2015 due to the shutdown of the All-American Pipeline (AAPL). The platforms operate in a caretaker mode until they are permanently decommissioned. No further operation for oil and gas production will occur.

The emissions from Platforms Harvest, Hermosa, and Hidalgo come from combustion sources, storage tanks and piping components, such as valves and flanges.

The emission sources from the platforms include:

- Seven turbine generators used for electrical power generation. (2 each on Hermosa and Hidalgo, and 3 on Harvest) The turbines typically burn sweetened natural gas, however diesel fuel may be used during times when the gas supply has been interrupted
- Four diesel fired turbine starter engines. (Hidalgo)
- Seven 50-ton pedestal cranes operated by diesel-driven internal combustion engines. (2 each on Hermosa and Hidalgo, and 3 on Harvest)
- Four standby diesel-driven generators that are used only in emergency situations. (1 each on Hermosa and Hidalgo, and 1 on Harvest)
- Five stand-by diesel driven fire water pumps and an air compressor that are used only in emergency situations. (2 on Hermosa, 1 on Hidalgo, and none on Harvest)
- Supply, and emergency response boats. (Hermosa, Hidalgo, Harvest)
- Survival Craft for emergency egress from the platform (Hermosa, Hidalgo, Harvest)
- High pressure and low pressure flares. (Hermosa, Hidalgo, Harvest)
- Helicopters. (Hermosa, Hidalgo, Harvest)
- Solvent cleaning. (Hermosa, Hidalgo, Harvest)
- Fugitive emissions due to leaks from turbine fuel gas piping components such as valves, flanges and other fittings as well as compressor and pump seals. Fuel gas is PUC supplied. (Hermosa, Hidalgo, Harvest)

INSIGNIFICANT **ACTIVITIES/EMISSIONS UNITS (Form 1302-H)**

APCD: **Santa Barbara County Air Pollution Control District**	**➢ APCD USE ONLY ≺** **APCD IDS PROCESSING ID:**
COMPANY NAME: Freeport-McMoRan Oil and Gas	**SOURCE NAME: Point Arguello Project Stationary Source, Platform Harvest**

Are you claiming any emitting activities to be insignificant? (See definition at bottom of page)

YES__X__ NO_____

I. ACTIVITIES CLAIMED TO BE INSIGNIFICANT (Attach supporting calculations)

Activity	Description of Activity/Emission Units	Potential to Emit for each Pollutant					
		NOx	ROC	CO	SOx	PM	PM10
Fuel storage	Diesel Storage Tanks	--	1.00	--	--	--	--
Maintenance	Surface Coating - Maintenance	--	2.00	--	--	--	--
Miscellaneous Portable ICEs	Miscellaneous Portable ICEs	1.54	0.13	0.33	0.02	0.11	0.11

Insignificant activities are defined in APCD Rule 1301 (definitions). For an activity to be considered insignificant emissions cannot exceed 2 tons per year potential to emit (PTE) any criteria pollutants, and 0.5 tons per year for any regulated HAP.

Note: Insignificant activities are not exempt from Part 70 requirements/permits.

INSIGNIFICANT **ACTIVITIES/EMISSIONS UNITS (Form 1302-H)**

APCD: **Santa Barbara County Air Pollution Control District**	**➢ APCD USE ONLY ≺** **APCD IDS PROCESSING ID:**
COMPANY NAME: Freeport-McMoRan Oil and Gas	**SOURCE NAME: Point Arguello Project Stationary Source, Platform Hermosa**

Are you claiming any emitting activities to be insignificant? (See definition at bottom of page)

YES__X__ NO_____

I. ACTIVITIES CLAIMED TO BE INSIGNIFICANT (Attach supporting calculations)

Activity	Description of Activity/Emission Units	Potential to Emit for each Pollutant					
		NOx	ROC	CO	SOx	PM	PM10
Fuel storage	Diesel Storage Tanks	--	1.00	--	--	--	--
Maintenance	Surface Coating - Maintenance	--	2.00	--	--	--	--
Miscellaneous Portable ICEs	Miscellaneous Portable ICEs	1.54	0.13	0.33	0.02	0.11	0.11

Insignificant activities are defined in APCD Rule 1301 (definitions). For an activity to be considered insignificant emissions cannot exceed 2 tons per year potential to emit (PTE) any criteria pollutants, and 0.5 tons per year for any regulated HAP.

