

DOCKETED	
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Project Title:	Blythe Energy Project Compliance & Blythe Transmission Line Modification
TN #:	258565
Document Title:	Blythe Energy Project - ACR, Part 1
Description:	Blythe Solar Project- 2023-2024 Annual Compliance Report, Part 1
Filer:	Ashley Gutierrez
Organization:	California Energy Commission
Submitter Role:	Commission Staff
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Annual Compliance Report Year 2023/2024
BE-GEN-07112010

David Gutierrez IV | Senior Manager, Operations & Maintenance
AltaGas | Blythe Energy Inc.
760.921.1359 desk | 760.899.0565 mobile
385 North Buck Blvd
Blythe, California 92225
760.921.1359
Email: david.gutierrez@altagas.ca

Ashley Gutierrez | Compliance Project Manager
California Energy Commission
Siting, Transmission, and Environmental Protection Division (STEP)
Safety and Reliability Branch
Compliance Monitoring and Enforcement Unit
715 P Street, MS-2000, Sacramento, CA 95814
Work/Cell: (916) 839-0400
Email: ashley.gutierrez@energy.ca.gov

Ashley Gutierrez,

Pursuant to the Commission Decision for the Blythe Energy Inc., enclosed please find the Annual Compliance Report for the reporting period July 1, 2023, through June 30, 2024.

REQUIRED DOCUMENTATION FOR ANNUAL COMPLIANCE REPORT

The items listed below correspond to required contents to be discussed in the annual compliance report and any required documentation is attached to this submittal.

Requirement #1: An updated compliance matrix which shows the status of all conditions of certification (fully satisfied and/or closed conditions do not need to be included in the matrix after they have been reported as closed);

Response: An updated compliance matrix containing the current status of all Conditions of Certification is attached.

Requirement #2: Summary of the current project operating status and an explanation of any significant changes to facility operations during the year;

Response: The Facility has had no significant changes with respect to Facility operations during the reporting period. The Facility total service hours were 5,189.67 from July 1, 2023, through June 30, 2024, with an availability factor of 83.75%. A summary of operating status for the prior year is shown in the table below.

MONTHLY PRODUCTION (MWh)

<u>Plant</u>	<u>Year</u>	<u>Month</u>	<u>Gross Production (MWh)</u>	<u>Net Production (MWh)</u>
Blythe	2022	Jul	188,101.00	178,922.00
Blythe	2022	Aug	235,081.00	224,113.00
Blythe	2022	Sep	131,792.00	125,476.00
Blythe	2022	Oct	186,546.00	178,946.00
Blythe	2022	Nov	157,087.00	151,291.00
Blythe	2022	Dec	142,372.00	137,154.00
Blythe	2023	Jan	72,410.00	70,158.00
Blythe	2023	Feb	0	0
Blythe	2023	Mar	14,777.00	14,194.00
Blythe	2023	Apr	94,677.00	90,923.00
Blythe	2023	May	36,209.00	34,674.00
Blythe	2023	Jun	41,215.00	39,523.00

MODIFICATIONS AND TESTING

The Facility completed CT12 Hot Gas Path and CT11 Combustion Inspection and ST10 Medium outages during January 22nd through March 14, 2024.

Outage projects consisted of the following

- CT 11 Minor Combustion Inspection
- CT 12 HGP Hot Gas Path
- ST Medium w/ replacement of TE and GE LP L-0 turbine blades
- BOP misc. projects, valves, pumps, motors, etc.
- CO catalyst and AIG cleaning
- SCR catalyst replacement
- Chiller system was thoroughly inspected and overhauled
- 10/11/12 Replace Obsolete Protection Relays - Multi-year project
- Information Technology Upgrades
- Water Treatment Brine Concentrator routine annual maintenance

The facility conducted RATA / Compliance stack testing for on November 7 and 9, 2023. Results indicate all conditions were met; reports were submitted on December 26, 2023.

ENVIRONMENTAL HEALTH AND SAFETY

Facility staff worked 44,842 hours.

Blythe Energy is an approved Cal OSHA VPP facility. The site identifies opportunities for continuous improvement through the VPP program, examining safety policies, programs, procedures, and best practices.

Requirement #3: Documents required by specific conditions to be submitted along with the Annual Compliance Report. Each of these items must be identified in the transmittal letter, and should be submitted as attachments to the Annual Compliance Report;

Response: Required documents are submitted as attachments and are identified in the transmittal letter above.

Requirement #4: A cumulative listing of all post-certification changes approved by the Energy Commission or cleared by the CPM;

Response: None this reporting period.

Requirement #5: An explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;

Response: The 2023Q4 Quarterly Emissions Monitoring Report was submitted late. An attempt was made to submit the report prior to the 1/30/24 deadline; however, unbeknownst to Blythe, it was not transmitted due to an unexpected email related issue. MDAQMD notified Blythe that the report was not received in correspondence dated 2/26/24 and Blythe promptly submitted the report on 3/1/24.

Requirement #6: A listing of filings made to, or permits issued by, other governmental agencies during the year;

Response: The Mojave Desert Air Quality Management District (MDAQMD) issued an updated Title V Operating Permit (#130202262) on November 1st, 2023 and is attached to this submittal.

Requirement #7: A projection of project compliance activities scheduled during the next year;

Response: A projection of compliance activities anticipate to be to be conducted during the next year (i.e. July 2024 – June 2025) include the following summarized in the table below.

	Activities	Resources/Comments	Update
1	First Aid/AED Training	Training conducted in September 2023	Annual/ Next September 2024
2	Ammonia Safety training	Training for the operations and Maintenance team	3-year compliance training completed Aug 2021; Next Training is scheduled for Aug 2024
3	PSM/RMP Aqueous Ammonia 3-year compliance audits	Last 3-year audit is performed on 06/2024	Next 3-year audit is scheduled with ECE consulting on 06/2027

4	PSM/RMP Aqueous Ammonia 3-year compliance audits	Last 3-year audit is performed on 06/2024	Next 3-year audit is scheduled with ECE consulting on 06/2027
5	RATA and Compliance Testing	Montrose: November 2023	Annual event
6	Biological Monitoring Program	Submitted to: California Energy Commission.	Annual event
7	Semi-Annual Water Monitoring Report	Submitted to California Regional Water Quality Board	Semi-Annual and Annual

Requirement #8: a listing of the year s additions to the on-site compliance file, and

Response: No new additions

Requirement #9: An evaluation of the on-site contingency plan for unexpected facility closure, including any suggestions necessary for bringing the plan up to date [see General Conditions for Facility Closure addressed later in this section].

Response: The on-site contingency plan has been reviewed and administrative updates are being made to bring the plan up to date.

Requirement #10: a listing of complaints, notices of violation, official warnings, and citations received during the year; a description of the resolution of any complaints which have been resolved, and the status of any unresolved complaints.

Response: During the reporting period Blythe Energy Inc. received one Notice of Violation (NOV) for the late submittal of the 2023Q4 Emissions Monitoring Report as discussed above and found in the attached document.

Blythe Energy Inc.



Mike Ludwin Mike.Ludwin@altagas.ca
Sr. Director Operations - Power, Blythe Energy Inc

Blythe Energy Inc. (CERSID: 10321807)**Facility Information** **Submitted Feb 18, 2024**Submitted on 2/18/2024 11:22:36 AM by *Jake Tilley* of Blythe Energy Inc. (Blythe, CA.)

- Business Activities
- Business Owner/Operator Identification

Hazardous Materials Inventory **Submitted Feb 18, 2024**Submitted on 2/18/2024 11:22:36 AM by *Jake Tilley* of Blythe Energy Inc. (Blythe, CA.)

- Hazardous Material Inventory (38)
- Site Map (Official Use Only)
 - *Facility Location Map* (Adobe PDF, 251KB)
 - *Annotated Site Map (Official Use Only)* (Adobe PDF, 1300KB)

Emergency Response and Training Plans **Submitted Feb 18, 2024**Submitted on 2/18/2024 11:22:36 AM by *Jake Tilley* of Blythe Energy Inc. (Blythe, CA.)

- Emergency Response/Contingency Plan
 - *Emergency Response/Contingency Plan* (Adobe PDF, 822KB)
- Employee Training Plan
 - Provided In Submittal Element: Emergency Response and Training Plans

Aboveground Petroleum Storage Act **Submitted Feb 18, 2024**Submitted on 2/18/2024 11:22:36 AM by *Jake Tilley* of Blythe Energy Inc. (Blythe, CA.)

- Aboveground Petroleum Storage Act Documentation
 - *Petroleum Storage Tank Locations (detail map)* (Adobe PDF, 459KB)
 - *Aboveground Petroleum Storage Act Documentation* (Adobe PDF, 199KB)
- APSA Facility Information

Site Identification

Blythe Energy Inc.

385 N Buck Blvd
Blythe, CA 92225

County
Riverside

CERS ID
10321807

EPA ID Number
CAL000364934

Submittal Status

Submitted on 2/18/2024 by *Jake Tilley* of Blythe Energy Inc. (Blythe, CA.)

Hazardous Materials

Does your facility have on site (for any purpose) at any one time, hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or is regulated under more restrictive inventory local reporting requirements (shown below if present); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?

Yes

Underground Storage Tank(s) (UST)

Does your facility own or operate underground storage tanks?

No

Hazardous Waste

Is your facility a Hazardous Waste Generator?

Yes

Does your facility treat hazardous waste on-site?

No

Is your facility's treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?

No

Does your facility consolidate hazardous waste generated at a remote site?

No

Does your facility need to report the closure/removal of a tank that was classified as hazardous waste and cleaned on-site?

No

Does your facility generate in any single calendar month 1,000 kilograms (kg) (2,200 pounds) or more of federal RCRA hazardous waste, or generate in any single calendar month greater than 1 kg (2.2 pounds) of RCRA acute hazardous waste; or generate more than 100 kg (220 pounds) of spill cleanup materials contaminated with RCRA acute hazardous waste.

No

Is your facility a Household Hazardous Waste (HHW) Collection site?

No

Excluded and/or Exempted Materials

Does your facility recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?

No

Aboveground Petroleum Storage

Does your facility own or operate aboveground petroleum storage tanks or containers AND:

* have a total aboveground petroleum storage capacity of 1,320 gallons or more, OR

* have one or more petroleum tanks in an underground area?

Yes

Regulated Substances

Does your facility have Regulated Substances stored onsite in quantities greater than the threshold quantities established by the California Accidental Release prevention Program (CalARP)?

Yes

Additional Information

No additional comments provided.

Facility/Site

Blythe Energy Inc.

385 N Buck Blvd
Blythe, CA 92225

CERS ID
10321807

Submission Status

Submitted on 2/18/2024 by *Jake Tilley* of Blythe Energy Inc. (Blythe, CA.)

Identification

Blythe Energy Inc.

Operator Phone
(760) 921-1359

Business Phone
(760) 922-9950

Business Fax
(760) 922-6475

Beginning Date

2/29/2024

Dun & Bradstreet

058599884

Ending Date

3/1/2025

SIC Code

4911

Primary NAICS

221112

Facility/Site Mailing Address

385 N. Buck Blvd.
Blythe, CA 92225

Primary Emergency Contact

Mike Ludwin

Title

Senior Director Operations - Power

Business Phone

(760) 921-1360

24-Hour Phone

(760) 600-2103

Pager Number

Owner

AltaGas Ltd

(760) 922-9950

385 N. Buck Blvd.
Blythe, CA 92225

Secondary Emergency Contact

David Gutierrez

Title

Senior Manager, Operations & Maintenance

Business Phone

(760) 921-1359

24-Hour Phone

(760) 899-0565

Pager Number

Billing Contact

Kris Kramer

(760) 989-9327

385 N. Buck Blvd.
Blythe, CA 92225

kris.kramer@altagas.ca

Environmental Contact

David Gutierrez

(760) 921-1359

385 N. Buck Blvd.
Blythe, CA 92225

david.gutierrez@altagas.ca

Name of Signer

David Gutierrez

Additional Information

Signer Title

Senior Manager, Operations & Maintenance

Document Preparer

Jake Tilley

Locally-collected Fields

Some or all of the following fields may be required by your local regulator(s).

Property Owner

AltaGas Ltd

Phone

(760) 922-9950

Mailing Address

385 N. Buck Blvd.
Blythe, CA 92225

Assessor Parcel Number (APN)

824-101-021

Number of Employees

22

Facility ID

FA0023213

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Blythe Energy Inc.			Chemical Location				CERS ID	10321807		
Facility Name Blythe Energy Inc.			BOP Chemical Treatment Area				Facility ID	FA0023213		
385 N Buck Blvd, Blythe 92225							Status	Submitted on 2/18/2024 11:22 AM		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	Sodium Hypochlorite Solution	Gallons	6000	6000	4000		- Physical	SODIUM HYPOCHLORITE	12%	7681-52-9
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosive To	SOLUTION		
	7681-52-9	Liquid	Aboveground Tank, Plastic/Non-metalic Drum, Tote Bin		Ambient		Metal	Water	85%	7732-18-5
		<u>Type</u>	Days on Site: 365		<u>Temperature</u>		- Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation			
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Water Reactive, Class 2, Toxic, Oxidizing, Class 1	Sulfuric Acid	Pounds	91800	91800	61200		- Physical	Water	7%	7332-18-5
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosive To			
	7664-93-9	Liquid	Aboveground Tank		Ambient		Metal			
		<u>Type</u>	Days on Site: 365		<u>Temperature</u>		- Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Chiller Area	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	Stabrex ST70	Gallons	400	400	300		- Physical	Sodium Hypochlorite	6%		7681-52-9
		State	Storage Container		Pressue		Corrosive To				
	CAS No	Liquid	Tote Bin		Ambient	Waste Code	Metal	Sodium Bromide	9%		7647-15-6
	See Below	Type			Temperature		- Health Acute	Sodium Hydroxide	5%		1310-73-2
		Mixture	Days on Site: 365		Ambient		Toxicity				
							- Health Skin				
							Corrosion				
							Irritation				
							- Health				
							Respiratory Skin				
							Sensitization				
							- Health Serious				
							Eye Damage Eye				
							Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Chiller Area, BOP Chemical Treatment Area	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	3DT Trasar 3DT487	Gallons	800	400	600		- Physical	Phosphoric Acid	10%		7664-38-2
Corrosive	CAS No see below	State	Storage Container			Pressue	Corrosive To				
		Liquid	Aboveground Tank, Plastic/Non-			Ambient	Metal				
		Type	metallic Drum, Tote Bin			Temperature	- Health Skin				
		Mixture	Days on Site: 365			Ambient	Corrosion				
							Irritation				
							- Health				
							Respiratory Skin				
							Sensitization				
							- Health Serious				
							Eye Damage Eye				
							Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Chiller Building	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 2.1 - Flammable Gases	Ammonia (Refrigerant R-717)	Pounds	55000	20000	55000		- Physical Gas	Anhydrous Ammonia	100%	✓ 7664-41-7
Corrosive, Flammable Gas, Explosive	CAS No 7664-41-7 ✓ EHS	State Gas	Storage Container Tank Inside Building		Pressue > Ambient	Waste Code 141	Under Pressure			
		Type Pure	Days on Site: 365		Temperature Ambient		- Physical Corrosive To Metal			
							- Health Acute Toxicity			
							- Health Skin Corrosion			
							Irritation			
							- Health Respiratory Skin Sensitization			
							- Health Serious Eye Damage Eye Irritation			
							- Health Aspiration Hazard			
							- Health Simple Asphyxiant			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Chiller Emerg Generator (bulk tank)	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 2.1 - Flammable Gases	PROPANE	Cu. Feet	10000	10000	10000		- Physical			
		State	Storage Container		Pressue	Waste Code	Flammable			
Flammable Gas	CAS No	Gas	Aboveground Tank		> Ambient		- Physical Gas			
	74-98-6	Type			Temperature		Under Pressure			
		Pure	Days on Site: 365		Ambient		- Physical			
							Explosive			
							- Health Skin			
							Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Simple			
							Asphyxiant			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Fab Shop	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
	N.O.S. (Argon/CO2)	Cu. Feet	304	304	260		- Physical Gas	Argon	75%		7440-37-1
	CAS No	State	Storage Container		Pressue	Waste Code	Under Pressure	Carbon Dioxide	25%		124-38-9
		Gas	Cylinder		> Ambient		- Health Serious				
		Type			Temperature		Eye Damage Eye				
		Mixture	Days on Site: 365		Ambient		Irritation				
							- Health Simple				
							Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.					Chemical Location	10321807							
Facility Name	Blythe Energy Inc.					Fab Shop, Gas Cylinder Area					Facility ID	FA0023213		
	385 N Buck Blvd, Blythe 92225											Status	Submitted on 2/18/2024 11:22 AM	
						Annual Waste	Federal Hazard	Hazardous Components						
						Amount	Categories	(For mixture only)						
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities					Component Name	% Wt	EHS	CAS No.			
			Max. Daily	Largest Cont.	Avg. Daily									
DOT: 2.2 - Nonflammable Gases	Nitrogen/Oxygen	Cu. Feet	1584	144	1296		- Physical Gas	Oxygen	22%		7782-44-7			
Cryogen	CAS No	State	Storage Container		Pressue	Waste Code	Under Pressure	Nitrogen	78%		7727-37-9			
	See Below	Gas	Cylinder		> Ambient		- Health Skin							
		Type			Temperature		Corrosion							
		Mixture	Days on Site: 365		Ambient		Irritation							
							- Health							
							Respiratory Skin							
							Sensitization							
							- Health Serious							
							Eye Damage Eye							
							Irritation							
DOT: 2.2 - Nonflammable Gases	ARGON	Cu. Feet	1344	336	1100		- Physical Gas							
	CAS No	State	Storage Container		Pressue	Waste Code	Under Pressure							
	7440-37-1	Gas	Cylinder		> Ambient		- Health Skin							
		Type			Temperature		Corrosion							
		Pure	Days on Site: 365		Ambient		Irritation							
							- Health							
							Respiratory Skin							
							Sensitization							
							- Health Simple							
							Asphyxiant							
DOT: 2.2 - Nonflammable Gases	OXYGEN	Cu. Feet	2359	337	2000		- Physical Gas							
Highly Toxic, Corrosive, Oxidizing,	CAS No	State	Storage Container		Pressue	Waste Code	Under Pressure							
Class 1	7782-44-7	Gas	Cylinder		> Ambient		- Physical Oxidizer							
		Type			Temperature									
		Pure	Days on Site: 365		Ambient		- Health Skin							
							Corrosion							
							Irritation							
							- Health							
							Respiratory Skin							
							Sensitization							
DOT: 2.1 - Flammable Gases	Acetylene	Cu. Feet	625	125	500		- Physical							
Unstable (Reactive), Class 2,	CAS No	State	Storage Container		Pressue	Waste Code	Flammable							
Flammable Gas	74-86-2	Gas	Cylinder		> Ambient		- Physical Gas							
		Type			Temperature		Under Pressure							
		Pure	Days on Site: 365		Ambient		- Health							
							Respiratory Skin							
							Sensitization							
							- Health Serious							
							Eye Damage Eye							
							Irritation							

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Fire Pump House	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	DIESEL FUEL	Gallons	620	500	400		- Physical	Fuels, diesel	99%		68334-30-5
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>		Flammable				
	68334-30-5	Liquid	Aboveground Tank, Can, Other			Ambient	- Health	Fatty acids, vegetable oil, methyl esters	1%		68990-52-3
Combustible Liquid, Class II		<u>Type</u>			<u>Temperature</u>		Carcinogenicity				
		Mixture	Days on Site: 365			Ambient	- Health Acute				
							Toxicity				
							- Health Skin				
							Corrosion				
							Irritation				
							- Health Serious				
							Eye Damage Eye				
							Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.				Chemical Location		CERS ID	10321807		
Facility Name	Blythe Energy Inc.				Gas Cylinder Area		Facility ID	FA0023213		
	385 N Buck Blvd, Blythe 92225						Status	Submitted on 2/18/2024 11:22 AM		
						Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 2.2 - Nonflammable Gases	NITROGEN	Cu. Feet	12160	304	8500		- Physical Gas			
	CAS No	State	Storage Container		Pressue	Waste Code	Under Pressure			
	7727-37-9	Gas	Cylinder		> Ambient		- Health Skin			
		Type			Temperature		Corrosion			
		Pure	Days on Site: 365		Ambient		Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Simple			
							Asphyxiant			
DOT: 2.1 - Flammable Gases	Nitrogen/Carbon Monoxide	Cu. Feet	2880	144	2304		- Health Skin	Carbon Monoxide		630-08-0
	CAS No	State	Storage Container		Pressue	Waste Code	Corrosion	Nitrogen		7727-37-9
Flammable Gas	See Below	Gas	Cylinder		> Ambient		Irritation			
		Type			Temperature		- Health Serious			
		Mixture	Days on Site: 365		Ambient		Eye Damage Eye			
							Irritation			
							- Health Simple			
							Asphyxiant			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Gas Cylinder Area	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 2.3 - Toxic Gases	Nitric Oxide/Nitrogen	Cu. Feet	1728	144	1152		- Physical Gas	Nitrogen	55%	7727-37-9
Oxidizing Gas, Gaseous	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Under Pressure	Nitric Oxide	45%	✓ 10102-43-9
	See Below	Gas	Cylinder		> Ambient		- Physical Oxidizer			
		<u>Type</u>			<u>Temperature</u>					
		Mixture	Days on Site: 365		Ambient		- Health Acute			
							Toxicity			
							- Health Skin			
							Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Simple			
							Asphyxiant			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Blythe Energy Inc.			Chemical Location				CERS ID	10321807		
Facility Name Blythe Energy Inc.			Hazardous Waste Storage Area				Facility ID	FA0023213		
385 N Buck Blvd, Blythe 92225							Status	Submitted on 2/18/2024 11:22 AM		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 3 - Flammable and Combustible Liquids	Waste Oil (refrigeration)	Gallons	165	55	110		- Physical	Waste Petroleum Hydrocarbons		Mixture
	CAS No	State	Storage Container		Pressue	Waste Code	Flammable			
Combustible Liquid, Class II	N/A	Liquid	Steel Drum		Ambient	223	- Health			
		Type			Temperature		Carcinogenicity			
		Waste	Days on Site: 365		Ambient		- Health Skin			
							Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
DOT: 4.1 - Flammable Solids	Waste Oil Filters / Oily Debris	Pounds	220	55	200		- Physical			
	CAS No	State	Storage Container		Pressue	Waste Code	Flammable			
Flammable Solid	N/A	Solid	Steel Drum		Ambient		- Health Skin			
		Type			Temperature		Corrosion			
		Waste	Days on Site: 90		Ambient		Irritation			
DOT: 2.1 - Flammable Gases	Waste Aerosols	Gallons	55	55	30		- Physical			
	CAS No	State	Storage Container		Pressue	Waste Code	Flammable			
Flammable Gas, Toxic	NA	Gas	Steel Drum, Other		Ambient		- Physical Gas			
		Type			Temperature		Under Pressure			
		Waste	Days on Site: 365		Ambient		- Health Skin			
							Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Simple			
							Asphyxiant			
DOT: 3 - Flammable and Combustible Liquids	Waste Oil	Gallons	465	300	150		- Physical			
	CAS No	State	Storage Container		Pressue	Waste Code	Flammable			
Flammable Liquid, Class I-B	N/A	Liquid	Aboveground Tank		Ambient		- Health			
		Type			Temperature		Carcinogenicity			
		Waste	Days on Site: 365		Ambient		- Health Skin			
							Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Blythe Energy Inc.		Chemical Location				CERS ID 10321807				
Facility Name Blythe Energy Inc.		New Product Storage Area				Facility ID FA0023213				
385 N Buck Blvd, Blythe 92225						Status Submitted on 2/18/2024 11:22 AM				
						Hazardous Components (For mixture only)				
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Component Name	% Wt	EHS CAS No.
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	Caustic Soda	Gallons	250	250	200		- Physical	Water	90%	7732-18-5
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosive To			
	See Below	Liquid	Plastic/Non-metalic Drum		Ambient		Metal	Sodium Hydroxide	10%	1310-73-2
		<u>Type</u>	Days on Site: 365		<u>Temperature</u>		- Health Skin			
		Mixture			Ambient		Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
DOT: 8 - Corrosives (Liquids and Solids) Corrosive	T-Chlor 12.5%	Gallons	165	55	110		- Physical	Sodium Hypochlorite	13%	7681-52-9
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosive To			
	See Below	Liquid	Plastic/Non-metalic Drum		Ambient		Metal	Water	88%	7732-18-5
		<u>Type</u>	Days on Site: 365		<u>Temperature</u>		- Health Skin			
		Mixture			Ambient		Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
	LAB Enzyme Producing Bacteria	Gallons	330	55	300		- Health Skin	Benzenesulfonic acid, C10-16-alkyl	5%	68081-81-2
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosion	Derivatives, sodium salts		
		Liquid	Plastic/Non-metalic Drum		Ambient		Irritation	Alcohols, C6-12, Ethoxylated	2%	689374-66-6
		<u>Type</u>	Days on Site: 365		<u>Temperature</u>		- Health Serious	Propoxylated		
		Mixture			Ambient		Eye Damage Eye	Cinnamic Aldehyde	0%	104-55-2
							Irritation	Ethylene Glycol Monobutyl Ether	0%	111-76-2
								Tetrasodium EDTA	0%	64-02-8
DOT: 3 - Flammable and Combustible Liquids Combustible Liquid, Class III-B	Lubrication Oil	Gallons	1600	60	800		- Physical	Synthetic Hydrocarbon Based Oil		varies
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable			
	N/A	Liquid	Aboveground Tank		Ambient		- Health Serious			
		<u>Type</u>	Days on Site: 365		<u>Temperature</u>		Eye Damage Eye			
		Mixture			Ambient		Irritation			
DOT: 3 - Flammable and Combustible Liquids	FES #1 Refrigeration Oil	Gallons	330	55	165		- Physical	FES #1 Refrigeration oil		N/A
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable			
	mixture	Liquid	Steel Drum		Ambient		- Health Skin			
		<u>Type</u>	Days on Site: 365		<u>Temperature</u>		Corrosion			
		Mixture			Ambient		Irritation			
							- Health Serious			
							Eye Damage Eye			
							Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.				Chemical Location		CERS ID	10321807		
Facility Name	Blythe Energy Inc.				New Product Storage Area		Facility ID	FA0023213		
	385 N Buck Blvd, Blythe 92225						Status	Submitted on 2/18/2024 11:22 AM		
				Quantities		Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	Permaclean PC-87 (Nalco)	Gallons	55	5	55		- Health Skin	Phosphoric Acid	10%	7664-38-2
	CAS No	State	Storage Container		Pressue	Waste Code	Corrosion			
		Liquid	Can		Ambient		Irritation			
		Type			Temperature		- Health Serious			
		Mixture	Days on Site: 365		Ambient		Eye Damage Eye Irritation			
	Permaclean PC-98 (Nalco)	Gallons	55	5	55		- Health Skin			
	CAS No	State	Storage Container		Pressue	Waste Code	Corrosion			
		Liquid	Can		Ambient		Irritation			
		Type			Temperature		- Health Serious			
		Mixture	Days on Site: 365		Ambient		Eye Damage Eye Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Outside of Water Treatment Equipment Area	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	Aqueous Ammonia	Pounds	104400	116000	90000		- Physical	AMMONIUM HYDROXIDE	30%	✓	1336-21-6
Corrosive	CAS No	State	Storage Container		Pressue		Corrosive To				
	1336-21-6	Liquid	Aboveground Tank		> Ambient	Waste Code	Metal				
		Type			Temperature		- Health Acute				
		Mixture	Days on Site: 365		Ambient		Toxicity				
							- Health Skin				
							Corrosion				
							Irritation				
							- Health				
							Respiratory Skin				
							Sensitization				
							- Health Serious				
							Eye Damage Eye				
							Irritation				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Step Up Transformer Pads	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
DOT: 9 - Misc. Hazardous Materials	Nytro 10 GB XT (Insulating Oil)	Gallons	70320	16800	70320		- Physical	Hydrotreated Light Napthenic	99%		64742-53-6
	CAS No	State	Storage Container		Pressue		Flammable	Distillate			
	NA	Liquid	Aboveground Tank		Ambient	Waste Code	- Health	2,6-ditertiary Butyl-4-Methyl	1%		128-37-0
		Type			Temperature		Aspiration Hazard	Phenol			
		Mixture	Days on Site: 365		Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Blythe Energy Inc.			Chemical Location				CERS ID	10321807		
Facility Name Blythe Energy Inc.			Turbine Building A				Facility ID	FA0023213		
385 N Buck Blvd, Blythe 92225							Status	Submitted on 2/18/2024 11:22 AM		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 3 - Flammable and Combustible Liquids	Lubrication Oil	Gallons	14176	6650	10000		- Physical	Synthetic Hydrocarbon Based Oil		Varies
	CAS No	State	Storage Container		Pressue	Waste Code	Flammable			
	N/A	Liquid	Aboveground Tank, Tank Inside Building		Ambient		- Health Serious			
Combustible Liquid, Class III-B		Type	Days on Site: 365		Temperature		Eye Damage Eye Irritation			
		Mixture			Ambient					
DOT: 3 - Flammable and Combustible Liquids	Hydraulic Oil	Gallons	326	166	275		- Physical	Highly Refined Mineral Oils (C15-C50)	99%	Mixture
	CAS No	State	Storage Container		Pressue	Waste Code	Flammable			
	55957-10-3	Liquid	Tank Inside Building		Ambient		- Health Skin			
Combustible Liquid, Class III-B		Type	Days on Site: 365		Temperature		Corrosion			
		Mixture			Ambient		Irritation			
							- Health Respiratory Skin Sensitization			
DOT: 8 - Corrosives (Liquids and Solids)	Aqueous Ammonia (19%)	Pounds	3465	3465	2500		- Health Acute	AMMONIUM HYDROXIDE	19%	✓ 1336-21-6
	CAS No	State	Storage Container		Pressue	Waste Code	Toxicity			
	1336-21-6	Liquid	Tote Bin		Ambient		- Health Skin			
Corrosive, Toxic		Type	Days on Site: 365		Temperature		Corrosion			
		Mixture			Ambient		Irritation			
							- Health Serious			
							Eye Damage Eye Irritation			
DOT: 6.1 - Toxic Substances	Nalco 5711	Gallons	300	400	250		- Health Acute	Ammonia	20%	✓ 7664-41-7
	CAS No	State	Storage Container		Pressue	Waste Code	Toxicity	Monoethanolamine	15%	141-43-5
	mixture	Liquid	Tote Bin		Ambient		- Health Skin			
		Type	Days on Site: 365		Temperature		Corrosion			
		Mixture			Ambient		Irritation			
							- Health Respiratory Skin Sensitization			
							- Health Serious			
							Eye Damage Eye Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Blythe Energy Inc.			Chemical Location				CERS ID	10321807		
Facility Name Blythe Energy Inc.			Water Treatment Area				Facility ID	FA0023213		
385 N Buck Blvd, Blythe 92225							Status	Submitted on 2/18/2024 11:22 AM		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 3 - Flammable and Combustible Liquids	Permatreat PC191T (Anti-Scalant)	Gallons	120	120	120		- Health Skin	Mixture		N/A
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosion			
	NA	Liquid	Steel Drum, Tote Bin		Ambient		Irritation			
		<u>Type</u>	Mixture Days on Site: 365		<u>Temperature</u>		- Health Respiratory Skin Sensitization			
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Water Reactive, Class 2	Sulfuric Acid	Pounds	26000	30600	20700		- Physical Corrosive To			
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Metal			
	7664-93-9 ✓ EHS	Liquid	Aboveground Tank		Ambient		- Health Carcinogenicity			
		<u>Type</u>	Pure Days on Site: 365		<u>Temperature</u>		- Health Acute Toxicity			
DOT: 8 - Corrosives (Liquids and Solids) Corrosive, Toxic, Water Reactive, Class 1	Sodium Hydroxide	Gallons	120	120	70		- Physical Flammable	SODIUM HYDROXIDE (CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.)	25%	1310-73-2
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	- Health Skin			
	1310-73-2	Liquid	Aboveground Tank, Plastic/Non-metalic Drum		Ambient		Corrosion			
		<u>Type</u>	Mixture Days on Site: 365		<u>Temperature</u>		Irritation			
					Ambient		- Health Respiratory Skin Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Water Treatment Area	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

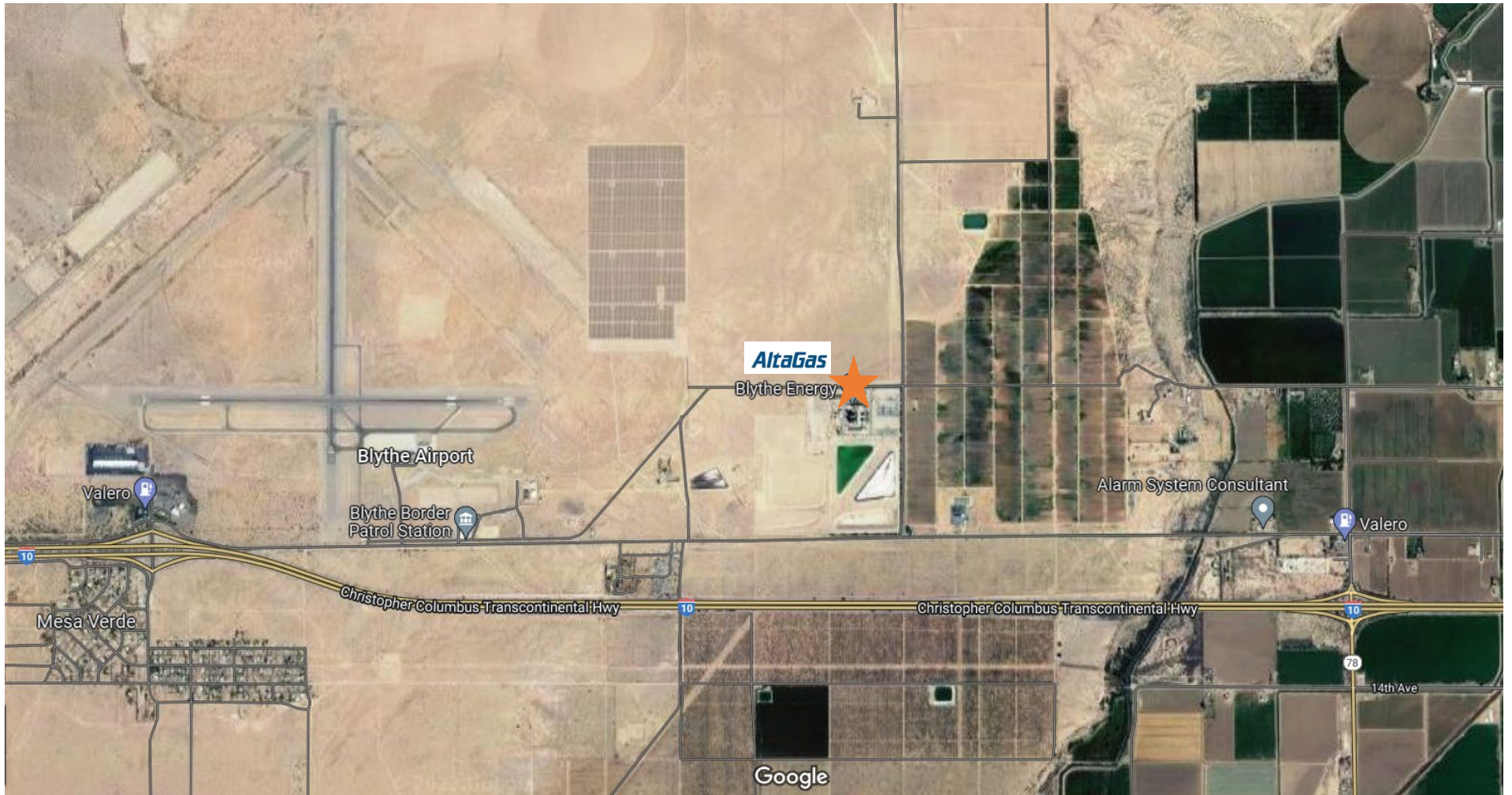
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 6.1 - Toxic Substances	Permaclean PC-11	Gallons	110	110	60		- Physical	Polyethylene Glycol	60%	25322-68-3
Toxic, Corrosive	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosive To	2,2-Dibromo-3-nitrilopropionamide	30%	10222-01-2
	See Below	Liquid	Aboveground Tank		Ambient		Metal	Sodium Bromide	5%	7647-15-6
		<u>Type</u>			<u>Temperature</u>		Toxicity	Dibromoacetonitrile	1%	3252-43-5
		Mixture	Days on Site: 365		Ambient		- Health Acute			
							- Health Skin			
							Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
DOT: 8 - Corrosives (Liquids and Solids)	SODIUM HYPOCHLORITE (12.5%)	Gallons	120	120	60		- Physical	SODIUM HYPOCHLORITE	13%	7681-52-9
Corrosive	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosive To	SOLUTION		
	7681-52-9	Liquid	Plastic/Non-metalic Drum		Ambient		Metal			
		<u>Type</u>			<u>Temperature</u>		- Health Skin			
		Mixture	Days on Site: 365		Ambient		Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Blythe Energy Inc.	Chemical Location	CERS ID	10321807
Facility Name	Blythe Energy Inc.	Water Treatment Equipment Area	Facility ID	FA0023213
	385 N Buck Blvd, Blythe 92225		Status	Submitted on 2/18/2024 11:22 AM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 9 - Misc. Hazardous Materials	Snow White Calcium Sulfate	Pounds	10020	60	7200		- Health Skin			
		State	Storage Container		Pressue		Corrosion			
	CAS No	Solid	Bag		Ambient	Waste Code	Irritation			
	7778-18-9	Type			Temperature		- Health Serious			
		Pure	Days on Site: 180		Ambient		Eye Damage Eye Irritation			

Blythe Energy Inc. – Facility Location Map



NOTES
1. FOR INDOOR STORAGE OF HAZARDOUS MATERIAL AND MITIGATION EQUIPMENT LOCATIONS, ALSO SEE DRAWINGS HMMP-2,3,4,5,6 & 7.T

HAZARDOUS MATERIAL IDENTIFICATION AND INVENTORY				
REF NO.	DESCRIPTION	MAXIMUM QUANTITY-TYPE OF STORAGE	CHEMICAL COMMON NAME	HAZARD CLASS
1	Permaclean PC-11	100 GAL TANK		CR
2	NOT USED	NOT USED	NOT USED	NOT USED
3	SODIUM HYDROXIDE, 25% CONCENTRATION	100 GAL TANK	SODIUM HYDROXIDE	CR
4	PERMATREAT-191	100 GAL TANK	ANTI-SCALANT	IR
5	NOT USED	NOT USED	NOT USED	NOT USED
6	CALCIUM SULFATE, 100% CONCENTRATION	10,000 LBS. BAGS	GYPSUM	IR;OHH
7	SULFURIC ACID, 93-97% CONCENTRATION	2,000 GAL. TANK	SULFURIC ACID	CR;TX;WR2; OHH
8	SODIUM HYPRCHLORITE, 12% CONCENTRATION	100 GAL. TANK	BLEACH	IR;CR;OX2
9	LUBE OIL	100 GAL. T RESERVOIR	MINERAL OIL	C3B;IR
10	AMMONIUM HYDROXIDE, 29.5% CONCENTRATION	16,000 GAL. TANK	AQUEOUS AMMONIA	CR;TX
11	SULFURIC ACID, 93-97% CONCENTRATION	6,000 GAL. TANK	SULFURIC ACID	CR;TX;WR2; OHH
12	SODIUM HYPRCHLORITE, 12% CONCENTRATION	6,000 GAL. TANK	BLEACH	IR;CR;OX2
13	3D TRASAR 3DT 487	300 GAL TOTE	CORROSION INHIBITOR	CR;SN;OHH
14	NOT USED	NOT USED	NOT USED	NOT USED
15	BULK PROPANE	10,000 cubic ft	PROPANE	FLAMM; CL3B
16	NALCO STABREX ST 70	300 GAL TOTE	ANTI-SCALANT	IR;CR;TX
17	3D TRASAR 3DT 487	300 GAL TOTE	Corrosion Inhibitor	CR;SN;OHH
18	INSULATING OIL	15,900 GAL. RESERVOIR	MINERAL OIL	C3B;IR
19	INSULATING OIL	1,560 GAL. RESERVOIR	MINERAL OIL	C3B;IR
20	NOT USED	NOT USED	NOT USED	NOT USED
21	CALCITE	TWO TANKS 76,000 POUNDS EACH	CALCIUM CARBONATE	IR
22	ANHYDROUS AMMONIA	55,000 POUNDS	AMMONIA LIQUID GAS	IR;CR;TX

HAZARD CLASS LEGEND FOR TABLE:
IR - IRRITANT
CR - CORROSIVE
TX - TOXIC
SN - SENSITIZER
CL3B - COMBUSTIBLE LIQUID
WR2 - WATER REACTIVE
OX2 - OXIDIZER
OHH - OTHER HEALTH HAZARD

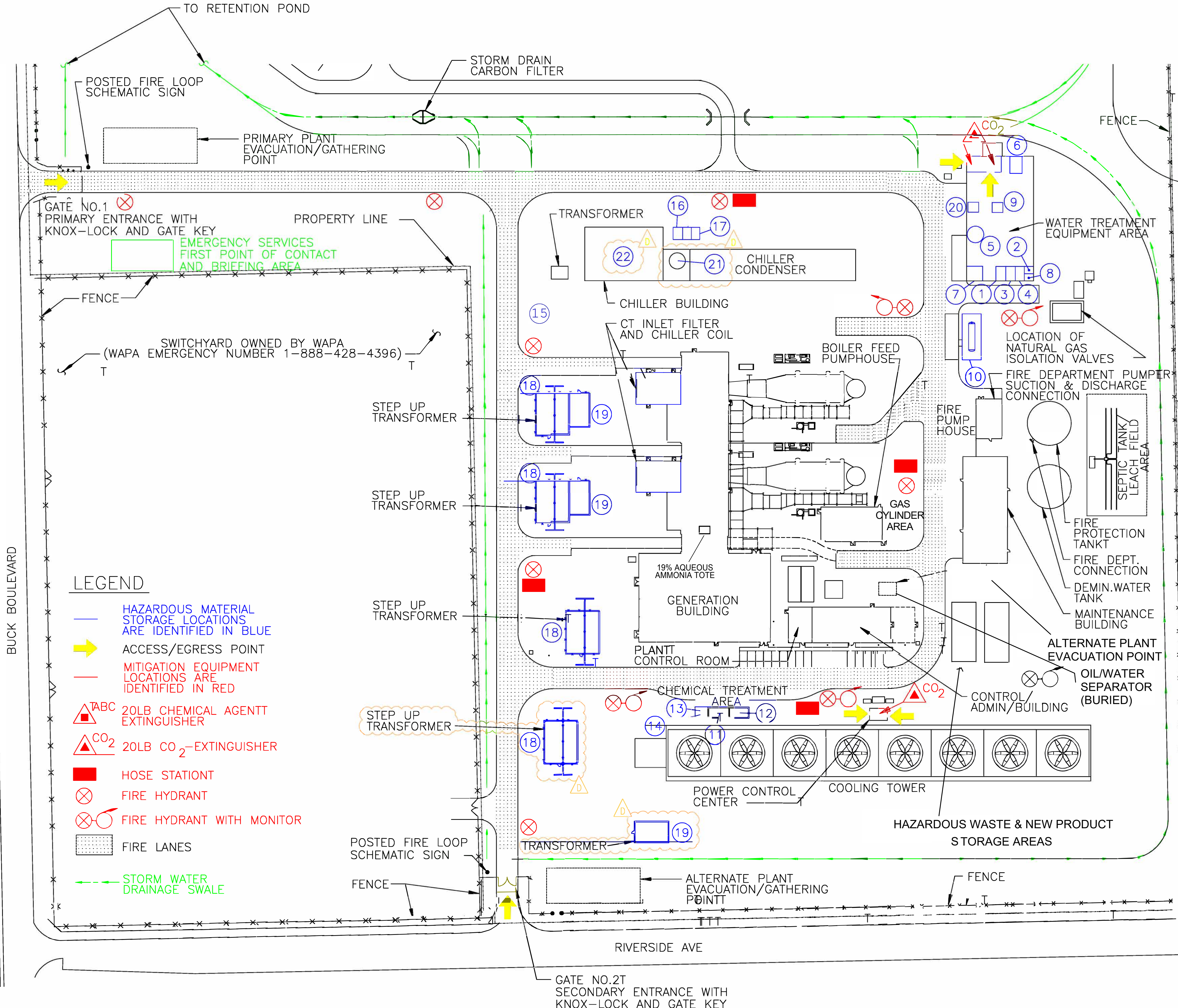
BLYTHE ENERGY PROJECT
OWNER: BLYTHE ENERGY LLC.T
385 N. BUCK BLVD., BLYTHE, CA 92225

PLANT OUTDOOR AND
COOLING TOWER POWER CONTROL CENTER

HAZARDOUS MATERIAL AND MITIGATION
EQUIPMENT LOCATION PLAN

HMBP-1

DATE: 2/18/24
REVISION F



- LEGEND
- HAZARDOUS MATERIAL STORAGE LOCATIONS ARE IDENTIFIED IN BLUE
 - ACCESS/EGRESS POINT
 - MITIGATION EQUIPMENT LOCATIONS ARE IDENTIFIED IN RED
 - 20LB CHEMICAL AGENT EXTINGUISHER
 - 20LB CO₂-EXTINGUISHER
 - HOSE STATION
 - FIRE HYDRANT
 - FIRE HYDRANT WITH MONITOR
 - FIRE LANES
 - STORM WATER DRAINAGE SWALE

CALIFORNIA ENVIRONMENTAL REPORTING SYSTEM (CERS) CONSOLIDATED EMERGENCY RESPONSE / CONTINGENCY PLAN

Prior to completing this Plan, please refer to the INSTRUCTIONS FOR COMPLETING A CONSOLIDATED CONTINGENCY PLAN

FACILITY ID #		CERS ID #	DATE OF PLAN PREPARATION/REVISION (MM/DD/YYYY)
BUSINESS NAME (Same as Facility Name or DBA - Doing Business As)			
BUSINESS SITE ADDRESS			
BUSINESS SITE CITY		CA	ZIP CODE
TYPE OF BUSINESS (e.g., Painting Contractor)		INCIDENTAL OPERATIONS (e.g., Fleet Maintenance)	
THIS PLAN COVERS CHEMICAL SPILLS, FIRES, AND EARTHQUAKES INVOLVING (Check all that apply):			
<input type="checkbox"/> 1. HAZARDOUS MATERIALS; <input type="checkbox"/> 2. HAZARDOUS WASTES			
INTERNAL FACILITY EMERGENCY RESPONSE WILL OCCUR BY (Check all that apply):			
<input type="checkbox"/> 1. CALLING PUBLIC EMERGENCY RESPONDERS (e.g., 9-1-1) <input type="checkbox"/> 2. CALLING HAZARDOUS WASTE CONTRACTOR <input type="checkbox"/> 3. ACTIVATING IN-HOUSE EMERGENCY RESPONSE TEAM			
<p>In the event of an emergency involving hazardous materials and/or hazardous waste, all facilities must IMMEDIATELY:</p> <ol style="list-style-type: none"> 1. Notify facility personnel and evacuate if necessary in accordance with the Emergency Action Plan (Title 8 California Code of Regulations §3220); 2. Notify local emergency responders by calling 9-1-1; 3. Notify the local Unified Program Agency (UPA) at the phone number below; and 4. Notify the State Warning Center at (800) 852-7550. <p>Facilities that generate, treat, store or dispose of hazardous waste have additional responsibilities to notify and coordinate with other response agencies. Whenever there is an imminent or actual emergency situation such as an explosion, fire, or release, the Emergency Coordinator must follow the appropriate requirements for the category of facility and type of release involved:</p> <ol style="list-style-type: none"> 1. Title 22 California Code of Regulations §66265.56. Emergency Procedures for generators of 1,000 kilograms or more of hazardous waste in any calendar month. 2. Title 22 California Code of Regulations §66265.196. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems. 3. Title 40 Code of Federal Regulations §302.6. Notification requirements for a release of a hazardous substance equal to or greater than the reportable quantity. 4. Title 22 California Code of Regulations §66262.34(d)(2) and Title 40 Code of Federal Regulations §262.34(d)(5)(ii) for generators of less than 1000 kilograms of hazardous waste in any calendar month. <p>Following notification and before facility operations are resumed in areas of the facility affected by the incident, the Emergency Coordinator shall notify the local UPA and the local fire department's hazardous materials program, if necessary, that the facility is in compliance with requirements to:</p> <ol style="list-style-type: none"> 1. Provide for proper storage and disposal of recovered waste, contaminated soil or surface water, or any other material that results from an explosion, fire, or release at the facility; and 2. Ensure that no material that is incompatible with the released material is transferred, stored, or disposed of in areas of the facility affected by the incident until cleanup procedures are completed. 			
EMERGENCY RESPONSE PHONE NUMBERS:		AMBULANCE, FIRE, POLICE AND CHP 9-1-1 CALIFORNIA STATE WARNING CENTER (CSWC)/CAL OES. (800) 852-7550 NATIONAL RESPONSE CENTER (NRC) (800) 424-8802 POISON CONTROL CENTER (800) 222-1222 LOCAL UNIFIED PROGRAM AGENCY (UPA) (outside business hours) OTHER (Specify):	
NEAREST MEDICAL FACILITY / HOSPITAL NAME:			
AGENCY NOTIFICATION PHONE NUMBERS:		CALIFORNIA DEPT. OF TOXIC SUBSTANCES CONTROL (DTSC) (916) 255-3545 REGIONAL WATER QUALITY CONTROL BOARD (RWQCB). U.S. ENVIRONMENTAL PROTECTION AGENCY (US EPA) (800) 300-2193 CALIFORNIA DEPT. OF FISH AND WILDLIFE (CDFW) (916) 358-2900 U.S. COAST GUARD (USCG) (202) 267-2180 CAL OSHA (916) 263-2800 CAL FIRE OFFICE OF THE STATE FIRE MARSHAL (OSFM) (916) 323-7390 OTHER (Specify): OTHER (Specify):	

Check the applicable boxes to indicate your facility's procedures for containing spills and preventing and mitigating releases, fires and/or explosions.		D1.
<input type="checkbox"/>	1. MONITOR FOR LEAKS, RUPTURES, PRESSURE BUILD-UP, ETC.;	
<input type="checkbox"/>	2. PROVIDE STRUCTURAL PHYSICAL BARRIERS (e.g., Portable spill containment walls, built-in berms);	
<input type="checkbox"/>	3. PROVIDE ABSORBENT PHYSICAL BARRIERS (e.g., Pads, spill pigs, spill pillows);	
<input type="checkbox"/>	4. COVER OR BLOCK FLOOR AND/OR STORM DRAINS;	
<input type="checkbox"/>	5. LINED TRENCH DRAINS AND/OR SUMPS;	
<input type="checkbox"/>	6. AUTOMATIC FIRE SUPPRESSION SYSTEM;	
<input type="checkbox"/>	7. ELIMINATE SOURCES OF IGNITION FOR FLAMMABLE HAZARDS;	
<input type="checkbox"/>	8. STOP PROCESSES AND/OR OPERATIONS;	
<input type="checkbox"/>	9. AUTOMATIC / ELECTRONIC EQUIPMENT SHUT-OFF SYSTEM;	
<input type="checkbox"/>	10. SHUT OFF WATER, GAS, ELECTRICAL UTILITIES;	
<input type="checkbox"/>	11. CALL 9-1-1 FOR PUBLIC EMERGENCY RESPONDER ASSISTANCE AND/OR MEDICAL AID;	
<input type="checkbox"/>	12. NOTIFY AND EVACUATE PERSONS IN ALL THREATENED AND/OR IMPACTED AREAS;	
<input type="checkbox"/>	13. ACCOUNT FOR EVACUATED PERSONS IMMEDIATELY AFTER EVACUATION;	
<input type="checkbox"/>	14. PROVIDE PROTECTIVE EQUIPMENT FOR ON-SITE EMERGENCY RESPONSE TEAM;	
<input type="checkbox"/>	15. REMOVE CONTAINERS AND/OR ISOLATE AREAS;	
<input type="checkbox"/>	16. HIRE LICENSED HAZARDOUS WASTE CONTRACTOR; (HCI Environmental)	
<input type="checkbox"/>	17. USE ABSORBENT MATERIAL FOR SPILL CONTAINMENT;	
<input type="checkbox"/>	18. VACUUM SUCTION USING APPROPRIATE VACUUM (e.g., Intrinsically safe) FOR SPILL CONTROL AND/OR CLEANUP;	
<input type="checkbox"/>	19. DECONTAMINATE PERSONNEL AND EQUIPMENT WITHIN DESIGNATED AREA AND DISPOSE OF WASTEWATER AS HAZARDOUS WASTE;	
<input type="checkbox"/>	20. PROVIDE SAFE TEMPORARY STORAGE OF HAZARDOUS WASTE GENERATED DURING EMERGENCY ACTIONS;	
<input type="checkbox"/>	21. OTHER (Specify):	D2.

THE FOLLOWING ALARM SIGNAL(S) WILL BE USED TO BEGIN EVACUATION OF THE FACILITY (Check all that apply):	E1.
<input type="checkbox"/> 1. BELLS;	E2.
<input type="checkbox"/> 2. HORNS/SIRENS;	
<input type="checkbox"/> 3. VERBAL (i.e., Shouting);	
<input type="checkbox"/> 4. OTHER (Specify):	
THE FOLLOWING LOCATION(S) WILL BE USED FOR AN EMERGENCY ASSEMBLY AREA(S) (e.g., Parking lot, street corner):	E3.
Note: The Emergency Coordinator must account for all onsite employees and visitors after evacuation.	
EVACUATION ROUTE S AND ALTERNATE EVACUATION ROUTES ARE DESCRIBED AS FOLLOWS:	E4.
<input type="checkbox"/> 1. WRITTEN PROCEDURES DESCRIBING ROUTES, EXITS, AND ASSEMBLY AREAS;	
<input type="checkbox"/> 2. EVACUATION MAP(S) DEPICTING ROUTES, EXITS, AND ASSEMBLY AREAS;	
<input type="checkbox"/> 3. OTHER (Specify):	E5.
Note: Evacuation procedures and/or maps should be posted in visible facility locations and must be included in the Contingency Plan.	

ADVANCE ARRANGEMENTS FOR LOCAL EMERGENCY SERVICES (Check one of the following):	F1.
<input type="checkbox"/> 1. HAVE BEEN DETERMINED NOT NECESSARY;	
<input type="checkbox"/> 2. THE FOLLOWING ARRANGEMENTS HAVE BEEN MADE (Specify):	F2.
<p>Note: Advance arrangements with local fire and police departments, hospitals, state and local emergency response teams, and/or emergency services contractors should be made for your facility, if necessary. Large Quantity Generators must describe arrangements in the Contingency Plan.</p>	

G. EMERGENCY EQUIPMENT

Check the applicable boxes to list emergency response equipment available at the facility, identify the location(s) where the equipment is kept, and indicate the equipment's capability, if applicable.

TYPE	EQUIPMENT AVAILABLE <small>G1.</small>	LOCATION <small>G2.</small>	CAPABILITY <small>G3.</small>
EXAMPLE	<input checked="" type="checkbox"/> CHEMICAL PROTECTIVE GLOVES	SPILL RESPONSE KIT	SINGLE USE, OIL RESISTANT ONLY
Safety and First Aid	1. <input type="checkbox"/> CHEMICAL PROTECTIVE SUITS, APRONS, AND/OR VESTS		
	2. <input type="checkbox"/> CHEMICAL PROTECTIVE GLOVES		
	3. <input type="checkbox"/> CHEMICAL PROTECTIVE BOOTS		
	4. <input type="checkbox"/> SAFETY GLASSES, GOGGLES, AND FACE SHIELDS		
	5. <input type="checkbox"/> HARD HATS		
	6. <input type="checkbox"/> AIR-PURIFYING RESPIRATORS		
	7. <input type="checkbox"/> SELF-CONTAINED BREATHING APPARATUS (SCBA)		
	8. <input type="checkbox"/> FIRST AID KITS	Control Room, Admin Bldg, Maint Shop, in trucks	
	9. <input type="checkbox"/> PLUMBED EYEWASH FOUNTAIN AND/OR SHOWER		
	10. <input type="checkbox"/> PORTABLE EYEWASH KITS AND/OR STATION	Haz Waste, Batt. Area (4), Fire Pump House, shop	
	11. <input type="checkbox"/> OTHER		
Fire Fighting	12. <input type="checkbox"/> PORTABLE FIRE EXTINGUISHERS		
	13. <input type="checkbox"/> FIXED FIRE SUPPRESSION SYSTEMS AND/OR SPRINKLERS		
	14. <input type="checkbox"/> FIRE ALARM BOXES		
	15. <input type="checkbox"/> OTHER		
Spill Control and Clean-Up	16. <input type="checkbox"/> ALL-IN-ONE SPILL KIT		
	17. <input type="checkbox"/> ABSORBENT MATERIAL		
	18. <input type="checkbox"/> CONTAINER FOR USED ABSORBENT		
	19. <input type="checkbox"/> BERM AND/OR DIKING EQUIPMENT		
	20. <input type="checkbox"/> BROOM		
	21. <input type="checkbox"/> SHOVEL		
	22. <input type="checkbox"/> VACUUM		
	23. <input type="checkbox"/> EXHAUST HOOD		
	24. <input type="checkbox"/> SUMP AND/OR HOLDING TANK		
	25. <input type="checkbox"/> CHEMICAL NEUTRALIZERS		
	26. <input type="checkbox"/> GAS CYLINDER LEAK REPAIR KIT		
	27. <input type="checkbox"/> SPILL OVERPACK DRUMS		
	28. <input type="checkbox"/> OTHER		
Communications and Alarm Systems	29. <input type="checkbox"/> TELEPHONES (e.g., Cellular)		
	30. <input type="checkbox"/> INTERCOM AND/OR PA SYSTEM		
	31. <input type="checkbox"/> PORTABLE RADIOS		
	32. <input type="checkbox"/> AUTOMATIC ALARM CHEMICAL MONITORING EQUIPMENT		
Other	33. <input type="checkbox"/> OTHER		
	34. <input type="checkbox"/> OTHER		

H. EARTHQUAKE VULNERABILITY

Identify areas of the facility that are vulnerable to hazardous materials releases due to seismic motion. These areas require immediate isolation and inspection.

VULNERABLE AREAS (Check all that apply):

H1.

LOCATIONS (e.g., Shop, outdoor shed, lab):

H2.

- ☐ 1. HAZARDOUS MATERIALS AND/OR WASTE STORAGE AREAS
- ☐ 2. PROCESS LINES AND PIPING
- ☐ 3. LABORATORY
- ☐ 4. WASTE TREATMENT AREA

Identify mechanical systems vulnerable to releases / spills due to earthquake-related motion. These systems require immediate isolation and inspection.

VULNERABLE SYSTEMS AND/OR EQUIPMENT (Check all that apply):

H3.

LOCATIONS:

H4.

- ☐ 1. SHELVES, CABINETS AND/OR RACKS
- ☐ 2. TANKS AND SHUT-OFF VALVES
- ☐ 3. PORTABLE GAS CYLINDERS
- ☐ 4. EMERGENCY SHUT-OFF AND/OR UTILITY VALVES
- ☐ 5. SPRINKLER SYSTEMS
- ☐ 6. STATIONARY PRESSURIZED CONTAINERS (e.g., Propane tank)

I. EMPLOYEE TRAINING

Employee training is required for all employees and/or contractors handling hazardous materials and/or hazardous wastes during normal and/or emergency operations. Most facilities will need to submit a separate Training Plan. However, your CUPA may accept this section as the Training Plan for some small facilities.

Employee training plans may include the following content:

- Applicable laws and regulations;
- Emergency response plans and procedures;
- Safety Data Sheets;
- Hazard communication related to health and safety;
- Methods for safe handling of hazardous substances;
- Hazards of materials and processes (e.g., fire, explosion, asphyxiation);
- Hazard mitigation, prevention and abatement procedures;
- Coordination of emergency response actions;
- Notification procedures for local emergency responders, CUPA, Cal OES, and onsite personnel;
- Communication and alarm systems;
- Personal protective equipment;
- Use and maintenance of emergency response equipment and supplies (e.g. Fire extinguishers, respirators, spill control materials);
- Decontamination procedures;
- Evacuation procedures and evacuation staging locations;
- Identification of facility areas, equipment, and systems vulnerable to earthquakes and other natural disasters.
- OTHER (Specify):

Check the applicable boxes below to indicate how the employee training program is administered.

- ☐ 1. FORMAL CLASSROOM ☐ 2. VIDEOS ☐ 3. SAFETY MEETINGS ☐ 4. STUDY GUIDES / MANUALS
- ☐ 5. OTHER (Specify): _____
- ☐ 6. NOT APPLICABLE SINCE FACILITY HAS NO EMPLOYEES
- ☐ 7. CHECK IF A SEPARATE EMPLOYEE TRAINING PLAN IS USED AND UPLOADED TO CERS AS A PDF DOCUMENT
- ☐ 8. CHECK IF EMPLOYEE TRAINING IS COVERED BY THE ABOVE REFERENCED CONTENT AND OTHER DOCUMENTS ONSITE

I1.

I2.

I3.

I4.

EMPLOYEE TRAINING FREQUENCY AND RECORDKEEPING TRAINING MUST BE:

- Provided initially for new employees as soon as possible following the date of hire. New employees should not work in an unsupervised position that involves hazardous materials handling and/or hazardous waste management without proper training;
- Provided within six months from the date of hire for new employees at a large quantity generator;
- Ongoing and provided at least annually;
- Amended prior to a change in process or work assignment;
- Given upon modification to the Emergency Response/Contingency Plan.

Large Quantity Generator Training: Large quantity generators (1,000 kg or more) must retain written plan and documentation of employee training which includes:

- A written description of the type and amount of both initial and ongoing training that will be given to persons filling each job position having responsibility for hazardous waste management and/or emergency response.
- The name, job title and job description for each position at the facility related to hazardous waste management.
- Current employee training records must be retained until closure of the facility and former employee training records must be retained for at least three years after termination of employment.

Small Quantity Generator Training: Small quantity generators (less than 1,000 kg) must include basic hazardous waste management and emergency response procedures but a written employee training plan and training records are not required. In order to show that the facility has met the small quantity generator employee training requirement, an employee training plan and training records may be made available.

Hazardous Materials Business Plan Training: Businesses must provide initial and annual employee training that includes the content referenced above. The training may be based on the job position and training records must be made available for a period of at least three years.

J. LIST OF ATTACHMENTS

Check one of the following:

J1.

- ☐ 1. NO ATTACHMENTS ARE REQUIRED; or
- ☐ 2. THE FOLLOWING DOCUMENTS ARE ATTACHED:

J2.

Blythe Energy Inc. maintains a full Emergency Action Plan at the facility. Please refer to the EAP for more details of the emergency procedures, evacuation plan, and emergency contact information.

Facility/Site

Blythe Energy Inc.385 N Buck Blvd
Blythe, CA 92225

CERS ID

10321807

CAL000364934

Submittal Status

Submitted on 2/18/2024 by *Jake Tilley* of Blythe Energy Inc. (Blythe, CA.)

APSA Facility Information

Conditionally Exempt APSA Tank Facility

N

Date Of SPCC Plan Certification or Date of 5-Year Review

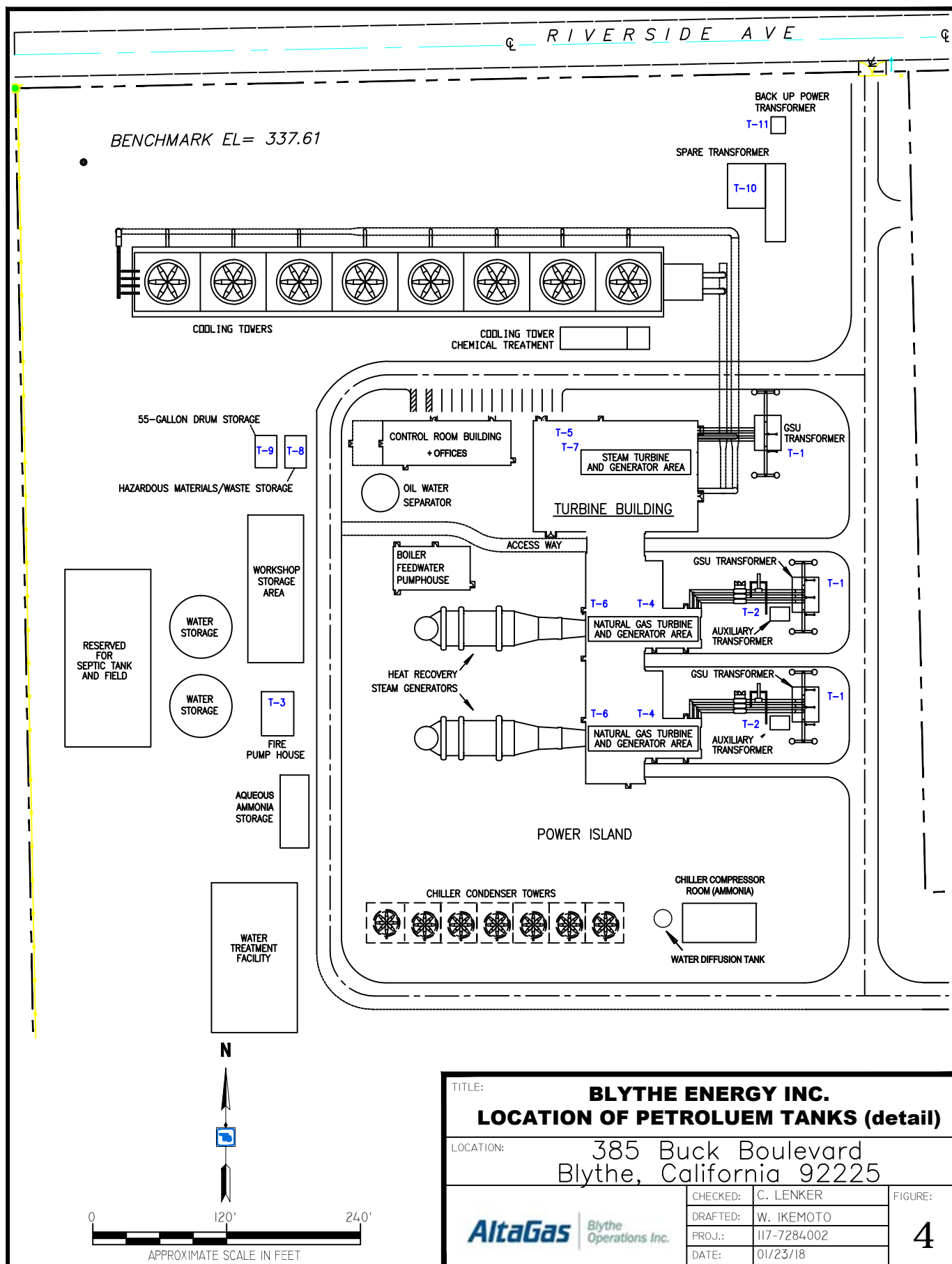
3/27/2023

Total Aboveground Storage Capacity of
Petroleum

86643

Number of Tanks in Underground Area(s)

0



Petroleum Storage Tank Locations				
Tank ID	Oil Products	Volume (Gallons)	Use	Storage/Use Area
T-1	Nitro 10 GBXT	16,500 (x3)	GSU Transformers	Electrical Equipment
T-2	Nitro 10 GBXT	1,620 (x2)	Auxiliary Transformers	Electrical Equipment
T-3	Diesel	500	Fire Pump Fuel Tank	Fire Pump Building
T-4	Lubrication Oil	3,600 (x2)	Combustion Turbine Lubrication	Turbine Building
T-5	Lubrication Oil	6650 gallons	Steam Turbine Lubrication	Turbine Building
T-6	Hydraulic Oil	80 (x2)	Combustion Turbine Hydraulics	Turbine Building
T-7	Hydraulic Oil	166	Steam Turbine Hydraulics	Turbine Building
T-8	Used Oil	250-gallon tank	Hazardous Materials Storage	Haz Mat Area
T-9	Lubrication Oil	55 (x30)	Refilling Lubrication Tanks	55-Gallon Drum Area
T-10	Nitro 10 GBXT	16,500	Spare Transformer - In Case of Emergency	Electrical Equipment @ Spare Transformer
T-11	Nitro 10 GBXT	827	Back up Transformer for Emergency Loss of Power	Electrical Equipment Northeast of Spare Transformer

*** See also the APSA Tank Statement included in this HMBP**

ABOVEGROUND PETROLEUM STORAGE ACT: TANK FACILITY STATEMENT

I. IDENTIFICATION

FACILITY NAME (Same as BUSINESS NAME or DBA – Doing Business As):

FACILITY PHONE: _____

FACILITY ADDRESS: _____

FACILITY CITY: _____ STATE: CA ZIP CODE: _____

CONTACT NAME: _____

CONTACT PHONE: _____

II. TOTAL FACILITY STORAGE CAPACITY

Tank facility's total aboveground petroleum storage capacity (in gallons) for all tanks and containers, including tanks in an underground area, with a shell capacity **greater than or equal to** 55 gallons (see instructions for details):

_____ gallons

III. TANK AND CONTAINER DETAILS

Details of each aboveground petroleum storage tank or container **greater than** 10,000 gallons in shell capacity (attach additional forms if needed)

Tank 1:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 2:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 3:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 4:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 5:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 6:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 7:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

APSA - TANK FACILITY STATEMENT (con't)

Tank 8:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 9:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 10:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 11:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

Tank 12:

Tank or Container ID Number: _____

Contents (Gas, Diesel, etc.): _____

Shell Capacity (in gallons): _____

Location of Tank or Container: _____

ABOVEGROUND PETROLEUM STORAGE ACT: Tank Facility Statement Instructions

A tank facility is subject to the Aboveground Petroleum Storage Act (APSA) if any of the following apply:

- a. The tank facility is subject to the oil pollution prevention regulations specified in the Code of Federal Regulations, Title 40, Part 112 (commencing with section 112.1); **OR**
- b. The tank facility has a storage capacity of 1,320 gallons or more of petroleum; **OR**
- c. The tank facility has a storage capacity of less than 1,320 gallons of petroleum **AND** has one or more tanks in an underground area meeting the conditions specified in the Health and Safety Code (HSC) Section 25270.2(o)(1). If this subdivision is applicable, only tanks meeting the conditions specified in HSC Section 25270.2(o)(1) shall be included as storage tanks and subject to APSA.

Each owner or operator of a tank facility that is subject to APSA is required to submit a Tank Facility Statement annually into the California Environmental Reporting System (CERS). A Hazardous Materials Business Plan (HMBP) submittal into CERS satisfies the requirement to file the Tank Facility Statement.

I. FACILITY INFORMATION

FACILITY NAME – Enter the full legal name of the tank facility. (Same as BUSINESS NAME or DBA-Doing Business As.)

FACILITY PHONE – Enter the phone number, area code first, and any extension.

FACILITY ADDRESS – Enter the street address where the tank facility is located. No post office box numbers are allowed. This information must provide a means to locate the facility geographically.

CITY – Enter the city or unincorporated area in which the tank facility is located.

ZIPCODE – Enter the zip code of the tank facility. The extra 4-digit zip code may also be added.

CONTACT NAME – Enter the name of the person, who receives aboveground storage tank correspondences, for the tank facility.

CONTACT PHONE – Enter the phone number of the person who receives aboveground storage tank correspondences for the tank facility, area code first, and any extension.

II. TOTAL FACILITY STORAGE CAPACITY

TOTAL FACILITY STORAGE CAPACITY – Enter the facility's total aboveground petroleum storage tank capacity (in gallons). Add the **shell capacity** of each aboveground petroleum storage tank and container, including each tank in an underground area, greater than or equal to 55 gallons. Do not enter the actual volume stored in the tank or container. To calculate the capacity of 55 gallon drums on site, use the **maximum** number of drums that would typically be stored at your facility.

III. TANK AND CONTAINER DETAILS

Provide details of each aboveground petroleum storage tank and container greater than 10,000 gallons in shell capacity (attach additional forms if needed) at your facility. If your facility does not have an aboveground storage tank or container with shell capacity greater than 10,000 gallons, you can skip the data fields in this section of the Tank Facility Statement.

TANK OR CONTAINER ID NUMBER – Enter a unique identification number for each aboveground petroleum storage tank and container at your facility. You may create your own numbering system.

CONTENTS – Enter the contents (i.e. DIESEL, GASOLINE, OIL, etc.) of each aboveground petroleum storage tank and container at your facility.

SHELL CAPACITY – Enter the shell capacity (in gallons) of each aboveground petroleum storage tank and container at your facility.

LOCATION OF TANK OR CONTAINER – Enter the general location of each aboveground petroleum storage tank or container at your facility (e.g., at north end of facility; inside maintenance shop).

DEFINITIONS

TANK FACILITY – Any one or more aboveground storage tanks, including any piping that is integral to the tanks that **contain petroleum** and that are used by an owner or operator at a single location or site.

ABOVEGROUND STORAGE TANK (AST) – A tank (or container) with the capacity to store 55 gallons or more of petroleum that is substantially or totally above the surface of the ground, including a tank in an underground area. Some AST exceptions exist; they are specified in HSC section 25270.2(a). An AST includes drums, totes, oil-filled operational or manufacturing equipment, etc.

PETROLEUM – Crude oil, or a fraction thereof, that is liquid at 60°F temperature and 14.7 pounds per square inch absolute pressure. Petroleum includes gasoline, diesel, E85, motor oil, waste oil, etc., but does NOT include antifreeze, propane, or natural gas.

STORAGE – Containment, handling, or treatment of petroleum, for any period, including standby storage, seasonal storage, and temporary storage.

STORAGE CAPACITY (of a tank facility) – The aggregate shell capacity of each AST (including containers 55 gallons and greater) at a tank facility. For example, if a facility has two 500-gallon capacity diesel ASTs and a 600-gallon capacity waste oil AST, but only keeps each AST half full, then the storage capacity for this facility is 1,600 gallons (calculated by adding the shell capacity of each tank/container).

CODE	SECTION	CONDITION	VERIFICATION	Compliance	COMPLIANCE STATUS
AIR QUALITY (AQ) THE FOLLOWING CONDITIONS OF CERTIFICATION APPLY TO THE TWO INDIVIDUAL GAS TURBINE GENERATORS (DISTRICT PERMIT NUMBERS: B007953, B007954)					
AQ-T1	Air Quality	Operation of the turbines shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.	The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (ARB), the United States Environmental Protection Agency (U.S. EPA) and Energy Commission.	Site Complies with AQ-T1	Ongoing: Blythe Energy documents facility-wide operations and maintains records for identification of breakdown conditions. Operation of this equipment is conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted.
AQ-T2	Air Quality	The turbines shall be exclusively fueled with pipeline quality natural gas with a sulfur content not exceeding 0.5 grains per 100 dscf on a twenty-four hour basis and not exceeding 0.25 grains per 100 dscf on a rolling twelve month average basis. The turbines shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.	The project owner shall incorporate into the Quarterly Operations Report either a monthly laboratory analysis showing the fuel sulfur content, a monthly fuel sulfur content report from the fuel supplier(s), or the results from a custom fuel monitoring schedule approved by USEPA for compliance with the fuel monitoring provisions of 40 CFR 60 Subpart GG.	Site Complies with AQ-T2	Ongoing: Blythe Energy conducts monthly analysis of the natural gas. Analysis is performed by an independent lab and results are logged and submitted in quarterly reports.
AQ-T4	Air Quality	Emissions from the turbines (including the associated duct burners) shall not exceed the following emission limits at any firing rate, except for CO, NOx and VOC during periods of startup, shutdown and malfunction: a. Hourly rate, computed every 15 minutes, verified by CEMS and annual compliance tests: i. NOx as NO2 — the most stringent of 19.80 lb/hr or 2.5 ppmvd corrected to 15% O2 and averaged over one hour). ii. NOx as NO2 — effective May 7, 2016, 2.0 ppmvd corrected to 15% O2 and averaged over a rolling 12 month period. iii. CO — the most stringent of 17.5 lb/hr or 4.0 ppmvd corrected to 15% O2 and averaged over 3 hours. iv. CO — 10 lb/hr averaged over a rolling 12-month period b. Hourly rates, verified by annual compliance tests or other compliance methods in the case of SOx: i. VOC as CH4 — 2.9 lb/hr (based on 1 ppmvd corrected to 15% O2). ii. SOx as SO2 — 2.7 lb/hr (based on 0.5 grains/100 dscf fuel sulfur). iii. PM10 — 6.2 lb/hr.	The project owner shall submit the following in each Quarterly Operations Report: All continuous emissions data reduced and reported in accordance with the District approved CEMS protocol; a list of maximum hourly, maximum daily, monthly, total quarterly, total calendar year, and rolling 12-month emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol); total monthly and rolling 12-month fuel use in the gas turbines and duct burners; average NO2 concentration and average CO mass emission rate, for all operating periods except during startup, shutdown and malfunction, for each gas turbine and associated duct burner, calculated on a rolling 12-month basis; a log of all excess emissions, including the information regarding malfunctions/breakdowns required by District Rule 430; operating parameters of emission control equipment, including but not limited to ammonia injection rate, NOx emission rate and ammonia slip; any maintenance to any air pollutant control system (recorded on an as-performed basis); and any permanent changes made in the plant process or production that could affect air pollutant emissions, and when the changes were made.	Site Complies with AQ-T4	Ongoing: Emissions from the Gas Turbines including Duct burners are verified by CEMS and annual compliance tests. Quarterly reports are submitted in accordance with the District approved CEMS protocol.
AQ-T5	Air Quality	Emissions of CO and NOx from the turbines shall only exceed the limits contained in AQ-T4 during startup and shutdown periods as follows: a. Startup is defined as the period beginning with ignition and lasting until either the equipment complies with all condition AQ-T4 operating permit limits for two consecutive 15-minute averaging periods or four hours after ignition, whichever occurs first. Shutdown is defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased. b. The emissions from each startup and shutdown event shall not exceed the following, verified by CEMS: i. NOx — 376 lb. ii. CO — 3600 lb. c. Effective May 7, 2016, the CO emissions from all startup and shutdown events at both power blocks, averaged over a rolling 12-month period, shall not exceed 750 lb/event, verified by CEMS.	The emission limits defined in this condition apply to one combined startup/shutdown event (one cycle). The project owner shall include a detailed record of each startup and shutdown event in the Quarterly Operations Report. Each record shall include, but not be limited to: duration; fuel consumption; total emissions of NOx and CO; average CO emissions from all startups and shutdowns of the gas turbines on a per event basis calculated on a rolling 12-month basis; and the date and time of the beginning and end of each startup and shutdown event. Additionally, the project owner shall report the total plant operation time (hours), number of startups, hours in startup and shutdown, and average plant operation schedule (hours per day, days per week, weeks per year).	Site Complies with AQ-T5	Ongoing: Blythe Energy uses CEMS to verify emissions and maintains records of startup and shutdown periods. Quarterly reports are submitted with detailed record of each startup and shutdown event.
AQ-T6	Air Quality	Aggregate emissions from the turbines, including the duct burner, shall not exceed the following emission limits, based on a calendar day summary: a. NOx — 5762 lb/day, verified by CEMS. b. CO — 8004 lb/day, verified by CEMS. c. VOC as CH4 — 239 lb/day, verified by compliance tests and hours of operation in steady-state, pre-mix mode. d. SOx as SO2 — 130 lb/day, verified by fuel sulfur content and fuel use data. e. PM10 — 298.5 lb/day, verified by compliance tests and hours of operation.	The project owner shall submit the following in each Quarterly Operations Report: All continuous emissions data reduced and reported in accordance with the District approved CEMS protocol; a list of maximum hourly, maximum daily, total quarterly, and total calendar year emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol); a log of all excess emissions, including the information regarding malfunctions/breakdowns required by District Rule 430; operating parameters of emission control equipment, including but not limited to ammonia injection rate, NOx emission rate and ammonia slip; any maintenance to any air pollutant control system (recorded on an as-performed basis); and any permanent changes made in the plant process or production that could affect air pollutant emissions, and when the changes were made.	Site Complies with AQ-T6	Ongoing: Blythe Energy uses CEMS, fuel content recordkeeping, and annual compliance tests to verify Daily emissions and maintains records. Quarterly reports are submitted in accordance with the District approved CEMS protocol.
AQ-T7	Air Quality	Emissions from all units at this facility, including the cooling towers, shall not exceed the following emission limits, based on a rolling 12 month summary: a. NOx —97 tons/year, verified by CEMS. b. CO —175 tons/year, verified by CEMS. c. VOC as CH4 — 24 tons/year, verified by compliance tests and hours of operation in steady-state, pre-mix mode. d. SOx as SO2 — 12 tons/year, verified by fuel sulfur content and fuel use data. e. PM10 —56.9 tons/year, verified by compliance tests and hours of operation. These limits shall apply to all emissions from all units at this facility, and shall include emissions during all modes of operation, including startup, shutdown and malfunction.	The project owner shall submit the following in each Quarterly Operations Report: All continuous emissions data reduced and reported in accordance with the District approved CEMS protocol; a list of maximum hourly, maximum daily, monthly, total quarterly, total calendar year, and rolling 12-month emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol); total monthly and rolling 12-month fuel use in the gas turbines and duct burners; average NO2 concentration and average CO mass emission rate for all operating periods except during startup, shutdown and malfunction for each gas turbine and associated duct burner, calculated on a rolling 12-month basis; a log of all excess emissions, including the information regarding malfunctions/breakdowns required by District Rule 430; operating parameters of emission control equipment, including but not limited to ammonia injection rate, NOx emission rate and ammonia slip; any maintenance to any air pollutant control system (recorded on an as-performed basis); and any permanent changes made in the plant process or production that could affect air pollutant emissions, and when the changes were made.	Site Complies with AQ-T7	Ongoing: Blythe Energy maintains emissions data to demonstrate compliance with rolling 12 month limits. Quarterly reports are submitted in accordance with the District approved CEMS protocol.

CODE	SECTION	CONDITION	VERIFICATION	Compliance	COMPLIANCE STATUS
AQ-T8	Air Quality	Particulate emissions from this equipment shall not exceed opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water vapor.	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and Energy Commission.	Site Complies with AQ-T8	Ongoing: Compliance with opacity limit is determined by annual EPA Method 9 testing. The site is made available for inspection.
AQ-T10	Air Quality	The project owner shall not operate the turbines after the initial commissioning period without the selective catalytic NOx reduction system with valid District permit, as well as the oxidation catalyst with valid District permit installed and fully functional.	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.	Site Complies with AQ-T10	Ongoing: The combustion turbines are not operated without the fully functional selective catalytic NOx reduction system with valid District permit C007959/60, as well as the oxidation catalyst with valid District permit C010832/33. The site is made available for inspection.
AQ-T11	Air Quality	The project owner shall provide stack sampling ports and platforms necessary to perform source tests required to verify compliance with District rules, regulations and permit conditions. The location of these ports and platforms shall be subject to District approval.	The project owner shall make the site available for inspection by representatives of the District, ARB, EPA and the CEC.	Site Complies with AQ-T11	Ongoing: Blythe Energy stacks have installed sampling ports and platforms necessary to perform source tests required to verify compliance. The site is made available for inspection.
AQ-T12	Air Quality	Emissions of NOx, CO, oxygen and ammonia slip shall be monitored using a Continuous Emissions Monitoring System (CEMS). Each CEMS shall be operational whenever the associated combustion turbine generator is in operation, including during periods of startup, shutdown and malfunction. Turbine fuel consumption shall be monitored using a continuous monitoring system. Stack gas flow rate shall be monitored using either a Continuous Emission Rate Monitoring System (CERMS) meeting the requirements of 40 CFR Part 75 Appendix A or a stack flow rate calculation method. The operator shall install, calibrate, maintain, and operate these monitoring systems according to a District approved monitoring plan and MDAQMD Rule 218, and they shall be installed prior to initial equipment startup. Six (6) months prior to installation the operator shall submit a monitoring plan for District review and approval.	The project owner shall make the site available for inspection by representatives of the District, ARB, EPA and the CEC.	Site Complies with AQ-T12	<p>Ongoing: Emissions of NOx, CO, oxygen and ammonia slip are monitored using a Continuous Emissions Monitoring System (CEMS) and 40 CFR 75 Appendix D (fuel metering and fuel sampling and analysis). The facility installs, calibrates, maintains, and operates these monitoring systems according to District-approved monitoring plan and MDAQMD Rule 218. The site is made available for inspection.</p> <p>An updated Title V Operating Permit was issued on 11/1/2023 where respective conditions were updated to better reflect the monitoring practices used by Blythe which now differ slightly than the "Condition" listed in the CEC Permit. The CEC permit should be updated to reflect the Title V Operating Permit.</p>
AQ-T13	Air Quality	The project owner shall conduct all required compliance/certification tests in accordance with a District-approved test plan.	Thirty (30) days prior to the compliance/certification tests the operator shall provide a written test plan for District review and approval. Written notice of the compliance/certification test shall be provided to the District ten (10) days prior to the tests so that an observer may be present. A written report with the results of such compliance/certification tests shall be submitted to the District within forty-five (45) days after testing.	Site Complies with AQ-T13	Ongoing: Blythe Energy conducts testing in accordance with a District-approved test plan and provides the District with notice of test date(s) and a test report within applicable deadlines.
AQ-T14	Air Quality	The project owner shall perform the following annual compliance tests in accordance with the MDAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the expiration date of this permit. The following compliance tests are required: a. NOx as NO2 in ppmvd at 15% O2 and lb/hr (measured per U.S. EPA Reference Methods 19, 20, or 7E). If testing is performed at 90%-100% of rated capacity, then the annual calibration RATA associated with the NOx CEMS in use on these units may be used in lieu of the required annual U.S. EPA Reference Method 20, as long as all of the requirements of prior test notification, proper test result submittal, etc., are followed. b. VOC as CH4 in ppmvd at 15% O2 and lb/hr (measured per U.S. EPA Reference Methods 25A and 18). c. SOx as SO2 in ppmvd at 15% O2 and lb/hr. d. CO in ppmvd at 15% O2 and lb/hr (measured per U.S. EPA Reference Method 10). e. PM10 in mg/m3 at 15% O2 and lb/hr (measured per U.S. EPA Reference Methods 5 and 202 or CARB Method 5). f. Flue gas flow rate in dscfm. g. Opacity (measured per U.S. EPA reference Method 9). h. Ammonia slip in ppmvd at 15% O2.	The annual source test report shall be submitted to the District and CPM no later than six (6) weeks prior to the expiration date of the District permit.	Site Complies with AQ-T14	<p>Ongoing: Blythe Energy performs annual compliance tests in accordance with the MDAQMD Compliance Test Procedural Manual.</p> <p>An updated Title V Operating Permit was issued on 11/1/2023 which removes reference to the "six (6) weeks prior to expiration date of this permit". The CEC permit should be updated to reflect the Title V Operating Permit.</p>

CODE	SECTION	CONDITION	VERIFICATION	Compliance	COMPLIANCE STATUS
AQ-T15	Air Quality	VOC emissions during startup and shutdown periods will be calculated by the CEMS using the following factors: For Permit B007953 (CT1) only: a. startup events: 0.0048 lb/mmBtu b. shutdown events: 0.0220 lb/mmBtu For Permit B007954 (CT2) only: a. startup events: 0.0056 lb/mmBtu b. shutdown events: 0.0107 lb/mmBtu	The calculated emission factors shall be reported in each Quarterly Operations Report, which is required by AQ-T17.	Site Complies with AQ-T15	Ongoing: VOC emissions are calculated using emission factors during periods of startup and shutdown.
AQ-T16	Air Quality	Continuous monitoring systems shall meet the following acceptability testing requirements from 40 CFR 60 Appendix B: a. For NOx, Performance Specification 2. b. For O2, Performance Specification 3. c. For CO, Performance Specification 4. d. For stack gas flow rate, Performance Specification 6 (if CERMS is installed.) e. For ammonia, a District approved procedure that is to be submitted by the project owner.	The project owner shall discuss compliance with these specifications in each Quarterly Operations Report.	Site Complies with AQ-T16	Ongoing: Blythe Energy Continuous monitoring systems meet the acceptability testing requirements. An updated Title V Operating Permit was issued on 11/1/2023 where respective conditions were updated to better reflect the monitoring practices used by Blythe which now differ slightly than the "Condition" listed in the CEC Permit. The CEC permit should be updated to reflect the Title V Operating Permit.
AQ-T17	Air Quality	The project owner shall submit to the Mojave Desert Air Pollution Control District (District) Air Pollution Control Officer (APCO), the United States Environmental Protection Agency (U.S. EPA) Region IX and the California Energy Commission a Quarterly Operations Report for the preceding calendar quarter by January 30, April 30, July 30 and October 30 of each year this permit is in effect. Each January 30 submittal shall include a summary of the reported information for the previous year. This information shall be maintained on site for a minimum of five (5) years and shall be provided to District or Energy Commission personnel on request. a. Operating parameters of emission control equipment, including but not limited to ammonia injection rate, NOx emission rate and ammonia slip. b. Total plant operation time (hours), number of startups, hours in startup, and hours in shutdown period. c. Date and time of the beginning and end of each startup and shutdown period. d. Average plant operation schedule (hours per day, days per week, weeks per year). e. All continuous emissions data reduced and reported in accordance with the District approved CEMS protocol. f. Maximum hourly, maximum daily, total quarterly, and total calendar year emissions of NOx, CO, PM10, VOC and SOx (including calculation protocol). g. Total monthly and rolling 12-month emissions of NOx, CO and PM10 from all permit units. h. Total monthly and rolling 12-month fuel use in the gas turbines and duct burners. i. Average NO2 concentration and average CO mass emission rate, for all operating periods except during startup, shutdown and malfunction, for each gas turbine and associated duct burner, calculated on a rolling 12-month basis. j. Average CO emissions from all startups and shutdowns of the gas turbines, on a per event basis, calculated on a rolling 12-month basis. k. Fuel sulfur content (monthly laboratory analyses, monthly natural gas sulfur content reports from the natural gas supplier(s), or the results of a custom fuel monitoring schedule approved by U.S. EPA for compliance with the fuel monitoring provisions of 40 CFR 60 Subpart GG). l. A log of all excess emissions, including the information regarding malfunctions/breakdowns required by Rule 430. m. Any permanent changes made in the plant process or production, which would affect air pollutant emissions, and indicate when changes were made. n. Any maintenance to any air pollutant control system (recorded on an as-performed basis).	The project owner shall submit a Quarterly Operations Report for the preceding calendar quarter by January 30, April 30, July 30 and October 30 of each year. The January 30 report shall include an annual summary of the Quarterly Operations Reports for the preceding year. The reports shall be submitted to the Mojave Desert Air Pollution Control District (District), the United States Environmental Protection Agency (U.S. EPA) and the California Energy Commission Compliance Project Manager (CPM).	Site Complies with AQ-T17	Ongoing: Quarterly reports containing the required information were submitted on time for the 2023Q2, 2023Q3, and 2024Q2 reporting periods. The 2023Q4 Quarterly Emissions Monitoring Report was submitted late. An attempt was made to submit the report prior to the 1/30/24 deadline; however, unbeknownst to Blythe, it was not transmitted due to an unexpected email related issue. MDAQMD notified Blythe that the report was not received in correspondence dated 2/26/24 and Blythe promptly submitted the report on 3/1/24.
AQ-T18	Air Quality	Effective May 7, 2016, total fuel use in the two gas turbines and two duct burners (Permit #B007953 combustion turbine generator power block (CT1), Permit #B007954 combustion turbine generator power block (CT2), Permit #B007955 duct burner unit 1 and Permit #B007956 duct burner unit 2)shall not exceed 31,852,800 MMBtu in any rolling 12-month period.	The project owner shall submit the total monthly and rolling 12-month fuel use in the gas turbines and duct burners in each Quarterly Operations Report.	Site Complies with AQ-T18	Ongoing: Quarterly reports are submitted with total monthly and rolling 12-month fuel use data.
The following Conditions of Certification apply to duct burner unit 1 (District Permit Number: B007955) and duct burner unit 2 (District Permit Number: B007956)					
AQ-DB1	Air Quality	Operation of the duct burners shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and Energy Commission.	Site Complies with AQ-DB1	Ongoing: The site is made available for inspection.

CODE	SECTION	CONDITION	VERIFICATION	Compliance	COMPLIANCE STATUS
AQ-DB2	Air Quality	The duct burners shall be exclusively fueled with natural gas and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and Energy Commission.	Site Complies with AQ-DB2	Ongoing: The duct burners are exclusively fueled with natural gas and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
AQ-DB3	Air Quality	The duct burners shall not be operated unless the combustion turbine generator with valid District permit B007953 (or B007954), selective catalytic reduction system with valid District permit C007959 (or C007960), and oxidation catalyst C010832 (or C010833) are in operation.	A summary of fuel use and equipment operation for each duct burner shall be included in each Quarterly Operations Report.	Site Complies with AQ-DB3	Ongoing: A summary of fuel use and equipment operation for each duct burner is included in quarterly reports.
AQ-DB4	Air Quality	Fuel use by duct burners shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District, ARB, Energy Commission or U.S. EPA personnel on request	The above information shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District or Energy Commission personnel on request.	Site Complies with AQ-DB4	Ongoing: Files are stored for 5 years and available upon request.
The following Conditions of Certification apply to the two individual selective catalytic NOx reduction systems (SCR) (District Permit Numbers: C007959, C007960.)					
AQ-SCR1	Air Quality	Operation of the SCR units shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and Energy Commission.	Site Complies with AQ-SCR1	Ongoing: The site is made available for inspection.
AQ-SCR2	Air Quality	The SCR Units shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.	A summary of significant operation and maintenance events for each selective catalytic reduction system shall be included in the Quarterly Operations Reports.	Site Complies with AQ-SCR2	Ongoing: SCR Units are operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
AQ-SCR3	Air Quality	The SCR Units shall be operated concurrently with the combustion turbine generator with valid MDAQMD permit B007953 (or B007954).	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and Energy Commission.	Site Complies with AQ-SCR3	Ongoing: SCR Units are operated concurrently with the combustion turbines. The site is made available for inspection.
AQ-SCR4	Air Quality	Ammonia shall be injected whenever the selective catalytic reduction system has reached or exceeded 550 degree Fahrenheit. Except during periods of startup and shutdown, ammonia slip shall not exceed 10 ppmvd (corrected to 15% O2), averaged over three hours.	The project owner shall maintain a log of the SCR temperatures and the commencement of ammonia injection times. This information shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District and Energy Commission personnel on request.	Site Complies with AQ-SCR4	Ongoing: Files are stored for 5 years and available upon request.
AQ-SCR5	Air Quality	Ammonia injection by the SCR units in pounds per hour shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District, ARB, Energy Commission or U.S. EPA personnel on request.	The project owner shall maintain a log of the SCR temperatures and the commencement of ammonia injection times. This information shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District and Energy Commission personnel on request.	Site Complies with AQ-SCR5	Ongoing: Files are stored for 5 years and available upon request.
The following Conditions of Certification apply to the two oxidation catalyst (OC) units (District Permit Numbers: C010832, C010833)					
AQ-OC1	Air Quality	Operation of the OC units shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and Energy Commission.	Site Complies with AQ-OC1	Ongoing: The site is made available for inspection.
AQ-OC2	Air Quality	The OC Units shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.	A summary of significant operation and maintenance events for each oxidation system unit shall be included in the Quarterly Operations Reports.	Site Complies with AQ-OC2	Ongoing: OC Units are operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
AQ-OC3	Air Quality	The OC Units shall be operated concurrently with the combustion turbine generator with valid MDAQMD permit B007953 (or B007954).	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and Energy Commission.	Site Complies with AQ-OC3	Ongoing: The site is made available for inspection.
The following Conditions of Certification apply to main cooling tower (District Permit Number: B007957) and chiller cooling tower (District Permit Number: B007958)					
AQ-CT1	Air Quality	Operation of the cooling towers shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and Energy Commission.	Site Complies with AQ-CT1	Ongoing: The site is made available for inspection.
AQ-CT2	Air Quality	The cooling towers shall be operated and maintained in strict accord with the recommendations of their manufacturer or supplier and/or sound engineering principles.	A summary of significant operation and maintenance events for each cooling tower shall be included in the Quarterly Operations Reports.	Site Complies with AQ-CT2	Ongoing: Cooling Towers are operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
AQ-CT3	Air Quality	The drift rate shall not exceed 0.0006 percent with a maximum circulation rate of 146,000 gallons per minute (gpm) for the Main Cooling Tower and 22,000 gpm for the Chiller Cooling Tower. The maximum hourly PM10 emission rate shall not exceed 0.546 pounds per hour from both cooling towers, as calculated per the written District approved protocol.	Compliance documentation in accordance with the written District approved protocol shall be submitted to the District and the CPM.	Site Complies with AQ-CT3	Ongoing: Cooling Towers are operated in accordance with District approved protocol.

CODE	SECTION	CONDITION	VERIFICATION	Compliance	COMPLIANCE STATUS
AQ-CT4	Air Quality	Whenever the power plant is in operation, the operator shall perform tests of the blow-down water quality once in every seven day period at a minimum; to clarify, if at any time during that same seven day period the power plant has run, then the owner operator shall perform blow-down water quality tests. The operator shall maintain a log that contains the date and result of each blow-down water quality test, and the resulting mass emission rate. This log shall be maintained on site for a minimum of five (5) years and shall be provided to District, ARB, Energy Commission or U.S. EPA personnel on request.	A summary of the results of the weekly blow-down water quality tests and the results of the mass emission rate calculations shall be submitted in the Quarterly Operations Report.	Site Complies with AQ-CT4	Ongoing: Blow-down water quality test results are included in Quarterly reports.
AQ-CT5	Air Quality	The operator shall conduct all required cooling tower water quality tests in accordance with a District-approved test and emissions calculation protocol. Thirty (30) days prior to the first such test the operator shall provide a written test and emissions calculation protocol for District review and approval.	Thirty (30) days prior to the first such test the operator shall provide a written test and emissions calculation protocol for District and CPM review.	Site Complies with AQ-CT5	Ongoing: water sampling is taken daily when the tower is in service.
AQ-CT6	Air Quality	A maintenance procedure shall be established that states how often and what procedures will be used to ensure the integrity of the drift eliminators. This procedure shall be submitted to the District for approval at least thirty (30) days prior to construction and shall be kept on-site and available to District personnel on request.	The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and Energy Commission.	Site Complies with AQ-CT6	Ongoing: The site is made available for inspection.
The following Conditions of Certification apply to the non-certified diesel IC engine, emergency fire pump (District Permit Number: E007961), propane IC engine, emergency generator (District Permit Number: E009492)					
AQ-IC1	Air Quality	The IC engines shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, the IC engines shall also be operated in accordance with all data and specifications submitted with the application for this permit.	A summary of significant operation and maintenance events for the IC engines shall be included in the Quarterly Operations Reports.	Site Complies with AC-IC1	Ongoing: IC engines are installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants.
AQ-IC2	Air Quality	The diesel IC engines shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements. The propane IC engine shall only be fired on propane (LPG).	The above information shall be maintained on-site for a minimum of five (5) years and shall be provided to District and/or Energy Commission personnel on request.	Site Complies with AC-IC2	Ongoing: Files are stored for 5 years and available upon request.
AQ-IC3	Air Quality	A non-resettable hour meter with a minimum display capacity of 9,999 hours shall be installed and maintained on the IC engines to indicate elapsed engine operating time.	The above information shall be maintained on-site for a minimum of five (5) years and shall be provided to District and/or Energy Commission personnel on request.	Site Complies with AC-IC3	Ongoing: Files are stored for 5 years and available upon request.
AQ-IC4	Air Quality	The diesel IC engines shall be limited to use for emergency power, defined as in response to a fire or due to low fire water pressure. In addition, the diesel IC engine (permit #E007961) shall be operated no more than 20 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 20 hour per year limit. The propane IC engine shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, the propane IC engine shall be operated no more than 100 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 100 hour per year limit.	The above information shall be maintained on-site for a minimum of five (5) years and shall be provided to District and/or Energy Commission personnel on request.	Site Complies with AC-IC4	Ongoing: Files are stored for 5 years and available upon request.
AQ-IC5	Air Quality	The requirements of section 93115.6 and 93116 of Airborne Toxic Control Measure for Stationary Compression Ignition Engines (ATCM) (Effective October 18, 2007), the hour limits indicated in AQ-IC4, do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.	The above information shall be maintained on-site for a minimum of five (5) years and shall be provided to District and/or Energy Commission personnel on request.	Site Complies with AC-IC5	Ongoing: Files are stored for 5 years and available upon request.
AQ-IC6	Air Quality	The project owner shall maintain an operations log for the IC engines current and onsite, either at the engine location or at an on-site location, for a minimum of five (5) years, and provide to District, ARB, Energy Commission or U.S. EPA personnel upon request. The log shall include, at a minimum, the information specified below: a. Date of each use and duration of each use (in hours), using the engines hour meter; b. Reason for use (testing & maintenance, emergency, required emission testing); c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours; d. Monthly and rolling 12-month total CO, NOx and PM10 emissions, calculated based on monthly fuel use and District-approved emission factors; and e. For diesel IC engines, fuel sulfur concentration (the project owner may use the supplier’s certification of sulfur content if it is maintained as part of this log).	The above information shall be maintained on-site for a minimum of five (5) years and shall be provided to District and/or Energy Commission personnel on request.	Site Complies with AC-IC6	Ongoing: Files are stored for 5 years and available upon request.
AQ-IC7	Air Quality	The project owner shall conduct inspections in accord with the following schedule. All inspections must occur at least annually regardless of operating hours. a. Change oil and filter every 500 hours of operation or annually, whichever comes first, or use an oil change analysis program to extend oil change frequencies per the requirements in 40 CFR 63.6625(i); b. For diesel IC engines, inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. For propane IC engine, inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and c. inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	The above information shall be maintained on-site for a minimum of five (5) years and shall be provided to District and/or Energy Commission personnel on request.	Site Complies with AC-IC7	Ongoing: Files are stored for 5 years and available upon request.
AQ-IC8	Air Quality	The project owner shall minimize the engine’s time spent at idle during startup and minimize the engine’s startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.	The above information shall be maintained on-site for a minimum of five (5) years and shall be provided to District and/or Energy Commission personnel on request.	Site Complies with AC-IC8	Ongoing: Files are stored for 5 years and available upon request.

CODE	SECTION	CONDITION	VERIFICATION	Compliance	COMPLIANCE STATUS
AQ-IC9	Air Quality	The diesel IC engine (permit #E007961) is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines Title 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ (RICE NESHAPs). The propane IC engine is subject to the requirements of 40 CFR 63 Subpart ZZZZ (RICE NESHAPs). In the event of conflict between conditions and the referenced regulatory citations, the more stringent requirements shall govern.	The above information shall be maintained on-site for a minimum of five (5) years and shall be provided to District and/or Energy Commission personnel on request.	Site Complies with AC-IC9	Ongoing: Files are stored for 5 years and available upon request.
HAZARDOUS MATERIALS HANDLING CONDITIONS OF CERTIFICATION					
Haz-1	Hazardous Materials Handling	The project owner shall not use any hazardous material in reportable quantities, as specified in Title 40, C. F.R. Part 355, Subpart J, section 355.50, not listed in Appendix B of the AFC, or in Table 5.11-1 of the Petition for Post-Certification Amendment, unless approved in advance by the CPM.	The project owner shall provide to the CPM, in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities.	Site Complies with Haz-1	Ongoing: Annual reports are submitted on time
WASTE MANAGEMENT CONDITIONS OF CERTIFICATION					
WASTE-2	Waste Mgmt.	Upon becoming aware of any impending waste management-related enforcement action, the project owner shall notify the CPM of any such action taken or proposed to be taken against it, or against any waste hauler or disposal facility or treatment operator with which the owner contracts.	The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action.	Site Complies with WASTE-2	Ongoing: No violations during this reporting period
WASTE-3	Waste Mgmt.	Prior to the start of construction and prior to the start of operation, the project owner shall prepare and submit to the CEC CPM, for review and comment, a waste management plan for all wastes generated during construction and operation of the facility, respectively. The plans shall contain, at a minimum, the following: <ul style="list-style-type: none">• A description of all expected waste streams, including projections of frequency and hazard classifications; and• Methods of managing each waste, including treatment methods and companies contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans. .	No less than Thirty (30) days prior to the start of construction, or a lesser time period mutually agreed upon, the project owner shall submit the construction waste management plan to the CPM for review. The operation waste management plan shall be submitted no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions within 30 days of notification by the CPM (or mutually agreed upon date). In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year compared to planned management methods.	Site Complies with WASTE-3	Ongoing: No violations during this reporting period
LAND USE					
LAND-2	Land Use	The proposed water conservation offset program shall not permanently retire lands in the Palo Verde Valley (Priority 1 lands) designated as Prime Farmlands or Farmlands of Statewide Importance as defined by the Department of Conservation, or lands included in a Williamson Act Preserve. Following or retirement of farmlands shall not violate any provision of a Williamson Act Contract. Lands selected for retirement on the Mesa shall not include lands currently involved in active orchard crop production.	At least 60 days prior to implementation of the Water Conservation Offset Program (WCOP), the project owner shall submit detailed information to the CPM regarding the lands involved in the WCOP, including: 1) location and assessor parcel number, 2) Department of Conservation Important Farmland Program Classification, 3) crop and cultivation history, and 4) Williamson Act Preserve and contract status. If the program will fallow or retire any lands under Williamson Act contract, the project owner shall provide documentation that such fallowing or retirement has been reviewed and approved by Riverside County Planning Department and does not violate any provision of a Williamson Act contract. Any WCOP agreements that are altered or added to the program shall be submitted to the CPM at least 30 days prior to taking effect.	Site Complies with LAND-2	Ongoing: No Change
NOISE					
NOISE-2	Noise	Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints.	Within 30 days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the City of Blythe (or applicable Agency), and with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 30-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is finally implemented.	Site Complies with NOISE-2	Ongoing : No complaints during this reporting period
BIOLOGICAL RESOURCES					
BIO-3	Biological Resources	The CPM approved Designated Biologist shall perform the following during project construction and operation: 1. Advise the project owner’s Construction Manager on the implementation of the Biological Resource Conditions of Certification; 2. Supervise or conduct mitigation, monitoring and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as, wetlands and special status species; and 3. Notify the project owner and the CPM of non-compliance with any Biological Resources Condition of Certification.	During project construction, the Designated Biologist shall maintain written records of the tasks described above, and summaries of these records shall be submitted along with the Monthly Compliance Reports to the CPM. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report.	Site Complies with BIO-3	Ongoing during current operations.
BIO-6	Biological Resources	The evaporation ponds shall be monitored by plant personnel for bird and wildlife losses (see BIO-1). If a substantial number of bird and wildlife are found dead during any year, as determined by the CPM or Designated Biologist, then measures shall be identified and implemented that will substantially reduce or eliminate the problem. This monitoring shall continue for the first three years of plant operations, and depending on the results, could be discontinued at that time.	In the Annual Compliance Report, the project owner shall submit records of all monitoring dates, data collected, annual report, and any corrective actions taken in the Annual Compliance Report to the CPM.	Site Complies with BIO-6	Ongoing: See Biologist annual report
BIO-8	Biological Resources	The water quality in the evaporation ponds shall be monitored monthly for the first three years of operation. Collections of invertebrates shall be taken from the evaporation ponds at the same time, and these samples preserved (e.g., alcohol and water in sealed glass containers labeled with date and location).	In the Annual Compliance Report, the project owner shall submit records of all monitoring dates, data collected, annual report, and any corrective actions taken in the Annual Compliance Report to the CPM.	Site Complies with BIO-8	Ongoing: See Biologist annual report
BIO-9	Biological Resources	The project owner shall conduct maintenance monitoring of the desert tortoise exclusion fencing on a monthly basis and complete repairs within one week of a problem being identified. Temporary fencing must be installed at any gaps opened in the project site fence if those gaps will be left open overnight.	The project owner shall submit records of all monitoring dates, identify the locations that required repair, and any corrective actions taken or temporary fence installed in the Annual Compliance Report.	Site Complies with BIO-9	Ongoing: See Biologist annual report

CODE	SECTION	CONDITION	VERIFICATION	Compliance	COMPLIANCE STATUS
BIO-10	Biological Resources	A comprehensive exotic control program for California Department of Agriculture List A, List B, and Red Alert weeds, shall be implemented at the 76-acre power plant site. This program should be implemented until such time that the adjacent land use on the north and west sides is no longer a natural community or agriculture, or until the plant is permanently closed. At the Colorado River, this exotic control program should be implemented as feasible until the Caltrans ROW is replanted and established. The natural vegetation adjacent to the BEP site shall be monitored to determine if it has been modified or degraded, if so, these changes to the adjacent sites should be documented by the project’s Designated Biologist in a report which includes photos of the adjacent land uses.	The project owner shall provide a progress/activity report regarding exotic weed control efforts and document changes (as needed) to the surrounding areas in the Annual Compliance Report.	Site Complies with BIO-10	Ongoing: See Biologist annual report
BIO-11	Biological Resources	If any landscaping must be removed from the directional drill site or laydown areas, the preferred method of revegetation is to follow the Blythe General Plan.	The Designated Biologist shall supervise the selection and installation of landscaping material and inform the CPM of any non-conforming plantings within 2 weeks of the action. If a state (Caltrans) mandated plant palette is on record, then these species can be used in lieu of the Blythe General Plan species. The success of the landscaping shall be monitored for 5 years after installation and corrective actions taken to sustain a survivorship rate of greater than 60% for all plantings. The Designated Biologist shall submit records of all monitoring dates, identify areas needing repair, and any corrective actions taken in the Annual Compliance Report	Site Complies with BIO-11	Ongoing: See Biologist annual report
BIO-15	Biological Resources	The project owner shall implement an Interim Weed and Erosion Prevention Program for the applicable portion of the 66-acre expansion area to mitigate any potential outbreak of noxious weeds on all bare ground sites for the three (3) years (1095 days) following final grading. The Interim Weed and Erosion Prevention Program shall propose a technique that prevents erosion, reduces dependence on herbicides, and prevents the germination of weed seed to the highest level possible. If the 66-acre expansion area remains undeveloped for the entire three (3) year period, and there is no permitted project for the site, then the project owner shall implement a long-term plan to re-establish regionally native vegetation on the site within one year, and remove portions of the desert tortoise proof fencing to allow wildlife to return to the site.	The project owner shall submit an Interim Weed and Erosion Prevention Program at least 30 days prior to the expected completion of grading to the CPM for approval. The Interim Weed and Erosion Prevention Program should: 1. evaluate at least two weed prevention techniques, 2. compare the merits and cost of their implementation at the Expansion Site, and 3. describe in detail the selected alternative. The Interim Weed and Erosion Prevention Program shall be in consultation with the Designated Biologist and be incorporated into the BRMIMP. If the project owner re-establishes vegetation after three (3) years, then they shall submit to the CPM for approval within 90 days prior to the start of re-vegetation on the 66 acre expansion area: 1. the proposed plantings or seed mixture (which includes at least one fast-growing cover crop) with the relative percentages of species types; 2. certification that the mulches and seed mixtures are nearly weed free; 3. a Long-Term Re-vegetation Maintenance and Monitoring Plan for the Expansion Site; and 4. a drawing indicating where the fence line would be altered to allow wildlife to enter the site. The Long-Term Re-vegetation Maintenance and Monitoring Plan shall be incorporated into the BRMIMP. The Long-Term Revegetation Maintenance and Monitoring Plan shall be prepared under the supervision of a botanist with desert restoration expertise, in consultation with the Designated Biologist.	Site Complies with BIO-15	Ongoing: See Biologist annual report
SOIL & WATER RESOURCES					
SOILS AND WATER 4	Soil & Water Resources	The project owner will record on a monthly basis the amount of groundwater pumped by the project. This information will be supplied to the Energy Commission, the Palo Verde Irrigation District, and the United States Bureau of Reclamation.	The project owner will submit a groundwater use summary to both the CPM and the PVID on an annual basis for the life of the project. The annual summary will include the monthly range, monthly average, and total groundwater use by the project in both gallons-per-minute and acre-feet. For subsequent years the annual summary will also include the yearly range and yearly average groundwater use by the project. This same information will be provided to both the PVID and the Lower Colorado Regional Office of the USBR. Any significant changes in the water supply needs for the project during construction or operation of the plant, will be noticed in writing to the CPM at least 90-days prior to the effective date of the proposed change.	Site Complies with SOIL AND WATER 4	Ongoing - Included in report.
SOIL & WATER 8	Soil & Water Resources	The project owner shall measure groundwater levels in the on-site monitoring well on a monthly basis for the first six months following the project start up and thereafter on a quarterly basis.	The project owner shall submit a quarterly report of the groundwater level monitoring to the CEC CPM on a quarterly basis.	Site Complies with SOIL AND WATER 8	Ongoing: Quarterly reports are submitted on time
SOILS & WATER 10	Soil & Water Resources	The Applicant will provide the results of an annual analysis of groundwater from the Northeast and Southeast monitoring wells (as identified in the BEP response to Staff Data Request 212), and from at least one of the wells constructed to supply the project with groundwater. The analytes will include the volatile and semi-volatile organic compounds reported in the response to Staff Data Request 212. If there is a significant increase in the concentration of groundwater contaminants, the need for additional pretreatment of water will be reassessed. The need for pretreatment of groundwater prior to use by the project would be based on incompatibility with the WDRs, exceedances of air emissions standards, worker safety standards, or standards of exposure of downwind receptors.	The results of the required analyses will be provided to the CPM in a summary format similar to that of the Applicant’s response to Staff Data Request Attachment 212B, on an annual basis beginning after one year of operation on the anniversary date the BEP begins operation and continuing for a total of 5-years. The need for additional pretreatment of water will be assessed on an ongoing basis. The need for continued monitoring will be reassessed at the end of the 5-year period.	Site Complies with SOILS & WATER 10	Ongoing: Samples are sent to independent lab and results are analyzed then provided to the waterboards

Blythe Energy Project

2023-24 Annual Report ***(Summer 2023 through Spring 2024)*** ***for Biological Resources***

Submitted to:

**David Gutierrez
Blythe Energy Center
P.O. Box 1210
Blythe, California 92226**

Submitted by:

Alice E. Karl, Ph.D. 
**Blythe Energy Project Designated Biologist
P.O. Box 74006
Davis, California 95617**

02 August 2024

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BLYTHER ENERGY PROJECT 2023-24 ANNUAL REPORT (SUMMER 2023 THROUGH SPRING 2024) FOR BIOLOGICAL RESOURCES

1.0 BACKGROUND

Blythe Energy Project (BEP or Project) became operational December 29, 2003. The California Energy Commission's (CEC's) licensing of BEP identified several Conditions of Certification that would occur after operation began¹. For the operations period, the following biological Conditions of Certification are applicable:

- BIO-6** BEP personnel monitor evaporation ponds for bird and wildlife losses
- BIO-7** The Designated Biologist monitors evaporation ponds for bird use
- BIO-8** Monitor water quality in the evaporation ponds
- BIO-9** Conduct maintenance monitoring of the plant's tortoise exclusion fencing
- BIO-11** Implement an exotic weed control program to control invasions on adjacent lands
- BIO-15** BEP's *Amendment to Add 66 Acre Area for Deposit of Excess Sediments* (August 14, 2002), incorporated an Interim Weed and Erosion Prevention Program (IWEPP)². Implement an exotic weed control program for this 66-acre site ("Blythe 1B") and adjacent 10-acre cultural exclusion site in order to mitigate any potential outbreak of noxious weeds on all bare ground sites for three years; eliminate weed seeds from the soil stockpile for future revegetation potential

Information related to **BIO-8** is addressed elsewhere in the Project's annual report to the CEC. Activities relating to the remaining biological conditions are reported here for the period from July 2023 through June 2024. A report on activities from the prior period can be found in the 2022-23 Annual Report on Biological Resources³ as well as earlier annual reports.