Note: Insignificant activities are not exempt from Part 70 requirements/permits.

INSIGNIFICANT **ACTIVITIES/EMISSIONS UNITS (Form 1302-H)**

APCD: **Santa Barbara County Air Pollution Control District**	**➢ APCD USE ONLY ≺** **APCD IDS PROCESSING ID:**
COMPANY NAME: Freeport-McMoRan Oil and Gas	**SOURCE NAME: Point Arguello Project Stationary Source, Platform Hidalgo**

Are you claiming any emitting activities to be insignificant? (See definition at bottom of page)

YES__X__ NO_____

I. ACTIVITIES CLAIMED TO BE INSIGNIFICANT (Attach supporting calculations)

Activity	Description of Activity/Emission Units	Potential to Emit for each Pollutant					
		NOx	ROC	CO	SOx	PM	PM10
Fuel storage	Diesel Storage Tanks	--	1.00	--	--	--	--
Maintenance	Surface Coating - Maintenance	--	2.00	--	--	--	--
Miscellaneous Portable ICEs	Miscellaneous Portable ICEs	1.54	0.13	0.33	0.02	0.11	0.11
Emergency ICEs	Emergency Start Fuel Pump	0.01	0.01	0.01	0.01	0.01	0.01

Insignificant activities are defined in APCD Rule 1301 (definitions). For an activity to be considered insignificant emissions cannot exceed 2 tons per year potential to emit (PTE) any criteria pollutants, and 0.5 tons per year for any regulated HAP.

Note: Insignificant activities are not exempt from Part 70 requirements/permits.

FORM 1302-H Activities Claimed to be Insignificant, Supporting Calculations

POINT ARGUELLO PROJECT STATIONARY SOURCE, PLATFORM HARVEST

Diesel Storage Tanks

PTE ROC = (ton ROC/month)(months)
= (0.0833 ton ROC/month)(12 months)
= 1.00 tpy ROC

Surface Coating – Maintenance

PTE ROC = (Emission Factor)(Annual Usage)
= (2.0 lb/gallon)(2000 gallons)/(2000 lb/ton)
= 2.00 tpy ROC

Miscellaneous Portable ICEs (100,000 bhp-hrs aggregate)

PTE NOx = (Emission Factor)(Heat Input)
= (100,000 bhp-hr)(7000 Btu/bhp-hr)(4.41 lb NOx/MMBtu)/1,000,000 Btu/MMBtu
= (3087 lbs NOx)/(2000 lb/ton)
= 1.54 tpy NOx

PTE ROC = (Emission Factor)(Heat Input)
= (0.36 lb ROC/MMBtu)(100,000 bhp-hr)(7000 Btu/bhp-hr)/1,000,000 Btu/MMBtu
= (0252 lbs ROC)/(2000 lb/ton)
= 0.13 tpy ROC

FORM 1302-H Activities Claimed to be Insignificant, Supporting Calculations - continued

POINT ARGUELLO PROJECT STATIONARY SOURCE, PLATFORM HERMOSA

Diesel Storage Tanks

PTE ROC = (ton ROC/month)(months)
= (0.0833 ton ROC/month)(12 months)
= 1.00 tpy ROC

Surface Coating – Maintenance

PTE ROC = (Emission Factor)(Annual Usage)
= (2.0 lb/gallon)(2000 gallons)/(2000 lb/ton)
= 2.00 tpy ROC

Miscellaneous Portable ICEs (100,000 bhp-hrs aggregate)

PTE NOx = (Emission Factor)(Heat Input)
= (100,000 bhp-hr)(7000 Btu/bhp-hr)(4.41 lb NOx/MMBtu)/1,000,000 Btu/MMBtu
= (3087 lbs NOx)/(2000 lb/ton)
= 1.54 tpy NOx