¹ California Energy Commission. 2001, Commission Decision, Application for Certification, Blythe Energy Project, Docket No. 99-AFC-8, March 2001.

² Karl, A. E. 2003. Blythe Energy Project. Interim Weed and Erosion Prevention Program. Submitted to the California Energy Commission, Sacramento, CA. 10 pp plus attachments.

³ Karl, A. E. 2023. Blythe Energy Project 2022-23 Annual Report for Biological Resources. Submitted to Blythe Energy Center, Blythe, CA. 29 pp.

2.0 ACTIONS AND RECOMMENDATIONS RELATING TO CONDITIONS OF CERTIFICATION

2.1 BIO-6

Condition of Certification **BIO-6** reads:

*“The evaporation ponds shall be monitored by plant personnel for bird and wildlife losses (see **BIO-1**). If a substantial number of bird and wildlife are found dead during any year, as determined by the CPM or Designated Biologist, then measures shall be identified and implemented that will substantially reduce or eliminate the problem. This monitoring shall continue for the first three years of plant operations, and depending on the results, could be discontinued at that time.”*

2.1.1 Methods Used at BEP to Achieve Compliance with Conditions of Certification

Evaporation ponds and the immediate area around the ponds are checked daily, during bird hazing and other maintenance activities. Any dead birds are removed from the pond and the Designated Biologist contacted and provided pictures and information for determination of species and mortality factors. Following this, the birds are labeled and frozen for examination during Designated Biologist site visits to further elucidate cause of death. The exception is a listed species, which the Designated Biologist immediately reports to the CEC, and also the U.S. Fish and Wildlife Service (FWS) if a federally listed species.

2.1.2 Results and Recommendations

No dead birds were reported for this period⁴.

Based on the very low ongoing mortality rate, the recommendation is to continue the current monitoring activities.

2.2 BIO-7

Condition of Certification **BIO-7** reads:

“The evaporation ponds (following start of operation when liquid is in the ponds) shall be monitored twice monthly (once every two weeks – two weeks apart) by the Designated Biologist or another biologist or person familiar with and who can identify birds of the area and is approved by the CPM.

⁴ D. Gutierrez, Senior Manager, Operations and Maintenance, AltaGas/Blythe Energy Inc. 19 July 2024 email to A. Karl.

Records shall be made of the type of birds (e.g. waterfowl, shorebird, etc.), number of birds and behavior. This monitoring shall continue for the first three years of plant operations, and depending on the results, could be discontinued at that time or continued, as needed.”

2.2.1 Methods Used at BEP to Achieve Compliance with Conditions of Certification

The project became operational December 29, 2003. Intensive monitoring of pond use by birds began in late June 2003 and continued through December 2007. Reports documenting bird use of the ponds were submitted every six months during this period, with the final monitoring report was submitted in February 2008⁵. All reports are on file at BEP.

Based on the potentially hazardous levels of selenium and sodium in the evaporation pond water, BEP implemented a program in March 2005 to minimize the risk of elevated levels of selenium and sodium in the evaporation ponds. The program included a bird-deterrent program, continued monitoring of bird use at the ponds and supplementary water monitoring.

As Designated Biologist, I developed a bird deterrent program focused on two premises: (1) making resources provided by the ponds less available (i.e., habitat elimination) and (2) making these resources less attractive (i.e., hazing). Removal of nesting habitat for shorebirds was achieved by (1) removing rainwater puddles from ponds when they were not in use, and (2) raising the water level in the ponds to eliminate the shoreline. Emergent vegetation was not permitted to grow in the ponds. These habitat modifications also rendered the sediment less available to wading species for foraging. As an ancillary benefit, salinity decreased when fresh water was added to raise the water level to remove the shoreline. Further, Charlyn Mosely, former Environmental Compliance Officer, and I developed an integrated system of negative stimuli to haze birds, including cannons, flags across the pond, and hourly walking/driving on the pond levees.

Because of decreased staffing, AltaGas (the current owner) modified this program and currently adheres to the following, reduced hazing methods:

- ◇ AltaGas added large, static “eye” balloons along the upper berm edges in 2016 in an attempt to replace the flags, which require at least annual replacement.
- ◇ 15 March through 14 September – The pond berms are driven several times a day. The bird “cannon” is fired at random times throughout the day and moved to different locations around the pond at least daily. Birds present at

⁵ Karl, A. E. 2008. Blythe Energy Project. Semiannual summary of bird use of the evaporation ponds: Summer and Fall 2007. Submitted to Blythe Energy, LLC, Blythe, CA. 11 pp.

the ponds are counted, identified if possible, and behaviors recorded; all data are recorded on monitoring logs.

- ◇ 15 September through 14 March - Before 0800 daily, the condition of the eye balloons is inspected. Birds present at both ponds are counted, identified if possible, and behaviors recorded; all data are recorded on monitoring logs.
- ◇ Areas surrounding the ponds and between the east and west ponds are surveyed once a day for predators and predation and annotated in the log. Any carcass remnants are removed and discarded unless there are sufficient remains for species identification. These are frozen for inspection by the Designated Biologist.

Any nests observed are recorded. Non-disturbance zones are clearly marked at sufficient distance from the nest to avoid disturbing the parents and young.

2.2.2 Results and Recommendations

The eastern pond was emptied for cleaning and to make any necessary repairs to the liner beginning in Summer 2019. It remained empty in Summer/Fall 2023, but was approximately ¼ full in Spring 2024. There were substantial brine accumulation “islands” along the shoreline. The western pond was about half to two-thirds full over the last year with a brine sludge shelf along most of the eastern shoreline (Figure 1). No vegetation is growing in either pond. It’s very possible that the



FIGURE 1. Example of Brine “Island” Accumulation in the Western Pond. Photo taken May 2023.

TABLE 1. Average Number of Birds per Count per Survey-Day, by Species. Sandpiper and northern shoveler are included in this table for comparison to earlier years, when they were present in small numbers.

Month	Avocet	Pipit	Bufflehead	Killdeer	Black-necked Stilt	Cinnamon Teal	Other Teals	Phalarope	Eared Grebe	Sandpiper	Northern Shoveler	# of Survey Days
July	0.5	0.4	0.2		0.1							31
August	0.5	0.4			0.2			0.1				31
September			0.5									26
October		0.1					0.04					28
November												30
December												31
January												25
February					0.04							28
March				0.1	0.04			0.04				27
April						0.04						27
May			0.1	0.1								28
June				0.3								30
Total	1.0	0.9	0.8	0.5	0.4	0.04	0.04	0.1	0.0	0.0	0.0	342
Average	0.08	0.08	0.07	0.04	0.03	0.003	0.003	0.01	0.00	0.00	0.00	

TABLE 2. Number of Survey-Days When Each Species Was Observed, for Those Species Observed. Birds are grouped by taxa (shorebirds, ducks).

Month	Avocet	Killdeer	Pipit	Black-necked Stilt	Phalarope	Bufflehead Duck	Cinnamon Teal	Other Teals	# of Survey Days
July (2023)	4		5	1		2			31
August	6		2	3	1				31
September						3			26
October								x	28
November									30
December									31
January (2024)									25
February				1					28
March		2		1	1				27
April							1		27
May		2				1			28
June		5							30
Total	10	9	7	6	2	6	1	0	342

water conditions inhibit plant growth since TDS is substantial: 130,000 mg/L in the eastern pond and 110,000 in the western in 2019⁶. Whatever the reason, the general lack of vegetation provides no habitat for secretive birds that require cover.

As in prior years, there was little bird use of the ponds, and presence was almost entirely transient. The higher average daily counts of avocets and buffleheads (Table 1) were largely due to flocks visiting in mid to late summer (Table 2). Outside of these pulses, shorebirds (pipits, killdeer and black-necked stilts) were the most frequently observed taxa in spring and summer (Tables 1 and 2), consistent with previous years. Notably however, black-necked stilts, a species usually observed at the ponds in spring and frequently observed nesting on the pond liner, were absent from April through June and no nests were seen. In fact, few birds of any species were observed in April and May compared to prior years. Only three birds were observed in April, all cinnamon teal on a single day. In May, three bufflehead were observed on a single day and 1-2 killdeer were observed in May on two days. By comparison, nine species were observed mostly on multiple days in both April and May 2023. Unlike earlier years, no eared grebes or sandpipers were observed during the entire year, and ducks were largely absent.

Killdeer was the only species that nested. Only a single nest was observed and it likely failed, as the parent bird was rarely observed in May after the eggs were discovered, and only observed one day in early June.

In summary, the bird deterrents and continual efforts to minimize sludge islands (nesting habitat) seem to be working, based on the absence of mortalities and nesting.

2.3 BIO-9

Condition of Certification **BIO-9** reads:

“The project owner shall conduct maintenance monitoring of the desert tortoise exclusion fencing on a monthly basis and complete repairs within one week of a problem being identified.

The project owner shall submit records of all monitoring dates, identify the locations that required repair, and any corrective actions taken in the Annual Compliance Report.”

2.3.1 Methods Used at BEP to Achieve Compliance with Conditions of Certification

⁶ Eurofins TestAmerica, Irvine. 2019. Analytical report for samples collected on 14 April 2019. Laboratory Job ID: 440-238964-1. Submitted to R. DeLaParra, Northstar Environmental Remediation, Lake Forest, CA. 23 pp.

Over time, sand accumulates on the southern property fence, thereby compromising the exclusion utility of the tortoise fence. Alta Gas keeps sand cleared from the fence. The fences are monitored weekly, with repairs made as necessary (D. Gutierrez, pers. comm. to A. Karl). Alta Gas maintains records of all monitoring dates and remedial actions, if any.

2.3.2 Results and Recommendations

My recommendation is to continue to monitor the fences, and repair as necessary, to ensure that they remain functional. Any gaps that suggest that tortoises may have entered the site could result in a site clearance survey.

2.4 BIO-11

Condition of Certification **BIO-11** reads:

“A comprehensive exotic weed control program for California Department of Agriculture List A, List B, and Red Alert weeds, shall be implemented at the 76-acre power plant site. This program shall be implemented until such time that the adjacent land use on the north and west sides is not longer a natural community or agriculture, or until the plant is permanently closed. ... The natural vegetation adjacent to the BEP site shall be monitored to determine if it has been modified or degraded, if so, these changes to the adjacent sites should be documented by the project’s Designated Biologist in a report which includes photos of the adjacent land uses.

The project owner shall provide a progress/activity report regarding exotic weed control efforts and document changes (as needed) to the surrounding areas in the annual Compliance report.

2.4.1 Methods Used at BEP to Achieve Compliance with Conditions of Certification

In 2009, based on my recommendations, the project owner began spraying all potential growth areas for Sahara mustard and Russian thistle (e.g., swales, berm edges, stockpiles, fencelines) with a pre-emergent herbicide in early fall, prior to seed germination. The spraying of pre-emergent herbicide has been consistently successful (see earlier annual reports). Prior to the implementation of pre-emergent spraying in 2009, weeds had consistently grown along fencelines and the stockpiles. Since spraying with a pre-emergent, there has been very little to no mustard or other weeds growing along the fencelines, despite a robust and persistent population of those weeds in all of the surrounding lands.

The habitat immediately surrounding the entire BEP and IB site (collectively termed the “Project”), including the 10-acre cultural exclusion area abutting Blythe

1B's northern border, has been surveyed annually for introduction of any weeds resulting from Project construction and operations activities. In practice this includes the entire fenceline, the temporary road on the western fenceline that was constructed to build the fence, and the shoulder of Buck Blvd. I also survey all surfaces, especially non-compacted surfaces (e.g., ditches, berms, stockpile edges) and places where water would collect (detention basins) inside the Project site. Generally these surveys, or at least those along the fence, occur in late January/early February before seed set by the most invasive and offensive weed species found at BEP: Sahara mustard (*Brassica tournefortii*); Russian thistle (*Salsola tragus*); and tamarisk (*Tamarix* sp.). In 2024, the surveys will be conducted in September/October, at which point residual plants, even dried, will be detectable.

During each year's surveys, I uproot or direct the removal of scattered mustard and Russian thistle plants under fencelines and inside the Project, as needed, and discard them into the enclosed BEP trash bins for disposal. Again, this generally occurs at the appropriate time of year to minimize population spread – i.e., following germination but prior to seed set, generally in early to mid-February. Dense groupings are mapped and directed to the Environmental Compliance Officer to be sprayed with glyphosate (Roundup®) or excavated and removed (bagged and disposed of in BEP bins) by BEP personnel or their herbicide contractor. These activities by BEP personnel are always to be accomplished immediately, prior to seed set. Based on several years of diligent herbicide application at the appropriate times, surveys were confidently postponed in 2024 until autumn. Residual plants will be easily identifiable even then, but they are unexpected due to the herbicide program.

2.4.2 Results and Recommendations

AltaGas sprayed a pre-emergent on 02 November 2023⁴. All surfaces on the power plant site, plus the switchyard, the 66-acre soil stockpile to the west (Blythe II), and the perimeter were sprayed. This was followed on 29 April 2024 by post-emergent spraying on all of these areas. As a result, sprayed surfaces remain largely devoid of any plant growth, including weeds, except for a few perennial and/or herbaceous subshrubs, primarily in the diversion channel and in the 66-acre set-aside ditch. The landscaping around the project is being well maintained on the eastern and southern fencelines. It appears that irrigation is limited on the northern border - shrubs are a little dry.

Both Sahara mustard and seeds are likely to continue to invade BEP from lands around BEP, due to existing seed banks and the potential for soil instability north of Riverside Avenue. Several of the Project's site features - the fencelines, slopes and depressions, and ditches - provide favorable microsites that enhance germination and growth and could contribute to the spread of noxious weeds, Sahara mustard in particular. However, our methods of pre-emergent spraying and post-emergent weed removal have prevented the spread or increased populations of these noxious,

highly invasive weeds on all of the Project site except the 10-acre cultural set-aside in the northwestern corner. That area has been heavily invaded by mustard from the infested lands to the north and northwest (prevailing winds). This set-aside has native habitat, so herbicide spraying is not an option and manual removal is impractical.

The current weed abatement program should be maintained. The following successful measures have been and will continue to be recommended for controlling weed populations specifically associated with the Project:

- ◇ Continue to monitor fences, roads, and other features that may enhance weed populations.
- ◇ Apply a pre-emergent herbicide (e.g., Diuron 4L) in October, prior to the first winter rains, to prevent germination of weeds the following winter and spring.
- ◇ As needed, each spring continue to manually remove and/or use post-emergent herbicides (e.g., glyphosate [Roundup[®]] or mustard-specific herbicides) to eliminate all weed individuals. Ensure that this activity is done prior to seed set by identifying plant phenological condition, checking the Project site at sufficient intervals in the event that weather patterns result in multiple flushes of germination, and submitting dates of plant removal and spraying.
- ◇ Re-apply dust palliatives as necessary on BEP and the stockpiles, to minimize the accumulation of sand (hospitable germination sites for weeds) and weed seeds.

2.5 BIO-15

Condition of Certification **BIO-15** for this amendment reads.

BIO-15 - *“The project owner shall implement an Interim Weed and Erosion Prevention Program for the applicable portion of the 66-acre expansion area to mitigate any potential outbreak of noxious weeds on all bare ground sites for the three (3) years (1095 days) following final grading. The Interim Weed and Erosion Prevention Program shall propose a technique that prevents erosion, reduces dependence on herbicides, and prevents the germination of weed seed to the highest level possible. If the 66-acre expansion area remains undeveloped for the entire three (3) year period, and there is no permitted project for the site, then the project owner shall implement a long-term plan to re-establish regionally native vegetation on the site within one year, and remove portions of the desert tortoise proof fencing to allow wildlife to return to the site.”*

2.5.1 Methods to Achieve Compliance with Conditions of Certification

The approved IWEPP for the BEP Amendment established a three-year program to manage the stockpile, in the event that Blythe II (now Sonoran Energy Project) was not permitted. The program objective was to produce a stockpile that was weed-seed free for use in subsequent revegetation. The IWEPP program began in Fall 2003, following completion of stockpile development and contouring. In accordance with the IWEPP, a pre-emergent herbicide was applied to the stockpile on 14 October 2003, following final contouring of the stockpiles⁷. The dust suppressant, “Envirotac” was applied, as needed, to minimize airborne dust.

The second and third years of the program were designed to eliminate the weed seed bank in the stockpiles by farming the weeds. This program was to include actively germinating weed seeds in the soil stockpile, applying supplemental irrigation as necessary, and then eliminating the weeds prior to seed set, through the use of herbicides. Exceptionally high winter rainfall the second year obviated the need for supplementary irrigation. The negligible response of weeds following that winter of high rainfall suggested that there were few viable seeds in the stockpile that were available for germination, so no supplemental irrigation was applied in Year 3. (There was precipitation in Year 3, but it was sub-average.)

The Sonoran Energy Project, which proposed to occupy the 66-acre expansion area, was permitted as Blythe II on 14 December 2005. Based on this permitting and the apparent lack of a viable weed seed bank in the stockpiles (see above), on April 4, 2007, Blythe Energy requested a suspension of that portion of the IWEPP program that included actively farming the weed seeds on the stockpile and subsequently using the stockpile soils for revegetation⁸. The CEC approved this request⁹. In its place, weed populations have been monitored and generally either removed manually or sprayed with glyphosate annually since 2003, in association with **BIO-11**. This has occurred at the appropriate time of year to minimize population spread – i.e. -following germination but prior to seed set, generally in early to mid-February. The stockpiles are also sprayed, typically annually, with the pre-emergent herbicide in fall, prior to seed germination associated with fall/early winter storms.

This program of weed inspection, prevention and removal will continue until Blythe II construction begins.

⁷ Karl, A.E. 2004. Blythe Energy Project: Annual report for biological compliance issues, June 2003 through June 2004. Submitted to FPL Energy, Blythe Energy Project, Blythe, CA. 7 pp plus appendices.

⁸ Karl, A. E. 2007. Letter to Steve Munro, Project Manager, California Energy Commission, to request suspension of the IWEPP. April 4, 2007. 2 pp.

⁹ Munro, S. 2007. E-mail to Alice Karl. June 28, 2007.

2.5.2 Results and Recommendations

See Section 2.4.2 in **BIO-11**, above, for results.

3.0 SUMMARY

The methods to achieve compliance have all been in place for several years and have functioned very successfully, with no issues. AltaGas reported no biological issues at the site over this report's time period⁴. They are doing an excellent job of minimizing the attraction of the ponds to birds. They are keeping the project weed free. They are maintaining the quality of the tortoise exclusion fences. They always readily and thoroughly complied with any requests I have made.

My recommendation is to continue with the current, very successful methods, incorporating appropriate changes should the need arise.

Appendix 1. Monthly Bird Counts

Day of Month - July 2023	Daily Average by Species													Daily Count Effort
	Eared Grebe	Black-necked Stilt	Other Teals	Cinnamon Teal	Phalarope	Pipit	Killdeer	Avocet	Sandpiper	Snowy Plover	California Gull	Bufflehead Duck	Northern Shoveler	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
7	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	4
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
11	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
12	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	3
20	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
21	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
22	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	3
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	4
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	5
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	4
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
Total	0.0	2.0	0.0	0.0	0.0	12.0	0.0	14.0	0.0	0.0	0.0	7.0	0.0	94.0
Average # Birds per Day	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.2	0.0	

Total Number of Survey Days

31

Notes Re Flocks and Nesting: Flock of 27 avocet on July 27

Day of Month-August	Daily Average by Species													Daily Count Effort
	Eared Grebe	Black-necked Stilt	Other Teals	Cinnamon Teal	Phalarope	Pipit	Killdeer	Avocet	Sandpiper	Snowy Plover	California Gull	Bufflehead Duck	Northern Shoveler	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
3	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
8	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
10	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	3
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
17	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	4
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	5
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
26	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	3
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	4
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	4
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
Total	0.0	6.0	0.0	0.0	2.0	12.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	106.0
Average # Birds per Day	0.0	0.2	0.0	0.0	0.1	0.4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	

Total Number of Survey Days

31

Notes Re Flocks and Nesting: Flock of 6 avocet on August 30

Day of Month - September	Daily Average by Species													Daily Count Effort
	Eared Grebe	Black-necked Stilt	Other Teals	Cinnamon Teal	Phalarope	Pipit	Killdeer	Avocet	Sandpiper	Snowy Plover	California Gull	Bufflehead Duck	Northern Shoveler	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	1
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	1
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	13.0	0.0	47.0
Average # Birds per Day	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	

Total Number of Survey Days 26

Notes Re Flocks and Nesting: Flock of 07 bufflehead on September 30

Day of Month- October	Daily Average by Species													Daily Count Effort
	Eared Grebe	Black-necked Stilt	Other Teals	Cinnamon Teal	Phalarope	Pipit	Killdeer	Avocet	Sandpiper	Snowy Plover	California Gull	Bufflehead Duck	Northern Shoveler	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
23	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
25	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Total	0.0	0.0	1.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0
Average # Birds per Day	0.0	0.0	0.04	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Total Number of Survey Days 28
Notes Re Flocks and Nesting None

Day of Month - December	Daily Average by Species													Daily Count Effort
	Eared Grebe	Black-necked Stilt	Other Teals	Cinnamon Teal	Phalarope	Pipit	Killdeer	Avocet	Sandpiper	Snowy Plover	California Gull	Bufflehead Duck	Northern Shoveler	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.0
Average # Birds per Day	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Total Number of Days 31
Notes Re Flocks and Nesting None

Day of Month - January 2024	Daily Average by Species													Daily Count Effort
	Eared Grebe	Black-necked Stilt	Other Teals	Cinnamon Teal	Phalarope	Pipit	Killdeer	Avocet	Sandpiper	Snowy Plover	California Gull	Bufflehead Duck	Northern Shoveler	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0
Average # Birds per Day	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Total Number of Survey Days 25
Notes Re Flocks and Nesting None

Day of Month - March	Daily Average by Species													Daily Count Effort
	Eared Grebe	Black-necked Stilt	Other Teals	Cinnamon Teal	Phalarope	Pipit	Killdeer	Avocet	Sandpiper	Snowy Plover	California Gull	Bufflehead Duck	Northern Shoveler	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
17	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	4
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
26	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
28	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Total	0.0	1.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0
Average # Birds per Day	0.0	0.04	0.0	0.0	0.04	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	

Total Number of Survey Days 27
Notes Re Flocks and Nesting None

Day of Month- April	Daily Average by Species													Daily Count Effort
	Eared Grebe	Black-necked Stilt	Other Teals	Cinnamon Teal	Phalarope	Pipit	Killdeer	Avocet	Sandpiper	Snowy Plover	California Gull	Bufflehead Duck	Northern Shoveler	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
21	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
Total	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0
Average # Birds per Day	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	


Total Number of Survey Days 27
Notes Re Flocks and Nesting None


Day of Month - May	Daily Average by Species													Daily Count Effort
	Eared Grebe	Black-necked Stilt	Other Teals	Cinnamon Teal	Phalarope	Pipit	Killdeer	Avocet	Sandpiper	Snowy Plover	California Gull	Bufflehead Duck	Northern Shoveler	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	3
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
20	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	3
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
31	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3
Total	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	63.0
Average # Birds per Day	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	

Total Number of Survey Days 28

Notes Re Flocks and Nesting May 7, Eggs found on east roadway of east pond

Emergency Backup Generator - Operations Log Ford Emergency Propane Generator - Chiller								Blythe Energy Inc.
date	run-time meter start	run-time meter stop	duration (hr)	fuel use (gal)	NOx emissions (lb/hr)	CO emissions @1.55 lb/hr (lb/hr)	PM-10 emissions (lb/hr)	Comments
eff 05/07/15 - Title V Regs emissions factors					1.67 lb/hr	1.55 lb/hr	0.06 lb/hr	
06/08/23	200.57	200.71	0.14	1.68	0.23	0.22	0.01	Monthly test run
07/11/23	200.71	200.88	0.17	2.04	0.28	0.26	0.01	Monthly test run
08/13/23	200.88	201.99	1.11	13.32	1.85	1.72	0.07	Loss of power
09/14/23	201.99	202.16	0.17	2.04	0.28	0.26	0.01	Monthly test run
10/10/23	202.16	202.32	0.16	1.92	0.27	0.25	0.01	Monthly test run
11/11/23	202.32	202.45	0.13	1.56	0.22	0.20	0.01	Monthly test run
12/12/23	202.45	202.62	0.17	2.04	0.28	0.26	0.01	Monthly test run
			duration (hr)	fuel use (gal)	NOx emissions (lb/hr)	CO emissions @1.55 lb/hr (lb/hr)	PM-10 emissions (lb/hr)	
2023 Totals YTD			2.05	24.60	3.42	3.18	0.12	

Diesel - Emergency Fire Pump - Operations Log Fire Backup Pump / Model # 6081HF001 - 14 gal/hr @ 1800 rpm								
date	run-time meter start	run-time meter stop	duration (hr)	fuel use (gal)	NOx emissions (lb/hr)	CO emissions @1.55 lb/hr (lb/hr)	PM-10 emissions (lb/hr)	Comments
eff 05/07/15 - Title V Regs emissions factors					4.60 lb/hr	5.70 lb/hr	0.05 lb/hr	
01/06/24	510.30	510.60	0.30	1.25	1.38	1.71	0.02	weekly auto start test
01/13/24	510.60	510.90	0.30	1.25	1.38	1.71	0.01	weekly auto start test
01/20/24	510.90	511.10	0.20	0.83	0.92	1.14	0.01	weekly auto start test
01/24/24	511.10	511.40	0.30	1.25	1.38	1.71	0.01	Annual Capacity test
01/28/24	511.40	511.50	0.10	0.42	0.46	0.57	0.01	weekly auto start test
02/03/24	511.50	511.70	0.20	0.83	0.92	1.14	0.01	weekly auto start test
02/09/24	511.70	511.90	0.20	0.83	0.92	1.14	0.01	weekly auto start test
02/17/24	511.90	512.00	0.10	0.42	0.46	0.57	0.01	weekly auto start test
02/23/24	512.00	512.30	0.30	1.25	1.38	1.71	0.01	weekly auto start test
03/03/24	512.30	512.50	0.20	0.83	0.92	1.14	0.01	weekly auto start test
03/10/24	512.50	512.80	0.30	1.25	1.38	1.71	0.01	weekly auto start test
03/16/24	512.80	513.10	0.30	1.25	1.38	1.71	0.02	weekly auto start test
03/24/24	513.10	513.30	0.20	0.83	0.92	1.14	0.01	weekly auto start test
03/30/24	513.30	513.50	0.20	0.83	0.92	1.14	0.01	weekly auto start test
04/06/24	513.50	513.80	0.30	1.25	1.38	1.71	0.01	weekly auto start test
04/13/24	513.80	514.00	0.20	0.83	0.92	1.14	0.01	weekly auto start test
04/20/24	514.00	514.30	0.30	1.25	1.38	1.71	0.01	weekly auto start test
04/27/24	514.30	514.50	0.20	0.83	0.92	1.14	0.01	weekly auto start test
05/04/24	514.50	514.80	0.30	1.25	1.38	1.71	0.01	weekly auto start test
05/11/24	514.80	515.00	0.20	0.83	0.92	1.14	0.01	weekly auto start test
05/18/24	515.00	515.30	0.30	1.25	1.38	1.71	0.01	weekly auto start test
05/25/24	515.30	515.60	0.30	1.25	1.38	1.71	0.02	weekly auto start test
06/01/24	515.60	515.90	0.30	1.25	1.38	1.71	0.01	weekly auto start test
06/08/24	515.90	516.20	0.30	1.25	1.38	1.71	0.02	weekly auto start test
06/15/24	516.20	516.50	0.30	1.25	1.38	1.71	0.01	weekly auto start test
06/22/24	516.50	516.70	0.20	0.83	0.92	1.14	0.01	weekly auto start test
06/29/24	516.70	517.00	0.30	1.25	1.38	1.71	0.01	weekly auto start test
			duration (hr)	fuel use (gal)	NOx emissions	CO emissions	PM-10 emissions	
2024 Totals YTD			6.70	27.94	30.82	38.19	0.34	

Diesel - Emergency Fire Pump - Operations Log Fire Backup Pump / Model # 6081HF001 - 14 gal/hr @ 1800 rpm								
date	run-time meter start	run-time meter stop	duration (hr)	fuel use (gal)	NOx emissions (lb/hr)	CO emissions @1.55 lb/hr (lb/hr)	PM-10 emissions (lb/hr)	Comments
eff 05/07/15 - Title V Regs emissions factors					4.60 lb/hr	5.70 lb/hr	0.05 lb/hr	
06/10/23	502.50	502.70	0.20	0.83	0.92	1.14	0.01	weekly auto start test
06/16/23	502.70	502.70	0.00	0.00	0.00	0.00	0.00	Motor Vibration Analysis
06/29/23	503.00	503.20	0.20	0.83	0.92	1.14	0.01	weekly auto start test
07/01/23	503.20	503.60	0.40	1.67	1.84	2.28	0.02	weekly auto start test
07/08/23	503.60	503.80	0.20	0.83	0.92	1.14	0.01	weekly auto start test
07/15/23	503.80	504.10	0.30	1.25	1.38	1.71	0.02	weekly auto start test
07/22/23	504.10	504.30	0.20	0.83	0.92	1.14	0.01	weekly auto start test
07/29/23	504.30	504.60	0.30	1.25	1.38	1.71	0.02	weekly auto start test
08/05/23	504.60	504.90	0.30	1.25	1.38	1.71	0.01	weekly auto start test
08/12/23	504.90	505.10	0.20	0.83	0.92	1.14	0.01	weekly auto start test
08/19/23	505.10	505.40	0.30	1.25	1.38	1.71	0.01	weekly auto start test
08/26/23	505.40	505.70	0.30	1.25	1.38	1.71	0.02	weekly auto start test
09/02/23	505.70	505.90	0.20	0.83	0.92	1.14	0.01	weekly auto start test
09/09/23	505.90	506.20	0.30	1.25	1.38	1.71	0.02	weekly auto start test
09/16/23	506.20	506.50	0.30	1.25	1.38	1.71	0.02	weekly auto start test
09/23/23	506.50	506.70	0.20	0.83	0.92	1.14	0.01	weekly auto start test
09/30/23	506.70	507.00	0.30	1.25	1.38	1.71	0.02	weekly auto start test
10/07/23	507.00	507.30	0.30	1.25	1.38	1.71	0.02	weekly auto start test
10/17/23	507.30	507.50	0.20	0.83	0.92	1.14	0.01	weekly auto start test
10/21/23	507.50	507.80	0.30	1.25	1.38	1.71	0.02	weekly auto start test
10/27/23	507.80	507.90	0.10	0.42	0.46	0.57	0.00	Vibration test
11/4/23	507.90	508.30	0.40	1.67	1.84	2.28	0.02	weekly auto start test
11/11/23	508.30	508.50	0.20	0.83	0.92	1.14	0.01	weekly auto start test
11/18/23	508.50	508.80	0.30	1.25	1.38	1.71	0.02	weekly auto start test
11/26/23	508.80	509.10	0.30	1.25	1.38	1.71	0.02	weekly auto start test
12/02/23	509.10	509.30	0.20	0.83	0.92	1.14	0.01	weekly auto start test
12/09/23	509.30	509.50	0.20	0.83	0.92	1.14	0.01	weekly auto start test
12/16/23	509.50	509.80	0.30	1.25	1.38	1.71	0.02	weekly auto start test
12/23/23	509.80	510.01	0.21	0.88	0.97	1.20	0.01	weekly auto start test
12/30/23	510.01	510.30	0.29	1.21	1.33	1.65	0.01	weekly auto start test
			duration (hr)	fuel use (gal)	NOx emissions	CO emissions	PM-10 emissions	
2023 Totals YTD			7.50	31.28	34.50	42.75	0.38	

Emergency Backup Generator - Operations Log
Ford Emergency Propane Generator - Chiller



date	run-time meter start	run-time meter stop	duration (hr)	fuel use (gal)	NOx emissions (lb/hr)	CO emissions @1.55 lb/hr (lb/hr)	PM-10 emissions (lb/hr)	Comments
eff 05/07/15 - Title V Regs emissions factors					1.67 lb/hr	1.55 lb/hr	0.06 lb/hr	
01/08/24	202.62	203.08	0.46	5.52	0.77	0.71	0.03	Loss of power (Black Plant)
01/17/24	203.08	203.25	0.17	2.04	0.28	0.26	0.01	Monthly test run
01/22/24	203.25	203.34	0.09	1.08	0.15	0.14	0.01	Loss of Power (switching)
03/07/24	203.34	203.53	0.19	2.28	0.32	0.29	0.01	Loss of Power (switching)
03/09/24	203.53	203.70	0.17	2.04	0.28	0.26	0.01	Loss of Power (switching)
03/15/24	203.70	204.40	0.70	8.40	1.17	1.09	0.04	Loss of Power (switching)
04/09/24	204.40	204.58	0.18	2.16	0.30	0.28	0.01	Monthly test run
05/19/24	204.58	204.75	0.17	2.04	0.28	0.26	0.01	Monthly test run
06/19/24	204.75	204.91	0.16	1.92	0.27	0.25	0.01	Monthly test run
			duration (hr)	fuel use (gal)	NOx emissions (lb/hr)	CO emissions @1.55 lb/hr (lb/hr)	PM-10 emissions (lb/hr)	
2024 Totals YTD			2.29	27.48	3.82	3.55	0.14	



4/2/2024

Blythe Energy

385 N. Buck Blvd

Blythe Ca 92226

Attn: David Gutierrez

David.Gutierrez@altagas.ca

Ref: 302609 CA

Dear Mr. Gutierrez

Amertech Tower Services LLC. Like to thank you for the opportunity to perform the PM's and inspection on your Cooling Tower manufacture by Hamon, Model HUC 5645 Eight (8) cells counterflow cooling tower.

All cells were available at the same time for the internal component inspection including the cold water basin and base anchoring.

We inspected the structure conditions of the fan deck, plenum, mechanicals including oil changes, distribution system, DE's, film fill, air inlet area, CWB base anchoring, enclosure casing, access stairways and cage ladder.

During the inspection we found critical fan damages and gear box which we received your approval for replacement before the end of your outage.

We prepared a report with findings and other recommendations including photos that illustrates the conditions found in your tower

If there are any questions after your review please do not hesitate to call me at the numbers below.

Sincerely,

Jesse F. Garcia

Amertech Tower Services LLC.

Technical Service Manager (QA&QC)

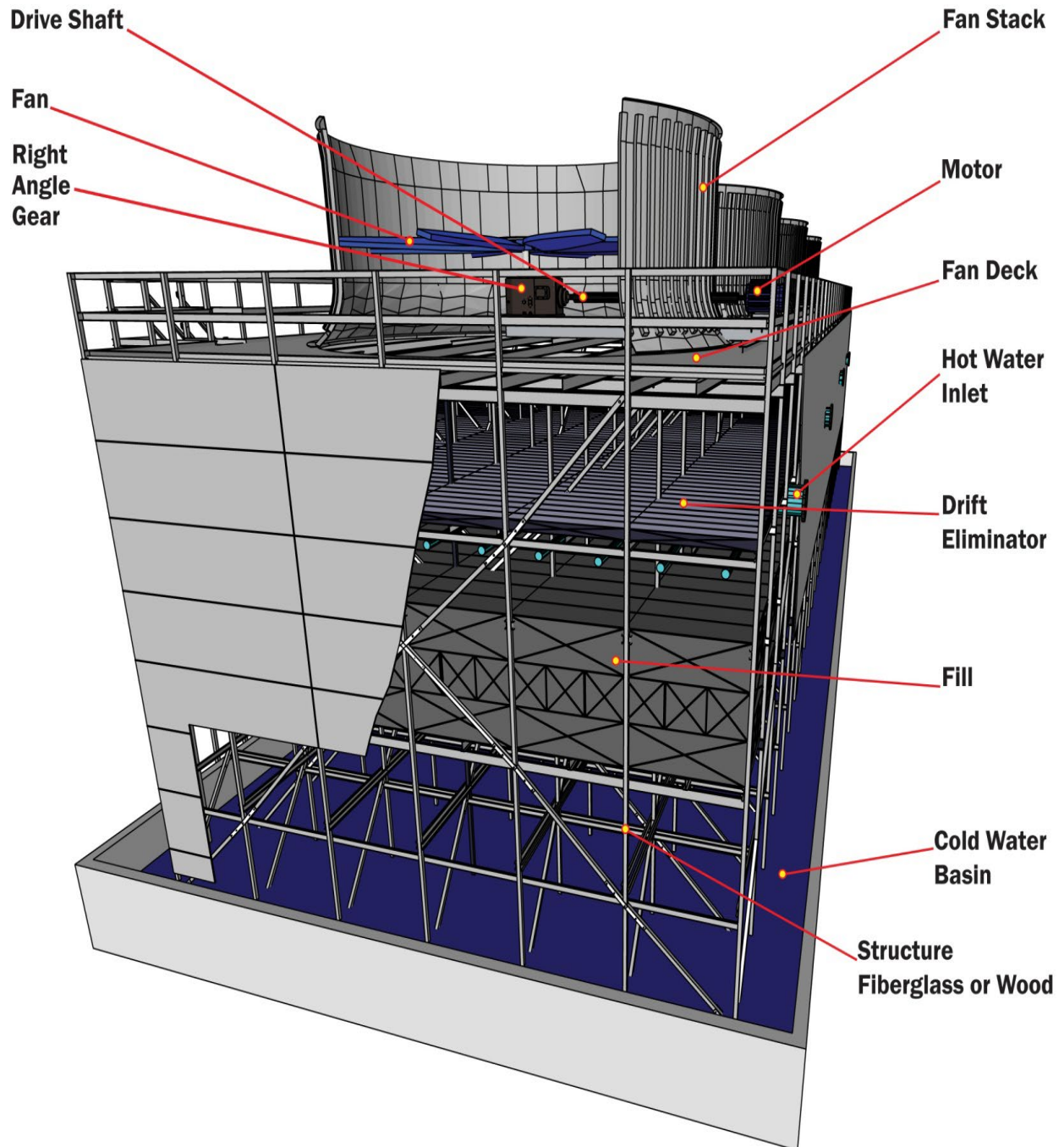
jgarcia@amertechtower.com

Cell (602) 686-0578

Tower profile

Reference No.	ATS Ref: # 302609-CA / Manufacturer by Hamon # HUC 5645
Design Conditions	121,296 GPM/ HW 102.9/CW 83.5 / WB 76/ 8 Counter Flow cells
Tower Dimensions	52.6 L x 59-3/4 T x 31.8H
Motor	200 HP/ 1785 RPM / 460V/60 Hz/ 3 Phase/Frame 445T
Fan Stack frp Velocity Recover	32 Diameter/10' Height lap Joint
Drive Shaft	Addax SS 316 / DBSE 168"
Gear Box	Amarillo Model 1712 / Ratio 16.0:1 (see each cell Alignments reports)
Fan Assembly	Hudson T30H/ 32' Diameter / 8 fan blades Cells #1#3#4#5#6#7#8 and Cell #2 Hudson Fan T-30K 12 Blades
Plenum	10' Height
Air Inlet	11' Longitudinal walls (Close endwalls)
Structure	Pultruded fiber glass /Angle Ties, 3x3 bracing, SS Hardware
Fan Deck	J Groove Style 2" T&G /Transverse direction
Partition walls	Fire wall ½" Plywood with mid supports and SS hardware
Wind-walls	4.2 corrugated 12 Oz frp panels, mid vertical supports and SS hardware
Enclosure Casing	FRP 4.2 Corrugated 12 Oz fr and SS hardware
Fill Media	5' Depth Film Fill/ Evaptech Tech Clean
Drift Eliminators	CF 80 MAX/with additional step over DE's on the main header/ supported over with lateral pipes
Distribution System	30" Header /6" PVC Lateral -3 per bay /French style nozzles

Illustration of the cooling tower & Internal component





Inspection Summary

The purpose of the inspection on the Hamon Cooling Tower Model HUC 5645 was to determine the conditions of the internal structure and heat rejection components including the mechanical rotating equipment with the intention to extend the best performance, life and safe operation of the tower.

We begin the inspection on the outside of the cooling tower while tower was being drain and then we proceed doing the oil changes one (1) cell at the time including the preventive maintenance (PM's) continuing with the inspection with entire Equipment:

- Mechanical Rotating Equipment
- Drift eliminators (DE's)
- Distribution System
- Film Fill
- Partition & Wind-walls including repairs per T&M
- Fiber Glass Structure (Plenum and Air Inlet areas)
- Base Anchoring

After the entire towers was inspected and data collected, we develop scope of recommended repairs for your considerations on your next outage

Work based on the most critical components that need immediate attention

Inspection Summary:

STRUCTURE AND INTERNAL COMPONENTS INSPECTION-

FAN DECK	<p>The Fiber glass Fan deck is a Non-skid 2" J Type deck supported with a C-6 frp channels joist and a one single mid-bay I Beam center support from below and a C-6 frp channel joist sub-support bolted at every two meters.</p> <ul style="list-style-type: none">• Fan Deck was found with a very minor crack on the north side due to improper unloading of heavy materials over the deck• The perimeter hand and knee rails are losing their top protection veil exposing the frp fibers and damaging the integrity of the Hand rails <p>ATS Recommend: Apply a Urethane safety yellow coating on your next outage to extend the life of the H/K rails and safe conditions.</p>
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FIBER GLASS STRUCTURE	<p>The upper pultruded fiber glass structure at plenum, distribution and air inlet areas are compose of 3x3 vertical post tubing bolted to a horizontal tie lines L3 and brace with 3x3 frp tubing on the side of structure bents</p> <p>All frp structure were found in GOOD conditions</p>
PARTITION FIRE WALLS	<p>The partition fire wall compose of ½” treated double sided plywood materials, secured with SS hardware to columns and mid-supports This were found in good conditions</p> <p>Fire Wall Partition are overall are in Good Conditions</p>
WIND-WALLS	<p>Wind-walls compose of 4.2 corrugated frp 12 Oz panels secured with SS hardware to columns and mid supports by air inlet along the center longitudinally of the tower</p> <p>Wind wall overall are in Good conditions</p>
DRIFT ELIMINATORS	<p>The Drift Eliminators Model CF80 are supported over the existing distribution Lateral pipes and step-up framing over the main header pipe</p> <p>Overall the Drift Eliminators are in GOOD conditions</p>
FILL MEDIA	<p>The film fill was installed previously by Evaptech 5’ Depth, Tech Clean</p> <p>ATS-Recommendations: Monitor fill every outage, there are some indications on the end cells for possible fouling conditions</p>
FILL SUPPORTS	<p>Fill sub-supports compose of C-6 bolted at 2 mts and Two single I-6” Beam per each bay over the sub-supports C-6</p> <p>Overall supports are in GOOD conditions</p>
DISTRIBUTION SYSTEM	<p>The Distribution system compose of 30” frp Header and PVC lateral 6” pipes 3 per bay with French style Nozzles each with 4” extensions</p> <ul style="list-style-type: none"> • The perimeter nozzles were found plugged up with mud and rust debris mainly along the walls • Found a substantial amount of broken nozzles mainly at end cells <p>All missing and broken nozzles were replace during the outage also nozzles were clean along the longitudinal walls</p> <p>ATS Recommend the following for you next outage:</p> <ol style="list-style-type: none"> a. Clean perimeter nozzles on next outage b. Design supply and install a 4” drain valve at the end of each main header so a periodic flushing can be done during

	<p>operation preventing from plugging up nozzles in the near future</p>
ENCLOSURE FRP CASING	<p>Casing enclosure compose of 12 Oz 4.2 V-beam FR</p> <ul style="list-style-type: none"> Casing was found in GOOD conditions with some leaks at random location <p>ATS recommend the following:</p> <ul style="list-style-type: none"> Clean & Remove calcium built up around leaks and re-seal with mastic as required
MECHANICAL EQUIPMENT	<p>Torque Tube Mechanical Supports</p> <ul style="list-style-type: none"> The supports in all cells are in GOOD conditions <p>Gear Boxes</p> <ul style="list-style-type: none"> Gear Boxes oil was replaced in all cells as part of the PM service with customer supplied oil and dispose into customer barrels Gear Box Cell #8 was found in a poor conditions extensive corrosion and backlash way over the allowable limits, ATS replaced gear box from their warehouse surplus all T&M Work Gear Box Input Seals was replace as part of the PM service in seven cells (Cells 1-2-3-4-5-6-7) <p>ATS Recommendations: Do Not over filled oil sight gauges maintain proper oil levels, continued checking for leaks input and output shafts seals including checking input backlash.</p> <p>Fan Assemblies</p> <ul style="list-style-type: none"> Fan Assemblies were found in very poor conditions the fan clamps were not able to withstand the torque verifications per the OEM recommendations of 125 lbs. Blade clamps begin crushing or crumbling. ATS was able to locate Three new Hubs and authorized to supply reusing fan blades, Blythe Energy provide Three full fan assemblies from their warehouse surplus All work was perform during the outage under T&M terms The following is the final fan replacement per each cell Cell: 1 <i>Reused</i> Complete fan assembly (8 Blades) Cell: 2 <i>Reused</i> complete fan assembly (12 Blades) Cell: 3 <i>New Hub</i> / Reuse blades (8 Blades) Cell: 4 <i>New Hub</i> / Reuse blades (8 Blades) Cell: 5 <i>New Hub</i> / Reuse blades (8 Blades) Cell: 6 <i>New Complete</i> Fan Assembly (8 Blades) Cell: 7 <i>New Complete</i> Full Fan Assembly (8 Blades) Cell: 8 <i>New Complete</i> Fan Assembly (8 Blades)

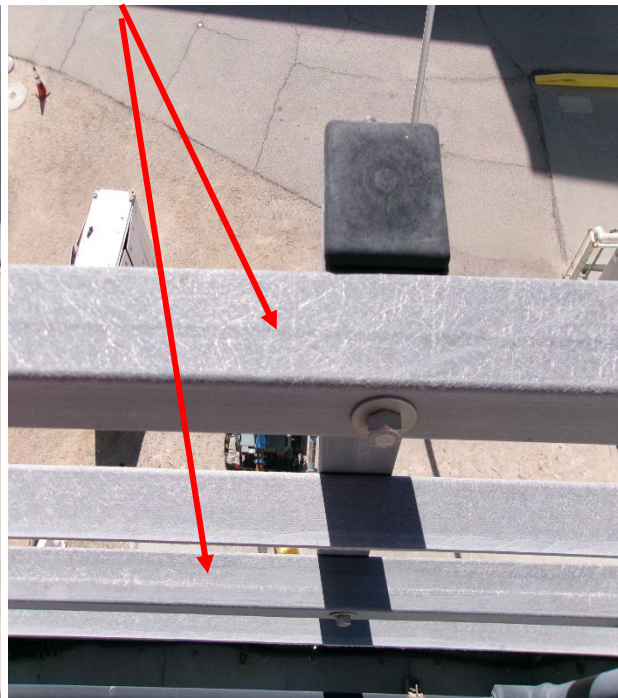
	<p>ATS Recommendations: Monitor fan blades condition on cells 1 through 5 closely on every outage mainly for any visible cracks or wear and tear and external delamination coating</p> <p>Electric Motor</p> <ul style="list-style-type: none"> • The Motor found in GOOD conditions <p>Drive Shafts</p> <ul style="list-style-type: none"> • Drive shafts look in GOOD conditions <p>ATS Recommendations: Verify coupling alignments and flex elements conditions for wear and tear on every outage</p> <p>Fan Stacks</p> <ul style="list-style-type: none"> • Fan Stack were found in GOOD conditions • Hurricane blocks in place and secured on main structure • All hold down bolts tight • All vertical stitch bolts tight <p>ATS Recommendations: Inspect all accessible hardware every outage mainly hurricane blocks and hold down bolting</p>
LIGHTNING PROTECTION	<p>Perimeter Fan Deck Lightning protection</p> <ul style="list-style-type: none"> • Missing connections due to fan stack vibration • Some areas cabling is hanging down already • Lighting cable at bottom of tower broken at random <p>ATS Recommendations: Repair broken cable areas on fan stack and at the bottom of the cooling tower along the wall to basin curb</p>
CABLE TRAY FAN DECK	<p>Cable tray over the fan deck lost a substantial amount of covers protecting the electrical wiring</p> <p>ATS Recommends: Install new covers</p>
COLD WATER BASIN	<p>During our visual inspection on the structure base anchoring we found a substantial amount of concrete cracks more than 1/8" wide for 10' plus in length at random locations</p> <p>ATS Recommends: To reseal cracks as required with an epoxy coating (SIKA 62)</p>

PHOTOS ILLUSTRATING CONDITION FOUND

Fan Deck good safe conditions



Fan Deck Perimeter Hand & Kee Rails UV damaged expose fiber



Fiber Glass structure plenum area, post, tie lines and braces good conditions



Air inlet Fiber Glass structure post, tie Lines, fill joist and braces good conditions



Partition Fire Walls by plenum area good Conditions



Fire wall partition walls by air inlet area good conditions



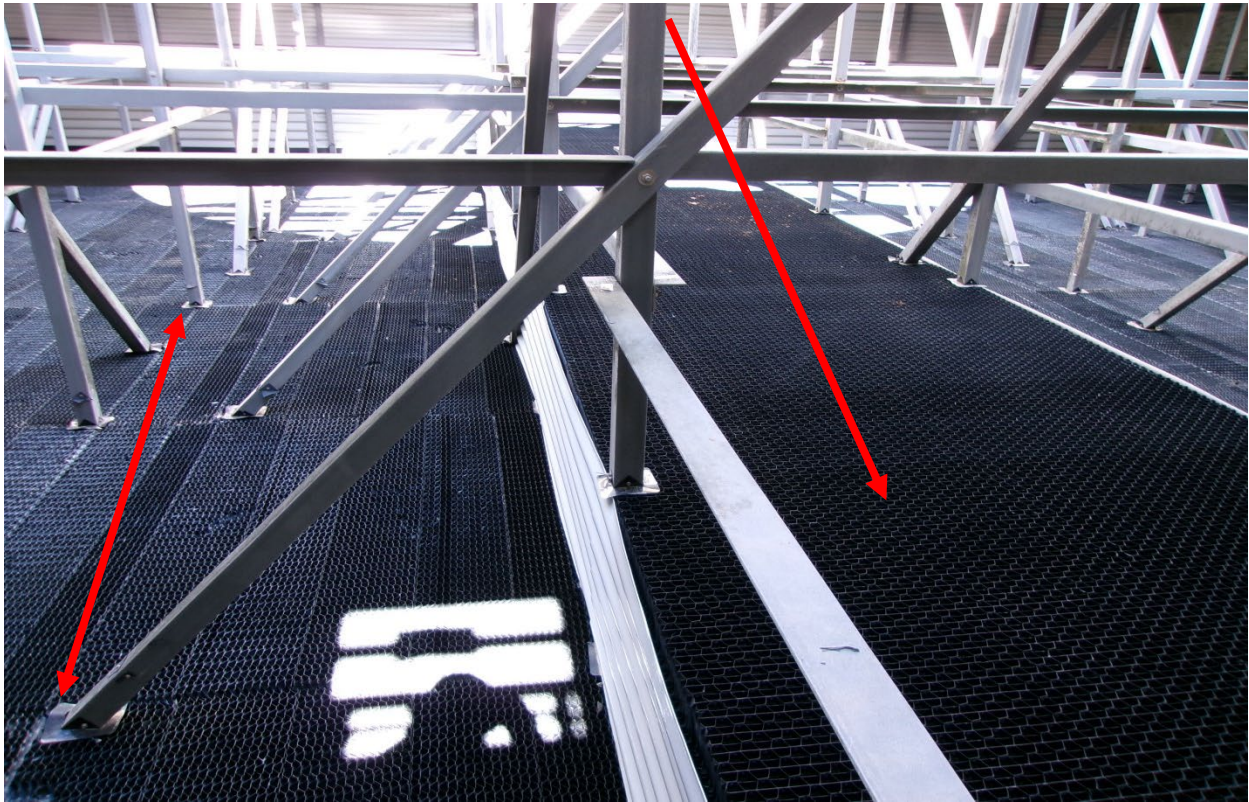
Wind-wall by air inlet in good conditions



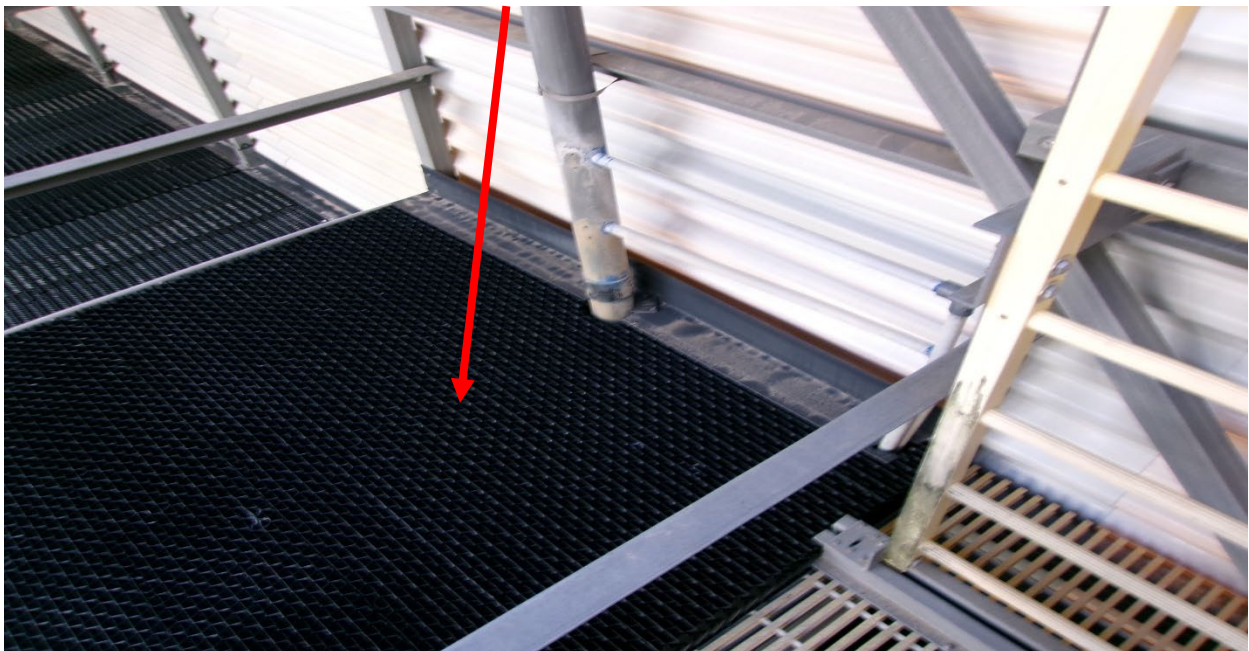
Wind wall and framing good conditions



Drift Eliminators covering header and Dri seals good conditions



Other view of the DE per OEM design to enclose header properly



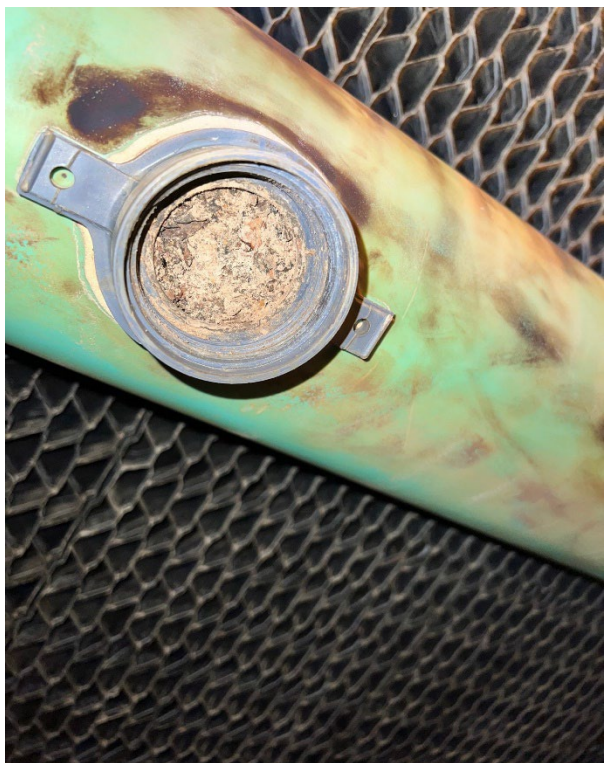
Fill Supports Joist and sub-support Joist bottom area good conditions