PTE ROC = (Emission Factor)(Heat Input)
= (0.36 lb ROC/MMBtu)(100,000 bhp-hr)(7000 Btu/bhp-hr)/1,000,000 Btu/MMBtu
= (0252 lbs ROC)/(2000 lb/ton)
= 0.13 tpy ROC

POINT ARGUELLO PROJECT STATIONARY SOURCE, PLATFORM HIDALGO

Diesel Storage Tanks

PTE ROC = (ton ROC/month)(months)
= (0.0833 ton ROC/month)(12 months)
= 1.00 tpy ROC

Surface Coating – Maintenance

PTE ROC = (Emission Factor)(Annual Usage)
= (2.0 lb/gallon)(2000 gallons)/(2000 lb/ton)
= 2.00 tpy ROC

Miscellaneous Portable ICEs (100,000 bhp-hrs aggregate)

PTE NOx = (Emission Factor)(Heat Input)
= (100,000 bhp-hr)(7000 Btu/bhp-hr)(4.41 lb NOx/MMBtu)/1,000,000 Btu/MMBtu
= (3087 lbs NOx)/(2000 lb/ton)
= 1.54 tpy NOx

PTE ROC = (Emission Factor)(Heat Input)
= (0.36 lb ROC/MMBtu)(100,000 bhp-hr)(7000 Btu/bhp-hr)/1,000,000 Btu/MMBtu
= (0252 lbs ROC)/(2000 lb/ton)
= 0.13 tpy ROC

COMPLIANCE PLAN
(Form 1302-I1)

APCD: Santa Barbara County Air Pollution Control District	➢ APCD USE ONLY ≺ APCD IDS PROCESSING ID:
COMPANY NAME: Freeport-McMoRan Oil and Gas	SOURCE NAME: Point Arguello Project Stationary Source, Platform Harvest

I. PROCEDURE FOR USING FORM 1302-I

☞ This form shall be submitted as part of the SBCAPCD's Regulation XIII Application. The Responsible Official shall identify the applicable federal requirement(s) to which the source is subject. In the Compliance Plan (Form 1302-I), a Responsible Official shall identify whether the source identified in the SBCAPCD's Regulation XIII Application currently operates in compliance with all applicable federal requirements.

II. APPLICABLE FEDERAL REQUIREMENTS

Applicable Federal Requirement[1]		Affected Emission Unit	In compliance?	Effective Date[4]
Regulatory Reference[2]	Regulation Title[2]		(yes/no/exempt[3])	
APCD Rule 301	Circumvention	Entire Source	Yes	2001
APCD Rule 302	Visible Emissions	Entire Source	Yes	2001
APCD Rule 303	Nuisance	Entire Source	Yes	2001
APCD Rule 305	Particulate Matter Concentration – Southern Zone	Flare and diesel-fired IC Engines	Yes	2001
APCD Rule 309	Specific Contaminants	Combustion Units	Yes	2001
APCD Rule 310	Odorous Organic Sulfides	Entire Source	Yes	2001
APCD Rule 311	Sulfur Content of Fuels	Piston IC Engines	Yes	2001
APCD Rule 317	Organic Solvents	Maintenance/Wipe Cleaning	Yes	2001
APCD Rule 321	Solvent Cleaning Operations	Degreasing Unit	Yes – exempt 321 J.2.	
APCD Rule 322	Metal Surface Coating Thinner and Reducer	Maintenance Operations	Yes	2001
APCD Rule 323	Architectural Coatings	Maintenance Operations	Yes	2001
APCD Rule 324	Disposal and Evaporation of Solvents	Maintenance/Wipe Cleaning	Yes	2001
APCD Rule 325	Crude Oil Production and Separation	Equipment used in the production, gathering, storage, processing and separation of oil and gas.	Yes	2001
APCD Rule 331	Fugitive Emissions Inspection and Maintenance	Fugitive Emissions	Yes – exempt 331 B.2.c, B.3.a, B.3.b.	2001

Applicable Federal Requirement[1]		Affected Emission Unit	In compliance?	Effective Date[4]
Regulatory Reference[2]	Regulation Title[2]		(yes/no/exempt[3])	
APCD Rule 333	Control of Emissions from Reciprocating Internal Combustion Engines	Crane I.C. Engines	Yes	2001
APCD Rule 359	Flares and Thermal Oxidizers	Flares	Yes – exempt 359 D.1.a	2001
APCD Rule 603	Emergency Episode Plans	Entire Source	Yes	2001
APCD Rule 801	New Source Review	Entire Source	Yes	2001
APCD Rule 802	Nonattainment Review	Entire Source	Yes	2001
APCD Rule 803	Prevention of Significant Deterioration	Entire Source	Yes	2001
APCD Rule 804	Emission Offsets	Entire Source	Yes	2001
APCD Rule 805	Air Quality Impact and Modeling	Entire Source	Yes	2001
APCD Rule 806	Emission Reduction Credits	Entire Source	Yes	2001
APCD Rule 901	New Source Performance Standards (NSPS)	Entire Source	Yes	2001
APCD Rule 903	Outer Continental Shelf (OCS) Regulations	Entire Source	Yes	2001
APCD Rule 1001	National Emission Standards for Hazardous Air Pollutants (NESHAPS)	Entire Source	Yes	2001
APCD Rule 1301	General Information	Entire Source	Yes	2001
APCD Rule 1302	Permit Application	Entire Source	Yes	2001
APCD Rule 1303	Permits	Entire Source	Yes	2001
APCD Rule 1304	Issuance, Renewal, Modification and Reopening	Entire Source	Yes	2001
APCD Rule 1305	Enforcement	Entire Source	Yes	2001
40 CFR 55	OCS Air Regulation	Entire Source	Yes	2001
40 CFR 63	Maximum Achievable Control Technology (MACT)	Entire Source	Approved Black Oil Exemption	2001
40 CFR 70	Operating Permits	Entire Source	Yes	2001

1 Review APCD SIP Rules, NSPS, NESHAPS, and MACTs·

2 Regulatory Reference is the abbreviated citation (e.g. 40 CFR 60 Subpart OOO, APCD Rule 325.H) and Title is the prosaic title (e.g. NSPS Standards of Performance for Nonmetallic Mineral Processing Plants, Crude Oil Production and Separation, Inspection)

3 If exempt from applicable federal requirement, include explanation for exemption.

4 Indicate the date during the permit term that the applicable federal requirement will become effective for the emission unit.

Other Applicable Federal Requirements[5]	Affected Emission Unit	In compliance?	Effective Date
PC.C1 Internal Combustion Engines	Diesel ICEs	Yes	2001
PC.C2 Turbines	Turbines	Yes	2001
PC.C3 Combustion Equipment – Flare	Flares	Yes	2001
PC.C4 Fugitive Hydrocarbon Emissions Components	Fugitive Emissions	Yes	2001
PC.C5 Crew and Supply Boats	Boats	Yes	2001
PC.C6 Pigging Equipment	Pigging Equipment	Yes	2001
PC.C7 Tanks/Sumps/Separators	Sumps and Wastewater Tanks; Oil/Water Separators	Yes	2001
PC.C8 Solvent Usage	Cleaning/Degreasing	Yes	2001
PC.C13 Facility Throughput Limitations	Entire Source	Yes	2001
PC.C14 Produced Gas	Entire Source	Yes	2001
PC.C24 Mass Emission Limitations	Entire Source	Yes	2001

5 All environmentally significant permit conditions -- such as emission, operation, and throughput limitations or compliance monitoring conditions associated with such limitations -- listed in all authority to construct (ATC) permits issued to the Part 70 source are also applicable requirements.