Fill showing possible beginning of fouling conditions end cells



Nozzles found Plugged up and some areas broken or missing



Condition found were repaired, replaced and corrected during the outage

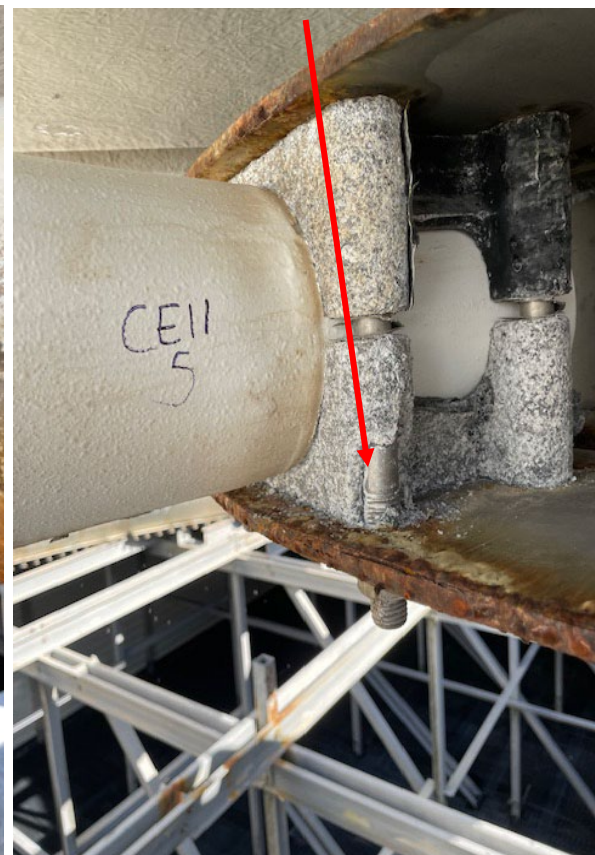
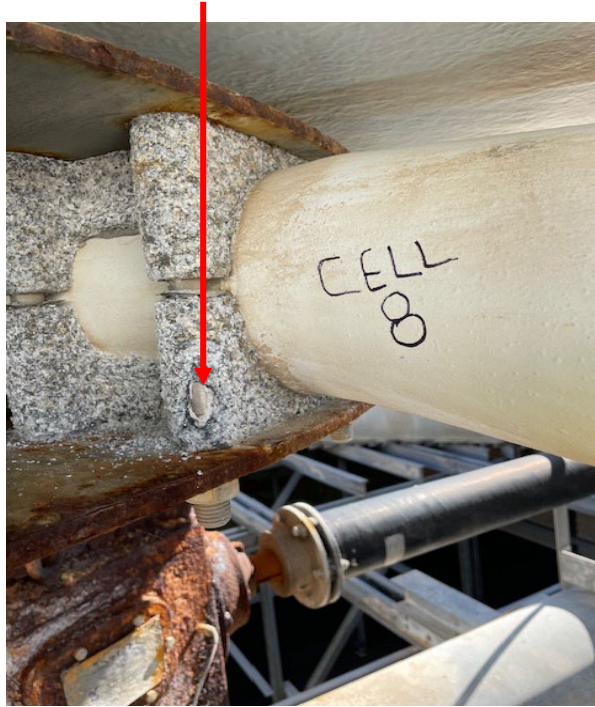
Enclosure casing leaks at random



Enclosure casing leaks at random and calcium build up



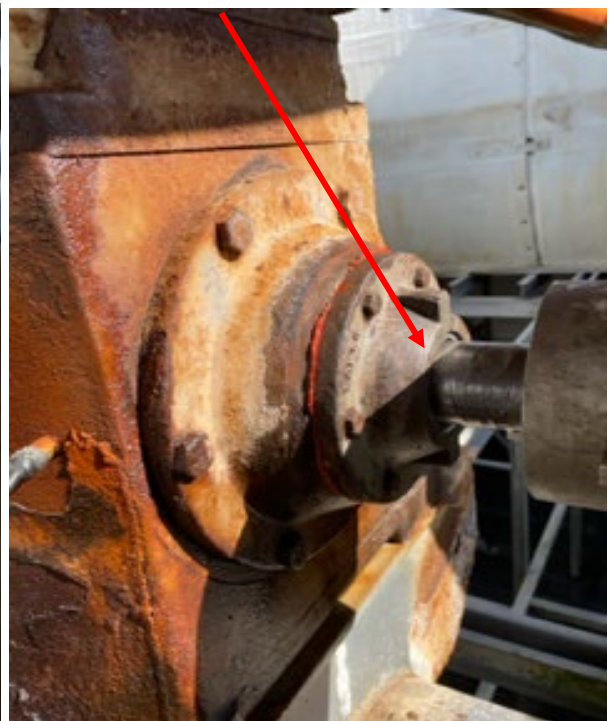
Damaged fan assemblies all corrected during the outage total Six cells



Gear Box Cell #8 excessive corrosion and damaged input bearing was replaced during outage



Gear Box Input Seals Replaced in Seven cells



Fan Stack good conditions



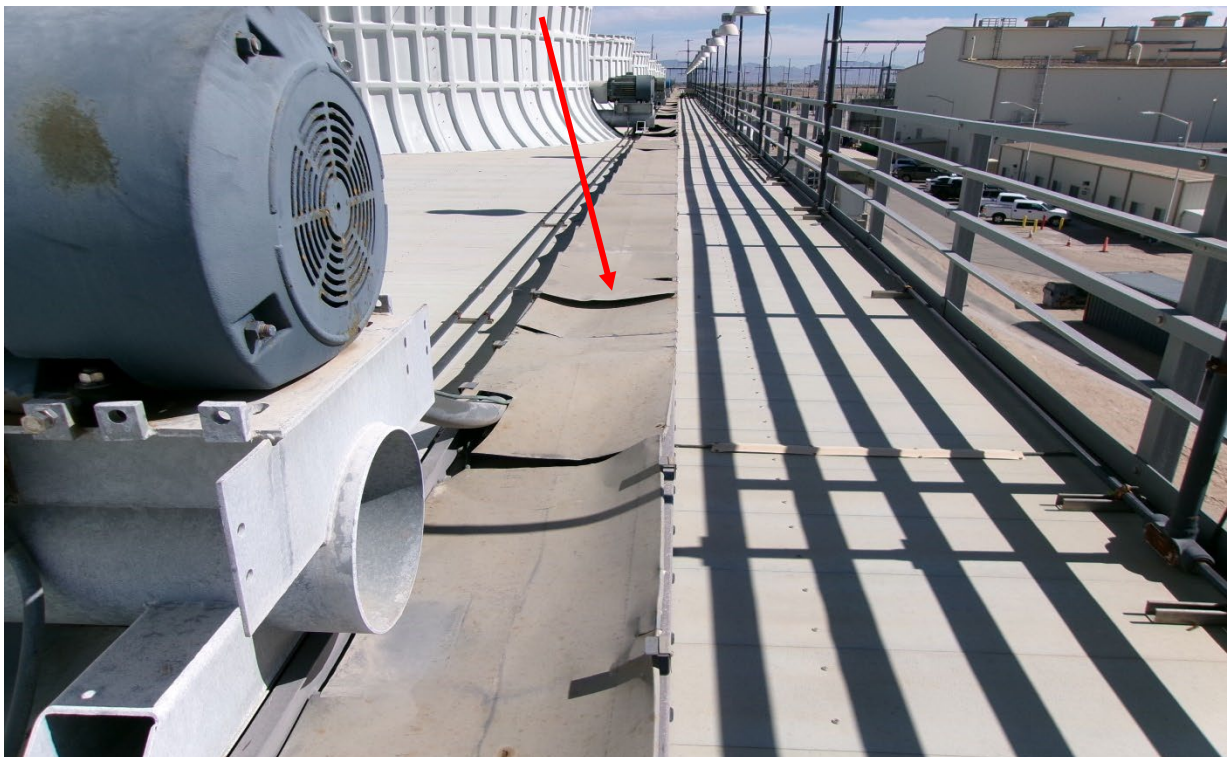
Tower access stairway and emergency ladder all in good conditions



Fan Stacks lightning protection cable and rods missing or broken at random



Cable Trays damaged and missing covers



Cold Water Basin concrete cracks at random



REPAIR RECOMMENDATIONS FOR ALL 8 CELLS

1. Fan Deck

- Monitor cracks and Re-seal with epoxy resin as needed
- Monitor and Secure deck screws as needed on the entire fan deck
- Apply a Urethane coating over the hand & Knee Rails

2. Distribution System

- Remove and clean the perimeter nozzles on each cell
- Install a 4" drain system at the end of each header down to Cold water basin curb with a valve to open periodically during operations for flushing mud from header

3. Enclosure casing

- Clean & Remove calcium build up around leaks and re-seal with mastic as required all cells

4. Film Fill Media

- Monitor film fill for excessive build up in between fill layers
- Remove one bay of fill to check for fouling condition every other year
- Mainly end cells

5. Mechanical Equipment

- Provide a Preventive Maintenance Service for the existing condition record all rotating equipment, Motor, Fan assembly, Drive shaft & Fan stack hold down bolts
- Monitor corrosion over the torque tube supports, Clean and paint with Coal Tar Epoxy over the rusty areas as needed
- Monitor fan blades on cells 1 through 5 replace as necessary between 3 to 5 years

6. Recommended repairs by OTHERS

- a. Repair cable trays cover
- b. Repairs Lightning cabling and rods on the perimeter fan deck
 - Repair broken Lightning cabling at bottom of the tower by CWB curb
- c. Repair & Seal CWB Concrete cracks including expansion joints random

Natural Gas Analyses**Analytical Data Summary**

sample date	report date	analytical lab	results, grains / 100 ft ³	method	Comments
07/14/22	07/26/22	Texas Oil Tech	0.030	ASTM D 5504	No sample taken due to insufficient run time
08/02/22	08/12/22	Texas Oil Tech	0.040	ASTM D 5504	No sample taken due to insufficient run time
09/01/22	09/16/22	Texas Oil Tech	0.100	ASTM D 5504	
10/05/22	10/13/22	Texas Oil Tech	0.080	ASTM D 5504	
11/01/22	11/17/22	Texas Oil Tech	0.070	ASTM D 5504	
12/01/22	12/14/22	Texas Oil Tech	0.032	ASTM D 5504	
01/04/23	01/13/23	Texas Oil Tech	0.080	ASTM D 5504	
02/28/23	02/28/23	Texas Oil Tech	0.000	ASTM D 5504	No sample taken due to insufficient run time
03/14/23	03/29/23	Texas Oil Tech	0.050	ASTM D 5504	
04/05/23	04/24/23	Texas Oil Tech	0.100	ASTM D 5504	
05/02/23	05/12/23	Texas Oil Tech	0.100	ASTM D 5504	
06/07/23	06/19/23	Texas Oil Tech	0.030	ASTM D 5504	

Natural Gas Analyses**Analytical Data Summary**

sample date	report date	analytical lab	results, grains / 100 ft ³	method	Comments
06/07/23	06/19/23	Texas Oil Tech	0.030	ASTM D 5504	
01/18/24	03/22/24	Texas Oil Tech	0.010	ASTM D 5504	
02/29/24	02/29/24	Texas Oil Tech	0.000	ASTM D 5504	No sample taken due to insufficient run time
03/31/24	03/31/24	Texas Oil Tech	0.000	ASTM D 5504	No sample taken due to insufficient run time
04/27/24	05/01/24	Texas Oil Tech	0.060	ASTM D 5504	
05/11/24	05/21/24	Texas Oil Tech	0.080	ASTM D 5504	
06/10/24	06/19/24	Texas Oil Tech	0.020	ASTM D 5504	

Title : Blythe Monthly Report (Jul 2023 to Jun 2024)

Plant	Unit	Year	Month	SH	AH	EOH	FOH	RS	EAF	AF	FOF	EFOR	GAG	NAG	PriBurnQuantity - (Short tons, Barrels, Cubic Feet)	NHR BTU	GHR BTU	NCF
Blythe	Unit 1	2023	Jul	711.95	744.00	0.00	0.00	32.05	97.31	100.00	0.00	0.00	188101.00	178922.00	1348000000.00	7744.96	7367.02	46.25
Blythe	Unit 1	2023	Aug	734.85	740.63	0.00	3.37	5.78	94.77	99.55	0.45	2.56	235081.00	224113.00	1691000000.00	7764.11	7401.87	57.93
Blythe	Unit 1	2023	Sep	561.67	672.37	0.00	47.63	110.70	90.87	93.38	6.62	7.82	131792.00	125476.00	951050000.00	7792.52	7419.07	33.51
Blythe	Unit 1	2023	Oct	699.23	744.00	0.00	0.00	44.77	97.31	100.00	0.00	0.00	186546.00	178946.00	1339900000.00	7661.45	7349.32	46.25
Blythe	Unit 1	2023	Nov	650.23	719.35	0.00	1.65	69.12	99.47	99.77	0.23	0.37	157087.00	151291.00	1125360000.00	7592.35	7312.22	40.35
Blythe	Unit 1	2023	Dec	648.83	744.00	0.00	0.00	95.17	99.81	100.00	0.00	0.00	142372.00	137154.00	1015330000.00	7594.58	7316.24	35.45
Blythe	Unit 1	2024	Jan	305.47	504.12	0.00	0.00	198.65	67.76	67.76	0.00	0.00	72410.00	70158.00	509280000.00	7498.59	7265.38	18.13
Blythe	Unit 1	2024	Feb	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	0.00
Blythe	Unit 1	2024	Mar	90.93	331.43	0.00	0.62	240.50	44.52	44.61	0.08	0.67	14777.00	14194.00	129000000.00	9279.20	8913.11	3.67
Blythe	Unit 1	2024	Apr	437.75	720.00	0.00	0.00	282.25	97.22	100.00	0.00	0.14	94677.00	90923.00	691520000.00	7750.82	7443.50	24.28
Blythe	Unit 1	2024	May	161.07	744.00	0.00	0.00	582.93	97.31	100.00	0.00	0.00	36209.00	34674.00	252590000.00	7444.97	7129.36	8.96
Blythe	Unit 1	2024	Jun	187.68	720.00	0.00	0.00	532.32	97.31	100.00	0.00	0.00	41215.00	39523.00	302710000.00	7827.58	7506.24	10.56
Blythe	Unit 1	2023		4006.76	4364.35	0.00	52.65	357.59	96.59	98.78	1.22	1.79	1040979.00	995902.00	7470640000.00	7691.66	7360.96	43.29
Blythe	Unit 1	2024		1182.90	3019.55	0.00	0.62	1836.65	67.35	68.73	0.01	0.14	259288.00	249472.00	1885100000.00	6633.53	6376.27	10.93
Blythe Total July 2023 - June 2024				5189.66	7383.90	0.00	53.27	2194.24	81.97	83.76	0.62	0.96	1300267.00	1245374.00	9355740000.00	7162.59	6868.61	27.11

**ON-SITE CONTINGENCY PLAN FOR
UNEXPECTED TEMPORARY AND PERMANENT FACILITY CLOSURE
BLYTHE ENERGY PROJECT
BLYTHE, CALIFORNIA**

Submitted by:

Blythe Energy Inc.
385 N. Buck Blvd.
Blythe, California 92225

Submitted to:

California Energy Commission 1516
Ninth Street
Sacramento, California 95814

July 31, 2024

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Appendix B	Chemical Unloading Procedure/Waste Management Plan (included in HMMP submittal)
Appendix C	Aqua Ammonia Risk Management Pla (included in HMMP submittal)

1.0 INTRODUCTION

The Blythe Energy Project (BEP) is in Blythe, California, on 180 acres, at 385 N. Buck Blvd. (Figure 1). BEP is a 520 MW natural gas-fired, combustion turbine combined cycle plant. BEP's technical configuration consists of a two times one combined cycle plant utilizing two Siemens Westinghouse KWU model F-class V84.3A(2) combustion turbines, two Vogt- NEM Harp-design heat recovery steam generators (HRSGs), and a single condensing Siemens Westinghouse Series K-N steam turbine generator. The project will be interconnected to the Western Area Power Administration's Blythe substation.

A common water treatment plant is provided to process makeup water for boiler losses and to process water from the eight cell cooling tower. Wastewater produced on-site from the water treatment operation, is treated and the brine waste is sent to an onsite, double-lined evaporation pond. All rainwater trapped on-site will be directed to an on-site storm water retention pond.

In the event of an unexpected temporary and/or permanent facility closure, this On-Site Contingency Plan for Unexpected Temporary and Permanent Facility Closure has been prepared in accordance with the California Energy Commission's (CEC) Commission Decision Docket Number 99-AFC-8, Section IV - General Conditions for Closure Plan. This document is also a requirement of the Public Resources Code section 25532.

Blythe Energy Project (BEP) personnel will use this plan in the event of an unexpected temporary or permanent closure of the facility. "Unexpected temporary" closure is defined by the CEC as:

"This unplanned unexpected temporary closure occurs when the facility is closed suddenly and/or unexpectedly, on a short-term basis, due to unforeseen circumstances such as a natural disaster, or an emergency".

"Unexpected permanent closure" is defined as:

"This unplanned unexpected permanent closure occurs if the project owner closes the facility suddenly and/or unexpectedly, on a permanent basis. This includes both when an owner is implementing the on-site contingency plan, and when the project owner has abandoned the project."

The purpose of this plan is to provide an on-site contingency plan in the event if an unexpected temporary or permanent closure of the facility is warranted. The plan is designed such that public health and safety and the environment are protected from adverse impacts. The plan covers additional procedures concerning site security, hazardous materials and waste removal, and insurance and warranty coverage.

2.0 NOTIFICATION PROCEDURES

In the event of an unexpected temporary or permanent closure, the Plant General Manager or alternate designated by the Plant General Manager shall notify the CEC's Compliance Project Manager (CPM) and other responsible agencies listed on Table 1 within 24 hours and take all necessary steps to implement this Plan. The General Manager shall also keep the CPM informed of the circumstances of closure and the expected duration.

If a temporary closure is determined to likely be permanent, or for the duration of more than twelve consecutive months, a closure plan consistent with the CBC requirements for a planned closure shall be developed and submitted to the CPM within 90 days of the CPMs determination, or some other period of time mutually agreed to by the owner and the CPM.

TABLE 1
AGENCIES TO BE NOTIFIED

California Energy Commission (CEC)
Ms. Ashley Gutierrez 1516 9 th Street, MS-200 Sacramento, CA 95814 (916) 839-0400 ashley.gutierrez@energy.ca.gov
California Department of Occupational Health & Safety (Cal/OSHA)
464 West 4 th Street Suite 332 San Bernardino, CA 92401 909-383-4321
City of Blythe Fire Department
Station #43 140 West Bernard Street Blythe, CA 92225 911 or 760-921-7822
County of Riverside Fire Department
Station# 45 - Blythe Air Base 17280 West Hobsonway Blythe, CA 92225 760-921-7825
Regional Water Quality Control Board - Colorado River Basin Region (RWQCB)
73 - 720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260 760-346-7491 info7@waterboards.ca.gov
Mojave Desert Air Quality Management District (MDAQMD)
14306 Park Avenue Victorville, CA 92392 760-245-1661

TABLE 1
AGENCIES TO BE NOTIFIED (continued)

County of Riverside - Community Health Agency

Supervising EHS
47950 Arabia Street Suite A
Indio, CA 92201
760-863-8976

U.S. Environmental Protection Agency - Region IX (EPA)

24 - Hour Environmental Emergencies – **800-424-8802**

California Department of Fish & Game

Environmental Response Branch
P.O. Box 949209
Sacramento, CA 94244-2090
916-375-8500

City of Blythe Police Department

240 North Spring Street
Blythe, CA. 92225
911 or 760-922-6111

National Response Center

National Coast Guard Response Center
800-424-8802
nrc@usgc.mil

U.S. Coast Guard - Marine Response

National Command Center - Emergencies Only
202-372-2100

In the event of an unexpected temporary or permanent plant closure, BEP personnel will shut down all operating equipment that is not necessary to respond to an emergency in accordance with plant operating procedures. In the event of an emergency shutdown (e.g., earthquake, fire, or explosion), BEP personnel should consult the Emergency Response Plan (ERP and HMMP) (Appendix A).

The ERP for the BEP has been developed to provide procedures for the continual development and implementation of the Emergency Action Plan (EAP and HMMP). The EAP is an interactive document and is intended to protect facility personnel, the public, the environment, and property should an emergency occur at the facility. The HMMP is the site Hazardous Material Management Plan and contains specific site hazardous material response information.

The ERP/HMMP provides emergency response guidelines so that BEP shift and management personnel can adequately evaluate and respond to issues affecting the protection of plant personnel, company resources, and the environment. The ERP/HMMP includes information on the organization, equipment, instructions, and requirements necessary to enable a rapid and effective response to an emergency situation at the BEP. The plan is divided into several subsections that address areas of responsibility and actions to be taken immediately during and after an accident or emergency.

Specifically, the ERP/HMMP provides guidelines for emergencies including personal injuries, fire, leaks and or spills of hazardous materials, sabotage, civil disturbance, severe weather, and earthquakes. The appropriate response to each of these emergency situations, including evacuation, is outlined in Section 5.3.7, "Initial Response Procedures" of the ERP (Appendix A).

In the event of an emergency, BEP Production Leaders are responsible for the operation of the facility and will assume the duties of Emergency Coordinator (EC) until the Production Manager arrives on site. Upon notification of an incident, the Production Manager or an alternate designated by the EC assumes the functions of the facility EC. The EC will exercise command and control over the response actions of the facility organization. The EC is also responsible for ensuring that local emergency response agencies and appropriate emergency response contractors are notified of an incident (Table 1).

4.0 SITE SECURITY AND EMERGENCY RESPONSE

The Blythe Energy Project (BEP) is in Blythe, California, on 180 acres, at 385 N. Buck Blvd (Figure 1). The main entrance to the plant is located on the west side of Buck Boulevard, north of Hobsonway. A security audio/video surveillance system monitors entry to the Plant 24 hours per day, 365 days per year. An eight-foot-high chain-link fence surrounds the plant. Entry is controlled through an automatic gate, which is activated remotely by the Control Room, or by a unique card key system. BEP authorized personnel carry ID/gate key cards.

All gate activity, personnel entry/exit data is maintained in a PLC database which is an integral part of the security system.

In the event of an unexpected closure, BEP will inspect and ensure that the plant fence is intact. In addition, BEP will use an onsite guard (or other private security services) to maintain site security, if necessary.

In the event of a personal injury, fire, hazardous materials emergency or similar situation, the EC will notify the City of Blythe Fire Department. The Fire Department will have access to the site through the main gate and will also have access to copies of the following documents:

- Emergency Response Plan/HMMP (Appendix A)
- Chemical Unloading Procedure/Waste Management Plan (Appendix B)
- Aqua Ammonia Risk Management Plan (Appendix C)
- Spill Prevention Control and Countermeasures Plan

The information contained in these documents will help enable the Fire Department to respond to any emergency situation in the event that site personnel have evacuated the premises.

5.0 HAZARDOUS MATERIAL AND WASTE REMOVAL

Handling and disposal of all hazardous materials and wastes shall be performed in accordance with all applicable laws and ordinances as outlined in the Waste Management Plan (WMP) (Appendix B). The locations of all hazardous materials routinely present at BEP are shown in the HMMP. In the event of an unexpected temporary closure, not all hazardous materials may require removal. In such an event, BEP will conduct a visual inspection of all hazardous material storage vessels to assess tank integrity.

The objectives of the Waste Management Plan is to ensure that all hazardous materials at BEP are used and handled in the safest manner possible, to prevent/minimize employee exposure to those materials, and to minimize the effects of an accidental release of those materials, in compliance with applicable laws and regulations. In the event of an unexpected temporary closure, the Waste Management Plan (Appendix B) will be consulted if it is necessary to remove any hazardous material or waste.

The largest quantities of potentially hazardous liquid chemicals used at BEP are for water treatment. These chemicals include concentrated sulfuric acid and sodium hydroxide. These chemicals are stored in aboveground tanks in the water treatment area and piped throughout the water treatment facility.

Potentially hazardous gasses at BEP include anhydrous ammonia (liquid phase), aqueous ammonia (vapor phase), and natural gas. Aqueous Ammonia is used as part of the air emission control system. The aqueous ammonia is stored in one tank north of the Water Treatment Plant. The anhydrous ammonia is stored on an ammonia skid south of the Power Block (east of the aqueous ammonia tank). While stored as a liquid, anhydrous ammonia will change to a gas if released into the atmosphere.

Whenever practical, hazardous materials will be returned to the vender or transferred to another entity that may have use for the material(s). The following waste transporters or other qualified waste transporters will be used if it is deemed necessary to remove any hazardous wastes from the site:

**TABLE 2
WASTE TRANSPORTERS**

HCI Environmental & Engineering

Corporate Office:
800.988.4424 24/7 Live Operator
customerservice@hcienv.com

If the unexpected temporary closure also results in a release of hazardous materials or waste, plant personnel will consult the Emergency Response Plan/HMMP (Appendix A), Chemical Unloading Procedure/WMP (Appendix B), and/or the Risk Management Plan (Appendix C).

These plans address release prevention and emergency policies in place at BEP, a hazardous materials inventory including Material Safety Data Sheets (MSDS), applicable employee training, the location of safety equipment and main utility shutoff valves, notification methods, and accident investigation procedures.

The BEP is a zero-discharge facility meaning that there is no offsite runoff from the site. Spilled materials are therefore contained onsite. The BEP filed for an exemption with the California Regional Water Quality Control Board - Colorado River Basin Region (RWQCB), from requirements of the Storm Water Pollution Prevention Plan. The Spill Prevention Control and Countermeasures Plan (SPCCP) describes the engineered controls and necessary actions to contain spilled petroleum products, and the ERP/HMMP describes the methods to be employed to respond to any released material. The SPCCP and ERP/HMMP documents are available to responders at the facility.

Best Management Practices (BMPs), both structural and non-structural, are utilized at the site to reduce pollutants in storm water discharge. Structural BMPs include such measures as berms, and a storm water retention pond used to hold or divert storm water. Non-structural BMPs include such measures as regular inspections, good housekeeping practices, proper initial training and subsequent annual training, and specific procedures for storing and/or loading and unloading of hazardous materials and wastes.

BEP personnel will consult the ERP/HMMP (Appendix A), Waste Management Plan (WMP) (Appendix B), Risk Management Plan (RMP) (Appendix C), and the Spill Prevention Control and Countermeasures Plan (SPCCP) prior to handling any hazardous material or conducting waste removal.

6.0 INSURANCE COVERAGE

All supplied equipment including the combustion turbine generators are under warranty for one year after provisional acceptance of the plant by BEP. BEP is currently insured under an "All- Risk" Builders Risk policy provided by the Plant Construction Contractor for property damage and business interruption. This policy will remain in place until provisional acceptance of the plant by BEP, after which time equivalent insurance will be provided under a policy provided by BEP or its affiliates for property damage and business interruption.

BEP or its affiliates maintains insurance in forms and to limits appropriate for BEP operations, including All Risk Property insurance for property damage.

7.0 UNEXPECTED TEMPORARY CLOSURE

In the event that BEP is closed temporarily, there are additional tasks to be performed including notification procedures and development of contingency plans for areas of transmission line engineering and biological resources.

7.1 Transmission Line Engineering

Prior to electrical generation, BEP must sign a Generator Facility Interconnection Agreement SCE and the Cal ISO that establishes procedures for planned or unexpected temporary and/or permanent closure. These procedures define communication between BEP and SCE that is necessary to ensure that plant closure will comply with all applicable laws, ordinances, regulations and standards (LORS), and that system safety and reliability will not be jeopardized.

7.2 Biological Resources

In the case of temporary closure, measures to protect biological resources. will be needed only if there is a potential for surface disturbances or releases of hazardous materials. If such an event occurs, BEP will consult with the California Department of Fish and Game and US Department of Fish and Wildlife to help plan clean up and mitigation of impacts to biological resources.

8.0 PERMANENT CLOSURE

In the event that BEP is closed permanently, there are additional tasks that need to be performed including preparing a facility closure plan, notifying agencies, ensuring site security, removing hazardous materials and wastes and providing for closure of the evaporation pond(s).

8.1 Facility Closure Plan

In order to ensure that permanent closure does not create adverse impacts, a closure process will be undertaken by BEP that provides for careful consideration of available options, applicable LORS, and local plans in existence at the time of closure. BEP will meet with the CEC, RWQCB and other agencies as necessary prior to the development of the closure plan to establish elements of the plan. In accordance with CEC provisions, the plan, at minimum, will include the following:

1. Future plans for the site (i.e., redevelopment etc.).
2. Information required by specific CEC Conditions of Certification.
3. A plan for the removal of hazardous materials stored on site. If hazardous waste or contamination exists, or if there is a potential for contamination to exist, a plan to conduct an environmental site assessment and remediation, where applicable, shall be prepared. The plan will be submitted to the Department of Toxic Substances Control (DTSC), the RWQCB, or other appropriate agency with jurisdiction over the remediation.
4. A schedule of activities for closure of the power plant site, transmission line corridor, gas meter station, evaporation pond(s), and all other facilities included as part of the plant site.
5. A discussion of potential impacts and mitigation to address significant adverse impacts associated with the proposed closure activities, and to address facilities or other plant-related equipment that will remain on site following closure. A list of the facilities and equipment intended to remain on site following closure, including the reason it must remain on site and its intended future use, if any, should also be included.
6. A discussion on conformance of the plan with all applicable LORS, local and/or regional plans in existence at the time of plant closure and applicable conditions of certification.

The facility closure plan will be submitted to the CECs CPM, City of Blythe, Riverside County, and RWQCB for review and approval at least 12 months, or other mutually agreed upon time, prior to commencing permanent closure activities.

8.2 Agency Notification

Additional notification may be necessary in the event of a permanent closure including re-notifying each of the agencies listed in Table 1. The closure plan will also be sent to those appropriate agencies with which BEP has a current permit.

8.3 Site Security

Prior to permanent closure, the Plant General Manager or designee will notify the City of Blythe, Riverside County Fire Department and Riverside County Sheriff's Department giving them notice that the existing level of site security and/or surveillance will not be in effect. This will enable these agencies to respond appropriately in the event of a fire or disturbance. It may be necessary for BEP to provide site security for a period of time following permanent closure. The Plant Production Manager or designee will determine the need for such interim security and will address it in the closure plan, where appropriate.

8.4 Removal of Hazardous Materials and Waste

As required by the CECs Commission Decision, BEP is responsible for the removal of all hazardous materials and wastes from the site as part of permanent site closure. If BEP intends to redevelop the site, other requirements may need to be met to remove or store materials at a different site location. A detailed removal plan will be included in the closure plan.

8.5 Biological, Cultural, and Paleontological Resources

When a permanent closure plan is prepared, it will include the mitigation requirements in effect at the time for species that would be impacted. The plan will also include the removal of the transmission facilities when they are no longer used, and reclamation of areas where facilities would be removed. This may include ripping of soil, contouring of disturbed areas, implementation of erosion control measures, re-vegetation, and other actions deemed appropriate or necessary at the time the closure plan is developed.

Compliance reporting of biological resources for closure activities would likely include pre-activity survey reports, biological monitoring during reclamation, and a final report describing the closure activities and any follow-up/add-on mitigation work that would be required.

The permanent closure plan will include a description regarding the potential of the closure activities to impact cultural and paleontological resources. The closure requirements are to be based upon the Cultural Resources and Paleontological Resources final reports. If no activities are proposed that would potentially impact either of these resources, no mitigation measures will be required.

8.6 Closure of the Evaporation Pond(s)

In the event of permanent closure, BEP is required to close and abandon the evaporation pond(s) as outlined in the Waste Discharge Requirement (WDR) and Monitoring and Reporting Program (MRP) Board Order Number R7-2002-0012 and as required by Title 27. The site WDRs require that BEP submit a final closure and post-closure maintenance plan including a seismicity study one year prior to anticipated closure. For an unexpected temporary closure that appears will result in a permanent closure this schedule may be met. However, in the event of an unexpected permanent closure, BEP will work with the RWQCB and CEC to establish a mutually agreeable schedule.

BEP will attempt the Mandatory Clean- Closure of the pond(s) as required under Title 27, Chapter 3, Subchapter 5, Article 3, Section 21400, or applicable regulations in effect at the time of closure. Clean closure will consist of the removal and offsite disposal or re-use of all pond construction materials, accumulated sludge, and liquid wastes. The pond(s) area will be graded following removal of all materials.

REVISION HISTORY

Rev #	Revision Description	Approval Title	Approval Signature	Effective Date
00	Initial implementation	Blythe Energy LLC	Blythe Energy LLC	2003.03.12
01	Revised verbiage removing previous owner FPL. Updated figures to latest drawings	Sr. O&M Manager	<i>David Gutierrez</i>	2024.07.2024

UPDATE NOTICE

To all holders of the "On-Site Contingency Plan for Unexpected or Temporary. and Permanent Facility Closure" for the Plant:

Revision Number: R e v 0 1
Date: 07/31/2024

Attached are revised pages for the "On-Site Contingency Plan for Unexpected or Temporary and Permanent Facility Closure" that has been assigned to you. Please remove pages in your book and replace with these revisions. When this is done, record the revisions on the "Record of Revisions" page of your manual.

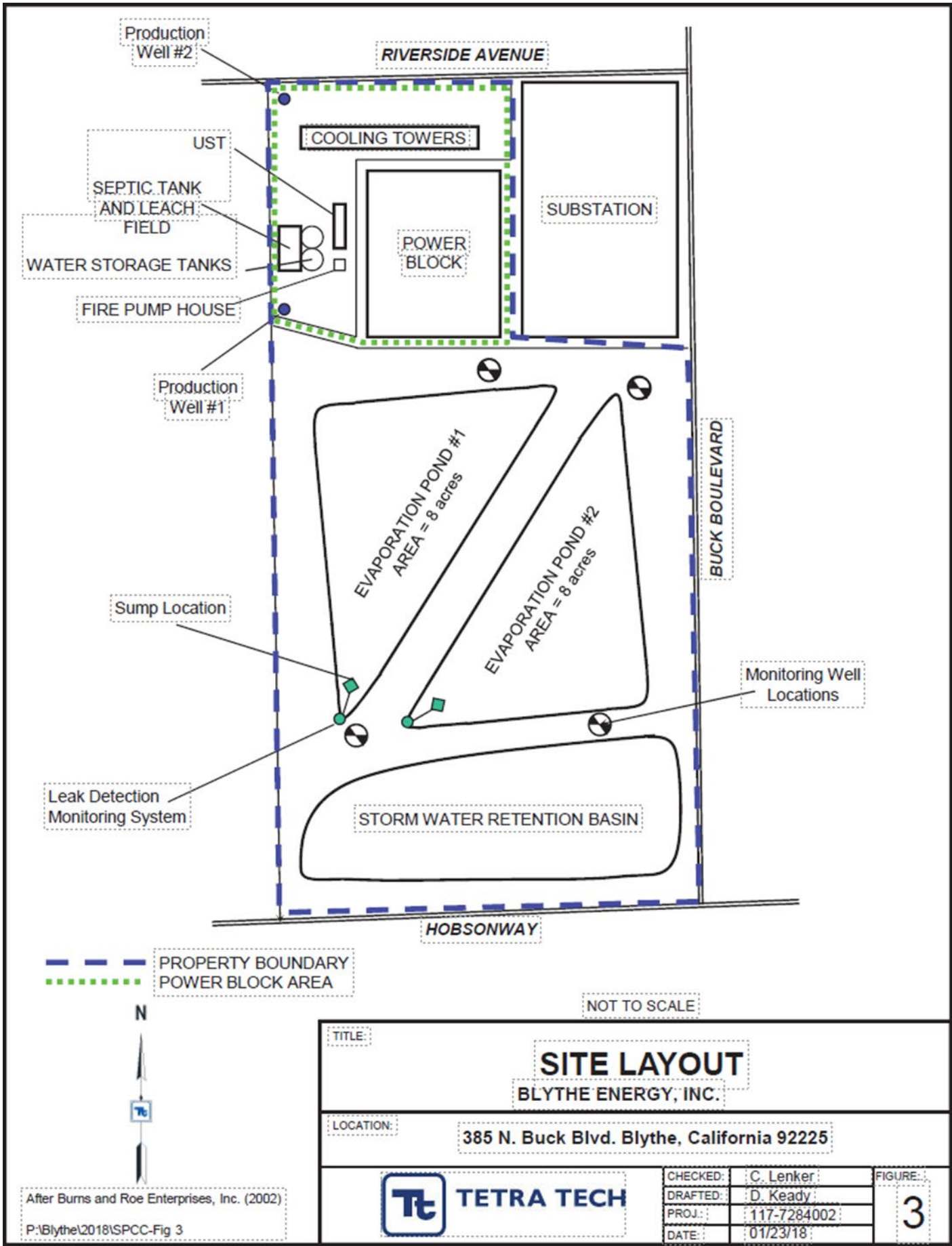
Remove Old Pages


(None)

Replace with Revised Pages

(Revised verbiage removing
previous owner FPL. Updated
figures to latest drawings)

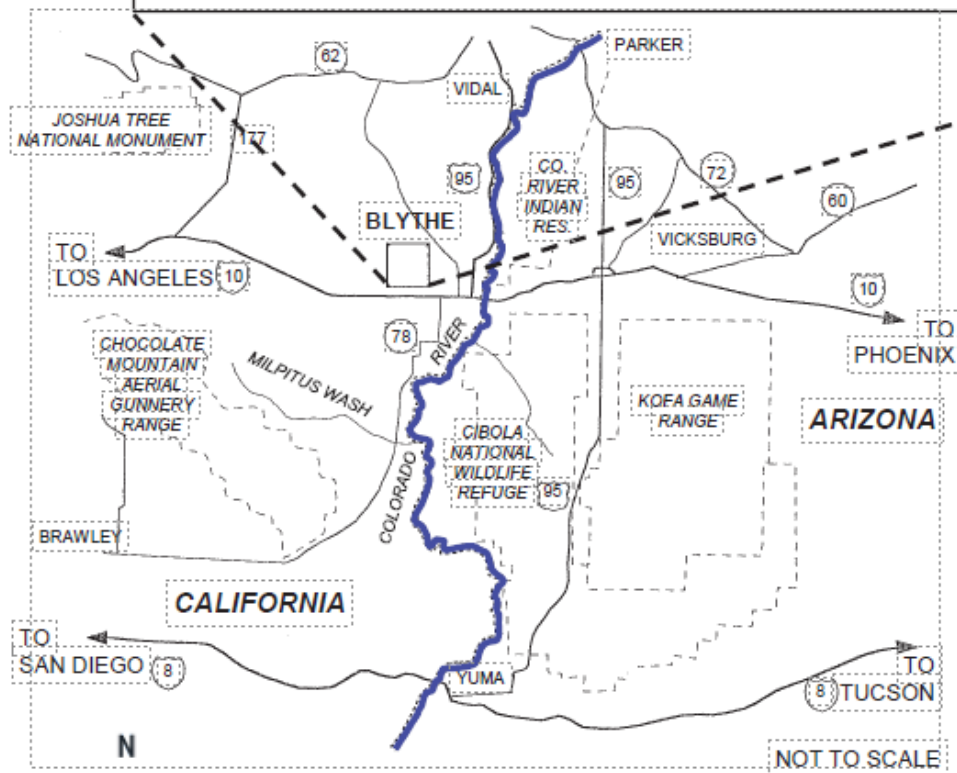
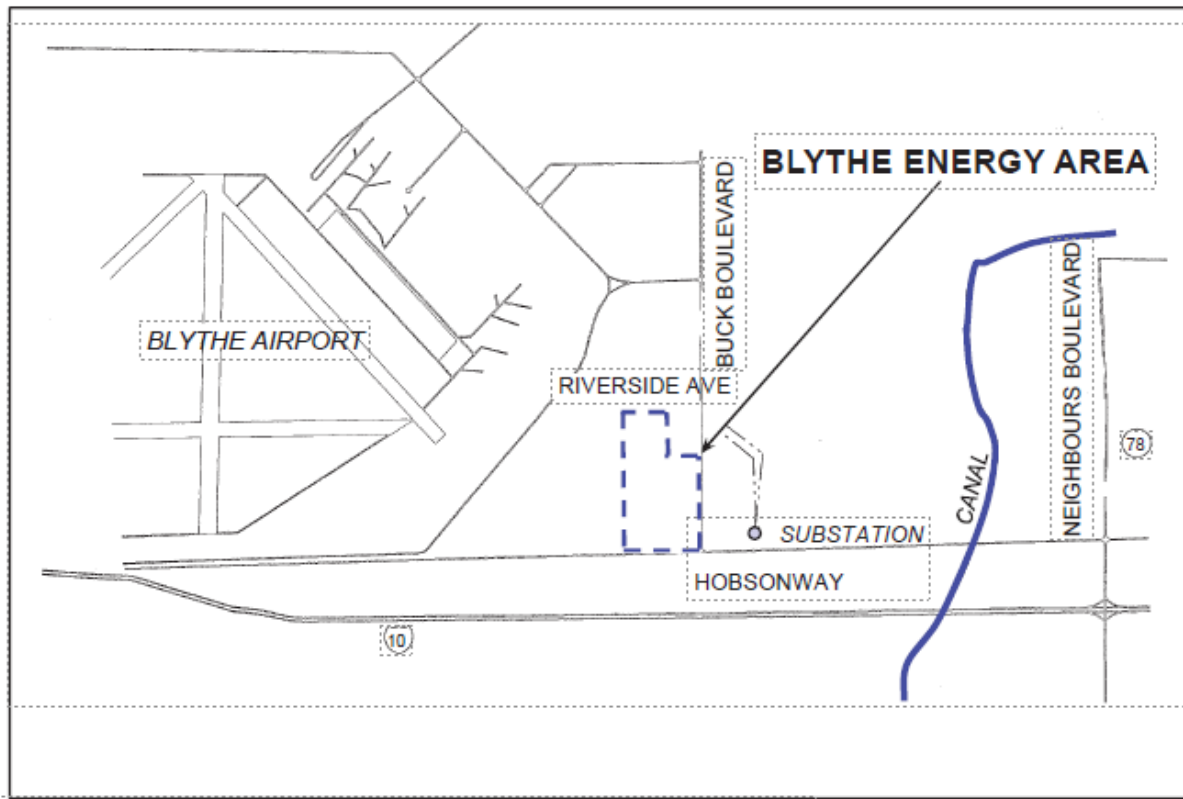
FIGURES




TITLE: SITE LAYOUT BLYTHE ENERGY, INC.			
LOCATION: 385 N. Buck Blvd. Blythe, California 92225			
 TETRA TECH	CHECKED:	C. Lenker	FIGURE: 3
	DRAFTED:	D. Keady	
	PROJ.:	117-7284002	
	DATE:	01/23/18	

After Burns and Roe Enterprises, Inc. (2002)

P:\Blythe\2018\SPCC-Fig 3



TITLE:		SITE LOCATION	
		BLYTHE ENERGY, INC.	
LOCATION:		385 N. Buck Blvd. Blythe, California 92225	
 TETRA TECH		CHECKED:	C. Lenker
		DRAFTED:	D. Keady
		PROJ.:	117-7284002
		DATE:	01/23/18
		FIGURE:	1

After Burns and Roe Enterprises, Inc. (2002)

P:\Blythe\2018\SPCC-Fig 1

APPENDIX A

EMERGENCY RESPONSE PLAN/HMMP (included in HMMP Submittal)

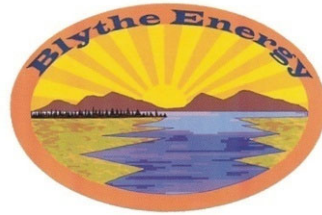
APPENDIX B

CHEMICAL UNLOADING PROCEDURE/WASTE MANAGEMENT PLAN (included in HMMP submittal)

APPENDIX C

AQUA AMMONIA RISK MANAGEMENT PLAN (included in HMMP submittal)

FIRST SEMI-ANNUAL 2024 MONITORING REPORT BLYTHE ENERGY PROJECT BLYTHE, CALIFORNIA



Submitted by:
Blythe Energy Inc.
385 North Buck Boulevard
Blythe, California 92225
(760) 922-9950

Submittal to:
The California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, California 92260



JULY 2024

July 31, 2024

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, California 92260

Attention: Mr. Scot Stormo
Engineering Geologist

Subject: First Semi-Annual 2024 Monitoring Report
Monitoring and Reporting Program
Board Order No. R7-2002-0012
Blythe Energy Project
Blythe, California

Dear Mr. Stormo:

Blythe Energy Inc. is pleased to present this report containing field data, laboratory analytical results, and statistical analysis for sampling conducted during the first and second quarters of 2024 at our Blythe, California facility. Field sampling was performed under the terms of the California Regional Water Quality Control Board – Colorado River Basin Region (RWQCB) Board Order Number R7-2002-0012. Field sampling was performed by Northstar Environmental Remediation (Northstar) of Lake Forest, California.

Data within this report summarizes the sampling activities that occurred during the first and second quarters of 2024. Laboratory data sheets and chain-of-custody records are also included as an appendix to this report.

If you should have any questions regarding this report, please contact David Gutierrez IV, Manager Operations at (760) 921-1359.

Sincerely,

Blythe Energy Inc.



Mike Ludwin
Interim Plant General Manager
Sr. Director Operations-Power

cc: David Gutierrez IV (Blythe Energy Inc.)
CDFW
USFWS



**FIRST SEMI-ANNUAL 2024 MONITORING REPORT
BLYTHE ENERGY INC.
BLYTHE, CALIFORNIA**

July 31, 2024

Prepared for:

Blythe Energy Inc.
385 North Buck Boulevard
Blythe, California 92225

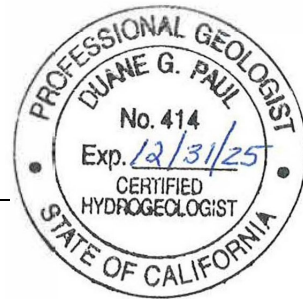
Prepared by:

WSP USA Environment and Infrastructure Inc.
3560 Hyland Avenue, Ste. 100
Costa Mesa, California 92626
(949) 642-0245

Project No. NB11160982

A handwritten signature in black ink that reads "Duane G. Paul". The signature is fluid and cursive.

Duane G. Paul, PG 6336, CHG 414
Principal Hydrogeologist



**FIRST SEMI-ANNUAL 2024 MONITORING REPORT
BLYTHE ENERGY INC.
BLYTHE, CALIFORNIA**

Submitted by:

Blythe Energy Inc.
385 North Buck Boulevard
Blythe, California 92225

A handwritten signature in dark ink, appearing to read 'Mike Ludwin', is positioned above a horizontal line.

Mike Ludwin
Interim Plant General Manager
Sr. Director Operations - Power
Agent For
Blythe Energy Inc.



TABLE OF CONTENTS

1. Facility Information and Declaration
2. Monitoring
3. Reference Maps
4. Quarterly Potentiometric Surface Maps
5. Analytical Summary Tables
6. Statistical Analysis
7. Lysimeter Test Records
8. Evaporation Pond Sampling Records
9. Well Sampling Records
10. Leachate Collection and Recovery System (LCRS) & Weekly Lysimeter Records

APPENDIX

Appendix A Laboratory Analytical Data Sheets



FIRST SEMI-ANNUAL 2024 MONITORING REPORT

SECTION 1

FACILITY INFORMATION AND DECLARATION



FACILITY INFORMATION

Facility Contact:

David Gutierrez IV
Senior Manager, Operations & Maintenance
Blythe Energy Inc.

Telephone:

(760) 921-1359

Address:

Blythe Energy Inc.
385 North Buck Boulevard
Blythe, California 92225

Monitoring and Reporting Program:

California Regional Water Quality Control Board Order No. R7-2002-0012

First Semi-Annual 2024 Monitoring Report
Blythe Energy Inc.
Blythe, California
July 31, 2024

DECLARATION

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.



Mike Ludwin
Interim Plant General Manager
Sr. Director Operations - Power
Agent For
Blythe Energy Inc.



FIRST SEMI-ANNUAL 2024 MONITORING REPORT

SECTION 2 MONITORING



MONITORING

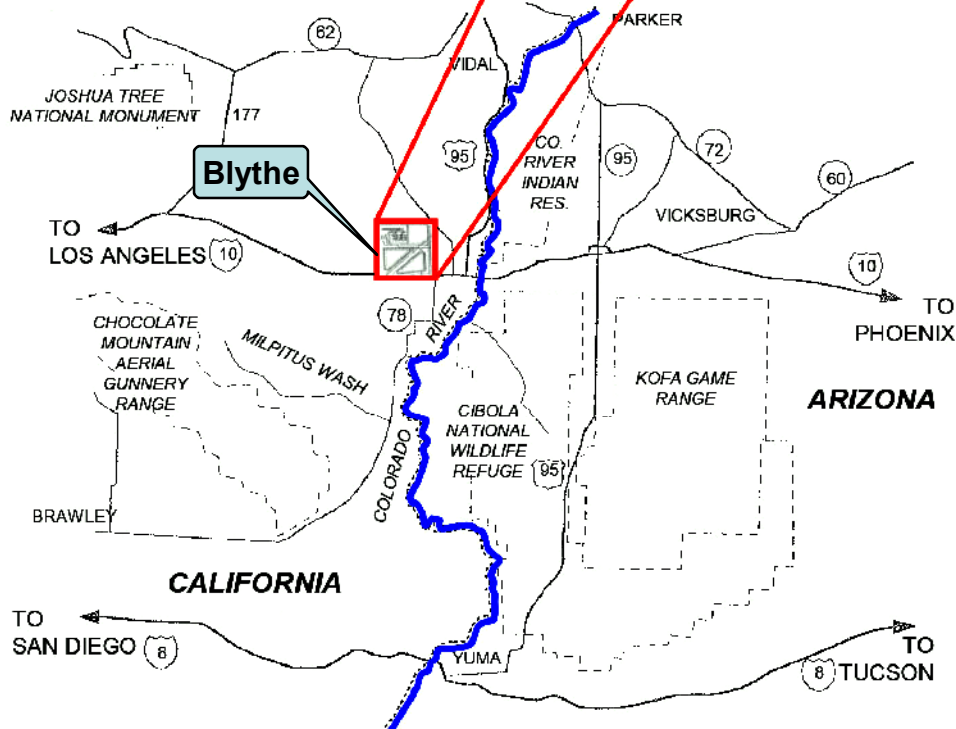
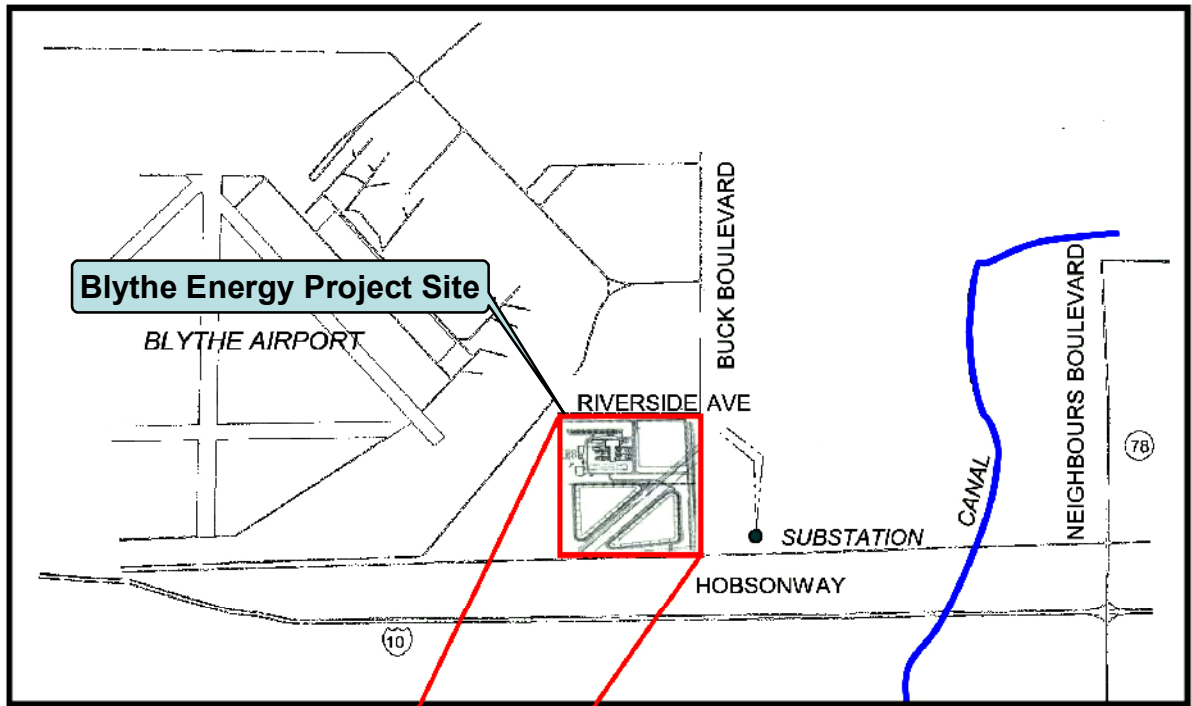
The First Semi-Annual 2024 monitoring event was conducted in compliance with the California Regional Water Quality Control Board- Lahontan Region (RWQCB) Board Order No. R7-2002-012 Waste Discharge Requirements (WDRs) and associated Monitoring and Reporting Program (MRP). First and second quarter 2024 groundwater monitoring was performed by Northstar Environmental Remediation (Northstar) of Lake Forest, California on March 27 and May 15, respectively.

Site reference maps and first and second quarter 2024 potentiometric surface maps are included in Sections 3 and 4. Groundwater quality laboratory analytical data is presented in Section 5 and the statistical analysis is presented in Section 6. The records for the lysimeter, evaporation pond, monitoring well, and the leakage collection recovery sump (LCRS) are presented in Sections 7 through 10. Laboratory analytical data sheets and chain-of-custody reports are also included in Appendix A.



FIRST SEMI-ANNUAL 2024 MONITORING REPORT

**SECTION 3
REFERENCE MAPS**



NOT TO SCALE

SITE LOCATION MAP
Blythe Energy Inc.
Blythe, California

By: MWW Date: 7/24/2024 Project No.: NB11160982



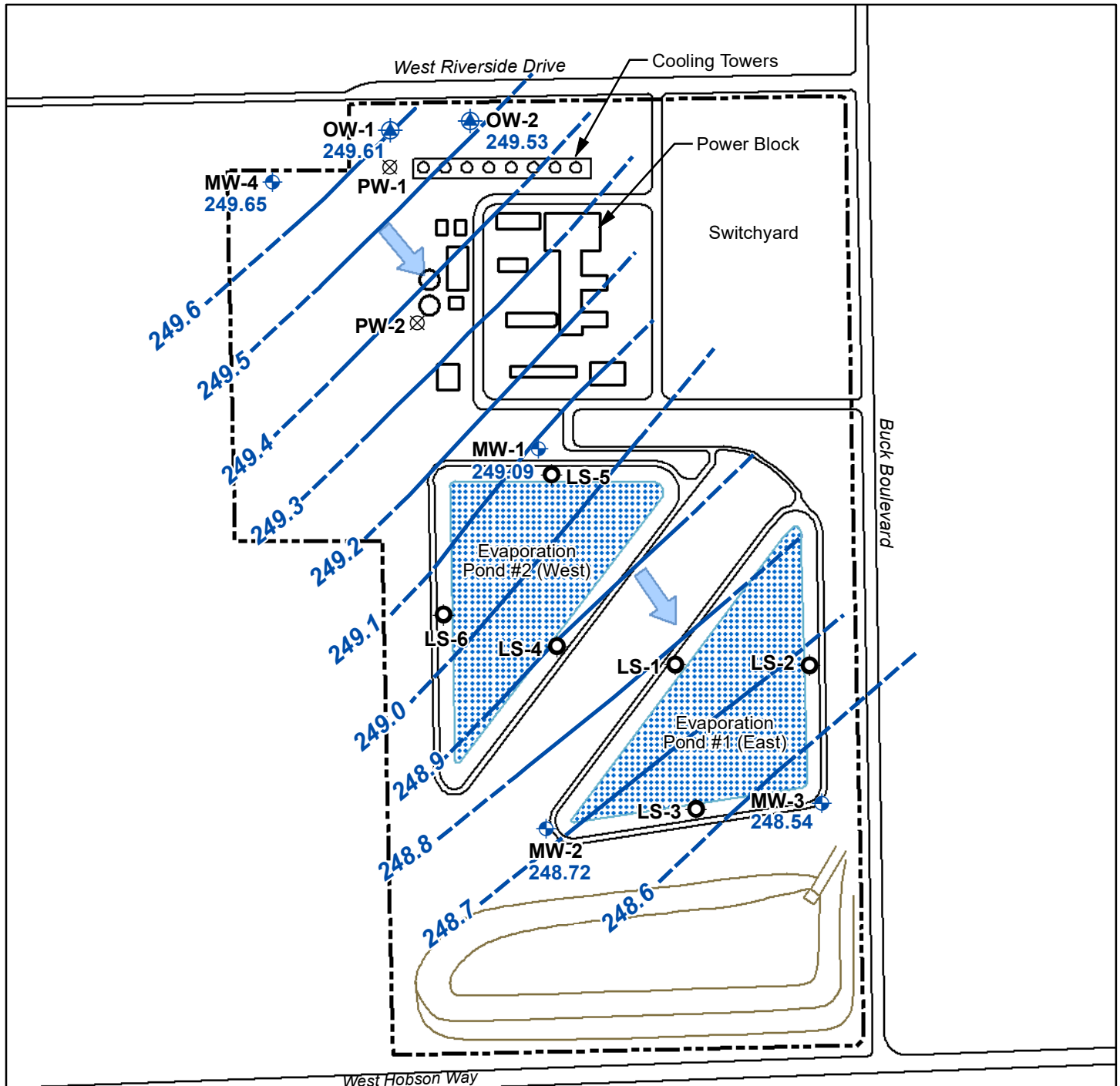
Figure

3-1







FIRST SEMI-ANNUAL 2024 MONITORING REPORT

**SECTION 4
QUARTERLY POTENTIOMETRIC SURFACE MAPS**




Explanation

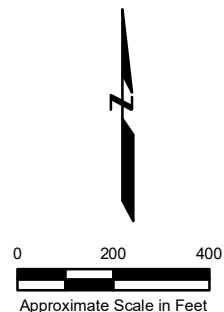
- MW-2**  Monitoring well location, designation, and groundwater elevation in feet above mean sea level (MSL)
248.72
- OW-2**  Observation well location, designation, and groundwater elevation in feet above MSL
249.53
- LS-6**  Lysimeter location and designation
- PW-1**  Production well location and designation

--- Approximate site boundary

249.6 --- Groundwater elevation contour in feet above MSL; dashed where inferred

 Approximate groundwater flow direction

Basemap modified from U.S.G.S. 7.5 minute quadrangle map Ripley 1952, California (photo-revised 1975) and aerial photograph from Bing Maps (Microsoft Corporation© 2011 and DigitalGlobe©, 2010).



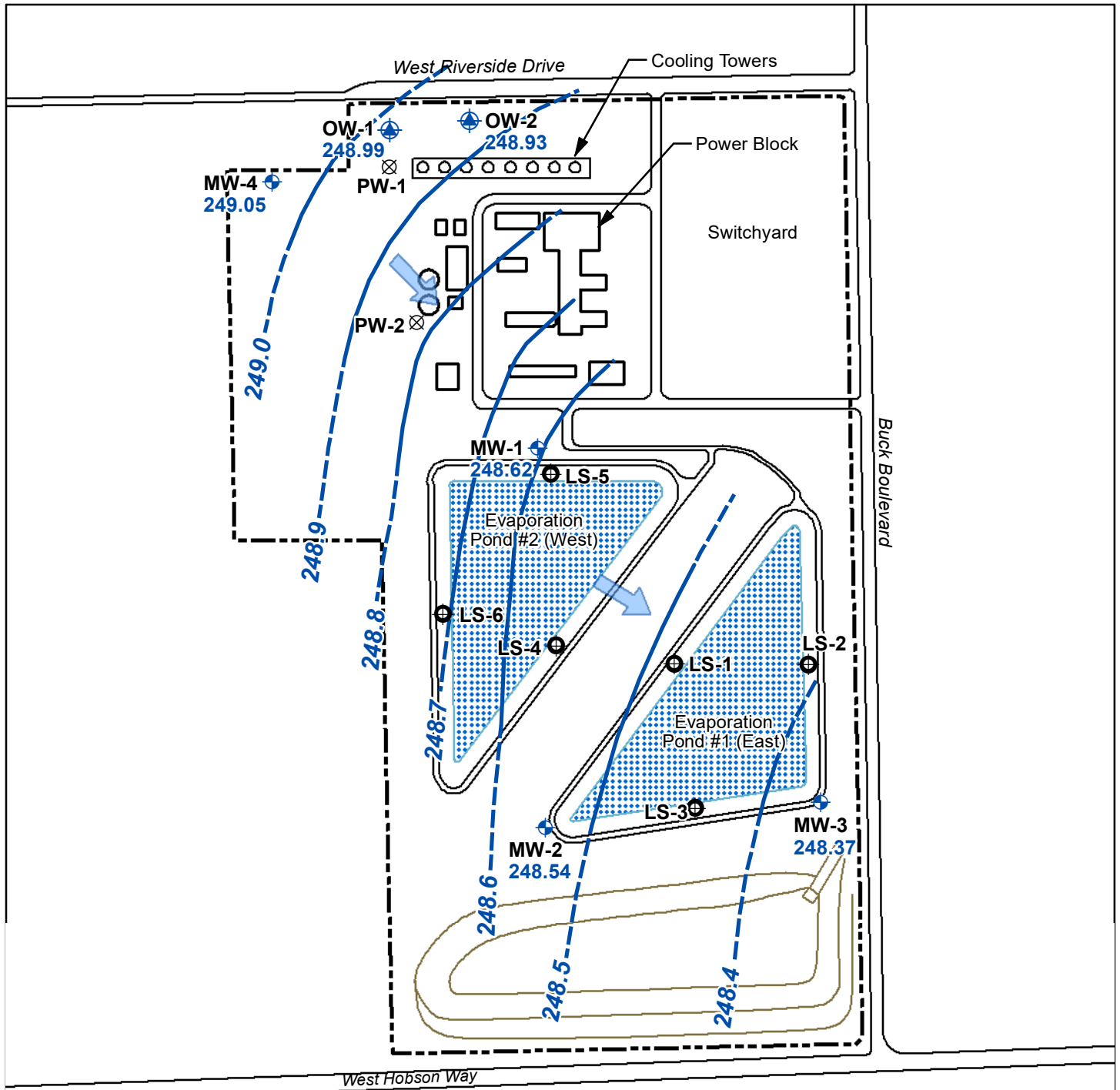
POTENTIOMETRIC SURFACE
MARCH 27, 2024
 Blythe Energy Inc.
 Blythe, California

By: MWW Date: 7/25/2024 Project No.: NB11160982







Figure

4-1




Explanation

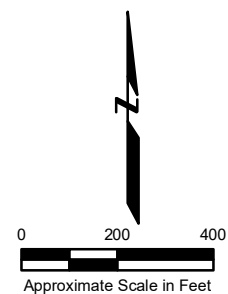
- MW-2**  Monitoring well location, designation, and groundwater elevation in feet above mean sea level (MSL)
248.54
- OW-2**  Observation well location, designation, and groundwater elevation in feet above MSL
248.93
- LS-6**  Lysimeter location and designation
- PW-1**  Production well location and designation

--- Approximate site boundary

249.0 --- Groundwater elevation contour in feet above MSL; dashed where inferred

 Approximate groundwater flow direction

Basemap modified from U.S.G.S. 7.5 minute quadrangle map Ripley 1952, California (photo-revised 1975) and aerial photograph from Bing Maps (Microsoft Corporation© 2011 and DigitalGlobe©, 2010.



POTENTIOMETRIC SURFACE
May 15, 2024
Blythe Energy Inc.
Blythe, California

By: MWW

Date: 7/25/2024

Project No.: NB11160982



Figure

4-2



FIRST SEMI-ANNUAL 2024 MONITORING REPORT

**SECTION 5
ANALYTICAL SUMMARY TABLES**



**TABLE 5-1 SUMMARY OF FIRST SEMI-ANNUAL 2024 WEST
 EVAPORATION POND WATER LABORATORY ANALYTICAL RESULTS**

Laboratory Analyte	Method	Detection Limit (mg/L)	Result (mg/L)
Antimony	EPA 200.7	2.5	ND
Arsenic	EPA 200.7	2.5	ND
Barium	EPA 200.7	0.10	0.13
Cadmium	EPA 200.7	0.25	ND
Total Chromium	EPA 200.7	1.3	ND
Cobalt	EPA 200.7	1.3	ND
Copper	EPA 200.7	1.3	ND
Lead	EPA 200.7	1.3	ND
Mercury	EPA 245.1	0.00020	ND
Nickel	EPA 200.7	1.3	ND
Selenium	EPA 200.7	1.0	ND
Zinc	EPA 200.7	6.3	ND
Sulfate	EPA 300.0	1,000	80,000
Chloride	EPA 300.0	1,000	78,000
Fluoride	EPA 300.0	5.0	32
Total Dissolved Solids	SM2540C	2,000	240,000
Specific Conductance	SM2510B	1.0 µmhos/cm	170,000
pH	SM4500-H,B	0.100 pH units	NA

Parameters (Field)	Units	Value
Water Temperature	Degrees Celsius	35.1
pH	pH Units	8.01
Specific Conductance	ms/cm	>20.00

Water sample collected on May 15, 2024, from the West Pond. The East Pond was dry.

Notes:

- mg/L = milligrams per liter
- ND = Not detected at method detection limit indicated
- ms/cm = Millisiemens per centimeter
- µmhos/cm = Micromhos per centimeter
- NA = Not Available



**TABLE 5-2 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
FIRST QUARTER 2024**

Analyte	EPA Method	Reporting Limit (mg/L)*	MW-1	MW-2	MW-3	MW-4	DUP
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Chloride	300.0	10	190	130	160	320	160
Sulfate	300.0	10	430	410	420	360	420
Selenium	200.7	0.10	ND	ND	ND	ND	ND
Total Dissolved Solids	SM2540C	10	1,200	1,100	1,200	1,200	1,300
Specific Conductance (umhos/cm)	SM2510B	1.0	1,900	1,700	1,800	2,000	1,800

Field Parameters	Units	MW-1	MW-2	MW-3	MW-4	DUP
Static Water Level	Feet Below Measuring Point	88.18	89.05	89.68	92.85	NA
Stabilized pH	pH Units	7.11	7.03	6.68	7.20	NA
Stabilized Water Temperature	Degrees Celsius	30.4	29.8	24.7	32.0	NA

Groundwater samples collected on March 27, 2024.

Notes:

mg/L = milligrams per liter

NA = Not applicable

ND = Not detected

Dup = Duplicate sample of MW-3

* = Except where noted on laboratory analytical data sheets



**TABLE 5-2 (Cont.) SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SECOND QUARTER 2024**

Analyte	EPA Method	Reporting Limit (mg/L)*	MW-1	MW-2	MW-3	MW-4	DUP
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Chloride	300.0	10	180	130	150	310	180
Sulfate	300.0	10	450	390	410	340	450
Selenium	200.7	0.10	ND	ND	ND	ND	ND
Total Dissolved Solids	SM2540C	20	1,300	1,200	1,200	1,200	1,300
Specific Conductance (umhos/cm)	SM2510B	1.0	2,000	1,700	1,800	2,000	2,000

Field Parameters	Units	MW-1	MW-2	MW-3	MW-4	DUP
Static Water Level	Feet Below Measuring Point	88.65	89.25	89.85	93.45	NA
Stabilized pH	pH Units	7.16	7.02	6.68	7.22	NA
Stabilized Water Temperature	Degrees Celsius	30.3	30.2	24.7	33.8	NA

Groundwater samples collected on May 15, 2024.

Notes:

mg/L = milligrams per liter

NA = Not applicable

ND = Not detected

Dup = Duplicate sample of MW-2

* = Except where noted on laboratory analytical data sheets



FIRST SEMI-ANNUAL 2024 MONITORING REPORT

SECTION 6 STATISTICAL ANALYSIS



STATISTICAL ANALYSIS – SECOND SEMI-ANNUAL 2023 MONITORING

Statistical analysis is used as an additional method for the detection of leakage from the surface impoundments. The statistical methods used for this program are those specified in the RWQCB Waste Discharge Requirements (WDR) and Monitoring and Reporting Programs (MRPs) of Order Number R7-2002-0012. Statistical analysis of groundwater quality data is based on intra-well rather than inter-well comparisons. The following section presents the technical approach and results of the statistical analysis for the First Semi-Annual 2024 sampling event and the intra-well statistical analysis.

APPROACH AND RESULTS

The Upper Tolerance Limit (UTL) is recalculated for each well based on historical data. Concentrations from subsequent quarterly groundwater samples collected from each well are compared to the corresponding UTLs. An UTL was calculated for each of the four groundwater monitoring wells sampled during the first and second quarters of 2024. Calculations of UTLs are presented in Table 6-1.

As shown in Table 6-2, there was an UTL exceedance for chloride in the water sample collected from well MW-4 during the first quarter 2024 sampling event. There was also an UTL exceedance for TDS from the water sample collected from well MW-2 in the second quarter 2024. Based on evaluation of the raw data, the UTL exceedances were determined not to be caused by rounding of the laboratory results. The higher chloride concentration reported at MW-4 during the first quarter 2024 is consistent with those reported in the first, second, and third quarter 2023 sample results. The higher TDS concentration reported from well MW-2 exceeded the UTL but did not exceed the range of previous TDS sample results for MW-2.

As described in the second semi-annual 2023 monitoring report, the quarterly groundwater elevation and flow interpretations since the first quarter 2023 have shown consistent groundwater flow from northwest to southeast beneath the site, with MW-4 as generally the most upgradient-most well at the site. As such, it is likely that the higher reported concentrations observed at MW-4 in 2023 and the first quarter 2023 are attributed to groundwater movement from areas north to northwest of the site flowing onto (beneath) the site and not attributed to operations at the facility.



Table 6-1: Calculation for Mean and Standard Deviation (Total Dissolved Solids)

MW1				MW2				MW3				MW4			
Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)
0	3Q-02	1170	7.0648	0	3Q-02	1180	7.0733	0	3Q-02	1120	7.0211				
270	2Q-03	1160	7.0562		2Q-03	1050	6.9565		2Q-03	947	6.8533				
450	1Q-04	1100	7.0031	450	1Q-04	1000	6.9078		1Q-04	1000	6.9078				
540	2Q-04	1200	7.0901	540	2Q-04	960	6.8669		2Q-04	1100	7.0031				
630	3Q-04	1100	7.0031	630	3Q-04	1000	6.9078		3Q-04	1000	6.9078				
720	4Q-04	1100	7.0031	720	4Q-04	1000	6.9078		4Q-04	1100	7.0031				
810	1Q-05	1100	7.0031	810	1Q-05	1100	7.0031		1Q-05	1100	7.0031				
900	2Q-05	1170	7.0648	900	2Q-05	1090	6.9939		2Q-05	1080	6.9847				
990	3Q-05	1080	6.9847	990	3Q-05	985	6.8926		3Q-05	1000	6.9078				
1080	4Q-05	1100	7.0031	1080	4Q-05	1000	6.9078		4Q-05	1200	7.0901				
1170	1Q-06	1070	6.9754	1170	1Q-06	999	6.9068		1Q-06	1040	6.9470				
1260	2Q-06	1100	7.0031	1260	2Q-06	1000	6.9078		2Q-06	1100	7.0031				
1350	3Q-06	1100	7.0031	1350	3Q-06	1100	7.0031		3Q-06	1100	7.0031				
1440	4Q-06	1100	7.0031	1440	4Q-06	1000	6.9078		4Q-06	1100	7.0031				
1530	1Q-07	1100	7.0031	1530	1Q-07	1000	6.9078		1Q-07	1100	7.0031				
1620	2Q-07	1100	7.0031	1620	2Q-07	1100	7.0031		2Q-07	1200	7.0901				
	RA-07	1200	7.0901		RA-07	1100	7.0031		RA-07	1200	7.0901				
1710	3Q-07	1100	7.0031		3Q-07	1100	7.0031		3Q-07	1100	7.0031				
1800	4Q-07	1200	7.0901	1800	4Q-07	1100	7.0031		4Q-07	1500	7.3132				
1867	12/7/2007	1200	7.0901	1867	12/7/2007	1100	7.0031	1867	12/7/2007	1400	7.2442				
1890	1Q-08	1200	7.0901		1Q-08	1100	7.0031		1Q-08	1300	7.1701				
1966	2Q-08	1200	7.0901	1966	2Q-08	1100	7.0031		2Q-08	1700	7.4384				
2068	3Q-08	1100	7.0031	2068	3Q-08	1100	7.0031		3Q-08	1600	7.3778				
2178	4Q-08	1100	7.0031	2178	4Q-08	1100	7.0031		4Q-08	1400	7.2442				
2349	1Q-09	1100	7.0031	2349	1Q-09	1100	7.0031		1Q-09	1200	7.0901				
2473	2Q-09	1200	7.0901	2473	2Q-09	1100	7.0031		2Q-09	1100	7.0031				
2571	3Q-09	1100	7.0031	2571	3Q-09	1100	7.0031	2571	3Q-09	1400	7.2442	0	3Q-09	1200	7.0901
								2605	10/30/09	1300	7.1701	34	10/30/09	1100	7.0031
2652	4Q-09	1200	7.0901	2652	4Q-09	1100	7.0031	2652	4Q-09	1500	7.3132	81	4Q-09	1200	7.0901
2718	1Q-10	1200	7.0901	2718	1Q-10	1100	7.0031	2718	1Q-10	1800	7.4955	116	1Q-10	1200	7.0901
								2753	4/2/2010	1800	7.4955				
2800	2Q-10	1200	7.0901	2800	2Q-10	1100	7.0031	2800	2Q-10	2300	7.7407	198	2Q-10	1200	7.0901
2828	6/18/2010	1200	7.0901	2828	6/18/2010	1100	7.0031	2828	6/18/2010	2400	7.7832	226	6/18/2010	1200	7.0901
2895	3Q-10	1100	7.0031	2895	3Q-10	1100	7.0031	2895	3Q-10	2500	7.8240	293	3Q-10	1100	7.0031
								2922	9/20/2010R	2200	7.6962				
3014	4Q-10	1200	7.0901	3014	4Q-10	1100	7.0031	3014	4Q-10	1500	7.3132	412	4Q-10	1200	7.0901
3086	1Q-11	1200	7.0901	3086	1Q-11	1100	7.0031	3086	1Q-11	1600	7.3778	576	1Q-11	1200	7.0901
3179	2Q-11	1100	7.0031	3179	2Q-11	1100	7.0031	3179	2Q-11	1800	7.4955	669	2Q-11	1100	7.0031
3286	3Q-11	1200	7.0901	3286	3Q-11	1100	7.0031	3286	3Q-11	1500	7.3132	776	3Q-11	1100	7.0031
3372	4Q-11	1200	7.0901	3372	4Q-11	1100	7.0031	3372	4Q-11	1400	7.2442	862	4Q-11	1200	7.0901
3472	1Q-12	1200	7.0901	3472	1Q-12	1100	7.0031	3472	1Q-12	1500	7.3132	962	1Q-12	1100	7.0031



Table 6-1: Calculation for Mean and Standard Deviation (Total Dissolved Solids)

MW1				MW2				MW3				MW4			
Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)
3572	2Q-12	1100	7.0031	3572	2Q-12	1100	7.0031	3572	2Q-12	1400	7.2442	1062	2Q-12	1100	7.0031
3638	3Q-12	1200	7.0901	3638	3Q-12	1100	7.0031	3638	3Q-12	1200	7.0901	1128	3Q-12	1100	7.0031
3741	4Q-12	1200	7.0901	3741	4Q-12	1100	7.0031	3741	4Q-12	1100	7.0031	1231	4Q-12	1100	7.0031
3840	1Q-13	1100	7.0031	3840	1Q-13	1000	6.9078	3840	1Q-13	1100	7.0031	1330	1Q-13	1000	6.9078
3904	2Q-13	1200	7.0901	3904	2Q-13	1100	7.0031	3904	2Q-13	1200	7.0901	1394	2Q-13	1100	7.0031
4013	3Q-13	1200	7.0901	4013	3Q-13	1100	7.0031	4013	3Q-13	1000	6.9078	1507	3Q-13	1100	7.0031
4088	4Q-13	1200	7.0901	4088	4Q-13	1100	7.0031	4088	4Q-13	1100	7.0031	1583	4Q-13	1100	7.0031
4202	1Q-14	1200	7.0901	4202	1Q-14	1100	7.0031	4202	1Q-14	1100	7.0031	1697	1Q-14	1100	7.0031
4316	2Q-14	1200	7.0901	4316	2Q-14	1100	7.0031	4316	2Q-14	1100	7.0031	1811	2Q-14	1100	7.0031
4395	3Q-14	1200	7.0901	4395	3Q-14	1100	7.0031	4395	3Q-14	1100	7.0031	1890	3Q-14	1100	7.0031
4472	4Q-14	1200	7.0901	4472	4Q-14	1100	7.0031	4472	4Q-14	1000	6.9078	1967	4Q-14	1100	7.0031
4579	1Q-15	1200	7.0901	4579	1Q-15	1100	7.0031	4579	1Q-15	970	6.8773	2074	1Q-15	1000	6.9078
4765	2Q-15	1200	7.0901	4765	2Q-15	1100	7.0031	4765	2Q-15	1000	6.9078	2260	2Q-15	1100	7.0031
4848	3Q-15	1300	7.1701	4848	3Q-15	1100	7.0031	4848	3Q-15	1000	6.9078	2343	3Q-15	1100	7.0031
4938	4Q-15	1200	7.0901	4938	4Q-15	1100	7.0031	4938	4Q-15	1000	6.9078	2433	4Q-15	1100	7.0031
5055	1Q-16	1200	7.0901	5055	1Q-16	1100	7.0031	5055	1Q-16	1000	6.9078	2550	1Q-16	1100	7.0031
5122	2Q-16	1200	7.0901	5122	2Q-16	1100	7.0031	5122	2Q-16	1000	6.9078	2617	2Q-16	1100	7.0031
5213	3Q-16	1300	7.1701	5213	3Q-16	1100	7.0031	5213	3Q-16	1000	6.9078	2708	3Q-16	1100	7.0031
5305	4Q-16	1100	7.0031	5305	4Q-16	1100	7.0031	5305	4Q-16	920	6.8244	2800	4Q-16	1100	7.0031
5397	1Q-17	1300	7.1701	5397	1Q-17	1100	7.0031	5397	1Q-17	980	6.8876	2892	1Q-17	1100	7.0031
5487	2Q-17	1200	7.0901	5487	2Q-17	1100	7.0031	5487	2Q-17	1000	6.9078	2982	2Q-17	1100	7.0031
5563	3Q-17	1200	7.0901	5563	3Q-17	1100	7.0031	5563	3Q-17	970	6.8773	3058	3Q-17	1200	7.0901
5672	4Q-17	1300	7.1701	5672	4Q-17	1100	7.0031	5672	4Q-17	950	6.8565	3167	4Q-17	1200	7.0901
5782	1Q-18	1200	7.0901	5782	1Q-18	1100	7.0031	5782	1Q-18	1100	7.0031	3277	1Q-18	1200	7.0901
5850	2Q-18	1200	7.0901	5850	2Q-18	1100	7.0031	5850	2Q-18	1100	7.0031	3345	2Q-18	1200	7.0901
5960	3Q-18	1300	7.1701	5960	3Q-18	1100	7.0031	5960	3Q-18	1100	7.0031	3455	3Q-18	1100	7.0031
6007	10/30/2018	1200	7.0901												
6041	4Q-18	1200	7.0901	6041	4Q-18	1100	7.0031	6041	4Q-18	1100	7.0031	3536	4Q-18	1100	7.0031
6136	1Q-19	1200	7.0901	6135	1Q-19	1100	7.0031	6135	1Q-19	1200	7.0901	3631	1Q-19	1000	6.9078
6233	2Q-19	1200	7.0901	6233	2Q-19	1100	7.0031	6233	2Q-19	1100	7.0031	3728	2Q-19	1100	7.0031
6330	3Q-19	1300	7.1701	6330	3Q-19	1100	7.0031	6330	3Q-19	1100	7.0031	3825	3Q-19	1100	7.0031
6311	4Q-19	1300	7.1701	6311	4Q-19	1100	7.0031	6311	4Q-19	1200	7.0901	3806	4Q-19	1100	7.0031
6417	1Q-20	1200	7.0901	6417	1Q-20	1100	7.0031	6417	1Q-20	1300	7.1701	3912	1Q-20	1100	7.0031
6494	2Q-20	1300	7.1701	6494	2Q-20	1100	7.0031	6494	2Q-20	1300	7.1701	3989	2Q-20	1100	7.0031
6606	3Q-20	1300	7.1701	6606	3Q-20	1200	7.0901	6606	3Q-20	1300	7.1701	4101	3Q-20	1200	7.0901
6678	4Q-20	1200	7.0901	6678	4Q-20	1200	7.0901	6678	4Q-20	1300	7.1701	4173	4Q-20	1100	7.0031
6769	1Q-21	1200	7.0901	6769	1Q-21	1100	7.0031	6769	1Q-21	1200	7.0901	4264	1Q-21	980	6.8876
6851	2Q-21	1300	7.1701	6851	2Q-21	1100	7.0031	6851	2Q-21	1200	7.0901	4346	2Q-21	1100	7.0031
7033	3Q-21	1300	7.1701	7033	3Q-21	1100	7.0031	7033	3Q-21	1000	6.9078	4528	3Q-21	1100	7.0031
7131	4Q-21	1100	7.0031	7131	4Q-21	1000	6.9078	7131	4Q-21	1100	7.0031	4626	4Q-21	990	6.8977
7223	1Q-22	1200	7.0901	7223	1Q-22	1100	7.0031	7223	1Q-22	1100	7.0031	4718	1Q-22	1100	7.0031
7298	2Q-22	1200	7.0901	7298	2Q-22	1100	7.0031	7298	2Q-22	1100	7.0031	4793	2Q-22	1100	7.0031
7388	3Q-22	1300	7.1701	7388	3Q-22	1100	7.0031	7388	3Q-22	1200	7.0901	4883	3Q-22	1100	7.0031



Table 6-1: Calculation for Mean and Standard Deviation (Total Dissolved Solids)

MW1				MW2				MW3				MW4			
Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)
7480	4Q-22	1300	7.1701	7480	4Q-22	1200	7.0901	7480	4Q-22	1300	7.1701	4975	4Q-22	1400	7.2442
7582	1Q-23	1300	7.1701	7582	1Q-23	1100	7.0031	7582	1Q-23	1200	7.0901	5077	1Q-23	1300	7.1701
7670	2Q-23	1200	7.0901	7670	2Q-23	1100	7.0031	7670	2Q-23	1300	7.1701	5165	2Q-23	1300	7.1701
7785	3Q-23	1300	7.1701	7785	3Q-23	1100	7.0031	7785	3Q-23	1300	7.1701	5280	3Q-23	1200	7.0901
7877	4Q-23	1300	7.1701	7877	4Q-23	1100	7.0031	7877	4Q-23	1300	7.1701	5372	4Q-23	1200	7.0901
7989	1Q-24	1200	7.0901	7989	1Q-24	1100	7.0031	7989	1Q-24	1200	7.0901	5484	1Q-24	1200	7.0901
8038	2Q-24	1300	7.1701	8038	2Q-24	1200	7.0901	8038	2Q-24	1200	7.0901	5533	2Q-24	1200	7.0901
Standard Deviation =		68.3218	0.0570	Standard Deviation =		38.5175	0.0408	Standard Deviation =		318.5425	0.2122	Standard Deviation =		74.7374	0.0648
Mean =		1190.2299	7.0803	Mean =		1089.1163	6.9923	Mean =		1249.1798	7.1055	Mean =		1129.0164	7.0270
n =		87	87	n =		86	86	n =		89	89	n =		61	61
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.662	1.662	(t{n-1, 0.95}) =		1.670	1.670
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.008
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.671	k = t(1 + 1/n) ^½ =			1.684
UTL = Mean + St.Dev.*k =			7.1757	UTL = Mean + St.Dev.*k =			7.0606	UTL = Mean + St.Dev.*k =			7.4602	UTL = Mean + St.Dev.*k =			7.1361
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No

Standard Deviation =		68.5069	0.0575	Standard Deviation =		44.9797	0.0419	Standard Deviation =		312.5222	0.2110	Standard Deviation =		74.6685	0.0647
Mean =		1191.4773	7.0813	Mean =		1090.3908	6.9934	Mean =		1248.6333	7.1053	Mean =		1130.1613	7.0280
n =		88	88	n =		87	87	n =		90	90	n =		62	62
(t{n-1, 0.95}) =		1.662	1.662	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.662	1.662	(t{n-1, 0.95}) =		1.670	1.670
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.008
k = t(1 + 1/n) ^½ =			1.671	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.671	k = t(1 + 1/n) ^½ =			1.683
UTL = Mean + St.Dev.*k =			7.1775	UTL = Mean + St.Dev.*k =			7.0635	UTL = Mean + St.Dev.*k =			7.4580	UTL = Mean + St.Dev.*k =			7.1370
Concentration Significant?			No	Concentration Significant?			Yes	Concentration Significant?			No	Concentration Significant?			No



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Sulfate)

MW1				MW2				MW3				MW4			
Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)
0	3Q-02	348	5.8522	0	3Q-02	419	6.0379	0	3Q-02	403	5.9989				
270	2Q-03	409	6.0137	270	2Q-03	427	6.0568	270	2Q-03	404	6.0014				
450	1Q-04	370	5.9135	450	1Q-04	360	5.8861	450	1Q-04	340	5.8289				
540	2Q-04	330	5.7991	540	2Q-04	340	5.8289	540	2Q-04	330	5.7991				
630	3Q-04	360	5.8861	630	3Q-04	360	5.8861	630	3Q-04	350	5.8579				
720	4Q-04	380	5.9402	720	4Q-04	370	5.9135	720	4Q-04	380	5.9402				
810	1Q-05	350	5.8579	810	1Q-05	360	5.8861	810	1Q-05	340	5.8289				
900	2Q-05	326	5.7869	900	2Q-05	331	5.8021	900	2Q-05	303	5.7137				
990	3Q-05	451	6.1115	990	3Q-05	450	6.1092	990	3Q-05	440	6.0868				
1080	4Q-05	360	5.8861	1080	4Q-05	360	5.8861	1080	4Q-05	330	5.7991				
1170	1Q-06	379	5.9375	1170	1Q-06	369	5.9108	1170	1Q-06	358	5.8805				
1260	2Q-06	390	5.9661	1260	2Q-06	370	5.9135	1260	2Q-06	370	5.9135				
1350	3Q-06	370	5.9135	1350	3Q-06	400	5.9915	1350	3Q-06	380	5.9402				
1440	4Q-06	370	5.9135	1440	4Q-06	380	5.9402	1440	4Q-06	380	5.9402				
1530	1Q-07	380	5.9402	1530	1Q-07	380	5.9402	1530	1Q-07	360	5.8861				
1620	2Q-07	460	6.1312	1620	2Q-07	470	6.1527	1620	2Q-07	450	6.1092				
	RA-07	385	5.9532		RA-07	365	5.8999		RA-07	360	5.8861				
1710	3Q-07	370	5.9135	1710	3Q-07	380	5.9402	1710	3Q-07	380	5.9402				
1800	4Q-07	360	5.8861	1800	4Q-07	360	5.8861	1800	4Q-07	420	6.0403				
1867	12/7/2007	380	5.9402		12/7/2007	360	5.8861	1867	12/7/2007	385	5.9532				
1890	1Q-08	380	5.9402	1890	1Q-08	380	5.9402	1890	1Q-08	390	5.9661				
1966	2Q-08	380	5.9402	1966	2Q-08	370	5.9135	1966	2Q-08	480	6.1738				
2068	3Q-08	390	5.9661	2068	3Q-08	400	5.9915	2068	3Q-08	480	6.1738				
2178	4Q-08	400	5.9915	2178	4Q-08	410	6.0162	2178	4Q-08	460	6.1312				
2349	1Q-09	380	5.9402	2349	1Q-09	390	5.9661	2349	1Q-09	360	5.8861				
2473	2Q-09	390	5.9661	2473	2Q-09	390	5.9661	2473	2Q-09	340	5.8289				
2571	3Q-09	370	5.9135	2571	3Q-09	350	5.8579	2571	3Q-09	560	6.3279	0	3Q-09	380	5.9402
								2618	10/30/09	430	6.0638	34	10/30/09	350	5.8579
2652	4Q-09	370	5.9135	2652	4Q-09	380	5.9402	2652	4Q-09	500	6.2146	81	4Q-09	350	5.8579
2718	1Q-10	370	5.9135	2718	1Q-10	400	5.9915	2718	1Q-10	610	6.4135	116	1Q-10	370	5.9135
								2753	4/2/2010	620	6.4297				
2800	2Q-10	390	5.9661	2800	2Q-10	420	6.0403	2800	2Q-10	620	6.4297	198	2Q-10	380	5.9402
2828	6/18/2010	330	5.7991	2828	6/18/2010	360	5.8861	2828	6/18/2010	690	6.5367	226	6/18/2010	340	5.8289
2895	3Q-10	380	5.9402	2895	3Q-10	370	5.9135	2895	3Q-10	700	6.5511	293	3Q-10	370	5.9135
								2922	9/20/2010R	750	6.6201				
3014	4Q-10	340	5.8289	3014	4Q-10	380	5.9402	3014	4Q-10	510	6.2344	412	4Q-10	380	5.9402
3086	1Q-11	360	5.8861	3086	1Q-11	370	5.9135	3086	1Q-11	490	6.1944	576	1Q-11	340	5.8289
3179	2Q-11	400	5.9915	3179	2Q-11	410	6.0162	3179	2Q-11	640	6.4615	669	2Q-11	370	5.9135
3286	3Q-11	380	5.9402	3286	3Q-11	410	6.0162	3286	3Q-11	510	6.2344	776	3Q-11	360	5.8861
3372	4Q-11	390	5.9661	3372	4Q-11	410	6.0162	3372	4Q-11	500	6.2146	862	4Q-11	370	5.9135



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Sulfate)

MW1				MW2				MW3				MW4			
Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)
3472	1Q-12	340	5.8289	3472	1Q-12	360	5.8861	3472	1Q-12	510	6.2344	962	1Q-12	300	5.7038
3572	2Q-12	500	6.2146	3572	2Q-12	420	6.0403	3572	2Q-12	480	6.1738	1062	2Q-12	350	5.8579
3638	3Q-12	380	5.9402	3638	3Q-12	400	5.9915	3638	3Q-12	420	6.0403	1128	3Q-12	320	5.7683
3741	4Q-12	410	6.0162	3741	4Q-12	420	6.0403	3741	4Q-12	390	5.9661	1231	4Q-12	340	5.8289
3840	1Q-13	400	5.9915	3840	1Q-13	410	6.0162	3840	1Q-13	370	5.9135	1330	1Q-13	330	5.7991
3904	2Q-13	380	5.9402	3904	2Q-13	390	5.9661	3904	2Q-13	350	5.8579	1394	2Q-13	300	5.7038
4013	3Q-13	390	5.9661	4013	3Q-13	420	6.0403	4013	3Q-13	330	5.7991	1507	3Q-13	310	5.7366
4088	4Q-13	420	6.0403	4088	4Q-13	410	6.0162	4088	4Q-13	340	5.8289	1583	4Q-13	310	5.7366
4202	1Q-14	420	6.0403	4202	1Q-14	440	6.0868	4202	1Q-14	450	6.1092	1697	1Q-14	330	5.7991
4316	2Q-14	410	6.0162	4316	2Q-14	480	6.1738	4316	2Q-14	400	5.9915	1811	2Q-14	360	5.8861
4395	3Q-14	440	6.0868	4395	3Q-14	410	6.0162	4395	3Q-14	370	5.9135	1890	3Q-14	310	5.7366
4472	4Q-14	340	5.8289	4472	4Q-14	360	5.8861	4472	4Q-14	290	5.6699	1967	4Q-14	270	5.5984
4579	1Q-15	390	5.9661	4579	1Q-15	360	5.8861	4579	1Q-15	290	5.6699	2074	1Q-15	270	5.5984
4765	2Q-15	370	5.9135	4765	2Q-15	360	5.8861	4765	2Q-15	280	5.6348	2260	2Q-15	270	5.5984
4848	3Q-15	430	6.0638	4848	3Q-15	410	6.0162	4848	3Q-15	330	5.7991	2343	3Q-15	320	5.7683
4938	4Q-15	410	6.0162	4938	4Q-15	410	6.0162	4938	4Q-15	330	5.7991	2433	4Q-15	320	5.7683
5055	1Q-16	370	5.9135	5055	1Q-16	380	5.9402	5055	1Q-16	340	5.8289	2550	1Q-16	310	5.7366
5122	2Q-16	390	5.9661	5122	2Q-16	420	6.0403	5122	2Q-16	330	5.7991	2617	2Q-16	310	5.7366
5213	3Q-16	420	6.0403	5213	3Q-16	390	5.9661	5213	3Q-16	300	5.7038	2708	3Q-16	310	5.7366
5305	4Q-16	400	5.9915	5305	4Q-16	420	6.0403	5305	4Q-16	330	5.7991	2800	4Q-16	360	5.8861
5397	1Q-17	450	6.1092	5397	1Q-17	400	5.9915	5397	1Q-17	310	5.7366	2892	1Q-17	340	5.8289
5487	2Q-17	440	6.0868	5487	2Q-17	400	5.9915	5487	2Q-17	330	5.7991	2982	2Q-17	340	5.8289
5563	3Q-17	430	6.0638	5563	3Q-17	400	5.9915	5563	3Q-17	310	5.7366	3058	3Q-17	330	5.7991
5672	4Q-17	400	5.9915	5672	4Q-17	380	5.9402	5672	4Q-17	290	5.6699	3167	4Q-17	310	5.7366
5782	1Q-18	390	5.9661	5782	1Q-18	400	5.9915	5782	1Q-18	390	5.9661	3277	1Q-18	340	5.8289
5850	2Q-18	390	5.9661	5850	2Q-18	380	5.9402	5850	2Q-18	360	5.8861	3345	2Q-18	310	5.7366
5960	3Q-18	430	6.0638	5960	3Q-18	390	5.9661	5960	3Q-18	380	5.9402	3455	3Q-18	300	5.7038
6007	10/30/2018	410	6.0162												
6041	4Q-18	380	5.9402	6041	4Q-18	380	5.9402	6041	4Q-18	380	5.9402	3536	4Q-18	280	5.6348
6136	1Q-19	370	5.9135	6135	1Q-19	370	5.9135	6135	1Q-19	390	5.9661	3631	1Q-19	270	5.5984
6233	2Q-19	450	6.1092	6233	2Q-19	400	5.9915	6233	2Q-19	400	5.9915	3728	2Q-19	290	5.6699
6330	3Q-19	440	6.0868	6330	3Q-19	400	5.9915	6330	3Q-19	390	5.9661	3825	3Q-19	300	5.7038
6311	4Q-19	390	5.9661	6311	4Q-19	370	5.9135	6311	4Q-19	390	5.9661	3806	4Q-19	270	5.5984
6417	1Q-20	390	5.9661	6417	1Q-20	370	5.9135	6417	1Q-20	410	6.0162	3912	1Q-20	260	5.5607
6494	2Q-20	430	6.0638	6494	2Q-20	390	5.9661	6494	2Q-20	400	5.9915	3989	2Q-20	280	5.6348
6606	3Q-20	210	5.3471	6606	3Q-20	380	5.9402	6606	3Q-20	430	6.0638	4101	3Q-20	280	5.6348
6678	4Q-20	420	6.0403	6678	4Q-20	390	5.9661	6678	4Q-20	440	6.0868	4173	4Q-20	280	5.6348
6769	1Q-21	440	6.0868	6769	1Q-21	390	5.9661	6769	1Q-21	440	6.0868	4264	1Q-21	280	5.6348
6851	2Q-21	450	6.1092	6851	2Q-21	400	5.9915	6851	2Q-21	410	6.0162	4346	2Q-21	300	5.7038
7033	3Q-21	440	6.0868	7033	3Q-21	380	5.9402	7033	3Q-21	330	5.7991	4528	3Q-21	280	5.6348



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Sulfate)

MW1				MW2				MW3				MW4			
Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)
7131	4Q-21	380	5.9402	7131	4Q-21	390	5.9661	7131	4Q-21	430	6.0638	4626	4Q-21	280	5.6348
7223	1Q-22	420	6.0403	7223	1Q-22	400	5.9915	7223	1Q-22	380	5.9402	4718	1Q-22	300	5.7038
7298	2Q-22	450	6.1092	7298	2Q-22	390	5.9661	7298	2Q-22	380	5.9402	4793	2Q-22	290	5.6699
7388	3Q-22	450	6.1092	7388	3Q-22	390	5.9661	7388	3Q-22	390	5.9661	4883	3Q-22	310	5.7366
7480	4Q-22	450	6.1092	7480	4Q-22	380	5.9402	7480	4Q-22	400	5.9915	4975	4Q-22	380	5.9402
7582	1Q-23	440	6.0868	7582	1Q-23	380	5.9402	7582	1Q-23	410	6.0162	5077	1Q-23	390	5.9661
7670	2Q-23	410	6.0162	7670	2Q-23	380	5.9402	7670	2Q-23	390	5.9661	5165	2Q-23	370	5.9135
7785	3Q-23	470	6.1527	7785	3Q-23	410	6.0162	7785	3Q-23	450	6.1092	5280	3Q-23	360	5.8861
7877	4Q-23	430	6.0638	7877	4Q-23	390	5.9661	7877	4Q-23	430	6.0638	5372	4Q-23	320	5.7683
7989	1Q-24	430	6.0638	7989	1Q-24	410	6.0162	7989	1Q-24	420	6.0403	5484	1Q-24	360	5.8861
8038	2Q-24	450	6.1092	8038	2Q-24	390	5.9661	8038	2Q-24	410	6.0162	5533	2Q-24	340	5.8289
Standard Deviation =				Standard Deviation =				Standard Deviation =				Standard Deviation =			
Mean =		40.5558	0.1113	Mean =		25.9061	0.0653	Mean =		94.3123	0.2069	Mean =		35.8884	0.1116
n =		395.6092	5.9747	n =		390.3605	5.9649	n =		411.1573	5.9965	n =		322.2951	5.7694
(t{n-1, 0.95}) =		87	87	(t{n-1, 0.95}) =		86	86	(t{n-1, 0.95}) =		89	89	(t{n-1, 0.95}) =		61	61
(1 + 1/n) ^½ =		1.663	1.663	(1 + 1/n) ^½ =		1.663	1.663	(1 + 1/n) ^½ =		1.662	1.662	(1 + 1/n) ^½ =		1.670	1.670
k = t(1 + 1/n) ^½ =			1.006	k = t(1 + 1/n) ^½ =			1.006	k = t(1 + 1/n) ^½ =			1.006	k = t(1 + 1/n) ^½ =			1.008
UTL = Mean + St.Dev.*k =			1.673	UTL = Mean + St.Dev.*k =			1.673	UTL = Mean + St.Dev.*k =			1.671	UTL = Mean + St.Dev.*k =			1.684
Concentration Significant?		6.1609		Concentration Significant?		6.0741		Concentration Significant?		6.3422		Concentration Significant?		5.9572	
		No				No				No				No	
Standard Deviation =				Standard Deviation =				Standard Deviation =				Standard Deviation =			
Mean =		40.7368	0.1114	Mean =		25.7551	0.0649	Mean =		93.7811	0.2057	Mean =		35.6640	0.1109
n =		396.2273	5.9762	n =		390.3563	5.9650	n =		411.1444	5.9967	n =		322.5806	5.7703
(t{n-1, 0.95}) =		88	88	(t{n-1, 0.95}) =		87	87	(t{n-1, 0.95}) =		90	90	(t{n-1, 0.95}) =		62	62
(1 + 1/n) ^½ =		1.662	1.662	(1 + 1/n) ^½ =		1.663	1.663	(1 + 1/n) ^½ =		1.662	1.662	(1 + 1/n) ^½ =		1.670	1.670
k = t(1 + 1/n) ^½ =			1.006	k = t(1 + 1/n) ^½ =			1.006	k = t(1 + 1/n) ^½ =			1.006	k = t(1 + 1/n) ^½ =			1.008
UTL = Mean + St.Dev.*k =			1.671	UTL = Mean + St.Dev.*k =			1.673	UTL = Mean + St.Dev.*k =			1.671	UTL = Mean + St.Dev.*k =			1.683
Concentration Significant?		6.1625		Concentration Significant?		6.0735		Concentration Significant?		6.3405		Concentration Significant?		5.9570	
		No				No				No				No	



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Chloride)

MW1				MW2				MW3				MW4			
Days	Date	Cl	ln(Cl)	Days	Date	Cl	ln(Cl)	Days	Date	Cl	ln(Cl)	Days	Date	Cl	ln(Cl)
0	3Q-02	294	5.6836	0	3Q-02	225	5.4161	0	3Q-02	202	5.3083				
270	2Q-03	272	5.6058	270	2Q-03	209	5.3423	270	2Q-03	117	4.7622				
450	1Q-04	200	5.2983	450	1Q-04	180	5.1930	450	1Q-04	110	4.7005				
540	2Q-04	220	5.3936	540	2Q-04	190	5.2470	540	2Q-04	120	4.7875				
630	3Q-04	200	5.2983	630	3Q-04	180	5.1930	630	3Q-04	120	4.7875				
720	4Q-04	210	5.3471	720	4Q-04	180	5.1930	720	4Q-04	210	5.3471				
810	1Q-05	230	5.4381	810	1Q-05	180	5.1930	810	1Q-05	130	4.8675				
900	2Q-05	182	5.2040	900	2Q-05	158	5.0626	900	2Q-05	109	4.6913				
990	3Q-05	255	5.5413	990	3Q-05	211	5.3519	990	3Q-05	156	5.0499				
1080	4Q-05	230	5.4381	1080	4Q-05	180	5.1930	1080	4Q-05	130	4.8675				
1170	1Q-06	219	5.3891	1170	1Q-06	189	5.2417	1170	1Q-06	149	5.0039				
1260	2Q-06	210	5.3471	1260	2Q-06	190	5.2470	1260	2Q-06	160	5.0752				
1350	3Q-06	210	5.3471	1350	3Q-06	190	5.2470	1350	3Q-06	180	5.1930				
1440	4Q-06	210	5.3471	1440	4Q-06	190	5.2470	1440	4Q-06	210	5.3471				
1530	1Q-07	230	5.4381	1530	1Q-07	190	5.2470	1530	1Q-07	200	5.2983				
1620	2Q-07	210	5.3471	1620	2Q-07	210	5.3471	1620	2Q-07	230	5.4381				
	RA-07	220	5.3936		RA-07	205	5.3230		RA-07	240	5.4806				
1710	3Q-07	250	5.5215	1710	3Q-07	190	5.2470	1710	3Q-07	190	5.2470				
1800	4Q-07	230	5.4381	1800	4Q-07	180	5.1930	1800	4Q-07	300	5.7038				
1867	12/7/2007	270	5.5984	1867	12/7/2007	190	5.2470	1867	12/7/2007	270	5.5984				
1890	1Q-08	250	5.5215	1890	1Q-08	190	5.2470	1890	1Q-08	280	5.6348				
1966	2Q-08	230	5.4381	1966	2Q-08	200	5.2983	1966	2Q-08	350	5.8579				
2068	3Q-08	250	5.5215	2068	3Q-08	200	5.2983	2068	3Q-08	400	5.9915				
2178	4Q-08	240	5.4806	2178	4Q-08	180	5.1930	2178	4Q-08	320	5.7683				
2349	1Q-09	230	5.4381	2349	1Q-09	190	5.2470	2349	1Q-09	230	5.4381				
2473	2Q-09	230	5.4381	2473	2Q-09	170	5.1358	2473	2Q-09	220	5.3936				
2571	3Q-09	230	5.4381	2571	3Q-09	220	5.3936	2571	3Q-09	370	5.9135	0	3Q-09	270	5.5984
								2618	10/30/09	220	5.3936	34	10/30/09	250	5.5215
2652	4Q-09	220	5.3936	2652	4Q-09	170	5.1358	2652	4Q-09	250	5.5215	81	4Q-09	250	5.5215
2718	1Q-10	230	5.4381	2718	1Q-10	170	5.1358	2718	1Q-10	360	5.8861	116	1Q-10	260	5.5607
								2753	4/2/2010	400	5.9915				
2800	2Q-10	260	5.5607	2800	2Q-10	180	5.1930	2800	2Q-10	580	6.3630	198	2Q-10	280	5.6348
2828	6/18/2010	250	5.5215	2828	6/18/2010	170	5.1358	2828	6/18/2010	660	6.4922	226	6/18/2010	250	5.5215
2895	3Q-10	220	5.3936	2895	3Q-10	220	5.3936	2895	3Q-10	670	6.5073	293	3Q-10	260	5.5607
								2922	9/20/2010R	460	6.1312				
3014	4Q-10	220	5.3936	3014	4Q-10	160	5.0752	3014	4Q-10	200	5.2983	412	4Q-10	260	5.5607
3086	1Q-11	210	5.3471	3086	1Q-11	160	5.0752	3086	1Q-11	240	5.4806	576	1Q-11	250	5.5215
3179	2Q-11	200	5.2983	3179	2Q-11	160	5.0752	3179	2Q-11	340	5.8289	669	2Q-11	260	5.5607
3286	3Q-11	190	5.2470	3286	3Q-11	160	5.0752	3286	3Q-11	190	5.2470	776	3Q-11	250	5.5215
3372	4Q-11	230	5.4381	3372	4Q-11	170	5.1358	3372	4Q-11	180	5.1930	862	4Q-11	270	5.5984
3472	1Q-12	210	5.3471	3472	1Q-12	160	5.0752	3472	1Q-12	220	5.3936	962	1Q-12	280	5.6348
3572	2Q-12	270	5.5984	3572	2Q-12	160	5.0752	3572	2Q-12	190	5.2470	1062	2Q-12	260	5.5607



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Chloride)

MW1				MW2				MW3				MW4			
Days	Date	CI	ln(CI)	Days	Date	CI	ln(CI)	Days	Date	CI	ln(CI)	Days	Date	CI	ln(CI)
3638	3Q-12	220	5.3936	3638	3Q-12	150	5.0106	3638	3Q-12	140	4.9416	1128	3Q-12	260	5.5607
3741	4Q-12	230	5.4381	3741	4Q-12	170	5.1358	3741	4Q-12	160	5.0752	1231	4Q-12	270	5.5984
3840	1Q-13	220	5.3936	3840	1Q-13	160	5.0752	3840	1Q-13	140	4.9416	1330	1Q-13	270	5.5984
3904	2Q-13	200	5.2983	3904	2Q-13	140	4.9416	3904	2Q-13	120	4.7875	1394	2Q-13	250	5.5215
4013	3Q-13	240	5.4806	4013	3Q-13	160	5.0752	4013	3Q-13	120	4.7875	1507	3Q-13	270	5.5984
4088	4Q-13	210	5.3471	4088	4Q-13	150	5.0106	4088	4Q-13	120	4.7875	1583	4Q-13	260	5.5607
4202	1Q-14	250	5.5215	4202	1Q-14	180	5.1930	4202	1Q-14	170	5.1358	1697	1Q-14	300	5.7038
4316	2Q-14	240	5.4806	4316	2Q-14	180	5.1930	4316	2Q-14	140	4.9416	1811	2Q-14	300	5.7038
4395	3Q-14	240	5.4806	4395	3Q-14	160	5.0752	4395	3Q-14	130	4.8675	1890	3Q-14	290	5.6699
4472	4Q-14	240	5.4806	4472	4Q-14	150	5.0106	4472	4Q-14	110	4.7005	1967	4Q-14	270	5.5984
4579	1Q-15	210	5.3471	4579	1Q-15	140	4.9416	4579	1Q-15	110	4.7005	2074	1Q-15	260	5.5607
4765	2Q-15	210	5.3471	4765	2Q-15	140	4.9416	4765	2Q-15	110	4.7005	2260	2Q-15	260	5.5607
4848	3Q-15	220	5.3936	4848	3Q-15	150	5.0106	4848	3Q-15	110	4.7005	2343	3Q-15	280	5.6348
4938	4Q-15	220	5.3936	4938	4Q-15	150	5.0106	4938	4Q-15	120	4.7875	2433	4Q-15	270	5.5984
5055	1Q-16	230	5.4381	5055	1Q-16	140	4.9416	5055	1Q-16	120	4.7875	2550	1Q-16	270	5.5984
5122	2Q-16	230	5.4381	5122	2Q-16	150	5.0106	5122	2Q-16	120	4.7875	2617	2Q-16	280	5.6348
5213	3Q-16	210	5.3471	5213	3Q-16	150	5.0106	5213	3Q-16	110	4.7005	2708	3Q-16	260	5.5607
5305	4Q-16	250	5.5215	5305	4Q-16	160	5.0752	5305	4Q-16	120	4.7875	2800	4Q-16	290	5.6699
5397	1Q-17	200	5.2983	5397	1Q-17	140	4.9416	5397	1Q-17	110	4.7005	2892	1Q-17	270	5.5984
5487	2Q-17	210	5.3471	5487	2Q-17	140	4.9416	5487	2Q-17	110	4.7005	2982	2Q-17	270	5.5984
5563	3Q-17	190	5.2470	5563	3Q-17	140	4.9416	5563	3Q-17	100	4.6052	3058	3Q-17	260	5.5607
5672	4Q-17	190	5.2470	5672	4Q-17	140	4.9416	5672	4Q-17	120	4.7875	3167	4Q-17	270	5.5984
5782	1Q-18	220	5.3936	5782	1Q-18	140	4.9416	5782	1Q-18	140	4.9416	3277	1Q-18	270	5.5984
5850	2Q-18	220	5.3936	5850	2Q-18	140	4.9416	5850	2Q-18	140	4.9416	3345	2Q-18	270	5.5984
5960	3Q-18	220	5.3936	5960	3Q-18	150	5.0106	5960	3Q-18	150	5.0106	3455	3Q-18	280	5.6348
6007	10/30/2018	200	5.2983												
6041	4Q-18	230	5.4381	6041	4Q-18	150	5.0106	6041	4Q-18	140	4.9416	3536	4Q-18	260	5.5607
6136	1Q-19	230	5.4381	6135	1Q-19	140	4.9416	6135	1Q-19	140	4.9416	3631	1Q-19	270	5.5984
6233	2Q-19	200	5.2983	6233	2Q-19	150	5.0106	6233	2Q-19	150	5.0106	3728	2Q-19	290	5.6699
6330	3Q-19	220	5.3936	6330	3Q-19	160	5.0752	6330	3Q-19	160	5.0752	3825	3Q-19	290	5.6699
6311	4Q-19	220	5.3936	6311	4Q-19	140	4.9416	6311	4Q-19	140	4.9416	3806	4Q-19	260	5.5607
6417	1Q-20	150	5.0106	6417	1Q-20	130	4.8675	6417	1Q-20	170	5.1358	3912	1Q-20	250	5.5215
6494	2Q-20	180	5.1930	6494	2Q-20	130	4.8675	6494	2Q-20	150	5.0106	3989	2Q-20	260	5.5607
6606	3Q-20	90	4.4998	6606	3Q-20	130	4.8675	6606	3Q-20	170	5.1358	4101	3Q-20	270	5.5984
6678	4Q-20	220	5.3936	6678	4Q-20	150	5.0106	6678	4Q-20	180	5.1930	4173	4Q-20	280	5.6348
6769	1Q-21	200	5.2983	6769	1Q-21	140	4.9416	6769	1Q-21	160	5.0752	4264	1Q-21	280	5.6348
6851	2Q-21	200	5.2983	6851	2Q-21	150	5.0106	6851	2Q-21	150	5.0106	4346	2Q-21	190	5.2470
7033	3Q-21	200	5.2983	7033	3Q-21	140	4.9416	7033	3Q-21	130	4.8675	4528	3Q-21	280	5.6348
7131	4Q-21	130	4.8675	7131	4Q-21	130	4.8675	7131	4Q-21	170	5.1358	4626	4Q-21	270	5.5984
7223	1Q-22	180	5.1930	7223	1Q-22	140	4.9416	7223	1Q-22	140	4.9416	4718	1Q-22	290	5.6699
7298	2Q-22	170	5.1358	7298	2Q-22	130	4.8675	7298	2Q-22	130	4.8675	4793	2Q-22	270	5.5984
7388	3Q-22	170	5.1358	7388	3Q-22	130	4.8675	7388	3Q-22	130	4.8675	4883	3Q-22	270	5.5984
7480	4Q-22	180	5.1930	7480	4Q-22	130	4.8675	7480	4Q-22	150	5.0106	4975	4Q-22	330	5.7991



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Chloride)

MW1				MW2				MW3				MW4																			
Days	Date	CI	ln(CI)	Days	Date	CI	ln(CI)	Days	Date	CI	ln(CI)	Days	Date	CI	ln(CI)																
7582	1Q-23	170	5.1358	7582	1Q-23	130	4.8675	7582	1Q-23	150	5.0106	5077	1Q-23	320	5.7683																
7670	2Q-23	200	5.2983	7670	2Q-23	130		7670	2Q-23	150		5165	2Q-23	330																	
7785	3Q-23	180	5.1930	7785	3Q-23	130	4.8675	7785	3Q-23	160	5.0752	5280	3Q-23	330	5.7991																
7877	4Q-23	200	5.2983	7877	4Q-23	130	4.8675	7877	4Q-23	150	5.0106	5372	4Q-23	290	5.6699																
7989	1Q-24	190	5.2470	7989	1Q-24	130	4.8675	7989	1Q-24	160	5.0752	5484	1Q-24	320	5.7683																
8038	2Q-24	180	5.1930	8038	2Q-24	130	4.8675	8038	2Q-24	150	5.0106	5533	2Q-24	310	5.7366																
Standard Deviation = Mean = n = (t{n-1, 0.95}) = (1 + 1/n) ^½ = k = t(1 + 1/n) ^½ = UTL = Mean + St.Dev.*k = Concentration Significant?				30.1198 215.5402 87 1.663 5.3618 1.006 87.663 5.6281 No				Standard Deviation = Mean = n = (t{n-1, 0.95}) = (1 + 1/n) ^½ = k = t(1 + 1/n) ^½ = UTL = Mean + St.Dev.*k = Concentration Significant?				25.4475 162.7558 86 1.663 5.0805 1.006 86.663 5.3364 No				Standard Deviation = Mean = n = (t{n-1, 0.95}) = (1 + 1/n) ^½ = k = t(1 + 1/n) ^½ = UTL = Mean + St.Dev.*k = Concentration Significant?				112.7276 196.6235 89 1.662 5.1683 1.006 89.662 5.8865 No				Standard Deviation = Mean = n = (t{n-1, 0.95}) = (1 + 1/n) ^½ = k = t(1 + 1/n) ^½ = UTL = Mean + St.Dev.*k = Concentration Significant?				22.6822 272.9508 61 1.670 5.6059 1.008 61.670 5.7473 Yes			
Standard Deviation = Mean = n = (t{n-1, 0.95}) = (1 + 1/n) ^½ = k = t(1 + 1/n) ^½ = UTL = Mean + St.Dev.*k = Concentration Significant?				30.1849 215.1364 88 1.662 1.006 1.662 5.6262 No				Standard Deviation = Mean = n = (t{n-1, 0.95}) = (1 + 1/n) ^½ = k = t(1 + 1/n) ^½ = UTL = Mean + St.Dev.*k = Concentration Significant?				25.5417 162.3793 87 1.663 1.006 1.663 5.3353 No				Standard Deviation = Mean = n = (t{n-1, 0.95}) = (1 + 1/n) ^½ = k = t(1 + 1/n) ^½ = UTL = Mean + St.Dev.*k = Concentration Significant?				112.1917 194.2556 90 1.662 1.006 1.662 5.8756 No				Standard Deviation = Mean = n = (t{n-1, 0.95}) = (1 + 1/n) ^½ = k = t(1 + 1/n) ^½ = UTL = Mean + St.Dev.*k = Concentration Significant?				22.9823 273.5484 62 1.670 1.008 1.670 5.7510 No			