*** If more than one page is used, please ensure that "Santa Barbara APCD", stationary source name and "Form 1302-I1" appear on each page. ***

COMPLIANCE PLAN
(Form 1302-I1)

APCD: Santa Barbara County Air Pollution Control District	➢ APCD USE ONLY ➣ APCD IDS PROCESSING ID:
COMPANY NAME: Freeport-McMoRan Oil and Gas	SOURCE NAME: Point Arguello Project Stationary Source, Platform Hermosa

I. PROCEDURE FOR USING FORM 1302-I

☞ This form shall be submitted as part of the SBCAPCD's Regulation XIII Application. The Responsible Official shall identify the applicable federal requirement(s) to which the source is subject. In the Compliance Plan (Form 1302-I), a Responsible Official shall identify whether the source identified in the SBCAPCD's Regulation XIII Application currently operates in compliance with all applicable federal requirements.

II. APPLICABLE FEDERAL REQUIREMENTS

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APCD Rule 309	Specific Contaminants	Combustion Units	Yes	2001
APCD Rule 310	Odorous Organic Sulfides	Entire Source	Yes	2001
APCD Rule 311	Sulfur Content of Fuels	Piston IC engines	Yes	2001
APCD Rule 317	Organic Solvents	Maintenance/Wipe Cleaning	Yes	2001
APCD Rule 321	Solvent Cleaning Operations	Degreasing unit	Yes – exempt 321 J.2	2001
APCD Rule 322	Metal Surface Coating Thinner and Reducer	Maintenance Operations	Yes	2001
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APCD Rule 324	Disposal and Evaporation of Solvents	Maintenance/Wipe Cleaning	Yes	2001
APCD Rule 325	Crude Oil Production and Separation	Equipment used in the production, gathering, storage, processing and separation of oil and gas.	Yes	2001
APCD Rule 331	Fugitive Emissions Inspection and Maintenance	Fugitive Emissions	Yes – exempt 331 B.2.c, B.3.a, B.3.b.	2001
APCD Rule 333	Control of Emissions from Reciprocating Internal Combustion	Crane I.C. Engines	Yes	2001

Applicable Federal Requirement[1]		Affected Emission Unit	In compliance?	Effective Date[4]
Regulatory Reference[2]	Regulation Title[2]		(yes/no/exempt[3])	
	Engines			
APCD Rule 359	Flares and Thermal Oxidizers	Flares	Yes – exempt 359 D.1.a	2001
APCD Rule 603	Emergency Episode Plans	Entire Source	Yes	2001
APCD Rule 801	New Source Review	Entire Source	Yes	2001
APCD Rule 802	Nonattainment Review	Entire Source	Yes	2001
APCD Rule 803	Prevention of Significant Deterioration	Entire Source	Yes	2001
APCD Rule 804	Emission Offsets	Entire Source	Yes	2001
APCD Rule 805	Air Quality Impact and Modeling	Entire Source	yes	2001
APCD Rule 806	Emission Reduction Credits	Entire Source	Yes	2001
APCD Rule 901	New Source Performance Standards (NSPS)	Entire Source	Yes	2001
APCD Rule 903	Outer Continental Shelf (OCS) Regulations	Entire Source	Yes	2001
APCD Rule 1001	National Emission Standards for Hazardous Air Pollutants (NESHAPS)	Entire Source	Yes	2001
APCD Rule 1301	General Information	Entire Source	Yes	2001
APCD Rule 1302	Permit Application	Entire Source	Yes	2001
APCD Rule 1303	Permits	Entire Source	Yes	2001
APCD Rule 1304	Issuance, Renewal, Modification and Reopening	Entire Source	Yes	2001
APCD Rule 1305	Enforcement	Entire Source	Yes	2001
40 CFR 55	OCS Air Regulation	Entire Source	Yes	2001
40 CFR 63	Maximum Achievable Control Technology (MACT)	Entire Source	Approved Black Oil Exemption	2001
40 CFR 70	Operating Permits	Entire Source	Yes	2001

1 Review APCD SIP Rules, NSPS, NESHAPS, and MACTs·

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3 If exempt from applicable federal requirement, include explanation for exemption.