WELL	PARAMETER	Q1 2024				Q2 2024			
		RESULT	ln(RESULT)	UPPER TOLERANCE LIMIT	UTL EXCEEDED (YES/NO)	RESULT	ln(RESULT)	UPPER TOLERANCE LIMIT	UTL EXCEEDED (YES/NO)
MW-1	TDS	1200	7.0901	7.1757	No	1300	7.1701	7.1775	No
	SO ₄	440	6.0868	6.1609	No	450	6.1092	6.1625	No
	Cl ₂	190	5.2470	5.6281	No	180	5.1930	5.6262	No
MW-2	TDS	1100	7.0031	7.0606	No	1200	7.0901	7.0635	Yes
	SO ₄	410	6.0162	6.0741	No	390	5.9661	6.0735	No
	Cl ₂	130	4.8675	5.3364	No	130	4.8675	5.3353	No
MW-3	TDS	1200	7.0901	7.4602	No	1200	7.0901	7.4580	No
	SO ₄	420	6.0403	6.3422	No	410	6.0162	6.3405	No
	Cl ₂	160	5.0752	5.8865	No	150	5.0106	5.8756	No
MW-4	TDS	1200	7.0901	7.1361	No	1200	7.0901	7.1370	No
	SO ₄	360	5.8861	5.9572	No	340	5.8289	5.9570	No
	Cl ₂	320	5.7683	5.7473	Yes	310	5.7366	5.7510	No

¹Upper tolerance limit (UTL) calculated using 95% distribution and 95% probability



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**SECTION 7
LYSIMETER TEST RECORDS**



LYSIMETER TEST RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No. NB11160982	Date: March 27, 2024
Weather Conditions: Sunny 75° F	Sampler: Ralph De La Parra

EAST POND	Notes: *
Lysimeter No.: 1	
TEST RESULTS: Dry	
Lysimeter No.: 2	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 3	Notes: *
TEST RESULTS: Dry	
WEST POND	Notes: *
Lysimeter No.: 4	
TEST RESULTS: Dry	
Lysimeter No.: 5	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 6	Notes: *
TEST RESULTS: Dry	



LYSIMETER TEST RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No. NB11160982	Date: May 15, 2024
Weather Conditions: Sunny	Sampler: Ralph De La Parra

EAST POND	Notes: *
Lysimeter No.: 1	
TEST RESULTS: Dry	
Lysimeter No.: 2	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 3	Notes: *
TEST RESULTS: Dry	
WEST POND	Notes: *
Lysimeter No.: 4	
TEST RESULTS: Dry	
Lysimeter No.: 5	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 6	Notes: *
TEST RESULTS: Dry	



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**SECTION 8
EVAPORATION POND SAMPLING RECORDS**



EVAPORATION POND SAMPLING RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No.: NB11160982	Date: March 27, 2024
Weather Conditions: Warm, Sunny	Sampler: Ralph De La Parra
<p>Pond No./Designation: #1 East Comments: Dry.</p> <p>Time: N/A</p> <p>Color/Clarity: N/A</p> <p>Temp.: N/A</p> <p>pH: N/A</p> <p>Ec: N/A</p>	
<p>Pond No./Designation: #2 West Comments: Contains Brine Shrimp</p> <p>Time: 11:20</p> <p>Color/Clarity: slightly green</p> <p>Temp.: 26.3°C</p> <p>pH: 8.49</p> <p>Ec: >20.00 ms/cm</p>	

Notes:

- Temperature reported in degrees Celsius
- pH reported in pH units
- Ec reported in millisiemens per centimeter (ms/cm)



EVAPORATION POND SAMPLING RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No.: NB11160982	Date: May 15, 2024
Weather Conditions: Warm, Sunny	Sampler: Ralph De La Parra
<div>Pond No./Designation: #1 East</div> <div>Time: N/A</div> <div>Color/Clarity: N/A</div> <div>Temp.: N/A</div> <div>pH: N/A</div> <div>Ec: N/A</div> <div>Comments: Dry</div>	
<div>Pond No./Designation: #2 West</div> <div>Time: 13:05</div> <div>Color/Clarity: slightly green</div> <div>Temp.: 35.1°C</div> <div>pH: 8.01</div> <div>Ec: >20.00 ms/cm</div> <div>Comments:</div>	

Notes:

- Temperature reported in degrees Celsius
- pH reported in pH units
- Ec reported in millisiemens per centimeter (ms/cm)



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**SECTION 9
WELL SAMPLING RECORDS**



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-1 Date: March 27, 2024 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>337.27</u>	ft. (a)
Elevation of Ground Surface	<u>337.76</u>	ft. (b)
Well Depth (below MP)	<u>120.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>88.18</u>	ft. (e)
Water Level Elevation (a-e)	<u>249.09</u>	ft. (f)
Height of Water in Well	<u>31.82</u>	ft.
Volume of Water in Casing	<u>31.82x 0.66 = 21.00</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Whale pump electric submersible</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

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Blythe Energy Inc.
Blythe, California
July 31, 2024



Project Name/Client Blythe Energy Inc. Well Number MW-1 Date March 27, 2024

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
12:10	2	10	30.1	7.08	1.92	Clear, odorless
12:20	2	20	30.2	7.10	1.93	Clear, odorless
12:30	2	30	30.2	7.11	1.93	Clear, odorless
12:40	2	40	30.3	7.11	1.94	Clear, odorless
12:50	2	50	30.3	7.11	1.94	Clear, odorless
13:05	2	65	30.4	7.11	1.94	Clear, odorless

Total Vol. Purged 65 (gal) Casing Vol. Purged 3.09

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-1	13:05	2	Quarterly	N	NA	1L poly

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-2 Date: March 27, 2024 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>337.77</u>	ft. (a)
Elevation of Ground Surface	<u>337.17</u>	ft. (b)
Well Depth (below MP)	<u>120.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>89.05</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.72</u>	ft. (f)
Height of Water in Well	<u>30.95</u>	ft.
Volume of Water in Casing	<u>30.95 x 0.66 = 20.42</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Whale pump electric submersible</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

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Project Name/Client **Blythe Energy Inc.** Well Number **MW-2** Date **March 27, 2024**

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
10:50	1	10	29.7	7.02	1.70	Clear, odorless
11:00	1	20	29.8	7.03	1.70	Clear, odorless
11:10	1	30	29.8	7.03	1.70	Clear, odorless
11:20	1	40	29.8	7.03	1.70	Clear, odorless
11:30	1	50	29.8	7.03	1.70	Clear, odorless
11:45	1	65	29.8	7.03	1.70	Clear, odorless

Total Vol. Purged **65** (gal) Casing Vol. Purged **3.18**

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water **Discharged to ground**

SAMPLE INVENTORY						
Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-2	11:45	2	Quarterly	N	NA	1L poly

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-3 Date: March 27, 2024 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>338.22</u>	ft. (a)
Elevation of Ground Surface	<u>336.28</u>	ft. (b)
Well Depth (below MP)	<u>115.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>89.68</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.54</u>	ft. (f)
Height of Water in Well	<u>25.32</u>	ft.
Volume of Water in Casing	<u>25.32 x 0.66 = 16.21</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Whale pump electric submersible</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>Rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

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Project Name/Client Blythe Energy Inc. Well Number MW-3 Date March 27, 2024

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
9:40	1	10	24.6	6.54	1.81	Clear, odorless
9:50	1	20	24.7	6.67	1.75	Clear, odorless
10:00	1	30	24.7	6.68	1.74	Clear, odorless
10:10	1	40	24.7	6.68	1.74	Clear, odorless
10:20	1	50	24.7	6.68	1.74	Clear, odorless
10:30	1	60	24.7	6.68	1.74	Clear, odorless

Total Vol. Purged 60 (gal) Casing Vol. Purged 3.59

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-3	10:30	4	Quarterly	N	NA	Duplicate Collected (DUP)

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-4 Date: March 27, 2024 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>342.50</u>	ft. (a)
Elevation of Ground Surface	<u>339.95</u>	ft. (b)
Well Depth (below MP)	<u>118.95</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>92.85</u>	ft. (e)
Water Level Elevation (a-e)	<u>249.65</u>	ft. (f)
Height of Water in Well	<u>26.1</u>	ft.
Volume of Water in Casing	<u>26.1 x 0.66 = 17.22</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Whale pump electric submersible</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>Rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

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Project Name/Client Blythe Energy Inc. Well Number MW-4 Date March 27, 2024

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
13:30	2	10	30.9	7..18	1.97	Clear, odorless
13:40	2	20	31.8	7.19	1.97	Clear, odorless
13:50	2	30	31.9	7.20	1.97	Clear, odorless
14:00	2	40	31.9	7.20	1.97	Clear, odorless
14:10	2	50	31.9	7.20	1.97	Clear, odorless
14:15	2	55	32.0	7.20	1.97	Clear, odorless

Total Vol. Purged 55 (gal) Casing Vol. Purged 3.19

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-4	14:15	2	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)

Depth to Water Readings:

OW-1 = 91.08 feet

OW-2 = 87.90 feet



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-1 Date: May 15, 2024 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>337.27</u>	ft. (a)
Elevation of Ground Surface	<u>337.76</u>	ft. (b)
Well Depth (below MP)	<u>120.0</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>88.65</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.62</u>	ft. (f)
Height of Water in Well	<u>31.35</u>	ft.
Volume of Water in Casing	<u>31.35 x 0.66 = 20.69</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Whale pump electric submersible</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

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Blythe Energy Inc.
Blythe, California
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Project Name/Client Blythe Energy Inc. Well Number MW-1 Date May 15, 2024

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
10:40	2	10	29.9	7.21	1.95	Clear, odorless
10:50	2	20	30.0	7.17	1.93	Clear, odorless
11:00	2	30	30.1	7.16	1.93	Clear, odorless
11:10	2	40	30.2	7.16	1.93	Clear, odorless
11:35	2	65	30.3	7.16	1.93	Clear, odorless

Total Vol. Purged 65 (gal) Casing Vol. Purged 3.14

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-1-5-15-24	11:35	4	Quarterly	N	NA	DUP-5-15-24

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-2 Date: May 15, 2024 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>337.77</u>	ft. (a)
Elevation of Ground Surface	<u>337.17</u>	ft. (b)
Well Depth (below MP)	<u>120.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>89.25</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.52</u>	ft. (f)
Height of Water in Well	<u>30.25</u>	ft.
Volume of Water in Casing	<u>30.25 x 0.66 = 20.29</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Whale pump electric submersible</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

First Semi-Annual 2024 Monitoring Report
Blythe Energy Inc.
Blythe, California
July 31, 2024



Project Name/Client Blythe Energy Inc. Well Number MW-2 Date May 15, 2024

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
9:15	1	10	29.8	7.01	1.71	Clear, odorless
9:25	1	20	30.2	7.02	1.71	Clear, odorless
9:35	1	30	30.2	7.02	1.71	Clear, odorless
9:45	1	40	30.2	7.02	1.71	Clear, odorless
10:10	1	65	30.2	7.02	1.71	Clear, odorless

Total Vol. Purged 65 (gal) Casing Vol. Purged 3.20

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-2-5-15-24	10:10	2	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-3 Date: May 15, 2024 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>338.22</u>	ft. (a)
Elevation of Ground Surface	<u>336.28</u>	ft. (b)
Well Depth (below MP)	<u>115.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>89.85</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.37</u>	ft. (f)
Height of Water in Well	<u>25.15</u>	ft.
Volume of Water in Casing	<u>25.15 x 0.66 = 16.59</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Whale pump electric submersible</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

First Semi-Annual 2024 Monitoring Report
Blythe Energy Inc.
Blythe, California
July 31, 2024



Project Name/Client Blythe Energy Inc. Well Number MW-3 Date May 15, 2024

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
8:10	1	10	24.9	6.63	1.80	Clear, odorless
8:20	1	20	24.7	6.62	1.75	Clear, odorless
8:30	1	30	24.7	6.68	1.72	Clear, odorless
8:40	1	40	24.7	6.68	1.72	Clear, odorless
8:55	1	55	24.7	6.68	1.72	Clear, odorless

Total Vol. Purged 55 (gal) Casing Vol. Purged 3.31

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-3-5-15-24	8:55	2	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-4 Date: May 15, 2024 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>342.50</u>	ft. (a)
Elevation of Ground Surface	<u>337.76</u>	ft. (b)
Well Depth (below MP)	<u>118.95</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>93.45</u>	ft. (e)
Water Level Elevation (a-e)	<u>249.05</u>	ft. (f)
Height of Water in Well	<u>25.5</u>	ft.
Volume of Water in Casing	<u>25.5 x 0.66 = 16.83</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Whale pump electric submersible</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>Rinse</u>	<u></u>	

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

First Semi-Annual 2024 Monitoring Report
Blythe Energy Inc.
Blythe, California
July 31, 2024



Project Name/Client Blythe Energy Inc. Well Number MW-4 Date May 15, 2024

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
11:55	2	10	32.7	7.24	1.87	Clear, odorless
12:05	2	20	33.1	7.22	1.88	Clear, odorless
12:15	2	30	33.3	7.22	1.88	Clear, odorless
12:25	2	40	33.6	7.22	1.88	Clear, odorless
12:40	2	55	33.8	7.22	1.88	Clear, odorless

Total Vol. Purged 55 (gal) Casing Vol. Purged 3.26

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-4-5-15-24	12:40	2	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)

Depth to Water Readings:

OW-1 = 91.20 feet

OW-2 = 88.50 feet



FIRST SEMI-ANNUAL 2024 MONITORING REPORT

**SECTION 10
LEACHATE COLLECTION AND RECOVERY SYSTEM (LCRS) & WEEKLY LYSIMETER
RECORDS**



LEACHATE COLLECTION AND RECOVERY SYSTEM (LCRS) & WEEKLY LYSIMETER RECORDS

Table 10-1 shows records of weekly inspections performed on the Leachate Collection and Recovery System (LCR) and Lysimeter Records



Table 10-1 Leachate Collection and Recovery System (LCRS) & Weekly Lysimeter Results

Date	East LRS Measurement in inches	East LRS pump Out Yes / No	Lysimeters checked	Water Present	East Pond Level Inches of Free Board	West LRS Measurement in inches	West LRS pump Out Yes / No	Lysimeters checked	Water Present	West Pond Level Inches of Free Board	Comments
1/7/2024	59	N	Y	N	363	56	N	Y	N	66	Weekly Inspection
1/12/2024	64	N	Y	N	363	52	N	Y	N	65	Weekly Inspection
1/21/2024	55	N	Y	N	360	36	N	Y	N	65	Weekly Inspection
1/28/2024	60	N	Y	N	140	60	N	Y	N	63	Weekly Inspection
2/3/2024	90	N	Y	Y	144	87	N	Y	N	68	Weekly Inspection - East LRS Pumped out - Water detected in Lysimeter determined to be rain water
2/10/2024	72	N	Y	Y	143	62	Y	Y	N	65	Weekly Inspection - Water detected in Lysimeter determined to be rain water
2/17/2024	84	N	Y	N	184	58	N	Y	N	68	Weekly Inspection
2/24/2024	76	Y	Y	N	147	65	Y	Y	N	66	Weekly Inspection - East and West LRS Pumped out
3/3/2024	72	Y	Y	N	145	52	N	Y	N	65	Weekly Inspection - West LRS Pumped out
3/10/2024	60	N	Y	N	144	48	N	Y	N	75	Weekly Inspection
3/17/2024	60	N	Y	N	134	53	N	Y	N	67	Weekly Inspection
3/24/2024	79	N	Y	N	145	66	N	Y	N	72	Weekly Inspection
3/31/2024	60	N	Y	N	144	54	N	Y	N	72	Weekly Inspection
4/7/2024	59	N	Y	N	136	49	N	Y	N	69	Weekly Inspection
4/14/2024	54	N	Y	N	141	48	N	Y	N	71	Weekly Inspection
4/21/2024	55	N	Y	N	141	48	N	Y	N	71	Weekly Inspection
4/28/2024	66	N	Y	N	139	56	N	Y	N	75	Weekly Inspection
5/4/2024	60	N	Y	N	150	60	N	Y	N	72	Weekly Inspection
5/12/2024	60	N	Y	N	147	51	N	Y	N	68	Weekly Inspection
5/19/2024	98	N	Y	N	155	80	N	Y	N	76	Weekly Inspection
5/26/2024	58	N	Y	N	160	60	N	Y	N	81	Weekly Inspection
6/2/2024	58	N	Y	N	157	60	N	Y	N	75	Weekly Inspection
6/9/2024	58	N	Y	N	158	60	N	Y	N	79	Weekly Inspection
6/16/2024	68	N	Y	N	147	60	N	Y	N	84	Weekly Inspection
6/23/2024	60	N	Y	N	145	58	N	Y	N	89	Weekly Inspection
6/30/2024	60	N	Y	N	151	54	N	Y	N	83	Weekly Inspection



FIRST SEMI-ANNUAL 2024 MONITORING REPORT

APPENDIX A

LABORATORY ANALYTICAL DATA SHEETS



ANALYTICAL REPORT

PREPARED FOR

Attn: Arlin Brewster
Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest, California 92630

Generated 4/5/2024 6:07:44 AM

JOB DESCRIPTION

Blythe Energy

JOB NUMBER

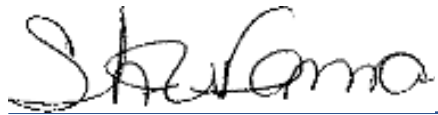
570-178204-1

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

Authorization



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Authorized for release by
Sheri Fama, Project Manager I
Sheri.Fama@et.eurofinsus.com
(657)210-6368



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Definitions/Glossary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Northstar Environmental Remediation
Project: Blythe Energy

Job ID: 570-178204-1

Job ID: 570-178204-1

Eurofins Calscience

Job Narrative 570-178204-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/27/2024 5:54 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.9°C.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Calscience

Sample Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-178204-1	MW-1	Water	03/27/24 13:05	03/27/24 17:54
570-178204-2	MW-2	Water	03/27/24 11:45	03/27/24 17:54
570-178204-3	MW-3	Water	03/27/24 10:30	03/27/24 17:54
570-178204-4	MW-4	Water	03/27/24 14:15	03/27/24 17:54
570-178204-5	DUP	Water	03/27/24 00:00	03/27/24 17:54

Detection Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Client Sample ID: MW-1

Lab Sample ID: 570-178204-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	190		10	mg/L	10		300.0	Total/NA
Sulfate	430		10	mg/L	10		300.0	Total/NA
Specific Conductance	1900		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1200		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 570-178204-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	130		10	mg/L	10		300.0	Total/NA
Sulfate	410		10	mg/L	10		300.0	Total/NA
Specific Conductance	1700		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1100		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 570-178204-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	160		10	mg/L	10		300.0	Total/NA
Sulfate	420		10	mg/L	10		300.0	Total/NA
Specific Conductance	1800		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1200		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 570-178204-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	320		10	mg/L	10		300.0	Total/NA
Sulfate	360		10	mg/L	10		300.0	Total/NA
Specific Conductance	2000		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1200		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP

Lab Sample ID: 570-178204-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	160		10	mg/L	10		300.0	Total/NA
Sulfate	420		10	mg/L	10		300.0	Total/NA
Specific Conductance	1800		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1300		10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Client Sample ID: MW-1

Lab Sample ID: 570-178204-1

Date Collected: 03/27/24 13:05

Matrix: Water

Date Received: 03/27/24 17:54

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		10	mg/L			03/30/24 10:38	10
Sulfate	430		10	mg/L			03/30/24 10:38	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		03/29/24 09:07	03/29/24 19:52	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1900		1.0	umhos/cm			04/02/24 18:21	1
Total Dissolved Solids (SM 2540C)	1200		10	mg/L			04/03/24 15:03	1

Client Sample ID: MW-2

Lab Sample ID: 570-178204-2

Date Collected: 03/27/24 11:45

Matrix: Water

Date Received: 03/27/24 17:54

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		10	mg/L			03/30/24 10:55	10
Sulfate	410		10	mg/L			03/30/24 10:55	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		03/29/24 09:07	03/29/24 19:55	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1700		1.0	umhos/cm			04/02/24 18:23	1
Total Dissolved Solids (SM 2540C)	1100		10	mg/L			04/03/24 15:03	1

Client Sample ID: MW-3

Lab Sample ID: 570-178204-3

Date Collected: 03/27/24 10:30

Matrix: Water

Date Received: 03/27/24 17:54

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		10	mg/L			03/30/24 11:45	10
Sulfate	420		10	mg/L			03/30/24 11:45	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		03/29/24 09:07	03/29/24 20:01	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1800		1.0	umhos/cm			04/02/24 18:25	1
Total Dissolved Solids (SM 2540C)	1200		10	mg/L			04/03/24 15:03	1

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Client Sample ID: MW-4

Lab Sample ID: 570-178204-4

Date Collected: 03/27/24 14:15

Matrix: Water

Date Received: 03/27/24 17:54

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		10	mg/L			03/30/24 12:02	10
Sulfate	360		10	mg/L			03/30/24 12:02	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		03/29/24 09:07	03/29/24 20:04	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	2000		1.0	umhos/cm			04/02/24 18:27	1
Total Dissolved Solids (SM 2540C)	1200		10	mg/L			04/03/24 15:03	1

Client Sample ID: DUP

Lab Sample ID: 570-178204-5

Date Collected: 03/27/24 00:00

Matrix: Water

Date Received: 03/27/24 17:54

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		10	mg/L			03/30/24 12:19	10
Sulfate	420		10	mg/L			03/30/24 12:19	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		03/29/24 09:07	03/29/24 20:06	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1800		1.0	umhos/cm			04/02/24 18:29	1
Total Dissolved Solids (SM 2540C)	1300		10	mg/L			04/03/24 15:03	1

Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Client Sample ID: MW-1

Lab Sample ID: 570-178204-1

Date Collected: 03/27/24 13:05

Matrix: Water

Date Received: 03/27/24 17:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	425775	03/30/24 10:38	UIP1	EET CAL 4
		Instrument ID: IC10								
Total Recoverable	Prep	200.7			50 mL	50 mL	425461	03/29/24 09:07	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			425734	03/29/24 19:52	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Analysis	SM 2510B		1			426916	04/02/24 18:21	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	427021	04/03/24 15:03	PK4M	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: MW-2

Lab Sample ID: 570-178204-2

Date Collected: 03/27/24 11:45

Matrix: Water

Date Received: 03/27/24 17:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	425775	03/30/24 10:55	UIP1	EET CAL 4
		Instrument ID: IC10								
Total Recoverable	Prep	200.7			50 mL	50 mL	425461	03/29/24 09:07	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			425734	03/29/24 19:55	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Analysis	SM 2510B		1			426916	04/02/24 18:23	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	427021	04/03/24 15:03	PK4M	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: MW-3

Lab Sample ID: 570-178204-3

Date Collected: 03/27/24 10:30

Matrix: Water

Date Received: 03/27/24 17:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	425775	03/30/24 11:45	UIP1	EET CAL 4
		Instrument ID: IC10								
Total Recoverable	Prep	200.7			50 mL	50 mL	425461	03/29/24 09:07	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			426170	03/29/24 20:01	Y2WS	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Analysis	SM 2510B		1			426916	04/02/24 18:25	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	427021	04/03/24 15:03	PK4M	EET CAL 4
		Instrument ID: BAL100								

Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Client Sample ID: MW-4
Date Collected: 03/27/24 14:15
Date Received: 03/27/24 17:54

Lab Sample ID: 570-178204-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	425775	03/30/24 12:02	UIP1	EET CAL 4
	Instrument ID: IC10									
Total Recoverable	Prep	200.7			50 mL	50 mL	425461	03/29/24 09:07	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			426170	03/29/24 20:04	Y2WS	EET CAL 4
	Instrument ID: ICP11									
Total/NA	Analysis	SM 2510B		1			426916	04/02/24 18:27	ZL4M	EET CAL 4
	Instrument ID: ManSciMantech									
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	427021	04/03/24 15:03	PK4M	EET CAL 4
	Instrument ID: BAL100									

Client Sample ID: DUP
Date Collected: 03/27/24 00:00
Date Received: 03/27/24 17:54

Lab Sample ID: 570-178204-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	425775	03/30/24 12:19	UIP1	EET CAL 4
	Instrument ID: IC10									
Total Recoverable	Prep	200.7			50 mL	50 mL	425461	03/29/24 09:07	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			426170	03/29/24 20:06	Y2WS	EET CAL 4
	Instrument ID: ICP11									
Total/NA	Analysis	SM 2510B		1			426916	04/02/24 18:29	ZL4M	EET CAL 4
	Instrument ID: ManSciMantech									
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	427021	04/03/24 15:03	PK4M	EET CAL 4
	Instrument ID: BAL100									

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 570-425775/5

Matrix: Water

Analysis Batch: 425775

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	mg/L			03/30/24 06:58	1
Sulfate	ND		1.0	mg/L			03/30/24 06:58	1

Lab Sample ID: LCS 570-425775/6

Matrix: Water

Analysis Batch: 425775

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.2		mg/L		96	90 - 110
Sulfate	50.0	48.4		mg/L		97	90 - 110

Lab Sample ID: LCSD 570-425775/7

Matrix: Water

Analysis Batch: 425775

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	48.3		mg/L		97	90 - 110	0	15
Sulfate	50.0	48.4		mg/L		97	90 - 110	0	15

Lab Sample ID: 570-178074-G-8 MS

Matrix: Water

Analysis Batch: 425775

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2.8		50.0	52.4		mg/L		99	80 - 120
Sulfate	12		50.0	63.7		mg/L		103	80 - 120

Lab Sample ID: 570-178074-G-8 MSD

Matrix: Water

Analysis Batch: 425775

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2.8		50.0	52.5		mg/L		99	80 - 120	0	20
Sulfate	12		50.0	63.8		mg/L		104	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 570-425461/1-A

Matrix: Water

Analysis Batch: 425734

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 425461

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		03/29/24 09:07	03/29/24 19:34	1

Lab Sample ID: LCS 570-425461/2-A

Matrix: Water

Analysis Batch: 425734

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 425461

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	0.500	0.439		mg/L		88	85 - 115

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QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 570-425461/3-A

Matrix: Water

Analysis Batch: 425734

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 425461

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	0.500	0.442		mg/L		88	85 - 115	1	20

Lab Sample ID: 570-178216-B-2-B MS

Matrix: Water

Analysis Batch: 425734

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 425461

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	ND		0.500	0.434		mg/L		87	80 - 120		

Lab Sample ID: 570-178216-B-2-C MSD

Matrix: Water

Analysis Batch: 425734

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 425461

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	ND		0.500	0.435		mg/L		87	80 - 120	0	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 570-426916/10

Matrix: Water

Analysis Batch: 426916

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	umhos/cm			04/02/24 16:26	1

Lab Sample ID: 570-178108-A-11 DU

Matrix: Water

Analysis Batch: 426916

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	110		105		umhos/cm		0.3	25

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 570-427021/1

Matrix: Water

Analysis Batch: 427021

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	mg/L			04/03/24 15:03	1

Lab Sample ID: LCS 570-427021/2

Matrix: Water

Analysis Batch: 427021

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	998		mg/L		100	84 - 108		

Eurofins Calscience

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 570-427021/3				Client Sample ID: Lab Control Sample Dup							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 427021											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1030		mg/L		103	84 - 108	3	10

Lab Sample ID: 570-178204-1 DU				Client Sample ID: MW-1							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 427021											
Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1200			1240		mg/L				0.3	10

QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

HPLC/IC

Analysis Batch: 425775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-178204-1	MW-1	Total/NA	Water	300.0	
570-178204-2	MW-2	Total/NA	Water	300.0	
570-178204-3	MW-3	Total/NA	Water	300.0	
570-178204-4	MW-4	Total/NA	Water	300.0	
570-178204-5	DUP	Total/NA	Water	300.0	
MB 570-425775/5	Method Blank	Total/NA	Water	300.0	
LCS 570-425775/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-425775/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-178074-G-8 MS	Matrix Spike	Total/NA	Water	300.0	
570-178074-G-8 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 425461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-178204-1	MW-1	Total Recoverable	Water	200.7	
570-178204-2	MW-2	Total Recoverable	Water	200.7	
570-178204-3	MW-3	Total Recoverable	Water	200.7	
570-178204-4	MW-4	Total Recoverable	Water	200.7	
570-178204-5	DUP	Total Recoverable	Water	200.7	
MB 570-425461/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-425461/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-425461/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
570-178216-B-2-B MS	Matrix Spike	Total Recoverable	Water	200.7	
570-178216-B-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7	

Analysis Batch: 425734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-178204-1	MW-1	Total Recoverable	Water	200.7 Rev 4.4	425461
570-178204-2	MW-2	Total Recoverable	Water	200.7 Rev 4.4	425461
MB 570-425461/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	425461
LCS 570-425461/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	425461
LCSD 570-425461/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	425461
570-178216-B-2-B MS	Matrix Spike	Total Recoverable	Water	200.7 Rev 4.4	425461
570-178216-B-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7 Rev 4.4	425461

Analysis Batch: 426170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-178204-3	MW-3	Total Recoverable	Water	200.7 Rev 4.4	425461
570-178204-4	MW-4	Total Recoverable	Water	200.7 Rev 4.4	425461
570-178204-5	DUP	Total Recoverable	Water	200.7 Rev 4.4	425461

General Chemistry

Analysis Batch: 426916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-178204-1	MW-1	Total/NA	Water	SM 2510B	
570-178204-2	MW-2	Total/NA	Water	SM 2510B	
570-178204-3	MW-3	Total/NA	Water	SM 2510B	
570-178204-4	MW-4	Total/NA	Water	SM 2510B	
570-178204-5	DUP	Total/NA	Water	SM 2510B	
MB 570-426916/10	Method Blank	Total/NA	Water	SM 2510B	

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QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

General Chemistry (Continued)

Analysis Batch: 426916 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-178108-A-11 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 427021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-178204-1	MW-1	Total/NA	Water	SM 2540C	
570-178204-2	MW-2	Total/NA	Water	SM 2540C	
570-178204-3	MW-3	Total/NA	Water	SM 2540C	
570-178204-4	MW-4	Total/NA	Water	SM 2540C	
570-178204-5	DUP	Total/NA	Water	SM 2540C	
MB 570-427021/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 570-427021/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 570-427021/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
570-178204-1 DU	MW-1	Total/NA	Water	SM 2540C	

Accreditation/Certification Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0		Water	Chloride
300.0		Water	Sulfate
SM 2510B		Water	Specific Conductance
SM 2540C		Water	Total Dissolved Solids

Method Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-178204-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
SM 2510B	Conductivity, Specific Conductance	SM	EET CAL 4
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAL 4
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4

Protocol References:

- EPA = US Environmental Protection Agency
- SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

- EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Login Sample Receipt Checklist

Client: Northstar Environmental Remediation

Job Number: 570-178204-1

Login Number: 178204

List Source: Eurofins Calscience

List Number: 1

Creator: Skinner, Alma D

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Arlin Brewster
Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest, California 92630

Generated 5/22/2024 6:38:39 PM

JOB DESCRIPTION

Blythe Energy

JOB NUMBER

570-184533-1

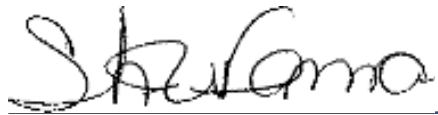
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Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

Authorization



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Authorized for release by
Sheri Fama, Project Manager I
Sheri.Fama@et.eurofinsus.com
(657)210-6368

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Definitions/Glossary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Qualifiers

Metals

Qualifier	Qualifier Description
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Northstar Environmental Remediation
Project: Blythe Energy

Job ID: 570-184533-1

Job ID: 570-184533-1

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Job Narrative 570-184533-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/15/2024 5:05 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.3°C.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

Method 200.7 - Total Recoverable: The initial calibration verification (ICV) result for batch 570-443027 was above the upper control limit. The affected analytes are: Zinc. Sample results were non-detects, and have been reported as qualified data.

Method 200.7 - Total Recoverable: The following sample was diluted due to the nature of the sample matrix: EP(West)-5-15-24 (570-184533-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Sample Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-184533-1	MW-3-5-15-24	Water	05/15/24 08:55	05/15/24 17:05
570-184533-2	MW-2-5-15-24	Water	05/15/24 10:10	05/15/24 17:05
570-184533-3	MW-1-5-15-24	Water	05/15/24 11:35	05/15/24 17:05
570-184533-4	MW-4-5-15-24	Water	05/15/24 12:40	05/15/24 17:05
570-184533-5	DUP-5-15-24	Water	05/15/24 00:00	05/15/24 17:05
570-184533-6	EP(West)-5-15-24	Water	05/15/24 13:05	05/15/24 17:05

Detection Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Client Sample ID: MW-3-5-15-24

Lab Sample ID: 570-184533-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.48		0.10	mg/L	1		300.0	Total/NA
Chloride - DL	150		10	mg/L	10		300.0	Total/NA
Sulfate - DL	410		10	mg/L	10		300.0	Total/NA
Specific Conductance	1800		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1200		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-2-5-15-24

Lab Sample ID: 570-184533-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.8		0.10	mg/L	1		300.0	Total/NA
Chloride - DL	130		10	mg/L	10		300.0	Total/NA
Sulfate - DL	390		10	mg/L	10		300.0	Total/NA
Specific Conductance	1700		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1200		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-1-5-15-24

Lab Sample ID: 570-184533-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.9		0.10	mg/L	1		300.0	Total/NA
Chloride - DL	180		10	mg/L	10		300.0	Total/NA
Sulfate - DL	450		10	mg/L	10		300.0	Total/NA
Specific Conductance	2000		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1300		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-4-5-15-24

Lab Sample ID: 570-184533-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.8		0.10	mg/L	1		300.0	Total/NA
Chloride - DL	310		10	mg/L	10		300.0	Total/NA
Sulfate - DL	340		10	mg/L	10		300.0	Total/NA
Specific Conductance	2000		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1200		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-5-15-24

Lab Sample ID: 570-184533-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.9		0.10	mg/L	1		300.0	Total/NA
Chloride - DL	180		10	mg/L	10		300.0	Total/NA
Sulfate - DL	450		10	mg/L	10		300.0	Total/NA
Specific Conductance	2000		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1300		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EP(West)-5-15-24

Lab Sample ID: 570-184533-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	32		5.0	mg/L	50		300.0	Total/NA
Chloride - DL	78000		1000	mg/L	1000		300.0	Total/NA
Sulfate - DL	80000		1000	mg/L	1000		300.0	Total/NA
Barium	0.13		0.10	mg/L	10		200.7 Rev 4.4	Total Recoverable
Specific Conductance	170000		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	240000		2000	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Client Sample ID: MW-3-5-15-24

Lab Sample ID: 570-184533-1

Date Collected: 05/15/24 08:55

Matrix: Water

Date Received: 05/15/24 17:05

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.48		0.10	mg/L			05/17/24 20:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		10	mg/L			05/17/24 22:40	10
Sulfate	410		10	mg/L			05/17/24 22:40	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		05/21/24 06:43	05/21/24 22:55	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1800		1.0	umhos/cm			05/21/24 17:35	1
Total Dissolved Solids (SM 2540C)	1200		10	mg/L			05/20/24 13:43	1

Client Sample ID: MW-2-5-15-24

Lab Sample ID: 570-184533-2

Date Collected: 05/15/24 10:10

Matrix: Water

Date Received: 05/15/24 17:05

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.8		0.10	mg/L			05/17/24 21:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		10	mg/L			05/17/24 22:57	10
Sulfate	390		10	mg/L			05/17/24 22:57	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		05/21/24 06:43	05/21/24 23:06	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1700		1.0	umhos/cm			05/21/24 17:33	1
Total Dissolved Solids (SM 2540C)	1200		10	mg/L			05/20/24 13:43	1

Client Sample ID: MW-1-5-15-24

Lab Sample ID: 570-184533-3

Date Collected: 05/15/24 11:35

Matrix: Water

Date Received: 05/15/24 17:05

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.9		0.10	mg/L			05/17/24 21:33	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		10	mg/L			05/17/24 23:14	10
Sulfate	450		10	mg/L			05/17/24 23:14	10

Eurofins Calscience

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Client Sample ID: MW-1-5-15-24

Lab Sample ID: 570-184533-3

Date Collected: 05/15/24 11:35

Matrix: Water

Date Received: 05/15/24 17:05

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		05/21/24 06:43	05/21/24 23:08	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	2000		1.0	umhos/cm			05/21/24 17:31	1
Total Dissolved Solids (SM 2540C)	1300		10	mg/L			05/20/24 13:43	1

Client Sample ID: MW-4-5-15-24

Lab Sample ID: 570-184533-4

Date Collected: 05/15/24 12:40

Matrix: Water

Date Received: 05/15/24 17:05

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.8		0.10	mg/L			05/17/24 21:50	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	310		10	mg/L			05/17/24 23:31	10
Sulfate	340		10	mg/L			05/17/24 23:31	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		05/21/24 06:43	05/21/24 23:11	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	2000		1.0	umhos/cm			05/21/24 17:29	1
Total Dissolved Solids (SM 2540C)	1200		10	mg/L			05/20/24 13:43	1

Client Sample ID: DUP-5-15-24

Lab Sample ID: 570-184533-5

Date Collected: 05/15/24 00:00

Matrix: Water

Date Received: 05/15/24 17:05

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.9		0.10	mg/L			05/17/24 22:07	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		10	mg/L			05/18/24 00:22	10
Sulfate	450		10	mg/L			05/18/24 00:22	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		05/21/24 06:43	05/21/24 23:13	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	2000		1.0	umhos/cm			05/21/24 17:27	1
Total Dissolved Solids (SM 2540C)	1300		10	mg/L			05/20/24 13:43	1

Eurofins Calscience

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Client Sample ID: EP(West)-5-15-24

Lab Sample ID: 570-184533-6

Date Collected: 05/15/24 13:05

Matrix: Water

Date Received: 05/15/24 17:05

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	32		5.0	mg/L			05/17/24 22:24	50

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78000		1000	mg/L			05/18/24 00:38	1000
Sulfate	80000		1000	mg/L			05/18/24 00:38	1000

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	mg/L		05/21/24 06:43	05/22/24 16:00	10
Arsenic	ND		1.0	mg/L		05/21/24 06:43	05/22/24 16:00	10
Barium	0.13		0.10	mg/L		05/21/24 06:43	05/22/24 16:00	10
Cadmium	ND		0.10	mg/L		05/21/24 06:43	05/22/24 16:00	10
Chromium	ND		0.50	mg/L		05/21/24 06:43	05/22/24 16:00	10
Cobalt	ND		0.50	mg/L		05/21/24 06:43	05/22/24 16:00	10
Copper	ND		0.50	mg/L		05/21/24 06:43	05/22/24 16:00	10
Lead	ND		0.50	mg/L		05/21/24 06:43	05/22/24 16:00	10
Nickel	ND		0.50	mg/L		05/21/24 06:43	05/22/24 16:00	10
Zinc	ND		2.5	mg/L		05/21/24 06:43	05/22/24 16:00	10

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		05/21/24 07:01	05/21/24 14:06	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	170000		1.0	umhos/cm			05/21/24 17:25	1
Total Dissolved Solids (SM 2540C)	240000		2000	mg/L			05/20/24 13:43	1

Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Client Sample ID: MW-3-5-15-24

Lab Sample ID: 570-184533-1

Date Collected: 05/15/24 08:55

Matrix: Water

Date Received: 05/15/24 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	4 mL	4 mL	441555	05/17/24 20:59	YO8L	EET CAL 4
		Instrument ID: IC9								
Total/NA	Analysis	300.0	DL	10	4 mL	4 mL	441555	05/17/24 22:40	YO8L	EET CAL 4
		Instrument ID: IC9								
Total Recoverable	Prep	200.7			50 mL	50 mL	442598	05/21/24 06:43	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			443027	05/21/24 22:55	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Analysis	SM 2510B		1			443199	05/21/24 17:35	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	442360	05/20/24 13:43	PK4M	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: MW-2-5-15-24

Lab Sample ID: 570-184533-2

Date Collected: 05/15/24 10:10

Matrix: Water

Date Received: 05/15/24 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	4 mL	4 mL	441555	05/17/24 21:16	YO8L	EET CAL 4
		Instrument ID: IC9								
Total/NA	Analysis	300.0	DL	10	4 mL	4 mL	441555	05/17/24 22:57	YO8L	EET CAL 4
		Instrument ID: IC9								
Total Recoverable	Prep	200.7			50 mL	50 mL	442598	05/21/24 06:43	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			443027	05/21/24 23:06	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Analysis	SM 2510B		1			443199	05/21/24 17:33	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	442360	05/20/24 13:43	PK4M	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: MW-1-5-15-24

Lab Sample ID: 570-184533-3

Date Collected: 05/15/24 11:35

Matrix: Water

Date Received: 05/15/24 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	4 mL	4 mL	441555	05/17/24 21:33	YO8L	EET CAL 4
		Instrument ID: IC9								
Total/NA	Analysis	300.0	DL	10	4 mL	4 mL	441555	05/17/24 23:14	YO8L	EET CAL 4
		Instrument ID: IC9								
Total Recoverable	Prep	200.7			50 mL	50 mL	442598	05/21/24 06:43	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			443027	05/21/24 23:08	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Analysis	SM 2510B		1			443199	05/21/24 17:31	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	442360	05/20/24 13:43	PK4M	EET CAL 4
		Instrument ID: BAL100								

Eurofins Calscience

Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Client Sample ID: MW-4-5-15-24

Lab Sample ID: 570-184533-4

Date Collected: 05/15/24 12:40

Matrix: Water

Date Received: 05/15/24 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	4 mL	4 mL	441555	05/17/24 21:50	YO8L	EET CAL 4
		Instrument ID: IC9								
Total/NA	Analysis	300.0	DL	10	4 mL	4 mL	441555	05/17/24 23:31	YO8L	EET CAL 4
		Instrument ID: IC9								
Total Recoverable	Prep	200.7			50 mL	50 mL	442598	05/21/24 06:43	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			443027	05/21/24 23:11	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Analysis	SM 2510B		1			443199	05/21/24 17:29	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	442360	05/20/24 13:43	PK4M	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: DUP-5-15-24

Lab Sample ID: 570-184533-5

Date Collected: 05/15/24 00:00

Matrix: Water

Date Received: 05/15/24 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	4 mL	4 mL	441555	05/17/24 22:07	YO8L	EET CAL 4
		Instrument ID: IC9								
Total/NA	Analysis	300.0	DL	10	4 mL	4 mL	441555	05/18/24 00:22	YO8L	EET CAL 4
		Instrument ID: IC9								
Total Recoverable	Prep	200.7			50 mL	50 mL	442598	05/21/24 06:43	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			443027	05/21/24 23:13	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Analysis	SM 2510B		1			443199	05/21/24 17:27	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	442360	05/20/24 13:43	PK4M	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: EP(West)-5-15-24

Lab Sample ID: 570-184533-6

Date Collected: 05/15/24 13:05

Matrix: Water

Date Received: 05/15/24 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50	4 mL	4 mL	441555	05/17/24 22:24	YO8L	EET CAL 4
		Instrument ID: IC9								
Total/NA	Analysis	300.0	DL	1000	4 mL	4 mL	441555	05/18/24 00:38	YO8L	EET CAL 4
		Instrument ID: IC9								
Total Recoverable	Prep	200.7			50 mL	50 mL	442598	05/21/24 06:43	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		10			443391	05/22/24 16:00	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Prep	7470A			25 mL	50 mL	442619	05/21/24 07:01	VCN7	EET CAL 4
Total/NA	Analysis	7470A		1			442851	05/21/24 14:06	ECX6	EET CAL 4
		Instrument ID: HG9								

Eurofins Calscience

Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Client Sample ID: EP(West)-5-15-24

Lab Sample ID: 570-184533-6

Date Collected: 05/15/24 13:05

Matrix: Water

Date Received: 05/15/24 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2510B		1			443199	05/21/24 17:25	ZL4M	EET CAL 4
Total/NA	Analysis	SM 2540C		1	0.5 mL	1000 mL	442360	05/20/24 13:43	PK4M	EET CAL 4
Instrument ID: BAL100										

Laboratory References:
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 570-441555/5

Matrix: Water

Analysis Batch: 441555

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	mg/L			05/17/24 05:57	1
Fluoride	ND		0.10	mg/L			05/17/24 05:57	1
Sulfate	ND		1.0	mg/L			05/17/24 05:57	1

Lab Sample ID: LCS 570-441555/6

Matrix: Water

Analysis Batch: 441555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.0		mg/L		100	90 - 110
Fluoride	2.50	2.39		mg/L		96	90 - 110
Sulfate	50.0	49.8		mg/L		100	90 - 110

Lab Sample ID: LCSD 570-441555/7

Matrix: Water

Analysis Batch: 441555

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	50.1		mg/L		100	90 - 110	0	15
Fluoride	2.50	2.40		mg/L		96	90 - 110	1	15
Sulfate	50.0	49.8		mg/L		100	90 - 110	0	15

Lab Sample ID: 570-184775-H-13 MS

Matrix: Water

Analysis Batch: 441555

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.4		50.0	56.8		mg/L		103	80 - 120
Fluoride	0.33		2.50	2.72		mg/L		95	80 - 120
Sulfate	11		50.0	62.1		mg/L		103	80 - 120

Lab Sample ID: 570-184775-H-13 MSD

Matrix: Water

Analysis Batch: 441555

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.4		50.0	57.0		mg/L		103	80 - 120	0	20
Fluoride	0.33		2.50	2.69		mg/L		94	80 - 120	1	20
Sulfate	11		50.0	62.4		mg/L		103	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 570-442598/1-A

Matrix: Water

Analysis Batch: 443027

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 442598

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.10	mg/L		05/21/24 06:43	05/21/24 22:48	1
Selenium	ND		0.10	mg/L		05/21/24 06:43	05/21/24 22:48	1
Arsenic	ND		0.10	mg/L		05/21/24 06:43	05/21/24 22:48	1

Eurofins Calscience

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 570-442598/1-A

Matrix: Water

Analysis Batch: 443027

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 442598

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.010	mg/L		05/21/24 06:43	05/21/24 22:48	1
Cadmium	ND		0.010	mg/L		05/21/24 06:43	05/21/24 22:48	1
Chromium	ND		0.050	mg/L		05/21/24 06:43	05/21/24 22:48	1
Cobalt	ND		0.050	mg/L		05/21/24 06:43	05/21/24 22:48	1
Copper	ND		0.050	mg/L		05/21/24 06:43	05/21/24 22:48	1
Lead	ND		0.050	mg/L		05/21/24 06:43	05/21/24 22:48	1
Nickel	ND		0.050	mg/L		05/21/24 06:43	05/21/24 22:48	1
Zinc	ND	^1+	0.25	mg/L		05/21/24 06:43	05/21/24 22:48	1

Lab Sample ID: LCS 570-442598/2-A

Matrix: Water

Analysis Batch: 443027

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 442598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.500	0.495		mg/L		99	85 - 115
Selenium	0.500	0.514		mg/L		103	85 - 115
Arsenic	0.500	0.518		mg/L		104	85 - 115
Barium	0.500	0.521		mg/L		104	85 - 115
Cadmium	0.500	0.526		mg/L		105	85 - 115
Chromium	0.500	0.530		mg/L		106	85 - 115
Cobalt	0.500	0.523		mg/L		105	85 - 115
Copper	0.500	0.521		mg/L		104	85 - 115
Lead	0.500	0.522		mg/L		104	85 - 115
Nickel	0.500	0.529		mg/L		106	85 - 115
Zinc	0.500	0.529	^1+	mg/L		106	85 - 115

Lab Sample ID: LCSD 570-442598/3-A

Matrix: Water

Analysis Batch: 443027

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 442598

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.500	0.495		mg/L		99	85 - 115	0	20
Selenium	0.500	0.512		mg/L		102	85 - 115	0	20
Arsenic	0.500	0.519		mg/L		104	85 - 115	0	20
Barium	0.500	0.520		mg/L		104	85 - 115	0	20
Cadmium	0.500	0.526		mg/L		105	85 - 115	0	20
Chromium	0.500	0.529		mg/L		106	85 - 115	0	20
Cobalt	0.500	0.523		mg/L		105	85 - 115	0	20
Copper	0.500	0.521		mg/L		104	85 - 115	0	20
Lead	0.500	0.524		mg/L		105	85 - 115	0	20
Nickel	0.500	0.530		mg/L		106	85 - 115	0	20
Zinc	0.500	0.526	^1+	mg/L		105	85 - 115	0	20

Lab Sample ID: 570-184533-1 MS

Matrix: Water

Analysis Batch: 443027

Client Sample ID: MW-3-5-15-24

Prep Type: Total Recoverable

Prep Batch: 442598

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		0.500	0.549		mg/L		110	80 - 120

Eurofins Calscience

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 570-184533-1 MS

Matrix: Water

Analysis Batch: 443027

Client Sample ID: MW-3-5-15-24

Prep Type: Total Recoverable

Prep Batch: 442598

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	ND		0.500	0.519		mg/L		104	80 - 120
Arsenic	ND		0.500	0.542		mg/L		108	80 - 120
Barium	0.022		0.500	0.535		mg/L		103	80 - 120
Cadmium	ND		0.500	0.506		mg/L		101	80 - 120
Chromium	ND		0.500	0.527		mg/L		105	80 - 120
Cobalt	ND		0.500	0.498		mg/L		100	80 - 120
Copper	ND		0.500	0.538		mg/L		108	80 - 120
Lead	ND		0.500	0.509		mg/L		102	80 - 120
Nickel	ND		0.500	0.497		mg/L		99	80 - 120
Zinc	ND	^1+	0.500	0.508	^1+	mg/L		102	80 - 120

Lab Sample ID: 570-184533-1 MSD

Matrix: Water

Analysis Batch: 443027

Client Sample ID: MW-3-5-15-24

Prep Type: Total Recoverable

Prep Batch: 442598

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		0.500	0.534		mg/L		107	80 - 120	3	20
Selenium	ND		0.500	0.518		mg/L		104	80 - 120	0	20
Arsenic	ND		0.500	0.540		mg/L		108	80 - 120	0	20
Barium	0.022		0.500	0.527		mg/L		101	80 - 120	1	20
Cadmium	ND		0.500	0.499		mg/L		100	80 - 120	1	20
Chromium	ND		0.500	0.522		mg/L		104	80 - 120	1	20
Cobalt	ND		0.500	0.494		mg/L		99	80 - 120	1	20
Copper	ND		0.500	0.530		mg/L		106	80 - 120	1	20
Lead	ND		0.500	0.499		mg/L		100	80 - 120	2	20
Nickel	ND		0.500	0.493		mg/L		99	80 - 120	1	20
Zinc	ND	^1+	0.500	0.503	^1+	mg/L		101	80 - 120	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 570-442619/1-A

Matrix: Water

Analysis Batch: 442851

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 442619

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		05/21/24 07:01	05/21/24 13:43	1

Lab Sample ID: LCS 570-442619/2-A

Matrix: Water

Analysis Batch: 442851

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 442619

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00800	0.00799		mg/L		100	80 - 120

Lab Sample ID: LCSD 570-442619/3-A

Matrix: Water

Analysis Batch: 442851

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 442619

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00800	0.00829		mg/L		104	80 - 120	4	10

Eurofins Calscience

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: 570-185062-Q-2-C MS
Matrix: Water
Analysis Batch: 442851

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 442619

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00089		0.00800	0.00919		mg/L		104	80 - 120

Lab Sample ID: 570-185062-Q-2-D MSD
Matrix: Water
Analysis Batch: 442851

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 442619

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00089		0.00800	0.00923		mg/L		104	80 - 120	0	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 570-443199/10
Matrix: Water
Analysis Batch: 443199

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	umhos/cm			05/21/24 15:54	1

Lab Sample ID: 570-184773-G-2 DU
Matrix: Water
Analysis Batch: 443199

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	640		587		umhos/cm		8	25

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 570-442360/1
Matrix: Water
Analysis Batch: 442360

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	mg/L			05/20/24 13:43	1

Lab Sample ID: LCS 570-442360/2
Matrix: Water
Analysis Batch: 442360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	968		mg/L		97	84 - 108

Lab Sample ID: LCSD 570-442360/3
Matrix: Water
Analysis Batch: 442360

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	966		mg/L		97	84 - 108	0	10

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 570-184504-D-9 DU				Client Sample ID: Duplicate			
Matrix: Water				Prep Type: Total/NA			
Analysis Batch: 442360							
Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD Limit
Total Dissolved Solids	730		730		mg/L		0 10

QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

HPLC/IC

Analysis Batch: 441555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-184533-1	MW-3-5-15-24	Total/NA	Water	300.0	
570-184533-1 - DL	MW-3-5-15-24	Total/NA	Water	300.0	
570-184533-2	MW-2-5-15-24	Total/NA	Water	300.0	
570-184533-2 - DL	MW-2-5-15-24	Total/NA	Water	300.0	
570-184533-3	MW-1-5-15-24	Total/NA	Water	300.0	
570-184533-3 - DL	MW-1-5-15-24	Total/NA	Water	300.0	
570-184533-4	MW-4-5-15-24	Total/NA	Water	300.0	
570-184533-4 - DL	MW-4-5-15-24	Total/NA	Water	300.0	
570-184533-5	DUP-5-15-24	Total/NA	Water	300.0	
570-184533-5 - DL	DUP-5-15-24	Total/NA	Water	300.0	
570-184533-6	EP(West)-5-15-24	Total/NA	Water	300.0	
570-184533-6 - DL	EP(West)-5-15-24	Total/NA	Water	300.0	
MB 570-441555/5	Method Blank	Total/NA	Water	300.0	
LCS 570-441555/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-441555/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-184775-H-13 MS	Matrix Spike	Total/NA	Water	300.0	
570-184775-H-13 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 442598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-184533-1	MW-3-5-15-24	Total Recoverable	Water	200.7	
570-184533-2	MW-2-5-15-24	Total Recoverable	Water	200.7	
570-184533-3	MW-1-5-15-24	Total Recoverable	Water	200.7	
570-184533-4	MW-4-5-15-24	Total Recoverable	Water	200.7	
570-184533-5	DUP-5-15-24	Total Recoverable	Water	200.7	
570-184533-6	EP(West)-5-15-24	Total Recoverable	Water	200.7	
MB 570-442598/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-442598/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-442598/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
570-184533-1 MS	MW-3-5-15-24	Total Recoverable	Water	200.7	
570-184533-1 MSD	MW-3-5-15-24	Total Recoverable	Water	200.7	

Prep Batch: 442619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-184533-6	EP(West)-5-15-24	Total/NA	Water	7470A	
MB 570-442619/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-442619/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-442619/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
570-185062-Q-2-C MS	Matrix Spike	Total/NA	Water	7470A	
570-185062-Q-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 442851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-184533-6	EP(West)-5-15-24	Total/NA	Water	7470A	442619
MB 570-442619/1-A	Method Blank	Total/NA	Water	7470A	442619
LCS 570-442619/2-A	Lab Control Sample	Total/NA	Water	7470A	442619
LCSD 570-442619/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	442619
570-185062-Q-2-C MS	Matrix Spike	Total/NA	Water	7470A	442619
570-185062-Q-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	442619

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QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Metals

Analysis Batch: 443027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-184533-1	MW-3-5-15-24	Total Recoverable	Water	200.7 Rev 4.4	442598
570-184533-2	MW-2-5-15-24	Total Recoverable	Water	200.7 Rev 4.4	442598
570-184533-3	MW-1-5-15-24	Total Recoverable	Water	200.7 Rev 4.4	442598
570-184533-4	MW-4-5-15-24	Total Recoverable	Water	200.7 Rev 4.4	442598
570-184533-5	DUP-5-15-24	Total Recoverable	Water	200.7 Rev 4.4	442598
MB 570-442598/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	442598
LCS 570-442598/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	442598
LCSD 570-442598/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	442598
570-184533-1 MS	MW-3-5-15-24	Total Recoverable	Water	200.7 Rev 4.4	442598
570-184533-1 MSD	MW-3-5-15-24	Total Recoverable	Water	200.7 Rev 4.4	442598

Analysis Batch: 443391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-184533-6	EP(West)-5-15-24	Total Recoverable	Water	200.7 Rev 4.4	442598

General Chemistry

Analysis Batch: 442360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-184533-1	MW-3-5-15-24	Total/NA	Water	SM 2540C	
570-184533-2	MW-2-5-15-24	Total/NA	Water	SM 2540C	
570-184533-3	MW-1-5-15-24	Total/NA	Water	SM 2540C	
570-184533-4	MW-4-5-15-24	Total/NA	Water	SM 2540C	
570-184533-5	DUP-5-15-24	Total/NA	Water	SM 2540C	
570-184533-6	EP(West)-5-15-24	Total/NA	Water	SM 2540C	
MB 570-442360/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 570-442360/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 570-442360/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
570-184504-D-9 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 443199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-184533-1	MW-3-5-15-24	Total/NA	Water	SM 2510B	
570-184533-2	MW-2-5-15-24	Total/NA	Water	SM 2510B	
570-184533-3	MW-1-5-15-24	Total/NA	Water	SM 2510B	
570-184533-4	MW-4-5-15-24	Total/NA	Water	SM 2510B	
570-184533-5	DUP-5-15-24	Total/NA	Water	SM 2510B	
570-184533-6	EP(West)-5-15-24	Total/NA	Water	SM 2510B	
MB 570-443199/10	Method Blank	Total/NA	Water	SM 2510B	
570-184773-G-2 DU	Duplicate	Total/NA	Water	SM 2510B	

Accreditation/Certification Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-184533-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
7470A	Mercury (CVAA)	SW846	EET CAL 4
SM 2510B	Conductivity, Specific Conductance	SM	EET CAL 4
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAL 4
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
7470A	Preparation, Mercury	SW846	EET CAL 4

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Eurofins Calscience

2841 Dow Avenue, Suite 100

Tustin, CA 92780

Phone (714) 895-5494

Chain of Custody Record



Loc: 570

184533



Environment Testing

Client Information		Sampler: Ralph De La Parra		Lab PM: Fama, Sheri M		570-184533 Chain of Custody		COC No: 570-102068-21246.1	
Client Contact: Arin Brewster		Phone: (949) 702-0968		E-Mail: Sheri.Fama@et.eurofinsus.com		State or Origin:		Page: Page 1 of 1	
Company: Northstar Environmental Remediation		PWSID:		Analysis Requested		Job #:		Preservation Codes: N - None, D - HNO3	
Address: 26225 Enterprise Court		Due Date Requested:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 25106, 2540C, Calcd, 300_ORGFM_280 200.7 - Selenium 200.7 Sb, As, Ba, Cd, Cr, Co, Cu, Pb, Ni, Zn, 7470A Hg		Total Number of containers		Other:	
City: Lake Forest		TAT Requested (days): Normal							
State, Zip: CA, 92630		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Phone: 949-274-1719(Tel)		PO #: Blythe Energy							
Email: arin.brewster@northstarer.com		WO #:							
Project Name: Blythe Energy		Project #: 57013297							
Site: California		SSOW#:							
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=oil, BT=tissue, A=air)	Special Instructions/Note:			
						Preservation Code: <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> D			
1 MW-3-5-15-24		5-15-24	0855	6	Water		x	x	2
2 MW-2-5-15-24			1010		Water		x	x	2
3 MW-1-5-15-24			1135		Water		x	x	2
4 MW-4-5-15-24			1240		Water		x	x	2
5 DUP-5-15-24					Water		x	x	2
6 EP (West)- 5-15-24 5-15-24			1305		Water		x	x	7
Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Deliverable Requested: I, II, III, IV, Other (specify)						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months			
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: [Signature]		Date/Time: 5-15-24 @ 12:05		Company: Northstar		Received by: [Signature]		Date/Time: 5-15-24 17:05	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks: 0.2/0.3 SC14			

Login Sample Receipt Checklist

Client: Northstar Environmental Remediation

Job Number: 570-184533-1

Login Number: 184533

List Source: Eurofins Calscience

List Number: 1

Creator: Nguyen, Jenny

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

SECOND SEMI-ANNUAL 2023 MONITORING REPORT BLYTHE ENERGY PROJECT BLYTHE, CALIFORNIA



Submitted by:
Blythe Energy Inc.
385 North Buck Boulevard
Blythe, California 92225
(760) 922-9950

Submittal to:
The California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, California 92260



JANUARY 2024

January 31, 2024

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, California 92260

Attention: Mr. Scott Stormo
Engineering Geologist

Subject: Second Semi-Annual 2023 Monitoring Report
Monitoring and Reporting Program
Board Order No. R7-2002-0012
Blythe Energy Project
Blythe, California

Dear Mr. Stormo:

Blythe Energy Inc. is pleased to present this report containing field data, laboratory analytical results, and statistical analysis for sampling conducted during the third and fourth quarters of 2023 at our Blythe, California facility. Field sampling was performed under the terms of the California Regional Water Quality Control Board – Colorado River Basin Region (RWQCB) Board Order Number R7-2002-0012. Field sampling was performed by Northstar Environmental Remediation (Northstar) of Lake Forest, California.