4 Indicate the date during the permit term that the applicable federal requirement will become effective for the emission unit.

Other Applicable Federal Requirements[5]	Affected Emission Unit	In compliance?	Effective Date
PC.C1 Internal Combustion Engines	Diesel ICEs	Yes	2001
PC.C2 Turbines	Turbines	Yes	2001
PC.C3 Combustion Equipment – Flare	Flares	Yes	2001
PC.C4 Fugitive Hydrocarbon Emissions Components	Fugitive Emissions	Yes	2001
PC.C5 Crew and Supply Boats	Boats	Yes	2001
PC.C6 Pigging Equipment	Pigging Equipment	Yes	2001
PC.C7 Tanks/Sumps/Separators	Tanks and Separators	Yes	2001
PC.C8 Solvent Usage	Cleaning/Degreasing	Yes	2001
PC.C16 Facility Throughput Limitations	Entire Source	Yes	2001
PC.C17 Produced Gas	Entire Source	Yes	2001
PC.C27 Mass Emission Limitations	Entire Source	Yes	2001

[5] All environmentally significant permit conditions -- such as emission, operation, and throughput limitations or compliance monitoring conditions associated with such limitations -- listed in all authority to construct (ATC) permits issued to the Part 70 source are also applicable requirements.

*** If more than one page is used, please ensure that "Santa Barbara APCD", stationary source name and "Form 1302-I1" appear on each page. **

COMPLIANCE PLAN
(Form 1302-I1)

APCD: Santa Barbara County Air Pollution Control District	➢ APCD USE ONLY ➣ APCD IDS PROCESSING ID:
COMPANY NAME: Freeport-McMoRan Oil and Gas	SOURCE NAME: Point Arguello Project Stationary Source, Platform Hidalgo

I. PROCEDURE FOR USING FORM 1302-I

☞ This form shall be submitted as part of the SBCAPCD's Regulation XIII Application. The Responsible Official shall identify the applicable federal requirement(s) to which the source is subject. In the Compliance Plan (Form 1302-I), a Responsible Official shall identify whether the source identified in the SBCAPCD's Regulation XIII Application currently operates in compliance with all applicable federal requirements.

II. APPLICABLE FEDERAL REQUIREMENTS

Applicable Federal Requirement[1]		Affected Emission Unit	In compliance?	Effective Date[4]
Regulatory Reference[2]	Regulation Title[2]		(yes/no/exempt[3])	
APCD Rule 301	Circumvention	Entire Source	Yes	2001
APCD Rule 302	Visible Emissions	Entire Source	Yes	2001
APCD Rule 303	Nuisance	Entire Source	Yes	2001
APCD Rule 305	Particulate Matter Concentration – Southern Zone	Flare and diesel-fired IC Engines	Yes	2001
APCD Rule 309	Specific Contaminants	Combustion Units	Yes	2001
APCD Rule 310	Odorous Organic Sulfides	Entire Source	Yes	2001
APCD Rule 311	Sulfur Content of Fuels	Piston IC Engines	Yes	2001
APCD Rule 317	Organic Solvents	Maintenance/Wipe Cleaning	Yes	2001
APCD Rule 321	Solvent Cleaning Operations	Degreasing unit	Yes – exempt 321 J.2.	
APCD Rule 322	Metal Surface Coating Thinner and Reducer	Maintenance Operations	Yes	2001
APCD Rule 323	Architectural Coatings	Maintenance Operations	Yes	2001
APCD Rule 324	Disposal and Evaporation of Solvents	Maintenance/Wipe Cleaning	Yes	2001
APCD Rule 325	Crude Oil Production and Separation	Equipment used in the production, gathering, storage, processing and separation of oil and gas.	Yes	2001
APCD Rule 331	Fugitive Emissions Inspection and Maintenance	Fugitive Emissions	Yes – exempt 331 B.2.c, B.3.a, B.3.b.	2001
APCD Rule 333	Control of Emissions from Reciprocating Internal	Crane I.C. Engines	Yes	2001