Data within this report summarizes the sampling activities that occurred during the third and fourth quarters of 2023. Laboratory data sheets and chain-of-custody records are also included as an appendix to this report.

If you should have any questions regarding this report, please contact David Gutierrez IV, Manager Operations at (760) 921-1359.

Sincerely,
Blythe Energy Inc.



Mike Ludwin
Interim Plant General Manager
Sr. Director Operations-Power

cc: David Gutierrez IV (Blythe Energy Inc.)
CDFW
USFWS



**SECOND SEMI-ANNUAL 2023 MONITORING REPORT
BLYTHE ENERGY INC.
BLYTHE, CALIFORNIA**

January 31, 2024

Prepared for:

Blythe Energy Inc.
385 North Buck Boulevard
Blythe, California 92225

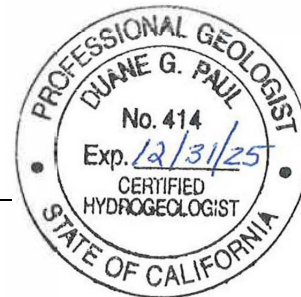
Prepared by:

WSP USA Environment and Infrastructure Inc.
3560 Hyland Avenue, Ste. 100
Costa Mesa, California 92626
(949) 642-0245

Project No. NB11160982

A handwritten signature in black ink that reads "Duane G. Paul".

Duane G. Paul, PG 6336, CHG 414
Principal Hydrogeologist



**SECOND SEMI-ANNUAL 2023 MONITORING REPORT
BLYTHE ENERGY INC.
BLYTHE, CALIFORNIA**

Submitted by:

Blythe Energy Inc.
385 North Buck Boulevard
Blythe, California 92225



Mike Ludwin
Interim Plant General Manager
Sr. Director Operations - Power
Agent For
Blythe Energy Inc.



TABLE OF CONTENTS

1. Facility Information and Declaration
2. Monitoring
3. Reference Maps
4. Quarterly Potentiometric Surface Maps
5. Analytical Summary Tables
6. Statistical Analysis
7. Lysimeter Test Records
8. Evaporation Pond Sampling Records
9. Well Sampling Records
10. Leachate Collection and Recovery System (LCRS) & Weekly Lysimeter Records

APPENDIX

Appendix A Laboratory Analytical Data Sheets



SECOND SEMI-ANNUAL 2023 MONITORING REPORT

SECTION 1 FACILITY INFORMATION AND DECLARATION



FACILITY INFORMATION

Facility Contact:

David Gutierrez IV
Senior Manager, Operations & Maintenance
Blythe Energy Inc.

Telephone:

(760) 921-1359

Address:

Blythe Energy Inc.
385 North Buck Boulevard
Blythe, California 92225

Monitoring and Reporting Program:

California Regional Water Quality Control Board Order No. R7-2002-0012

DECLARATION

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

A handwritten signature in black ink, appearing to read 'Mike Ludwin', is positioned above a horizontal line.

Mike Ludwin
Interim Plant General Manager
Sr. Director Operations - Power
Agent For
Blythe Energy Inc.



SECOND SEMI-ANNUAL 2023 MONITORING REPORT

SECTION 2 MONITORING



MONITORING

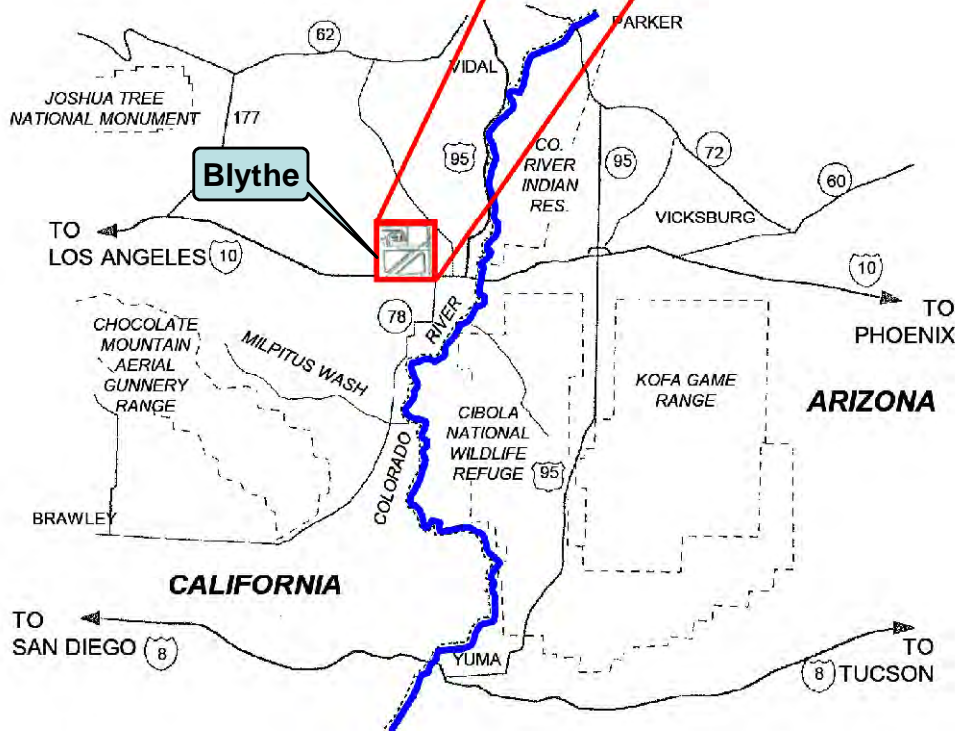
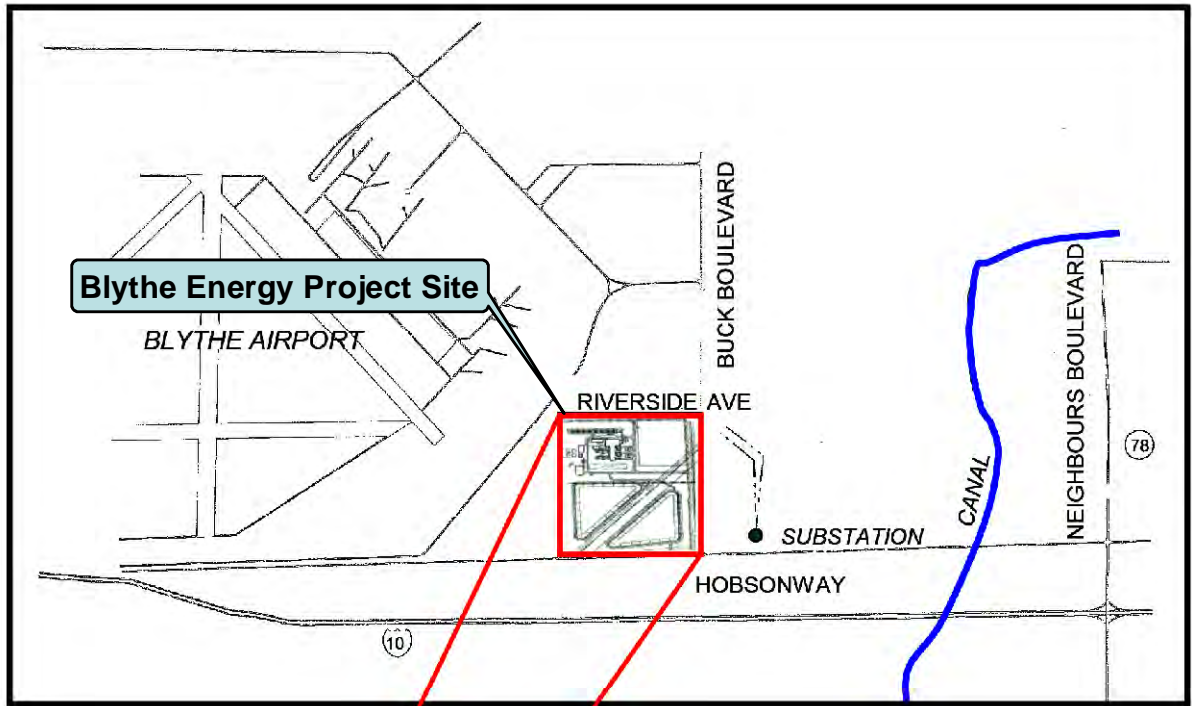
The Second Semi-Annual 2023 monitoring event was conducted in compliance with the California Regional Water Quality Control Board- Lahontan Region (RWQCB) Board Order No. R7-2002-012 Waste Discharge Requirements (WDRs) and associated Monitoring and Reporting Program (MRP). Third and fourth quarter 2023 groundwater monitoring was performed by Northstar Environmental Remediation (Northstar) of Lake Forest, California on September 26 and December 6, respectively.

Site reference maps and first, second, third, and fourth quarter 2023 potentiometric surface maps are included in Sections 3 and 4. Groundwater quality laboratory analytical data is presented in Section 5 and the statistical analysis is presented in Section 6. The records for the lysimeter, evaporation pond, monitoring well, and the leakage collection recovery sump (LCRS) are presented in Sections 7 through 10. Laboratory analytical data sheets and chain-of-custody reports are also included in Appendix A.



SECOND SEMI-ANNUAL 2023 MONITORING REPORT

SECTION 3 REFERENCE MAPS



NOT TO SCALE

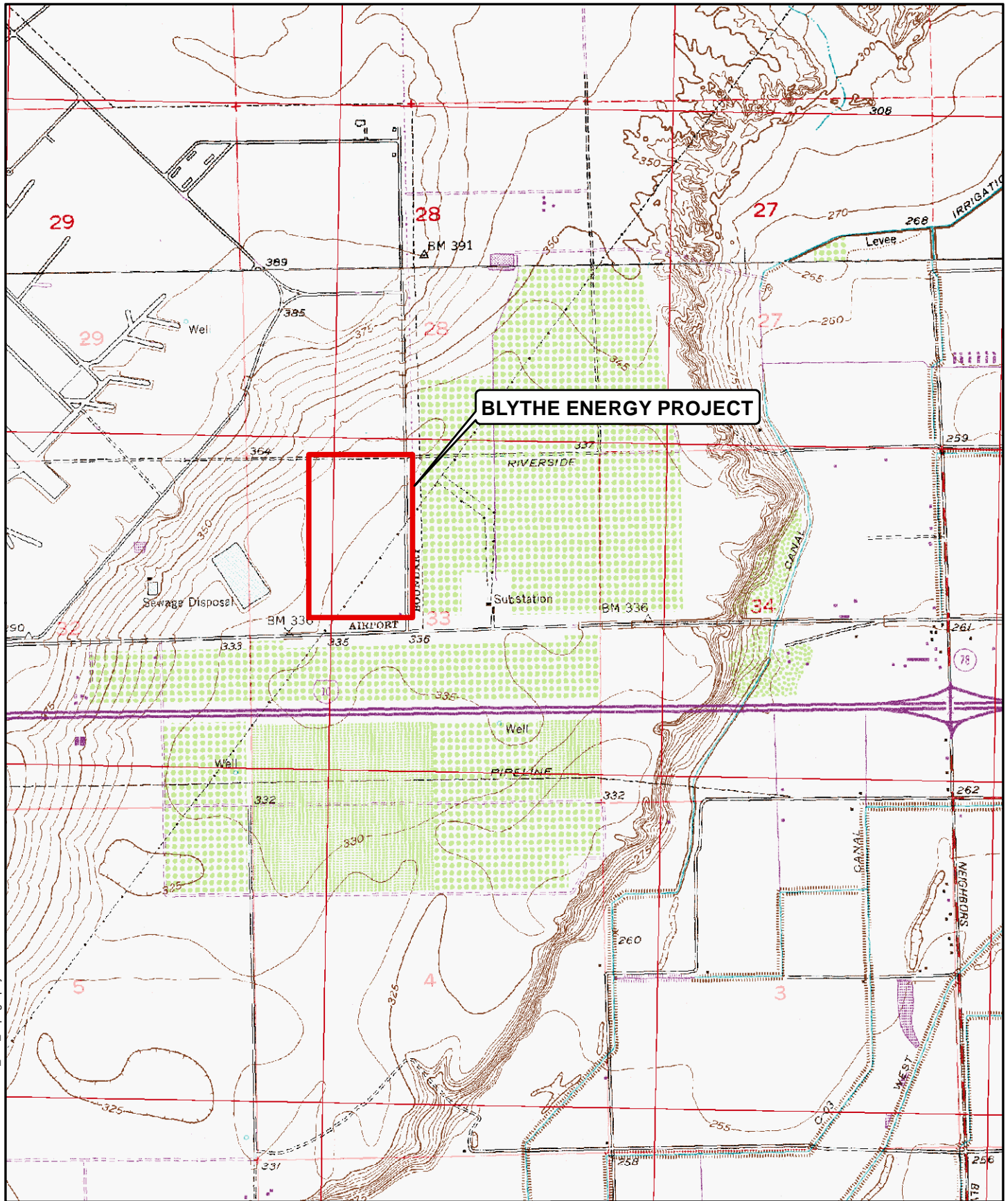
SITE LOCATION MAP
Blythe Energy Inc.
Blythe, California

By: pah Date: 1/9/2024 Project No.: NB11160982



Figure

3-1



0 1,000 2,000
 Approximate Scale in Feet

Basemap modified from U.S.G.S. 7.5 minute
 quadrangle map Ripley 1952, California
 (photo-revised 1975).

SITE TOPOGRAPHY Blythe Energy Inc. Blythe, California

By: pah Date: 1/9/2024 Project No.: NB11160982

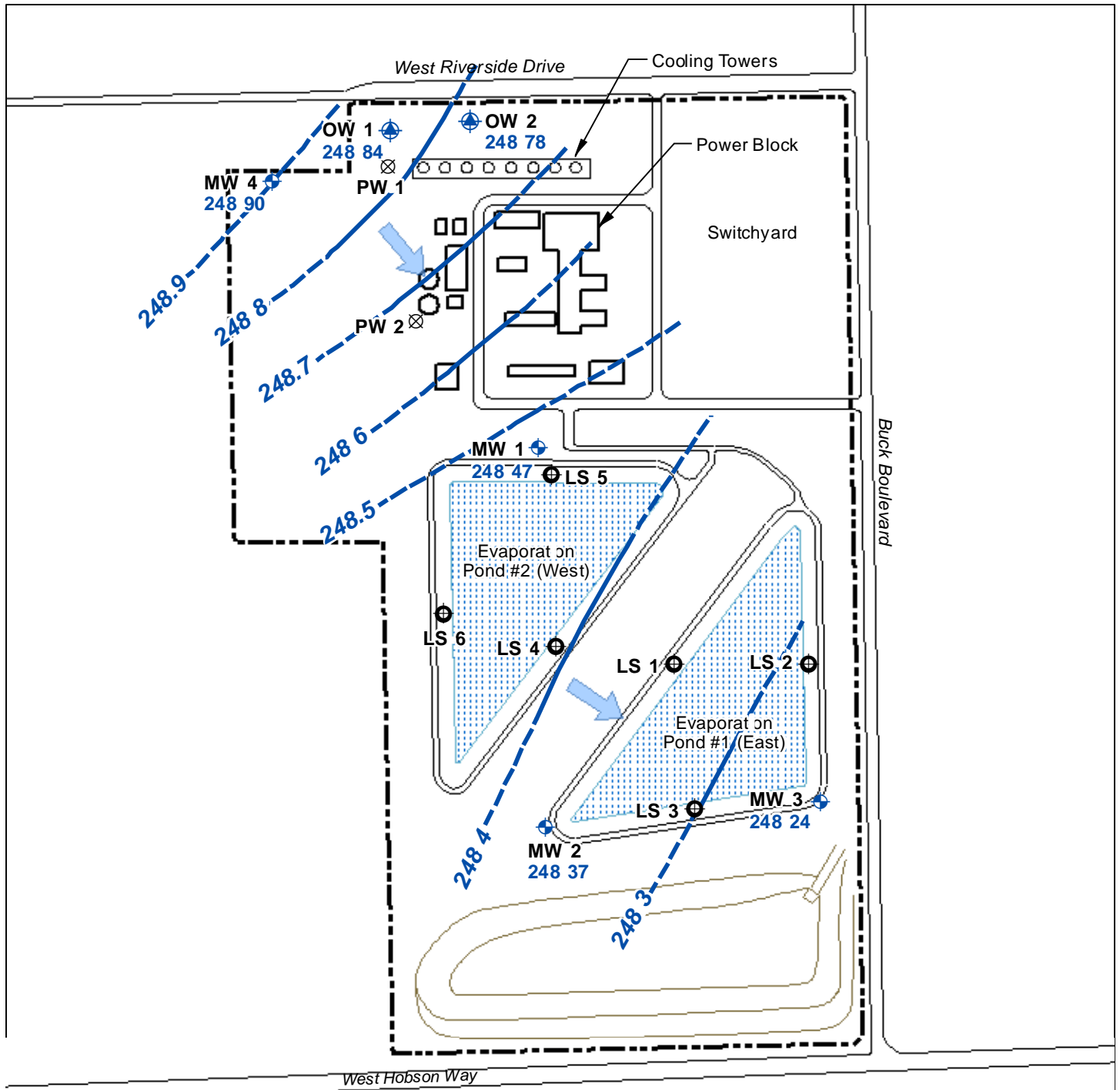


Figure **3-2**










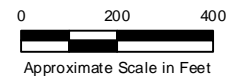
SECOND SEMI-ANNUAL 2023 MONITORING REPORT

**SECTION 4
QUARTERLY POTENTIOMETRIC SURFACE MAPS**



Explanation

- MW-2**  Monitoring well location, designation, and groundwater elevation in feet above mean sea level (MSL)
248.37
- OW-2**  Observation well location, designation, and groundwater elevation in feet above MSL
248.78
- LS-6**  Lysimeter location and designation
- PW-1**  Production well location and designation
-  Approximate site boundary
- 248.9**  Groundwater elevation contour in feet above MSL; dashed where inferred
-  Approximate groundwater flow direction



Basemap modified from U.S.G.S. 7.5 minute quadrangle map Ripley 1952, California (photo-revised 1975) and aerial photograph from Bing Maps (Microsoft Corporation© 2011 and DigitalGlobe©, 2010.

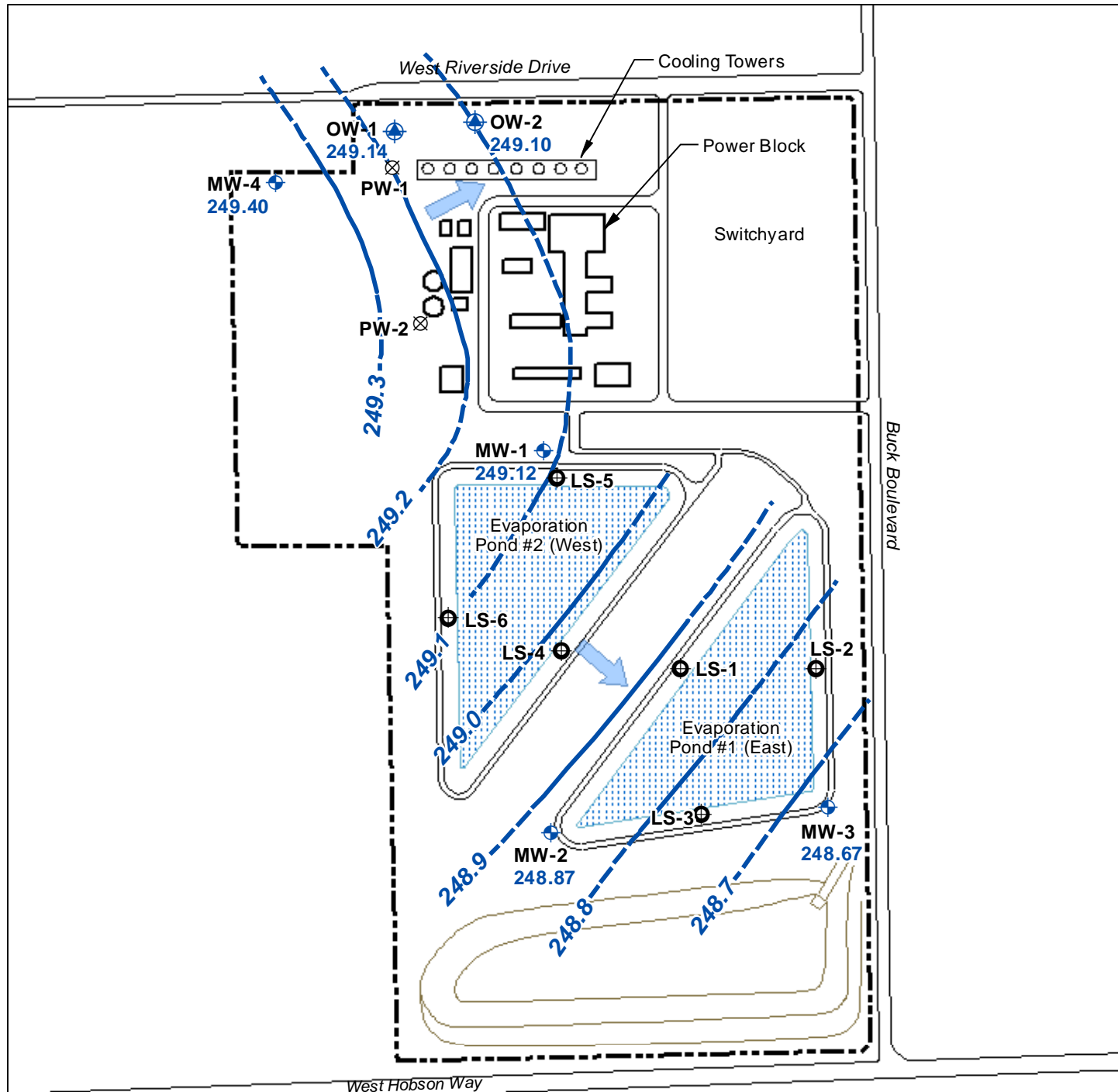
POTENTIOMETRIC SURFACE MARCH 12, 2023 Blythe Energy Inc. Blythe, California

By: pah Date: 1/9/2024 Project No.: NB11160982










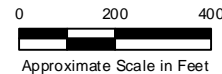
Figure

4-1



Explanation

- MW-2**  Monitoring well location, designation, and groundwater elevation in feet above mean sea level (MSL)
248.87
- OW-2**  Observation well location, designation, and groundwater elevation in feet above MSL
249.10
- LS-6**  Lysimeter location and designation
- PW-1**  Production well location and designation
-  Approximate site boundary
- 249.3**  Groundwater elevation contour in feet above MSL; dashed where inferred
-  Approximate groundwater flow direction



Basemap modified from U.S.G.S. 7.5 minute quadrangle map Ripley 1952, California (photo-revised 1975) and aerial photograph from Bing Maps (Microsoft Corporation© 2011 and DigitalGlobe©, 2010.

POTENTIOMETRIC SURFACE JUNE 7, 2023 Blythe Energy Inc. Blythe, California

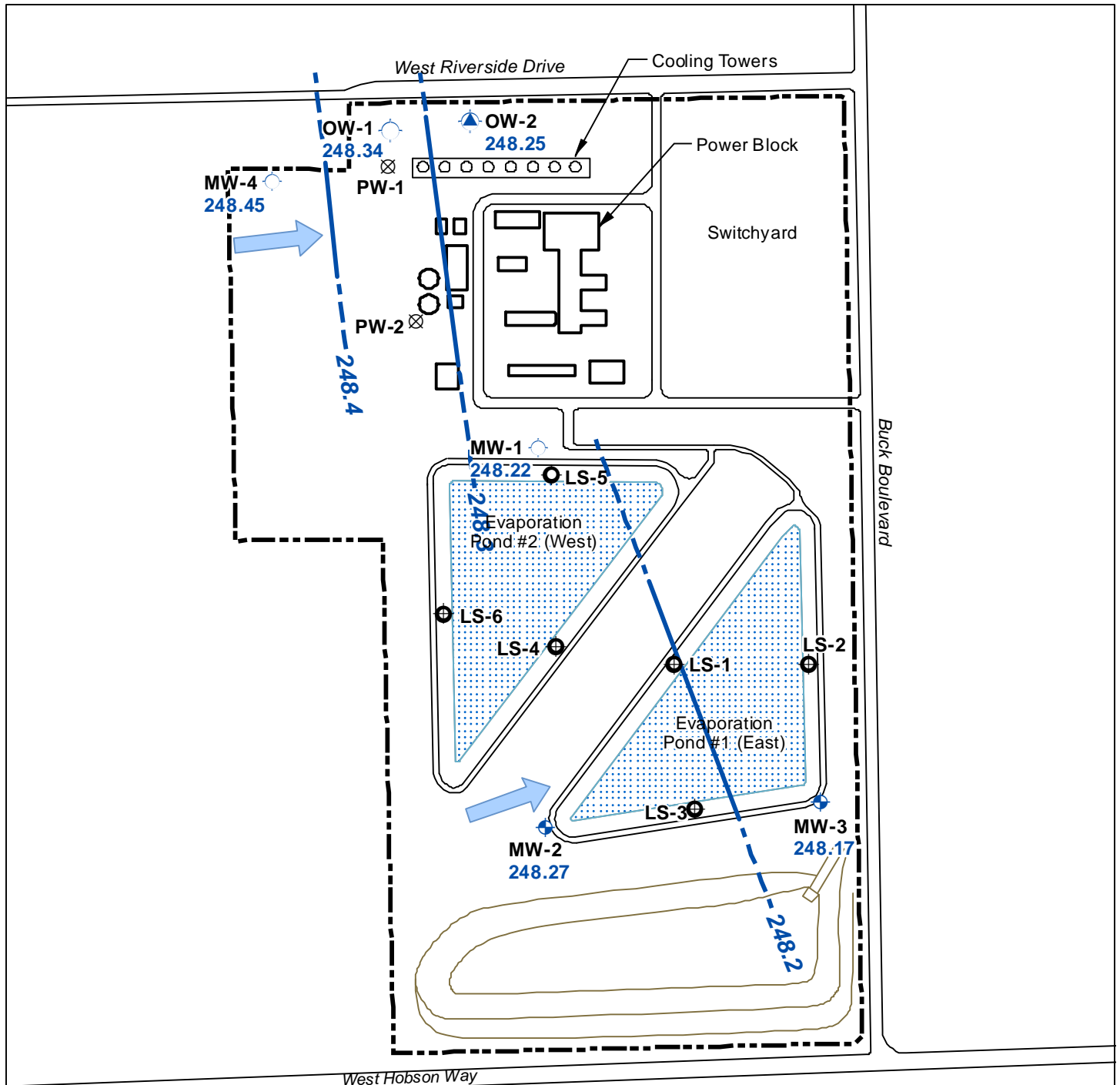
By: pah Date: 1/9/2024 Project No.: NB1160982










Figure

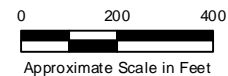
4-2

Date: 1/9/2024 Printed by: USJW720210
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Explanation

- MW-2**  Monitoring well location, designation, and groundwater elevation in feet above mean sea level (MSL)
248.27
- OW-2**  Observation well location, designation, and groundwater elevation in feet above MSL
248.25
- LS-6**  Lysimeter location and designation
- PW-1**  Production well location and designation
-  Approximate site boundary
- 248.4**  Groundwater elevation contour in feet above MSL; dashed where inferred
-  Approximate groundwater flow direction



Basemap modified from U.S.G.S. 7.5 minute quadrangle map Ripley 1952, California (photo-revised 1975) and aerial photograph from Bing Maps (Microsoft Corporation© 2011 and DigitalGlobe©, 2010.

POTENTIOMETRIC SURFACE SEPTEMBER 26, 2023 Blythe Energy Inc. Blythe, California

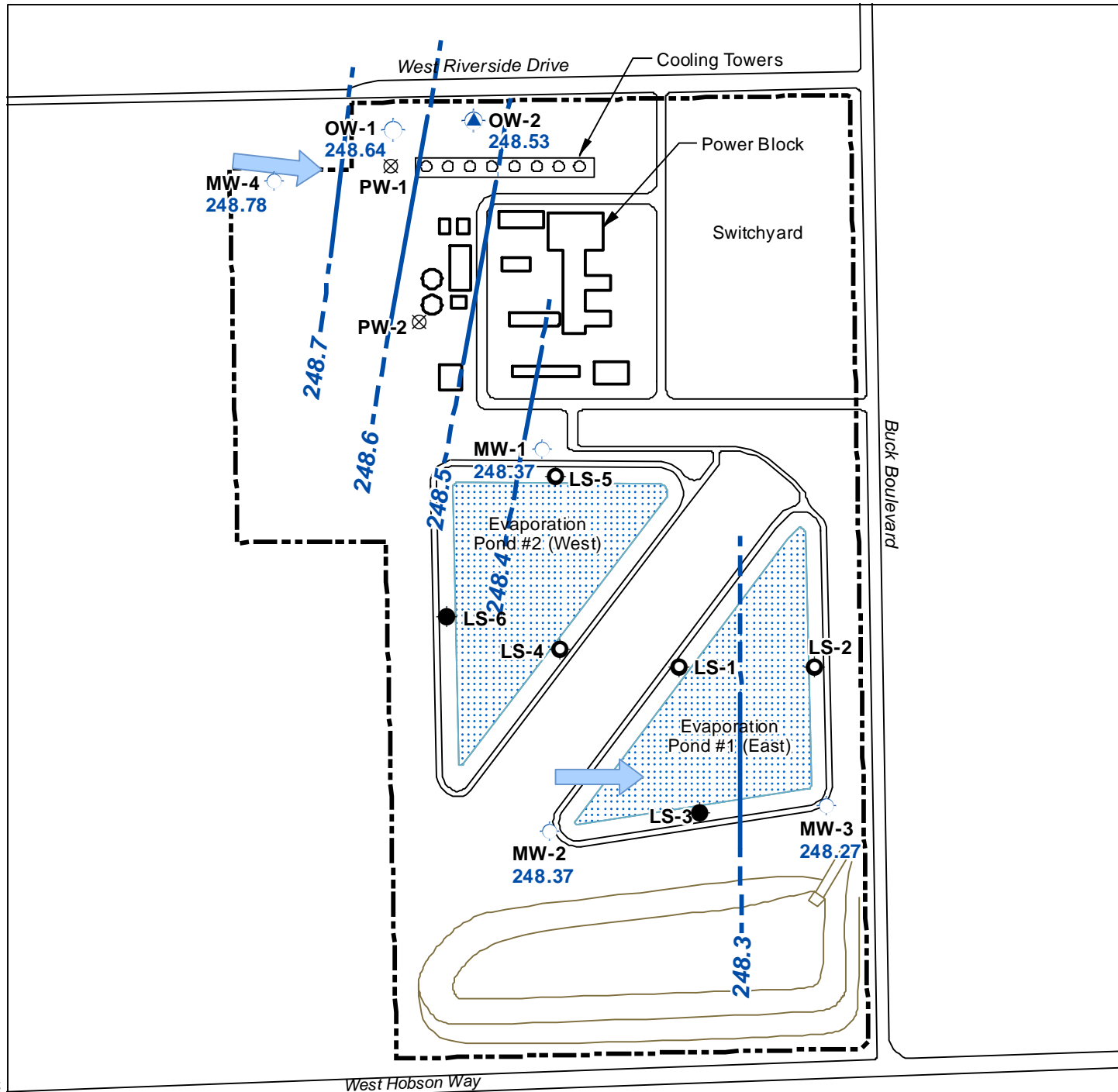
By: jrw/ pah	Date: 1/9/2024	Project No.: NB1160982
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Figure

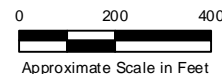
4-3

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Explanation

- MW-2**  Monitoring well location, designation, and groundwater elevation in feet above mean sea level (MSL)
248.37
- OW-2**  Observation well location, designation, and groundwater elevation in feet above MSL
248.53
- LS-6**  Lysimeter location and designation
- PW-1**  Production well location and designation
-  Approximate site boundary
- 248.7**  Groundwater elevation contour in feet above MSL; dashed where inferred
-  Approximate groundwater flow direction



Basemap modified from U.S.G.S. 7.5 minute quadrangle map Ripley 1952, California (photo-revised 1975) and aerial photograph from Bing Maps (Microsoft Corporation © 2011 and DigitalGlobe ©, 2010).

POTENTIOMETRIC SURFACE DECEMBER 6, 2023 Blythe Energy Inc. Blythe, California

By: jrw/ pah Date: 1/9/2024 Project No.: NB1160982



Figure **4-4**



SECOND SEMI-ANNUAL 2023 MONITORING REPORT

**SECTION 5
ANALYTICAL SUMMARY TABLES**



**TABLE 5-1 SUMMARY OF SECOND SEMI-ANNUAL 2023 WEST
 EVAPORATION POND WATER LABORATORY ANALYTICAL RESULTS**

Laboratory Analyte	Method	Detection Limit (mg/L)	Result (mg/L)
Antimony	EPA 200.7	2.5	ND
Arsenic	EPA 200.7	2.5	ND
Barium	EPA 200.7	0.25	ND
Cadmium	EPA 200.7	0.25	ND
Total Chromium	EPA 200.7	1.3	ND
Cobalt	EPA 200.7	1.3	ND
Copper	EPA 200.7	1.3	ND
Lead	EPA 200.7	1.3	ND
Mercury	EPA 245.1	0.00020	ND
Nickel	EPA 200.7	1.3	ND
Selenium	EPA 200.7	1.0	ND
Zinc	EPA 200.7	6.3	ND
Sulfate	EPA 300.0	1,000	14,000
Chloride	EPA 300.0	2,000	110,000
Total Dissolved Solids	SM2540C	2,000	220,000
Specific Conductance	SM2510B	1.0 µmhos/cm	180,000
pH	SM4500-H,B	0.100 pH units	NA

Parameters (Field)	Units	Value
Water Temperature	Degrees Celsius	18.4
pH	pH Units	7.83
Specific Conductance	ms/cm	>20.00

Water sample collected on December 6, 2023, from the West Pond. The East Pond was dry.

Notes:

mg/L = milligrams per liter
 ND = Not detected at method detection limit indicated
 ms/cm = Millisiemens per centimeter
 µmhos/cm = Micromhos per centimeter
 NA = Not Available



**TABLE 5-2 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
FIRST QUARTER 2023**

Analyte	EPA Method	Reporting Limit (mg/L)*	MW-1	MW-2	MW-3	MW-4	DUP
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Chloride	300.0	10	170	130	150	320	150
Sulfate	300.0	10	440	380	410	390	400
Selenium	200.7	0.10	ND	ND	ND	ND	ND
Total Dissolved Solids	SM2540C	10	1,300	1,100	1,200	1,300	1,200
Specific Conductance (umhos/cm)	SM2510B	1.0	2,000	1,800	1,800	2,200	1,800

Field Parameters	Units	MW-1	MW-2	MW-3	MW-4	DUP
Static Water Level	Feet Below Measuring Point	88.80	89.40	89.95	93.60	NA
Stabilized pH	pH Units	6.95	7.64	6.55	7.03	NA
Stabilized Water Temperature	Degrees Celsius	30.4	30.5	25.4	32.6	NA

Groundwater samples collected on March 12, 2023.

Notes:

mg/L = milligrams per liter

NA = Not applicable

ND = Not detected

Dup = Duplicate sample of MW-3

* = Except where noted on laboratory analytical data sheets



**TABLE 5-2 (Cont.) SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SECOND QUARTER 2023**

Analyte	EPA Method	Reporting Limit (mg/L)*	MW-1	MW-2	MW-3	MW-4	DUP
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Chloride	300.0	10	200	130	150	330	130
Sulfate	300.0	10	410	380	390	370	380
Selenium	200.7	0.10	ND	ND	ND	ND	ND
Total Dissolved Solids	SM2540C	20	1,200	1,100	1,300	1,300	1,100
Specific Conductance (umhos/cm)	SM2510B	1.0	2,000	1,700	1,800	2,100	1,700

Field Parameters	Units	MW-1	MW-2	MW-3	MW-4	DUP
Static Water Level	Feet Below Measuring Point	88.15	88.90	89.55	93.10	NA
Stabilized pH	pH Units	7.06	6.92	6.64	7.13	NA
Stabilized Water Temperature	Degrees Celsius	30.5	30.2	25.0	32.2	NA

Groundwater samples collected on June 7, 2023.

Notes:

mg/L = milligrams per liter

NA = Not applicable

ND = Not detected

Dup = Duplicate sample of MW-2

* = Except where noted on laboratory analytical data sheets



**TABLE 5-2 (Cont.) SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
THIRD QUARTER 2023**

Analyte	EPA Method	Reporting Limit (mg/L)*	MW-1	MW-2	MW-3	MW-4	DUP
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Chloride	300.0	10	180	130	160	330	130
Sulfate	300.0	10	470	410	450	360	420
Selenium	200.7	0.10	ND	ND	ND	ND	ND
Total Dissolved Solids	SM2540C	20	1300	1100	1300	1200	1200
Specific Conductance (umhos/cm)	SM2510B	1.0	2000	1700	1900	2000	1700

Field Parameters	Units	MW-1	MW-2	MW-3	MW-4	DUP
Static Water Level	Feet Below Measuring Point	89.05	89.5	90.05	94.05	NA
Stabilized pH	pH Units	7.13	7.06	6.51	7.23	NA
Stabilized Water Temperature	Degrees Celsius	30.5	30.1	23.9	32.8	NA

Groundwater samples collected on September 26, 2023.

Notes:

mg/L = milligrams per liter

NA = Not applicable

ND = Not detected

Dup = Duplicate sample of MW-2

* = Except where noted on laboratory analytical data sheets



**TABLE 5-2 (Cont.) SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
FOURTH QUARTER 2023**

Analyte	EPA Method	Reporting Limit (mg/L)*	MW-1	MW-2	MW-3	MW-4	DUP
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Chloride	300.0	10	200	130	150	290	130
Sulfate	300.0	10	430	390	430	320	400
Selenium	200.7	0.020	ND	ND	ND	ND	ND
Total Dissolved Solids	SM2540C	10-20	1300	1100	1300	1200	1100
Specific Conductance (umhos/cm)	SM2510B	1.0	1900	1700	1800	2000	1900

Field Parameters	Units	MW-1	MW-2	MW-3	MW-4	DUP
Static Water Level	Feet Below Measuring Point	88.90	89.40	89.95	93.72	NA
Stabilized pH	pH Units	7.18	7.01	6.69	7.29	NA
Stabilized Water Temperature	Degrees Celsius	30.5	30.5	25.1	31.2	NA

Groundwater samples collected on December 6, 2023.

Notes:

mg/L = milligrams per liter

NA = Not applicable

ND = Not detected

DUP = Duplicate sample of MW-2

* = Except where noted on laboratory analytical data sheets



SECOND SEMI-ANNUAL 2023 MONITORING REPORT

SECTION 6 STATISTICAL ANALYSIS



STATISTICAL ANALYSIS – SECOND SEMI-ANNUAL 2023 MONITORING

Statistical analysis is used as an additional method for the detection of leakage from the surface impoundments. The statistical methods used for this program are those specified in the RWQCB Waste Discharge Requirements (WDR) and Monitoring and Reporting Programs (MRPs) of Order Number R7-2002-0012. Statistical analysis of groundwater quality data is based on intra-well rather than inter-well comparisons. The following section presents the technical approach and results of the statistical analysis for the Second Semi-Annual 2023 sampling event and the intra-well statistical analysis.

APPROACH AND RESULTS

The Upper Tolerance Limit (UTL) is recalculated for each well based on historical data. Concentrations from subsequent quarterly groundwater samples collected from each well are compared to the corresponding UTLs. An UTL was calculated for each of the four groundwater monitoring wells sampled during the third and fourth quarters of 2023. Calculations of UTLs are presented in Table 6-1.

As shown in Table 6-2, there was an UTL exceedance for chloride in the water sample collected from well MW-4 during the third quarter 2023 sampling event, but was not exceeded for chloride during the fourth quarter sampling event. Based on evaluation of the raw data, the UTL exceedance was determined not to be caused by rounding of the laboratory results. The higher chloride concentration reported at MW-4 during the third quarter 2023 is consistent with those reported in the first and second quarter 2023 sample results.

As described in the first semi-annual 2023 monitoring report, the quarterly groundwater elevation and flow interpretations since first quarter have shown groundwater flow ranging from north to south to northwest to southeast beneath the site, with MW-4 as generally the most upgradient-most well at the site during that time. As such, it is likely that the higher reported concentrations recently observed at MW-4 are attributed to groundwater movement from areas north to northwest of the site flowing onto (beneath) the site and not attributed to operations at the facility. Based on the foregoing, the groundwater concentrations at MW-4 wells will continue to be evaluated and reassessed during the next quarterly groundwater sampling event.



Table 6-1: Calculation for Mean and Standard Deviation (Total Dissolved Solids)

MW1				MW2				MW3				MW4			
Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)
0	3Q-02	1170	7.0648	0	3Q-02	1180	7.0733	0	3Q-02	1120	7.0211				
270	2Q-03	1160	7.0562	270	2Q-03	1050	6.9565	270	2Q-03	947	6.8533				
450	1Q-04	1100	7.0031	450	1Q-04	1000	6.9078	450	1Q-04	1000	6.9078				
540	2Q-04	1200	7.0901	540	2Q-04	960	6.8669	540	2Q-04	1100	7.0031				
630	3Q-04	1100	7.0031	630	3Q-04	1000	6.9078	630	3Q-04	1000	6.9078				
720	4Q-04	1100	7.0031	720	4Q-04	1000	6.9078	720	4Q-04	1100	7.0031				
810	1Q-05	1100	7.0031	810	1Q-05	1100	7.0031	810	1Q-05	1100	7.0031				
900	2Q-05	1170	7.0648	900	2Q-05	1090	6.9939	900	2Q-05	1080	6.9847				
990	3Q-05	1080	6.9847	990	3Q-05	985	6.8926	990	3Q-05	1000	6.9078				
1080	4Q-05	1100	7.0031	1080	4Q-05	1000	6.9078	1080	4Q-05	1200	7.0901				
1170	1Q-06	1070	6.9754	1170	1Q-06	999	6.9068	1170	1Q-06	1040	6.9470				
1260	2Q-06	1100	7.0031	1260	2Q-06	1000	6.9078	1260	2Q-06	1100	7.0031				
1350	3Q-06	1100	7.0031	1350	3Q-06	1100	7.0031	1350	3Q-06	1100	7.0031				
1440	4Q-06	1100	7.0031	1440	4Q-06	1000	6.9078	1440	4Q-06	1100	7.0031				
1530	1Q-07	1100	7.0031	1530	1Q-07	1000	6.9078	1530	1Q-07	1100	7.0031				
1620	2Q-07	1100	7.0031	1620	2Q-07	1100	7.0031	1620	2Q-07	1200	7.0901				
	RA-07	1200	7.0901		RA-07	1100	7.0031		RA-07	1200	7.0901				
1710	3Q-07	1100	7.0031	1710	3Q-07	1100	7.0031	1710	3Q-07	1100	7.0031				
1800	4Q-07	1200	7.0901	1800	4Q-07	1100	7.0031	1800	4Q-07	1500	7.3132				
1867	12/7/2007	1200	7.0901	1867	12/7/2007	1100	7.0031	1867	12/7/2007	1400	7.2442				
1890	1Q-08	1200	7.0901	1890	1Q-08	1100	7.0031	1890	1Q-08	1300	7.1701				
1966	2Q-08	1200	7.0901	1966	2Q-08	1100	7.0031	1099	2Q-08	1700	7.4384				
2068	3Q-08	1100	7.0031	2068	3Q-08	1100	7.0031	2068	3Q-08	1600	7.3778				
2178	4Q-08	1100	7.0031	2178	4Q-08	1100	7.0031	2178	4Q-08	1400	7.2442				
2349	1Q-09	1100	7.0031	2349	1Q-09	1100	7.0031	2349	1Q-09	1200	7.0901				
2473	2Q-09	1200	7.0901	2473	2Q-09	1100	7.0031	2473	2Q-09	1100	7.0031				
2571	3Q-09	1100	7.0031	2571	3Q-09	1100	7.0031	2571	3Q-09	1400	7.2442	0	3Q-09	1200	7.0901
								2605	10/30/09	1300	7.1701	34	10/30/09	1100	7.0031
2652	4Q-09	1200	7.0901	2652	4Q-09	1100	7.0031	2652	4Q-09	1500	7.3132	81	4Q-09	1200	7.0901
2718	1Q-10	1200	7.0901	2718	1Q-10	1100	7.0031	2718	1Q-10	1800	7.4955	116	1Q-10	1200	7.0901
								2753	4/2/2010	1800	7.4955				
2800	2Q-10	1200	7.0901	2800	2Q-10	1100	7.0031	2800	2Q-10	2300	7.7407	198	2Q-10	1200	7.0901
2828	6/18/2010	1200	7.0901	2828	6/18/2010	1100	7.0031	2828	6/18/2010	2400	7.7832	226	6/18/2010	1200	7.0901
2895	3Q-10	1100	7.0031	2895	3Q-10	1100	7.0031	2895	3Q-10	2500	7.8240	293	3Q-10	1100	7.0031
								2922	9/20/2010R	2200	7.6962				
3014	4Q-10	1200	7.0901	3014	4Q-10	1100	7.0031	3014	4Q-10	1500	7.3132	412	4Q-10	1200	7.0901
3086	1Q-11	1200	7.0901	3086	1Q-11	1100	7.0031	3086	1Q-11	1600	7.3778	576	1Q-11	1200	7.0901
3179	2Q-11	1100	7.0031	3179	2Q-11	1100	7.0031	3179	2Q-11	1800	7.4955	669	2Q-11	1100	7.0031
3286	3Q-11	1200	7.0901	3286	3Q-11	1100	7.0031	3286	3Q-11	1500	7.3132	776	3Q-11	1100	7.0031
3372	4Q-11	1200	7.0901	3372	4Q-11	1100	7.0031	3372	4Q-11	1400	7.2442	862	4Q-11	1200	7.0901
3472	1Q-12	1200	7.0901	3472	1Q-12	1100	7.0031	3472	1Q-12	1500	7.3132	962	1Q-12	1100	7.0031



Table 6-1: Calculation for Mean and Standard Deviation (Total Dissolved Solids)

MW1				MW2				MW3				MW4			
Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)
3572	2Q-12	1100	7.0031	3572	2Q-12	1100	7.0031	3572	2Q-12	1400	7.2442	1062	2Q-12	1100	7.0031
3638	3Q-12	1200	7.0901	3638	3Q-12	1100	7.0031	3638	3Q-12	1200	7.0901	1128	3Q-12	1100	7.0031
3741	4Q-12	1200	7.0901	3741	4Q-12	1100	7.0031	3741	4Q-12	1100	7.0031	1231	4Q-12	1100	7.0031
3840	1Q-13	1100	7.0031	3840	1Q-13	1000	6.9078	3840	1Q-13	1100	7.0031	1330	1Q-13	1000	6.9078
3904	2Q-13	1200	7.0901	3904	2Q-13	1100	7.0031	3904	2Q-13	1200	7.0901	1394	2Q-13	1100	7.0031
4013	3Q-13	1200	7.0901	4013	3Q-13	1100	7.0031	4013	3Q-13	1000	6.9078	1507	3Q-13	1100	7.0031
4088	4Q-13	1200	7.0901	4088	4Q-13	1100	7.0031	4088	4Q-13	1100	7.0031	1583	4Q-13	1100	7.0031
4202	1Q-14	1200	7.0901	4202	1Q-14	1100	7.0031	4202	1Q-14	1100	7.0031	1697	1Q-14	1100	7.0031
4316	2Q-14	1200	7.0901	4316	2Q-14	1100	7.0031	4316	2Q-14	1100	7.0031	1811	2Q-14	1100	7.0031
4395	3Q-14	1200	7.0901	4395	3Q-14	1100	7.0031	4395	3Q-14	1100	7.0031	1890	3Q-14	1100	7.0031
4472	4Q-14	1200	7.0901	4472	4Q-14	1100	7.0031	4472	4Q-14	1000	6.9078	1967	4Q-14	1100	7.0031
4579	1Q-15	1200	7.0901	4579	1Q-15	1100	7.0031	4579	1Q-15	970	6.8773	2074	1Q-15	1000	6.9078
4765	2Q-15	1200	7.0901	4765	2Q-15	1100	7.0031	4765	2Q-15	1000	6.9078	2260	2Q-15	1100	7.0031
4848	3Q-15	1300	7.1701	4848	3Q-15	1100	7.0031	4848	3Q-15	1000	6.9078	2343	3Q-15	1100	7.0031
4938	4Q-15	1200	7.0901	4938	4Q-15	1100	7.0031	4938	4Q-15	1000	6.9078	2433	4Q-15	1100	7.0031
5055	1Q-16	1200	7.0901	5055	1Q-16	1100	7.0031	5055	1Q-16	1000	6.9078	2550	1Q-16	1100	7.0031
5122	2Q-16	1200	7.0901	5122	2Q-16	1100	7.0031	5122	2Q-16	1000	6.9078	2617	2Q-16	1100	7.0031
5213	3Q-16	1300	7.1701	5213	3Q-16	1100	7.0031	5213	3Q-16	1000	6.9078	2708	3Q-16	1100	7.0031
5305	4Q-16	1100	7.0031	5305	4Q-16	1100	7.0031	5305	4Q-16	920	6.8244	2800	4Q-16	1100	7.0031
5397	1Q-17	1300	7.1701	5397	1Q-17	1100	7.0031	5397	1Q-17	980	6.8876	2892	1Q-17	1100	7.0031
5487	2Q-17	1200	7.0901	5487	2Q-17	1100	7.0031	5487	2Q-17	1000	6.9078	2982	2Q-17	1100	7.0031
5563	3Q-17	1200	7.0901	5563	3Q-17	1100	7.0031	5563	3Q-17	970	6.8773	3058	3Q-17	1200	7.0901
5672	4Q-17	1300	7.1701	5672	4Q-17	1100	7.0031	5672	4Q-17	950	6.8565	3167	4Q-17	1200	7.0901
5782	1Q-18	1200	7.0901	5782	1Q-18	1100	7.0031	5782	1Q-18	1100	7.0031	3277	1Q-18	1200	7.0901
5850	2Q-18	1200	7.0901	5850	2Q-18	1100	7.0031	5850	2Q-18	1100	7.0031	3345	2Q-18	1200	7.0901
5960	3Q-18	1300	7.1701	5960	3Q-18	1100	7.0031	5960	3Q-18	1100	7.0031	3455	3Q-18	1100	7.0031
6007	10/30/2018	1200	7.0901												
6041	4Q-18	1200	7.0901	6041	4Q-18	1100	7.0031	6041	4Q-18	1100	7.0031	3536	4Q-18	1100	7.0031
6136	1Q-19	1200	7.0901	6135	1Q-19	1100	7.0031	6135	1Q-19	1200	7.0901	3631	1Q-19	1000	6.9078
6233	2Q-19	1200	7.0901	6233	2Q-19	1100	7.0031	6233	2Q-19	1100	7.0031	3728	2Q-19	1100	7.0031
6330	3Q-19	1300	7.1701	6330	3Q-19	1100	7.0031	6330	3Q-19	1100	7.0031	3825	3Q-19	1100	7.0031
6311	4Q-19	1300	7.1701	6311	4Q-19	1100	7.0031	6311	4Q-19	1200	7.0901	3806	4Q-19	1100	7.0031
6417	1Q-20	1200	7.0901	6417	1Q-20	1100	7.0031	6417	1Q-20	1300	7.1701	3912	1Q-20	1100	7.0031
6494	2Q-20	1300	7.1701	6494	2Q-20	1100	7.0031	6494	2Q-20	1300	7.1701	3989	2Q-20	1100	7.0031
6606	3Q-20	1300	7.1701	6606	3Q-20	1200	7.0901	6606	3Q-20	1300	7.1701	4101	3Q-20	1200	7.0901
6678	4Q-20	1200	7.0901	6678	4Q-20	1200	7.0901	6678	4Q-20	1300	7.1701	4173	4Q-20	1100	7.0031
6769	1Q-21	1200	7.0901	6769	1Q-21	1100	7.0031	6769	1Q-21	1200	7.0901	4264	1Q-21	980	6.8876
6851	2Q-21	1300	7.1701	6851	2Q-21	1100	7.0031	6851	2Q-21	1200	7.0901	4346	2Q-21	1100	7.0031
7033	3Q-21	1300	7.1701	7033	3Q-21	1100	7.0031	7033	3Q-21	1000	6.9078	4528	3Q-21	1100	7.0031
7131	4Q-21	1100	7.0031	7131	4Q-21	1000	6.9078	7131	4Q-21	1100	7.0031	4626	4Q-21	990	6.8977
7223	1Q-22	1200	7.0901	7223	1Q-22	1100	7.0031	7223	1Q-22	1100	7.0031	4718	1Q-22	1100	7.0031



Table 6-1: Calculation for Mean and Standard Deviation (Total Dissolved Solids)