Applicable Federal Requirement[1]		Affected Emission Unit	In compliance?	Effective Date[4]
Regulatory Reference[2]	Regulation Title[2]		(yes/no/exempt[3])	
	Combustion Engines			
APCD Rule 359	Flares and Thermal Oxidizers	Flares	Yes – exempt 359 D.1.a	2001
APCD Rule 603	Emergency Episode Plans	Entire Source	Yes	2001
APCD Rule 801	New Source Review	Entire Source	Yes	2001
APCD Rule 802	Nonattainment Review	Entire Source	Yes	2001
APCD Rule 803	Prevention of Significant Deterioration	Entire Source	Yes	2001
APCD Rule 804	Emission Offsets	Entire Source	Yes	2001
APCD Rule 805	Air Quality Impact and Modeling	Entire Source	Yes	2001
APCD Rule 806	Emission Reduction Credits	Entire Source	Yes	2001
APCD Rule 901	New Source Performance Standards (NSPS)	Entire Source	Yes	2001
APCD Rule 903	Outer Continental Shelf (OCS) Regulations	Entire Source	Yes	2001
APCD Rule 1001	National Emission Standards for Hazardous Air Pollutants (NESHAPS)	Entire Source	Yes	2001
APCD Rule 1301	General Information	Entire Source	Yes	2001
APCD Rule 1302	Permit Application	Entire Source	Yes	2001
APCD Rule 1303	Permits	Entire Source	Yes	2001
APCD Rule 1304	Issuance, Renewal, Modification and Reopening	Entire Source	Yes	2001
APCD Rule 1305	Enforcement	Entire Source	Yes	2001
40 CFR 55	OCS Air Regulation	Entire Source	Yes	2001
40 CFR 63	Maximum Achievable Control Technology (MACT)	Entire Source	Approved Black Oil Exemption	2001
40 CFR 70	Operating Permits	Entire Source	Yes	2001

[1] Review APCD SIP Rules, NSPS, NESHAPS, and MACTs·

[2] Regulatory Reference is the abbreviated citation (e.g. 40 CFR 60 Subpart OOO, APCD Rule 325.H) and Title is the prosaic title (e.g. NSPS Standards of Performance for Nonmetallic Mineral Processing Plants, Crude Oil Production and Separation, Inspection)

[3] If exempt from applicable federal requirement, include explanation for exemption.

[4] Indicate the date during the permit term that the applicable federal requirement will become effective for the emission unit.

Other Applicable Federal Requirements[5]	Affected Emission Unit	In compliance?	Effective Date
PC.C1 Internal Combustion Engines	Diesel ICEs	Yes	2001
PC.C2 Turbines	Turbines	Yes	2001
PC.C3 Combustion Equipment – Flare	Flares	Yes	2001
PC.C4 Fugitive Hydrocarbon Emissions Components	Fugitive Emissions	Yes	2001
PC.C5 Crew and Supply Boats	Boats	Yes	2001
PC.C6 Pigging Equipment	Pigging Equipment	Yes	2001
PC.C7 Tanks/Sumps/Separators	Tanks and Separators	Yes	2001
PC.C8 Solvent Usage	Cleaning/Degreasing	Yes	2001
PC.C13 Facility Throughput Limitations	Entire Source	Yes	2001
PC.C14 Produced Gas	Entire Source	Yes	2001
PC.C24 Mass Emission Limitations	Entire Source	Yes	2001

5 All environmentally significant permit conditions -- such as emission, operation, and throughput limitations or compliance monitoring conditions associated with such limitations -- listed in all authority to construct (ATC) permits issued to the Part 70 source are also applicable requirements.

*** If more than one page is used, please ensure that "Santa Barbara APCD", stationary source name and "Form 1302-I1" appear on each page. ***

COMPLIANCE PLAN
(Form 1302-I2)

APCD: Santa Barbara County Air Pollution Control District	➢ APCD USE ONLY ≺ APCD IDS PROCESSING ID:
COMPANY NAME: Freeport-McMoRan Oil and Gas	SOURCE NAME: Point Arguello Project Stationary Source

III. COMPLIANCE CERTIFICATION

Under penalty of perjury, I certify the following:

☒ **Based on information and belief formed after reasonable inquiry, the source identified in thi application will continue to comply with the applicable federal requirement(s) with which the source i in compliance identified in form 1302-I1;**

☐ **Based on information and belief formed after reasonable inquiry, the source identified in thi application will comply with the future-effective applicable federal requirement(s) identified in forn 1302-I1, on a timely basis[1];**

☐ Based on information and belief formed after reasonable inquiry, the source identified in this application is nc in compliance with the applicable federal requirement(s), identified in form 1302-I1, and I have attached compliance plan schedule.[2]

Signature of Responsible Official

March 31, 2021
Date

1. Unless a more detailed schedule is expressly required by the applicable federal requirement.

2. At the time of expected permit issuance, if the source expects to be out of compliance with an applicable federal requireme the applicant is required to provide a compliance schedule with this application, with the following exception. A source whi is operating under a variance that is effective for less than 90 days need not submit a Compliance Schedule. For sourc operating under a variance, which is in effect for more than 90 days, the Compliance Schedule is the schedule that w approved as part of the variance granted by the hearing board.

   The compliance schedule shall contain a schedule of remedial measures, including an enforceable sequence of actions wi milestones, leading to compliance with this applicable federal requirement. For sources operating under a variance, t compliance schedule is part of the variance granted by the hearing board. The compliance schedule shall resemble, and be least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. F sources not operating under a variance, consult the Air Pollution Control Officer regarding procedures for obtaining compliance schedule.

CERTIFICATION STATEMENT
(Form 1302-M)

APCD: **Santa Barbara County Air Pollution Control District**	**➢ APCD USE ONLY ≺** **APCD IDS PROCESSING ID:**
COMPANY NAME: Freeport-McMoRan Oil and Gas	**SOURCE NAME: Point Arguello Project Stationary Source**

Identify, by checking off below, the forms and attachments that are part of your application. If the application contains forms or attachments that are not identified below, please identify these attachments in the blank space provided below. Review the instructions if you are unsure of the forms and attachments that need to be included in a complete application.

Forms included with application:

_X_ Stationary Source Summary Forms
_X_ Total Stationary Source Emission Forms
_X_ Compliance Plan Form
_X_ Compliance Plan Certification Form
___ Exempt Equipment Form

_X_ Certification Statement Form

List other forms or attachments:
1302-H Insignificant Activities/Emission Units
Form 1302-H supporting calculations

[X] Check here if additional forms are listed on the back

Attachments included with application:

_X_ Description of Operating Scenarios
_X_ Sample Emissions Calculations
_X_ Fugitive Emission Estimates
_X_ List of Applicable Requirements
___ Discussion of units out of compliance with applicable federal requirements and, if required, submit a Schedule of Compliance
___ Facility schematic showing emission points
___ NSR Permit
___ PSD Permit
___ Compliance Assurance monitoring protocols
___ Risk management verification per 112(r)

I certify under penalty of law, based on information and belief formed after reasonable inquiry, that the information contained in this application, composed of the forms and attachments identified above, are true, accurate, and complete.

I certify that I am the responsible official, as defined in SBCAPCD's Regulation XIII, Rule 1301 or USEPA's 40 CFR Part 70.

Signature of Responsible Official Todd A Cantrall **Date March 31, 2021**

Print Name of Responsible Official: Todd Cantrall

Title of Responsible Official and Company Name: Vice President, Operations, Freeport-McMoRan Oil and Gas

CERTIFICATION STATEMENT
(Form 1302-M Continued)

APCD: **Santa Barbara County Air Pollution Control District**	**➢ APCD USE ONLY ≺** **APCD IDS PROCESSING ID:**
COMPANY NAME: Freeport-McMoRan Oil and Gas	**SOURCE NAME: Point Arguello Project Stationary Source**

List Other Forms or Attachments (cont.)

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