MW1				MW2				MW3				MW4			
Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)	Days	Date	TDS	ln(TDS)
7298	2Q-22	1200	7.0901	7298	2Q-22	1100	7.0031	7298	2Q-22	1100	7.0031	4793	2Q-22	1100	7.0031
7388	3Q-22	1300	7.1701	7388	3Q-22	1100	7.0031	7388	3Q-22	1200	7.0901	4883	3Q-22	1100	7.0031
7480	4Q-22	1300	7.1701	7480	4Q-22	1200	7.0901	7480	4Q-22	1300	7.1701	4975	4Q-22	1400	7.2442
7582	1Q-23	1300	7.1701	7582	1Q-23	1100	7.0031	7582	1Q-23	1200	7.0901	5077	1Q-23	1300	7.1701
7670	2Q-23	1200	7.0901	7670	2Q-23	1100	7.0031	7670	2Q-23	1300	7.1701	5165	2Q-23	1300	7.1701
7785	3Q-23	1300	7.1701	7785	3Q-23	1100	7.0031	7785	3Q-23	1300	7.1701	5280	3Q-23	1200	7.0901
7877	4Q-23	1300	7.1701	7877	4Q-23	1100	7.0031	7877	4Q-23	1300	7.1701	5372	4Q-23	1200	7.0901
Standard Deviation =		67.8424	0.0566	Standard Deviation =		39.4763	0.0418	Standard Deviation =		326.3482	0.2169	Standard Deviation =		74.7899	0.0623
Mean =		1187.3494	7.0779	Mean =		1088.5854	6.9918	Mean =		1247.9647	7.1034	Mean =		1127.8333	7.0212
n =		83	83	n =		82	82	n =		85	85	n =		60	57
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.664	1.664	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.671	1.671
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.009
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.674	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.686
UTL = Mean + St.Dev.*k =			7.1726	UTL = Mean + St.Dev.*k =			7.0617	UTL = Mean + St.Dev.*k =			7.4661	UTL = Mean + St.Dev.*k =			7.1262
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			Yes
Standard Deviation =		68.2813	0.0563	Standard Deviation =		44.3752	0.0415	Standard Deviation =		319.6070	0.2157	Standard Deviation =		74.8382	0.0648
Mean =		1190.1163	7.0780	Mean =		1088.9882	6.9919	Mean =		1248.5698	7.1042	Mean =		1125.3448	7.0237
n =		84	84	n =		83	83	n =		86	86	n =		58	58
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.672	1.672
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.009
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.686
UTL = Mean + St.Dev.*k =			7.1722	UTL = Mean + St.Dev.*k =			7.0614	UTL = Mean + St.Dev.*k =			7.4649	UTL = Mean + St.Dev.*k =			7.1330
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			Yes
Standard Deviation =		67.6196	0.0569	Standard Deviation =		44.1242	0.0413	Standard Deviation =		317.7912	0.2146	Standard Deviation =		74.8242	0.0648
Mean =		1188.8235	7.0791	Mean =		1088.8571	6.9921	Mean =		1249.1609	7.1049	Mean =		1126.6102	7.0249
n =		85	85	n =		84	84	n =		87	87	n =		59	59
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.671	1.671
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.008
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.685
UTL = Mean + St.Dev.*k =			7.1742	UTL = Mean + St.Dev.*k =			7.0611	UTL = Mean + St.Dev.*k =			7.4638	UTL = Mean + St.Dev.*k =			7.1341
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No
Standard Deviation =		68.2813	0.0574	Standard Deviation =		43.8774	0.0411	Standard Deviation =		316.0060	0.2134	Standard Deviation =		74.7899	0.0648
Mean =		1190.1163	7.0802	Mean =		1088.9882	6.9922	Mean =		1249.7386	7.1057	Mean =		1127.8333	7.0260
n =		86	86	n =		85	85	n =		88	88	n =		60	60
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.662	1.662	(t{n-1, 0.95}) =		1.671	1.671
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.008
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.671	k = t(1 + 1/n) ^½ =			1.685
UTL = Mean + St.Dev.*k =			7.1761	UTL = Mean + St.Dev.*k =			7.0609	UTL = Mean + St.Dev.*k =			7.4624	UTL = Mean + St.Dev.*k =			7.1351
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Sulfate)

MW1				MW2				MW3				MW4			
Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)
0	3Q-02	348	5.8522	0	3Q-02	419	6.0379	0	3Q-02	403	5.9989				
270	2Q-03	409	6.0137	270	2Q-03	427	6.0568	270	2Q-03	404	6.0014				
450	1Q-04	370	5.9135	450	1Q-04	360	5.8861	450	1Q-04	340	5.8289				
540	2Q-04	330	5.7991	540	2Q-04	340	5.8289	540	2Q-04	330	5.7991				
630	3Q-04	360	5.8861	630	3Q-04	360	5.8861	630	3Q-04	350	5.8579				
720	4Q-04	380	5.9402	720	4Q-04	370	5.9135	720	4Q-04	380	5.9402				
810	1Q-05	350	5.8579	810	1Q-05	360	5.8861	810	1Q-05	340	5.8289				
900	2Q-05	326	5.7869	900	2Q-05	331	5.8021	900	2Q-05	303	5.7137				
990	3Q-05	451	6.1115	990	3Q-05	450	6.1092	990	3Q-05	440	6.0868				
1080	4Q-05	360	5.8861	1080	4Q-05	360	5.8861	1080	4Q-05	330	5.7991				
1170	1Q-06	379	5.9375	1170	1Q-06	369	5.9108	1170	1Q-06	358	5.8805				
1260	2Q-06	390	5.9661	1260	2Q-06	370	5.9135	1260	2Q-06	370	5.9135				
1350	3Q-06	370	5.9135	1350	3Q-06	400	5.9915	1350	3Q-06	380	5.9402				
1440	4Q-06	370	5.9135	1440	4Q-06	380	5.9402	1440	4Q-06	380	5.9402				
1530	1Q-07	380	5.9402	1530	1Q-07	380	5.9402	1530	1Q-07	360	5.8861				
1620	2Q-07	460	6.1312	1620	2Q-07	470	6.1527	1620	2Q-07	450	6.1092				
	RA-07	385	5.9532		RA-07	365	5.8999		RA-07	360	5.8861				
1710	3Q-07	370	5.9135	1710	3Q-07	380	5.9402	1710	3Q-07	380	5.9402				
1800	4Q-07	360	5.8861	1800	4Q-07	360	5.8861	1800	4Q-07	420	6.0403				
1867	12/7/2007	380	5.9402	1867	12/7/2007	360	5.8861	1867	12/7/2007	385	5.9532				
1890	1Q-08	380	5.9402	1890	1Q-08	380	5.9402	1890	1Q-08	390	5.9661				
1966	2Q-08	380	5.9402	1966	2Q-08	370	5.9135	1966	2Q-08	480	6.1738				
2068	3Q-08	390	5.9661	2068	3Q-08	400	5.9915	2068	3Q-08	480	6.1738				
2178	4Q-08	400	5.9915	2178	4Q-08	410	6.0162	2178	4Q-08	460	6.1312				
2349	1Q-09	380	5.9402	2349	1Q-09	390	5.9661	2349	1Q-09	360	5.8861				
2473	2Q-09	390	5.9661	2473	2Q-09	390	5.9661	2473	2Q-09	340	5.8289				
2571	3Q-09	370	5.9135	2571	3Q-09	350	5.8579	2571	3Q-09	560	6.3279	0	3Q-09	380	5.9402
								2618	10/30/09	430	6.0638	34	10/30/09	350	5.8579
2652	4Q-09	370	5.9135	2652	4Q-09	380	5.9402	2652	4Q-09	500	6.2146	81	4Q-09	350	5.8579
2718	1Q-10	370	5.9135	2718	1Q-10	400	5.9915	2718	1Q-10	610	6.4135	116	1Q-10	370	5.9135
								2753	4/2/2010	620	6.4297				
2800	2Q-10	390	5.9661	2800	2Q-10	420	6.0403	2800	2Q-10	620	6.4297	198	2Q-10	380	5.9402
2828	6/18/2010	330	5.7991	2828	6/18/2010	360	5.8861	2828	6/18/2010	690	6.5367	226	6/18/2010	340	5.8289
2895	3Q-10	380	5.9402	2895	3Q-10	370	5.9135	2895	3Q-10	700	6.5511	293	3Q-10	370	5.9135
								2922	9/20/2010R	750	6.6201				
3014	4Q-10	340	5.8289	3014	4Q-10	380	5.9402	3014	4Q-10	510	6.2344	412	4Q-10	380	5.9402
3086	1Q-11	360	5.8861	3086	1Q-11	370	5.9135	3086	1Q-11	490	6.1944	576	1Q-11	340	5.8289
3179	2Q-11	400	5.9915	3179	2Q-11	410	6.0162	3179	2Q-11	640	6.4615	669	2Q-11	370	5.9135
3286	3Q-11	380	5.9402	3286	3Q-11	410	6.0162	3286	3Q-11	510	6.2344	776	3Q-11	360	5.8861
3372	4Q-11	390	5.9661	3372	4Q-11	410	6.0162	3372	4Q-11	500	6.2146	862	4Q-11	370	5.9135



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Sulfate)

MW1				MW2				MW3				MW4			
Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)
3472	1Q-12	340	5.8289	3472	1Q-12	360	5.8861	3472	1Q-12	510	6.2344	962	1Q-12	300	5.7038
3572	2Q-12	500	6.2146	3572	2Q-12	420	6.0403	3572	2Q-12	480	6.1738	1062	2Q-12	350	5.8579
3638	3Q-12	380	5.9402	3638	3Q-12	400	5.9915	3638	3Q-12	420	6.0403	1128	3Q-12	320	5.7683
3741	4Q-12	410	6.0162	3741	4Q-12	420	6.0403	3741	4Q-12	390	5.9661	1231	4Q-12	340	5.8289
3840	1Q-13	400	5.9915	3840	1Q-13	410	6.0162	3840	1Q-13	370	5.9135	1330	1Q-13	330	5.7991
3904	2Q-13	380	5.9402	3904	2Q-13	390	5.9661	3904	2Q-13	350	5.8579	1394	2Q-13	300	5.7038
4013	3Q-13	390	5.9661	4013	3Q-13	420	6.0403	4013	3Q-13	330	5.7991	1507	3Q-13	310	5.7366
4088	4Q-13	420	6.0403	4088	4Q-13	410	6.0162	4088	4Q-13	340	5.8289	1583	4Q-13	310	5.7366
4202	1Q-14	420	6.0403	4202	1Q-14	440	6.0868	4202	1Q-14	450	6.1092	1697	1Q-14	330	5.7991
4316	2Q-14	410	6.0162	4316	2Q-14	480	6.1738	4316	2Q-14	400	5.9915	1811	2Q-14	360	5.8861
4395	3Q-14	440	6.0868	4395	3Q-14	410	6.0162	4395	3Q-14	370	5.9135	1890	3Q-14	310	5.7366
4472	4Q-14	340	5.8289	4472	4Q-14	360	5.8861	4472	4Q-14	290	5.6699	1967	4Q-14	270	5.5984
4579	1Q-15	390	5.9661	4579	1Q-15	360	5.8861	4579	1Q-15	290	5.6699	2074	1Q-15	270	5.5984
4765	2Q-15	370	5.9135	4765	2Q-15	360	5.8861	4765	2Q-15	280	5.6348	2260	2Q-15	270	5.5984
4848	3Q-15	430	6.0638	4848	3Q-15	410	6.0162	4848	3Q-15	330	5.7991	2343	3Q-15	320	5.7683
4938	4Q-15	410	6.0162	4938	4Q-15	410	6.0162	4938	4Q-15	330	5.7991	2433	4Q-15	320	5.7683
5055	1Q-16	370	5.9135	5055	1Q-16	380	5.9402	5055	1Q-16	340	5.8289	2550	1Q-16	310	5.7366
5122	2Q-16	390	5.9661	5122	2Q-16	420	6.0403	5122	2Q-16	330	5.7991	2617	2Q-16	310	5.7366
5213	3Q-16	420	6.0403	5213	3Q-16	390	5.9661	5213	3Q-16	300	5.7038	2708	3Q-16	310	5.7366
5305	4Q-16	400	5.9915	5305	4Q-16	420	6.0403	5305	4Q-16	330	5.7991	2800	4Q-16	360	5.8861
5397	1Q-17	450	6.1092	5397	1Q-17	400	5.9915	5397	1Q-17	310	5.7366	2892	1Q-17	340	5.8289
5487	2Q-17	440	6.0868	5487	2Q-17	400	5.9915	5487	2Q-17	330	5.7991	2982	2Q-17	340	5.8289
5563	3Q-17	430	6.0638	5563	3Q-17	400	5.9915	5563	3Q-17	310	5.7366	3058	3Q-17	330	5.7991
5672	4Q-17	400	5.9915	5672	4Q-17	380	5.9402	5672	4Q-17	290	5.6699	3167	4Q-17	310	5.7366
5782	1Q-18	390	5.9661	5782	1Q-18	400	5.9915	5782	1Q-18	390	5.9661	3277	1Q-18	340	5.8289
5850	2Q-18	390	5.9661	5850	2Q-18	380	5.9402	5850	2Q-18	360	5.8861	3345	2Q-18	310	5.7366
5960	3Q-18	430	6.0638	5960	3Q-18	390	5.9661	5960	3Q-18	380	5.9402	3455	3Q-18	300	5.7038
6007	10/30/2018	410	6.0162												
6041	4Q-18	380	5.9402	6041	4Q-18	380	5.9402	6041	4Q-18	380	5.9402	3536	4Q-18	280	5.6348
6136	1Q-19	370	5.9135	6135	1Q-19	370	5.9135	6135	1Q-19	390	5.9661	3631	1Q-19	270	5.5984
6233	2Q-19	450	6.1092	6233	2Q-19	400	5.9915	6233	2Q-19	400	5.9915	3728	2Q-19	290	5.6699
6330	3Q-19	440	6.0868	6330	3Q-19	400	5.9915	6330	3Q-19	390	5.9661	3825	3Q-19	300	5.7038
6311	4Q-19	390	5.9661	6311	4Q-19	370	5.9135	6311	4Q-19	390	5.9661	3806	4Q-19	270	5.5984
6417	1Q-20	390	5.9661	6417	1Q-20	370	5.9135	6417	1Q-20	410	6.0162	3912	1Q-20	260	5.5607
6494	2Q-20	430	6.0638	6494	2Q-20	390	5.9661	6494	2Q-20	400	5.9915	3989	2Q-20	280	5.6348
6606	3Q-20	210	5.3471	6606	3Q-20	380	5.9402	6606	3Q-20	430	6.0638	4101	3Q-20	280	5.6348
6678	4Q-20	420	6.0403	6678	4Q-20	390	5.9661	6678	4Q-20	440	6.0868	4173	4Q-20	280	5.6348
6769	1Q-21	440	6.0868	6769	1Q-21	390	5.9661	6769	1Q-21	440	6.0868	4264	1Q-21	280	5.6348
6851	2Q-21	450	6.1092	6851	2Q-21	400	5.9915	6851	2Q-21	410	6.0162	4346	2Q-21	300	5.7038
7033	3Q-21	440	6.0868	7033	3Q-21	380	5.9402	7033	3Q-21	330	5.7991	4528	3Q-21	280	5.6348
7131	4Q-21	380	5.9402	7131	4Q-21	390	5.9661	7131	4Q-21	430	6.0638	4626	4Q-21	280	5.6348



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Sulfate)

MW1				MW2				MW3				MW4			
Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)	Days	Date	SO ₄	ln(SO ₄)
7223	1Q-22	420	6.0403	7223	1Q-22	400	5.9915	7223	1Q-22	380	5.9402	4718	1Q-22	300	5.7038
7298	2Q-22	450	6.1092	7298	2Q-22	390	5.9661	7298	2Q-22	380	5.9402	4793	2Q-22	290	5.6699
7388	3Q-22	450	6.1092	7388	3Q-22	390	5.9661	7388	3Q-22	390	5.9661	4883	3Q-22	310	5.7366
7480	4Q-22	450	6.1092	7480	4Q-22	380	5.9402	7480	4Q-22	400	5.9915	4975	4Q-22	380	5.9402
7582	1Q-23	440	6.0868	7582	1Q-23	380	5.9402	7582	1Q-23	410	6.0162	5077	1Q-23	390	5.9661
7670	2Q-23	410	6.0162	7670	2Q-23	380	5.9402	7670	2Q-23	390	5.9661	5165	2Q-23	370	5.9135
7785	3Q-23	470	6.1527	7785	3Q-23	410	6.0162	7785	3Q-23	450	6.1092	5280	3Q-23	360	5.8861
7877	4Q-23	430	6.0638	7877	4Q-23	390	5.9661	7877	4Q-23	430	6.0638	5372	4Q-23	320	5.7683
Standard Deviation =		40.6208	0.1113	Standard Deviation =		25.5520	0.0663	Standard Deviation =		98.3681	0.2112	Standard Deviation =		35.8512	0.1115
Mean =		395.2093	5.9699	Mean =		390.0122	5.9640	Mean =		410.6235	5.9942	Mean =		321.6667	5.7628
n =		83	83	n =		82	82	n =		85	85	n =		57	57
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.664	1.664	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.672	1.672
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.009
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.674	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.687
UTL = Mean + St.Dev.*k =			6.1560	UTL = Mean + St.Dev.*k =			6.0750	UTL = Mean + St.Dev.*k =			6.3474	UTL = Mean + St.Dev.*k =			5.9508
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			Yes
Standard Deviation =		40.0763	0.1107	Standard Deviation =		26.1925	0.0659	Standard Deviation =		95.8400	0.2099	Standard Deviation =		36.1134	0.1123
Mean =		393.9048	5.9704	Mean =		389.8916	5.9637	Mean =		410.3837	5.9939	Mean =		321.0345	5.7653
n =		84	84	n =		83	83	n =		86	86	n =		58	58
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.672	1.672
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.009
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.686
UTL = Mean + St.Dev.*k =			6.1556	UTL = Mean + St.Dev.*k =			6.0740	UTL = Mean + St.Dev.*k =			6.3450	UTL = Mean + St.Dev.*k =			5.9547
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No
Standard Deviation =		40.6831	0.1118	Standard Deviation =		26.1266	0.0658	Standard Deviation =		95.3757	0.2091	Standard Deviation =		36.1583	0.1124
Mean =		394.8000	5.9726	Mean =		390.1310	5.9643	Mean =		410.8391	5.9952	Mean =		321.6949	5.7674
n =		85	85	n =		84	84	n =		87	87	n =		59	59
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.671	1.671
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.008
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.685
UTL = Mean + St.Dev.*k =			6.1596	UTL = Mean + St.Dev.*k =			6.0744	UTL = Mean + St.Dev.*k =			6.3449	UTL = Mean + St.Dev.*k =			5.9568
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No
Standard Deviation =		40.6208	0.1116	Standard Deviation =		25.9706	0.0654	Standard Deviation =		94.8480	0.2080	Standard Deviation =		35.8512	0.1114
Mean =		395.2093	5.9736	Mean =		390.1294	5.9643	Mean =		411.0568	5.9960	Mean =		321.6667	5.7674
n =		86	86	n =		85	85	n =		88	88	n =		60	60
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.662	1.662	(t{n-1, 0.95}) =		1.671	1.671
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.008
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.671	k = t(1 + 1/n) ^½ =			1.685
UTL = Mean + St.Dev.*k =			6.1603	UTL = Mean + St.Dev.*k =			6.0738	UTL = Mean + St.Dev.*k =			6.3436	UTL = Mean + St.Dev.*k =			5.9552
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Chloride)

MW1				MW2				MW3				MW4			
Days	Date	CI	In(CI)	Days	Date	CI	In(CI)	Days	Date	CI	In(CI)	Days	Date	CI	In(CI)
0	3Q-02	294	5.6836	0	3Q-02	225	5.4161	0	3Q-02	202	5.3083				
270	2Q-03	272	5.6058	270	2Q-03	209	5.3423		2Q-03	117	4.7622				
450	1Q-04	200	5.2983	450	1Q-04	180	5.1930		1Q-04	110	4.7005				
540	2Q-04	220	5.3936	540	2Q-04	190	5.2470		2Q-04	120	4.7875				
630	3Q-04	200	5.2983	630	3Q-04	180	5.1930		3Q-04	120	4.7875				
720	4Q-04	210	5.3471	720	4Q-04	180	5.1930		4Q-04	210	5.3471				
810	1Q-05	230	5.4381	810	1Q-05	180	5.1930		1Q-05	130	4.8675				
900	2Q-05	182	5.2040	900	2Q-05	158	5.0626		2Q-05	109	4.6913				
990	3Q-05	255	5.5413	990	3Q-05	211	5.3519		3Q-05	156	5.0499				
1080	4Q-05	230	5.4381	1080	4Q-05	180	5.1930		4Q-05	130	4.8675				
1170	1Q-06	219	5.3891	1170	1Q-06	189	5.2417		1Q-06	149	5.0039				
1260	2Q-06	210	5.3471	1260	2Q-06	190	5.2470		2Q-06	160	5.0752				
1350	3Q-06	210	5.3471	1350	3Q-06	190	5.2470		3Q-06	180	5.1930				
1440	4Q-06	210	5.3471	1440	4Q-06	190	5.2470		4Q-06	210	5.3471				
1530	1Q-07	230	5.4381	1530	1Q-07	190	5.2470		1Q-07	200	5.2983				
1620	2Q-07	210	5.3471	1620	2Q-07	210	5.3471		2Q-07	230	5.4381				
	RA-07	220	5.3936		RA-07	205	5.3230		RA-07	240	5.4806				
1710	3Q-07	250	5.5215		3Q-07	190	5.2470		3Q-07	190	5.2470				
1800	4Q-07	230	5.4381	1800	4Q-07	180	5.1930		4Q-07	300	5.7038				
1867	12/7/2007	270	5.5984	1867	12/7/2007	190	5.2470	1867	12/7/2007	270	5.5984				
1890	1Q-08	250	5.5215		1Q-08	190	5.2470		1Q-08	280	5.6348				
1966	2Q-08	230	5.4381	1966	2Q-08	200	5.2983		2Q-08	350	5.8579				
2068	3Q-08	250	5.5215	2068	3Q-08	200	5.2983		3Q-08	400	5.9915				
2178	4Q-08	240	5.4806	2178	4Q-08	180	5.1930		4Q-08	320	5.7683				
2349	1Q-09	230	5.4381	2349	1Q-09	190	5.2470		1Q-09	230	5.4381				
2473	2Q-09	230	5.4381	2473	2Q-09	170	5.1358		2Q-09	220	5.3936				
2571	3Q-09	230	5.4381	2571	3Q-09	220	5.3936	2571	3Q-09	370	5.9135	0	3Q-09	270	5.5984
								2618	10/30/09	220	5.3936	34	10/30/09	250	5.5215
2652	4Q-09	220	5.3936	2652	4Q-09	170	5.1358	2652	4Q-09	250	5.5215	81	4Q-09	250	5.5215
2718	1Q-10	230	5.4381	2718	1Q-10	170	5.1358	2718	1Q-10	360	5.8861	116	1Q-10	260	5.5607
								2753	4/2/2010	400	5.9915				
2800	2Q-10	260	5.5607	2800	2Q-10	180	5.1930	2800	2Q-10	580	6.3630	198	2Q-10	280	5.6348
2828	6/18/2010	250	5.5215	2828	6/18/2010	170	5.1358	2828	6/18/2010	660	6.4922	226	6/18/2010	250	5.5215
2895	3Q-10	220	5.3936	2895	3Q-10	220	5.3936	2895	3Q-10	670	6.5073	293	3Q-10	260	5.5607
								2922	9/20/2010R	460	6.1312				
3014	4Q-10	220	5.3936	3014	4Q-10	160	5.0752	3014	4Q-10	200	5.2983	412	4Q-10	260	5.5607
3086	1Q-11	210	5.3471	3086	1Q-11	160	5.0752	3086	1Q-11	240	5.4806	576	1Q-11	250	5.5215
3179	2Q-11	200	5.2983	3179	2Q-11	160	5.0752	3179	2Q-11	340	5.8289	669	2Q-11	260	5.5607
3286	3Q-11	190	5.2470	3286	3Q-11	160	5.0752	3286	3Q-11	190	5.2470	776	3Q-11	250	5.5215
3372	4Q-11	230	5.4381	3372	4Q-11	170	5.1358	3372	4Q-11	180	5.1930	862	4Q-11	270	5.5984



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Chloride)

MW1				MW2				MW3				MW4			
Days	Date	Cl	In(Cl)	Days	Date	Cl	In(Cl)	Days	Date	Cl	In(Cl)	Days	Date	Cl	In(Cl)
3472	1Q-12	210	5.3471	3472	1Q-12	160	5.0752	3472	1Q-12	220	5.3936	962	1Q-12	280	5.6348
3572	2Q-12	270	5.5984	3572	2Q-12	160	5.0752	3572	2Q-12	190	5.2470	1062	2Q-12	260	5.5607
3638	3Q-12	220	5.3936	3638	3Q-12	150	5.0106	3638	3Q-12	140	4.9416	1128	3Q-12	260	5.5607
3741	4Q-12	230	5.4381	3741	4Q-12	170	5.1358	3741	4Q-12	160	5.0752	1231	4Q-12	270	5.5984
3840	1Q-13	220	5.3936	3840	1Q-13	160	5.0752	3840	1Q-13	140	4.9416	1330	1Q-13	270	5.5984
3904	2Q-13	200	5.2983	3904	2Q-13	140	4.9416	3904	2Q-13	120	4.7875	1394	2Q-13	250	5.5215
4013	3Q-13	240	5.4806	4013	3Q-13	160	5.0752	4013	3Q-13	120	4.7875	1507	3Q-13	270	5.5984
4088	4Q-13	210	5.3471	4088	4Q-13	150	5.0106	4088	4Q-13	120	4.7875	1583	4Q-13	260	5.5607
4202	1Q-14	250	5.5215	4202	1Q-14	180	5.1930	4202	1Q-14	170	5.1358	1697	1Q-14	300	5.7038
4316	2Q-14	240	5.4806	4316	2Q-14	180	5.1930	4316	2Q-14	140	4.9416	1811	2Q-14	300	5.7038
4395	3Q-14	240	5.4806	4395	3Q-14	160	5.0752	4395	3Q-14	130	4.8675	1890	3Q-14	290	5.6699
4472	4Q-14	240	5.4806	4472	4Q-14	150	5.0106	4472	4Q-14	110	4.7005	1967	4Q-14	270	5.5984
4579	1Q-15	210	5.3471	4579	1Q-15	140	4.9416	4579	1Q-15	110	4.7005	2074	1Q-15	260	5.5607
4765	2Q-15	210	5.3471	4765	2Q-15	140	4.9416	4765	2Q-15	110	4.7005	2260	2Q-15	260	5.5607
4848	3Q-15	220	5.3936	4848	3Q-15	150	5.0106	4848	3Q-15	110	4.7005	2343	3Q-15	280	5.6348
4938	4Q-15	220	5.3936	4938	4Q-15	150	5.0106	4938	4Q-15	120	4.7875	2433	4Q-15	270	5.5984
5055	1Q-16	230	5.4381	5055	1Q-16	140	4.9416	5055	1Q-16	120	4.7875	2550	1Q-16	270	5.5984
5122	2Q-16	230	5.4381	5122	2Q-16	150	5.0106	5122	2Q-16	120	4.7875	2617	2Q-16	280	5.6348
5213	3Q-16	210	5.3471	5213	3Q-16	150	5.0106	5213	3Q-16	110	4.7005	2708	3Q-16	260	5.5607
5305	4Q-16	250	5.5215	5305	4Q-16	160	5.0752	5305	4Q-16	120	4.7875	2800	4Q-16	290	5.6699
5397	1Q-17	200	5.2983	5397	1Q-17	140	4.9416	5397	1Q-17	110	4.7005	2892	1Q-17	270	5.5984
5487	2Q-17	210	5.3471	5487	2Q-17	140	4.9416	5487	2Q-17	110	4.7005	2982	2Q-17	270	5.5984
5563	3Q-17	190	5.2470	5563	3Q-17	140	4.9416	5563	3Q-17	100	4.6052	3058	3Q-17	260	5.5607
5672	4Q-17	190	5.2470	5672	4Q-17	140	4.9416	5672	4Q-17	120	4.7875	3167	4Q-17	270	5.5984
5782	1Q-18	220	5.3936	5782	1Q-18	140	4.9416	5782	1Q-18	140	4.9416	3277	1Q-18	270	5.5984
5850	2Q-18	220	5.3936	5850	2Q-18	140	4.9416	5850	2Q-18	140	4.9416	3345	2Q-18	270	5.5984
5960	3Q-18	220	5.3936	5960	3Q-18	150	5.0106	5960	3Q-18	150	5.0106	3455	3Q-18	280	5.6348
6007	10/30/2018	200	5.2983												
6041	4Q-18	230	5.4381	6041	4Q-18	150	5.0106	6041	4Q-18	140	4.9416	3536	4Q-18	260	5.5607
6136	1Q-19	230	5.4381	6135	1Q-19	140	4.9416	6135	1Q-19	140	4.9416	3631	1Q-19	270	5.5984
6233	2Q-19	200	5.2983	6233	2Q-19	150	5.0106	6233	2Q-19	150	5.0106	3728	2Q-19	290	5.6699
6330	3Q-19	220	5.3936	6330	3Q-19	160	5.0752	6330	3Q-19	160	5.0752	3825	3Q-19	290	5.6699
6311	4Q-19	220	5.3936	6311	4Q-19	140	4.9416	6311	4Q-19	140	4.9416	3806	4Q-19	260	5.5607
6417	1Q-20	150	5.0106	6417	1Q-20	130	4.8675	6417	1Q-20	170	5.1358	3912	1Q-20	250	5.5215
6494	2Q-20	180	5.1930	6494	2Q-20	130	4.8675	6494	2Q-20	150	5.0106	3989	2Q-20	260	5.5607
6606	3Q-20	90	4.4998	6606	3Q-20	130	4.8675	6606	3Q-20	170	5.1358	4101	3Q-20	270	5.5984
6678	4Q-20	220	5.3936	6678	4Q-20	150	5.0106	6678	4Q-20	180	5.1930	4173	4Q-20	280	5.6348
6769	1Q-21	200	5.2983	6769	1Q-21	140	4.9416	6769	1Q-21	160	5.0752	4264	1Q-21	280	5.6348
6851	2Q-21	200	5.2983	6851	2Q-21	150	5.0106	6851	2Q-21	150	5.0106	4346	2Q-21	190	5.2470
7033	3Q-21	200	5.2983	7033	3Q-21	140	4.9416	7033	3Q-21	130	4.8675	4528	3Q-21	280	5.6348
7131	4Q-21	130	4.8675	7131	4Q-21	130	4.8675	7131	4Q-21	170	5.1358	4626	4Q-21	270	5.5984



Table 6-1 (Cont.): Calculation for Mean and Standard Deviation (Chloride)

MW1				MW2				MW3				MW4			
Days	Date	Cl	ln(Cl)	Days	Date	Cl	ln(Cl)	Days	Date	Cl	ln(Cl)	Days	Date	Cl	ln(Cl)
7223	1Q-22	180	5.1930	7223	1Q-22	140	4.9416	7223	1Q-22	140	4.9416	4718	1Q-22	290	5.6699
7298	2Q-22	170	5.1358	7298	2Q-22	130	4.8675	7298	2Q-22	130	4.8675	4793	2Q-22	270	5.5984
7388	3Q-22	170	5.1358	7388	3Q-22	130	4.8675	7388	3Q-22	130	4.8675	4883	3Q-22	270	5.5984
7480	4Q-22	180	5.1930	7480	4Q-22	130	4.8675	7480	4Q-22	150	5.0106	4975	4Q-22	330	5.7991
7582	1Q-23	170	5.1358	7582	1Q-23	130	4.8675	7582	1Q-23	150	5.0106	5077	1Q-23	320	5.7683
7670	2Q-23	200	5.2983	7670	2Q-23	130	4.8675	7670	2Q-23	150	5.0106	5165	2Q-23	330	5.7991
7785	3Q-23	180	5.1930	7785	3Q-23	130	4.8675	7785	3Q-23	160	5.0752	5280	3Q-23	330	5.7991
7877	4Q-23	200	5.2983	7877	4Q-23	130	4.8675	7877	4Q-23	150	5.0106	5372	4Q-23	290	5.6699
Standard Deviation =		29.2262	0.1611	Standard Deviation =		23.8918	0.1490	Standard Deviation =		117.1764	0.4390	Standard Deviation =		22.0240	0.0746
Mean =		216.6506	5.3668	Mean =		164.3537	5.0909	Mean =		196.6235	5.1683	Mean =		272.1667	5.5951
n =		83	83	n =		82	82	n =		85	86	n =		60	58
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.664	1.664	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.671	1.671
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.009
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.674	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.685
UTL = Mean + St.Dev.*k =			5.6363	UTL = Mean + St.Dev.*k =			5.3404	UTL = Mean + St.Dev.*k =			5.9026	UTL = Mean + St.Dev.*k =			5.7208
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			Yes
Standard Deviation =		30.2186	0.1603	Standard Deviation =		25.1116	0.1501	Standard Deviation =		114.4650	0.4367	Standard Deviation =		20.8827	0.0787
Mean =		216.4524	5.3660	Mean =		163.9398	5.0882	Mean =		196.0814	5.1665	Mean =		270.8621	5.5986
n =		84	84	n =		83	83	n =		86	86	n =		58	58
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.672	1.672
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.009
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.686
UTL = Mean + St.Dev.*k =			5.6341	UTL = Mean + St.Dev.*k =			5.3394	UTL = Mean + St.Dev.*k =			5.8970	UTL = Mean + St.Dev.*k =			5.7313
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			Yes
Standard Deviation =		30.2973	0.1604	Standard Deviation =		25.2331	0.1511	Standard Deviation =		113.8633	0.4343	Standard Deviation =		22.0872	0.0822
Mean =		216.0235	5.3639	Mean =		163.5357	5.0856	Mean =		195.6667	5.1654	Mean =		271.8644	5.6020
n =		85	85	n =		84	84	n =		87	87	n =		59	59
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.671	1.671
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.008
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.685
UTL = Mean + St.Dev.*k =			5.6323	UTL = Mean + St.Dev.*k =			5.3384	UTL = Mean + St.Dev.*k =			5.8918	UTL = Mean + St.Dev.*k =			5.7406
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			Yes
Standard Deviation =		30.1681	0.1597	Standard Deviation =		25.3448	0.1521	Standard Deviation =		113.3116	0.4321	Standard Deviation =		22.0240	0.0820
Mean =		215.8372	5.3632	Mean =		163.1412	5.0830	Mean =		195.1477	5.1637	Mean =		272.1667	5.6032
n =		86	86	n =		85	85	n =		88	88	n =		60	60
(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.663	1.663	(t{n-1, 0.95}) =		1.662	1.662	(t{n-1, 0.95}) =		1.671	1.671
(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.006	(1 + 1/n) ^½ =			1.008
k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.673	k = t(1 + 1/n) ^½ =			1.671	k = t(1 + 1/n) ^½ =			1.685
UTL = Mean + St.Dev.*k =			5.6302	UTL = Mean + St.Dev.*k =			5.3374	UTL = Mean + St.Dev.*k =			5.8859	UTL = Mean + St.Dev.*k =			5.7413
Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No	Concentration Significant?			No



Table 6-2
Comparison to Tolerance Interval¹

WELL	PARAMETER	Q1 2023				Q2 2023			
		RESULT	ln(RESULT)	UPPER TOLERANCE LIMIT	UTL EXCEEDED (YES/NO)	RESULT	ln(RESULT)	UPPER TOLERANCE LIMIT	UTL EXCEEDED (YES/NO)
MW-1	TDS	1300	7.1701	7.1726	No	1200	7.0901	7.1722	No
	SO ₄	440	6.0868	6.1560	No	410	6.0162	6.1556	No
	Cl ₂	170	5.1358	5.6363	No	200	5.2983	5.6341	No
MW-2	TDS	1100	7.0031	7.0617	No	1100	7.0031	7.0614	No
	SO ₄	380	5.9402	6.0750	No	380	5.9402	6.0740	No
	Cl ₂	130	4.8675	5.3404	No	130	4.8675	5.3394	No
MW-3	TDS	1200	7.0901	7.4661	No	1300	7.1701	7.4649	No
	SO ₄	410	6.0162	6.3474	No	390	5.9661	6.3450	No
	Cl ₂	150	5.0106	5.9026	No	150	5.0106	5.8970	No
MW-4	TDS	1300	7.1701	7.1262	Yes	1300	7.1701	7.1330	Yes
	SO ₄	390	5.9661	5.9508	Yes	370	5.9135	5.9547	No
	Cl ₂	320	5.7683	5.7208	Yes	330	5.7991	5.7313	Yes

¹Upper tolerance limit (UTL) calculated using 95% distribution and 95% probability



Table 6-2
Comparison to Tolerance Interval¹

WELL	PARAMETER	Q3 2023				Q4 2023			
		RESULT	ln(RESULT)	UPPER TOLERANCE LIMIT	UTL EXCEEDED (YES/NO)	RESULT	ln(RESULT)	UPPER TOLERANCE LIMIT	UTL EXCEEDED (YES/NO)
MW-1	TDS	1300	7.1701	7.1742	No	1300	7.1701	7.1761	No
	SO ₄	470	6.1527	6.1596	No	430	6.0638	6.1603	No
	Cl ₂	180	5.1930	5.6323	No	200	5.2983	5.6302	No
MW-2	TDS	1100	7.0031	7.0611	No	1100	7.0031	7.0609	No
	SO ₄	410	6.0162	6.0744	No	390	5.9661	6.0738	No
	Cl ₂	130	4.8675	5.3384	No	130	4.8675	5.3374	No
MW-3	TDS	1300	7.1701	7.4638	No	1300	7.1701	7.4624	No
	SO ₄	450	6.1092	6.3449	No	430	6.0638	6.3436	No
	Cl ₂	160	5.0752	5.8918	No	150	5.0106	5.8859	No
MW-4	TDS	1200	7.0901	7.1341	No	1200	7.0901	7.1351	No
	SO ₄	360	5.8861	5.9568	No	320	5.7683	5.9552	No
	Cl ₂	330	5.7991	5.7406	Yes	290	5.6699	5.7413	No

¹Upper tolerance limit (UTL) calculated using 95% distribution and 95% probability



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**SECTION 7
LYSIMETER TEST RECORDS**



LYSIMETER TEST RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No. NB11160982	Date: March 12, 2023
Weather Conditions: Sunny 75° F	Sampler: Ralph De La Parra

EAST POND	Notes: *
Lysimeter No.: 1	
TEST RESULTS: Dry	
Lysimeter No.: 2	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 3	Notes: *
TEST RESULTS: Dry	
WEST POND	Notes: *
Lysimeter No.: 4	
TEST RESULTS: Dry	
Lysimeter No.: 5	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 6	Notes: *
TEST RESULTS: Dry	



LYSIMETER TEST RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No. NB11160982	Date: June 7, 2023
Weather Conditions: Sunny	Sampler: Ralph De La Parra

EAST POND	Notes: *
Lysimeter No.: 1	
TEST RESULTS: Dry	
Lysimeter No.: 2	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 3	Notes: *
TEST RESULTS: Dry	
WEST POND	Notes: *
Lysimeter No.: 4	
TEST RESULTS: Dry	
Lysimeter No.: 5	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 6	Notes: *
TEST RESULTS: Dry	



LYSIMETER TEST RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No. NB11160982	Date: September 26, 2023
Weather Conditions: Warm, Sunny	Sampler: Ralph De La Parra

EAST POND	Notes: *
Lysimeter No.: 1	
TEST RESULTS: Dry	
Lysimeter No.: 2	Notes: *
TEST RESULTS: Trace amount of water (~50 ml)	
Lysimeter No.: 3	Notes: *
TEST RESULTS: Dry	
WEST POND	Notes: *
Lysimeter No.: 4	
TEST RESULTS: Dry	
Lysimeter No.: 5	Notes: *
TEST RESULTS: Trace amount of water (~2 ml)	
Lysimeter No.: 6	Notes: *
TEST RESULTS: Dry	



LYSIMETER TEST RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No. NB11160982	Date: December 6, 2023
Weather Conditions: Sunny	Sampler: Ralph De La Parra

EAST POND	Notes: *
Lysimeter No.: 1	
TEST RESULTS: Dry	
Lysimeter No.: 2	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 3	Notes: *
TEST RESULTS: Dry	
WEST POND	Notes: *
Lysimeter No.: 4	
TEST RESULTS: Dry	
Lysimeter No.: 5	Notes: *
TEST RESULTS: Dry	
Lysimeter No.: 6	Notes: *
TEST RESULTS: Dry	



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**SECTION 8
EVAPORATION POND SAMPLING RECORDS**



EVAPORATION POND SAMPLING RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No.: NB11160982	Date: March 12, 2023
Weather Conditions: Warm, Sunny	Sampler: Ralph De La Parra
<p>Pond No./Designation: #1 East Comments: Dry.</p> <p>Time: N/A</p> <p>Color/Clarity: N/A</p> <p>Temp.: N/A</p> <p>pH: N/A</p> <p>Ec: N/A</p>	
<p>Pond No./Designation: #2 West Comments: Contains Brine Shrimp</p> <p>Time: 1215</p> <p>Color/Clarity: slightly green</p> <p>Temp.: 27.1°C</p> <p>pH: 8.49</p> <p>Ec: >20.00 ms/cm</p>	

Notes:

- Temperature reported in degrees Celsius
- pH reported in pH units
- Ec reported in millisiemens per centimeter (ms/cm)



EVAPORATION POND SAMPLING RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No.: NB11160982	Date: June 7, 2023
Weather Conditions: Warm, Sunny	Sampler: Ralph De La Parra
<div>Pond No./Designation: #1 East</div> <div>Time: N/A</div> <div>Color/Clarity: N/A</div> <div>Temp.: N/A</div> <div>pH: N/A</div> <div>Ec: N/A</div> <div>Comments: Dry</div>	
<div>Pond No./Designation: #2 West</div> <div>Time: 1545</div> <div>Color/Clarity: slightly green</div> <div>Temp.: 33.1°C</div> <div>pH: 8.23</div> <div>Ec: >20.00 ms/cm</div> <div>Comments:</div>	

Notes:

- Temperature reported in degrees Celsius
- pH reported in pH units
- Ec reported in millisiemens per centimeter (ms/cm)



EVAPORATION POND SAMPLING RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No.: NB11160982	Date: September 26, 2023
Weather Conditions: Warm, Sunny	Sampler: Ralph De La Parra
<div>Pond No./Designation: #1 East</div> <div>Time: NA</div> <div>Color/Clarity: NA</div> <div>Temp.: NA</div> <div>pH: NA</div> <div>Ec: NA</div> <div>Comments: DRY</div>	
<div>Pond No./Designation: #2 West</div> <div>Time: 1315</div> <div>Color/Clarity: slightly green</div> <div>Temp.: 30.8°C</div> <div>pH: 8.35</div> <div>Ec: >20.00 ms/cm</div> <div>Comments: Contains Brine Shrimp</div>	

Notes:

- Temperature reported in degrees Celsius
- pH reported in pH units
- Ec reported in millisiemens per centimeter (ms/cm)



EVAPORATION POND SAMPLING RECORD

Project Name/Client: Blythe Energy Inc.	Site Name: Blythe Energy Project
Project No.: NB11160982	Date: December 6, 2023
Weather Conditions: Warm, Sunny	Sampler: Ralph De La Parra
<div>Pond No./Designation: #1 East</div> <div>Time: NA</div> <div>Color/Clarity: NA</div> <div>Temp.: NA</div> <div>pH: A</div> <div>Ec: NA</div> <div>Comments: DRY</div>	
<div>Pond No./Designation: #2 West</div> <div>Time: 1600</div> <div>Color/Clarity: slightly green</div> <div>Temp.: 18.4 °C</div> <div>pH: 7.83</div> <div>Ec: >20.00 ms/cm</div> <div>Comments:</div>	

Notes:

- Temperature reported in degrees Celsius
- pH reported in pH units
- Ec reported in millisiemens per centimeter (ms/cm)



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**SECTION 9
WELL SAMPLING RECORDS**



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-1 Date: March 12, 2023 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>337.27</u>	ft. (a)
Elevation of Ground Surface	<u>337.76</u>	ft. (b)
Well Depth (below MP)	<u>120.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>88.80</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.47</u>	ft. (f)
Height of Water in Well	<u>31.20</u>	ft.
Volume of Water in Casing	<u>31.20x 0.66 = 20.59</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Grundfos electric submersible pump</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>



Project Name/Client **Blythe Energy Inc.** Well Number **MW-1** Date **March 12, 2023**

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
9:40	2	10	29.9	6.95	1.95	Clear, odorless
9:45	2	20	30.0	6.95	1.95	Clear, odorless
9:50	2	30	30.1	6.95	1.95	Clear, odorless
9:55	2	40	30.2	6.95	1.95	Clear, odorless
10:00	2	60	30.3	6.95	1.95	Clear, odorless
10:10	2	70	30.4	6.95	1.95	Clear, odorless

Total Vol. Purged **70** (gal) Casing Vol. Purged **3.40**

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water **Discharged to ground**

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-1-3-12-23	10:10	3	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project:	Blythe Energy Inc.	Project No:	NB11160982
Location:	Blythe, California	Logged by:	Ralph De La Parra
Well No.:	MW-2	Date:	March 12, 2023
		Sampler:	Ralph De La Parra

Elevation of Measuring Point (MP)	337.77	ft. (a)
Elevation of Ground Surface	337.17	ft. (b)
Well Depth (below MP)	120.00	ft. (c)
Casing Inside Diameter	4.0	in. (d)

CALCULATION OF CASING VOLUME		
Depth of Water Below MP	89.40	ft. (e)
Water Level Elevation (a-e)	248.37	ft. (f)
Height of Water in Well	30.60	ft.
Volume of Water in Casing	30.60 x 0.66 = 20.20	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	Grundfos electric submersible pump	
Sampling Apparatus: Type	Sampled through pump	
Cleaning Methods	Alconox and potable water wash, double distilled water	
	rinse	

FIELD OBSERVATIONS	
Weather Conditions	Clear, warm
Well Head Conditions	Dry, good
Comments	



Project Name/Client Blythe Energy Inc. Well Number MW-2 Date March 12, 2023

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
8:55	2	10	29.7	6.96	1.71	Clear, odorless
9:00	2	20	29.8	6.95	1.71	Clear, odorless
9:05	2	40	29.9	6.95	1.71	Clear, odorless
9:10	2	50	29.9	6.95	1.71	Clear, odorless
9:15	2	60	30.0	6.95	1.71	Clear, odorless
9:20	2	70	30.5	6.95	1.71	Clear, odorless

Total Vol. Purged 70 (gal) Casing Vol. Purged 3.48

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-2-3-12-23	9:20	3	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-3 Date: March 12, 2023 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>338.22</u>	ft. (a)
Elevation of Ground Surface	<u>336.28</u>	ft. (b)
Well Depth (below MP)	<u>115.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>89.95</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.27</u>	ft. (f)
Height of Water in Well	<u>25.05</u>	ft.
Volume of Water in Casing	<u>25.05 x 0.66 = 16.53</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Grundfos electric submersible pump</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>Rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>



Project Name/Client Blythe Energy Inc. Well Number MW-3 Date March 12, 2023

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
8:05	2	10	25.3	6.53	1.85	Clear, odorless
8:10	2	20	25.2	6.54	1.84	Clear, odorless
8:15	2	30	25.3	6.55	1.85	Clear
8:20	2	40	25.3	6.55	1.85	Clear
8:25	2	50	25.4	6.55	1.85	Clear
8:30	2	60	25.4	6.55	1.85	Clear

Total Vol. Purged 60 (gal) Casing Vol. Purged 3.63

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY						
Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-3-3-12-23	8:30	6	Quarterly	N	NA	Duplicate Collected (DUP-3-12-23)

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project:	Blythe Energy Inc.	Project No:	NB11160982
Location:	Blythe, California	Logged by:	Ralph De La Parra
Well No.:	MW-4	Date:	March 12, 2023
		Sampler:	Ralph De La Parra

Elevation of Measuring Point (MP)	342.50	ft. (a)
Elevation of Ground Surface	339.95	ft. (b)
Well Depth (below MP)	118.95	ft. (c)
Casing Inside Diameter	4.0	in. (d)

CALCULATION OF CASING VOLUME		
Depth of Water Below MP	93.60	ft. (e)
Water Level Elevation (a-e)	248.90	ft. (f)
Height of Water in Well	25.35	ft.
Volume of Water in Casing	25.35 x 0.66 = 16.73	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	Grundfos submersible pump	
Sampling Apparatus: Type	Sampled through pump	
Cleaning Methods	Alconox and potable water wash, double distilled water	
Rinse		

FIELD OBSERVATIONS	
Weather Conditions	Clear, warm
Well Head Conditions	Dry, good
Comments	



Project Name/Client Blythe Energy Inc. Well Number MW-4 Date March 12, 2023

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
10:25	2	10	32.4	7.03	2.07	Clear, odorless
10:30	2	20	32.4	7.03	2.07	Clear, odorless
10:35	2	30	32.5	7.03	2.07	Clear, odorless
10:40	2	40	32.5	7.03	2.07	Clear, odorless
10:45	2	50	32.5	7.03	2.07	Clear, odorless
10:50	2	60	32.6	7.03	2.07	Clear, odorless

Total Vol. Purged 60 (gal) Casing Vol. Purged 3.58

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-4-3-12-23	10:50	3	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)

Depth to Water Readings:

OW-1 = 91.85 feet

OW-2 = 88.65 feet



WELL SAMPLING/DEVELOPMENT RECORD

Project:	<u>Blythe Energy Inc.</u>	Project No:	<u>NB11160982</u>
Location:	<u>Blythe, California</u>	Logged by:	<u>Ralph De La Parra</u>
Well No.:	<u>MW-1</u>	Date:	<u>June 7, 2023</u>
		Sampler:	<u>Ralph De La Parra</u>

Elevation of Measuring Point (MP)	<u>337.27</u>	ft. (a)																		
Elevation of Ground Surface	<u>337.76</u>	ft. (b)																		
Well Depth (below MP)	<u>120.0</u>	ft. (c)																		
Casing Inside Diameter	<u>4.0</u>	in. (d)																		
CALCULATION OF CASING VOLUME																				
Depth of Water Below MP	<u>88.15</u>	ft. (e)																		
Water Level Elevation (a-e)	<u>249.12</u>	ft. (f)																		
Height of Water in Well	<u>31.85</u>	ft.																		
Volume of Water in Casing	<u>31.85 x 0.66 = 21.02</u>	gal.																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Sampling/Development System (High-light)</td> <td style="width: 25%; text-align: center;">Dedicated</td> <td style="width: 25%; text-align: center;">Non-dedicated <input checked="" type="checkbox"/></td> </tr> <tr> <td>Purging Apparatus: Type</td> <td colspan="2"><u>Proactive electric submersible pump</u></td> </tr> <tr> <td>Sampling Apparatus: Type</td> <td colspan="2"><u>Sampled through pump</u></td> </tr> <tr> <td>Cleaning Methods</td> <td colspan="2"><u>Alconox and potable water wash, double distilled water</u></td> </tr> <tr> <td><u>rinse</u></td> <td colspan="2"></td> </tr> <tr> <td></td> <td colspan="2"></td> </tr> </table>			Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>	Purging Apparatus: Type	<u>Proactive electric submersible pump</u>		Sampling Apparatus: Type	<u>Sampled through pump</u>		Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>		<u>rinse</u>					
Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>																		
Purging Apparatus: Type	<u>Proactive electric submersible pump</u>																			
Sampling Apparatus: Type	<u>Sampled through pump</u>																			
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>																			
<u>rinse</u>																				
FIELD OBSERVATIONS																				
Weather Conditions	<u>Clear, warm</u>																			
Well Head Conditions	<u>Dry, good</u>																			
Comments	<u></u>																			
	<u></u>																			
	<u></u>																			



Project Name/Client **Blythe Energy Inc.** Well Number **MW-1** Date **June 7, 2023**

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
12:45	1	5	30.5	7.06	1.91	Clear, odorless
12:50	1	10	30.4	7.06	1.91	Clear, odorless
13:00	1	20	30.4	7.06	1.91	Clear, odorless
13:20	1	40	30.4	7.06	1.91	Clear, odorless
13:40	1	60	30.4	7.06	1.91	Clear, odorless
13:50	1	70	30.5	7.06	1.91	Clear, odorless

Total Vol. Purged **70** (gal) Casing Vol. Purged **3.33**

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water **Discharged to ground**

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-1-6-7-23	13:50	3	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160982
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-2 Date: June 7, 2023 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>337.77</u>	ft. (a)
Elevation of Ground Surface	<u>337.17</u>	ft. (b)
Well Depth (below MP)	<u>120.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>88.90</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.87</u>	ft. (f)
Height of Water in Well	<u>31.10</u>	ft.
Volume of Water in Casing	<u>31.10 x 0.66 = 20.53</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Proactive electric submersible pump</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
	<u>rinse</u>	

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>



Project Name/Client **Blythe Energy Inc.** Well Number **MW-2** Date **June 7, 2023**

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
11:25	1	5	30.0	6.91	1.70	Clear, odorless
11:30	1	10	30.2	6.92	1.70	Clear, odorless
11:40	1	20	30.1	6.92	1.70	Clear, odorless
12:00	1	40	30.1	6.92	1.70	Clear, odorless
12:20	1	60	30.1	6.92	1.70	Clear, odorless
12:30	1	70	30.2	6.92	1.70	Clear, odorless

Total Vol. Purged **70** (gal) Casing Vol. Purged **3.41**

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water **Discharged to ground**

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-2-6-7-23	12:30	4	Quarterly	N	NA	Duplicate Collected (DUP-6-7-23)

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project:	<u>Blythe Energy Inc.</u>	Project No:	<u>NB11160982</u>
Location:	<u>Blythe, California</u>	Logged by:	<u>Ralph De La Parra</u>
Well No.:	<u>MW-3</u>	Date:	<u>June 7, 2023</u>
		Sampler:	<u>Ralph De La Parra</u>

Elevation of Measuring Point (MP)	<u>338.22</u>	ft. (a)																		
Elevation of Ground Surface	<u>336.28</u>	ft. (b)																		
Well Depth (below MP)	<u>115.00</u>	ft. (c)																		
Casing Inside Diameter	<u>4.0</u>	in. (d)																		
CALCULATION OF CASING VOLUME																				
Depth of Water Below MP	<u>89.55</u>	ft. (e)																		
Water Level Elevation (a-e)	<u>248.67</u>	ft. (f)																		
Height of Water in Well	<u>25.45</u>	ft.																		
Volume of Water in Casing	<u>25.45 x 0.66 = 16.80</u>	gal.																		
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Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>																		
Purging Apparatus: Type	<u>Proactive submersible pump</u>																			
Sampling Apparatus: Type	<u>Sampled through pump</u>																			
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>																			
<u>rinse</u>																				
FIELD OBSERVATIONS																				
Weather Conditions	<u>Clear, warm</u>																			
Well Head Conditions	<u>Dry, good</u>																			
Comments	<u></u>																			
	<u></u>																			
	<u></u>																			



Project Name/Client Blythe Energy Inc. Well Number MW-3 Date June 7, 2023

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
10:20	1	5	25.0	6.31	1.85	Clear, odorless
10:25	1	10	25.0	6.49	1.83	Clear, odorless
10:35	1	20	25.0	6.63	1.83	Clear, odorless
10:45	1	40	25.0	6.63	1.83	Clear, odorless
11:05	1	60	25.0	6.64	1.83	Clear, odorless

Total Vol. Purged 60 (gal) Casing Vol. Purged 3.57

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-3-6-7-23	11:05	2	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project:	Blythe Energy Inc.	Project No:	NB11160982
Location:	Blythe, California	Logged by:	Ralph De La Parra
Well No.:	MW-4	Date:	June 7, 2023
		Sampler:	Ralph De La Parra

Elevation of Measuring Point (MP)	342.50	ft. (a)
Elevation of Ground Surface	337.76	ft. (b)
Well Depth (below MP)	118.95	ft. (c)
Casing Inside Diameter	4.0	in. (d)

CALCULATION OF CASING VOLUME		
Depth of Water Below MP	93.10	ft. (e)
Water Level Elevation (a-e)	249.40	ft. (f)
Height of Water in Well	25.85	ft.
Volume of Water in Casing	25.85 x 0.66 = 17.06	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	Proactive submersible pump	
Sampling Apparatus: Type	Sampled through pump	
Cleaning Methods	Alconox and potable water wash, double distilled water	
Rinse		

FIELD OBSERVATIONS	
Weather Conditions	Clear, warm
Well Head Conditions	Dry, good
Comments	



Project Name/Client Blythe Energy Inc. Well Number MW-4 Date June 7, 2023

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
14:15	1	5	32.2	7.10	2.08	Clear, odorless
14:20	1	10	32.2	7.12	2.08	Clear, odorless
14:30	1	20	32.2	7.13	2.08	Clear, odorless
14:50	1	40	32.2	7.13	2.08	Clear, odorless
15:00	1	50	32.2	7.13	2.08	Clear, odorless
15:10	1	60	32.2	7.13	2.08	Clear, odorless

Total Vol. Purged 60 (gal) Casing Vol. Purged 3.51

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-4-6-7-23	15:10	2	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)

Depth to Water Readings:
OW-1 = 91.55 feet
OW-2 = 88.38 feet



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160980
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-1 Date: September 26, 2023 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>337.27</u>	ft. (a)
Elevation of Ground Surface	<u>337.76</u>	ft. (b)
Well Depth (below MP)	<u>120.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>89.05</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.22</u>	ft. (f)
Height of Water in Well	<u>30.95</u>	ft.
Volume of Water in Casing	<u>30.95x 0.66 = 20.42</u>	gal.

Sampling/Development System (High-light)	<u>Dedicated</u>	<u>Non-dedicated ✓</u>
Purging Apparatus: Type	<u>Geosub electric submersible pump</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>rinse</u>		

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

Second Semi-Annual 2023 Monitoring Report
Blythe Energy Inc.
Blythe, California
January 31, 2024



Project Name/Client **Blythe Energy Inc.** Well Number **MW-1** Date **September 26, 2023**

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
10:40	2	10	30.0	7.14	1.96	Clear, odorless
10:50	2	20	30.1	7.14	1.96	Clear, odorless
11:00	2	30	30.3	7.13	1.96	Clear, odorless
11:10	2	40	30.4	7.13	1.96	Clear, odorless
11:20	2	50	30.4	7.13	1.96	Clear, odorless
11:35	2	65	30.5	7.13	1.96	Clear, odorless

Total Vol. Purged **65** (gal) Casing Vol. Purged **3.18**

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water **Discharged to ground**

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-1-9-26-23	11:35	2	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160980
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-2 Date: September 26, 2023 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>337.77</u>	ft. (a)
Elevation of Ground Surface	<u>337.17</u>	ft. (b)
Well Depth (below MP)	<u>120.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>89.50</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.27</u>	ft. (f)
Height of Water in Well	<u>30.50</u>	ft.
Volume of Water in Casing	<u>30.50 x 0.66 = 20.13</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Geosu electric submersible pump</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
	<u>rinse</u>	

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

Second Semi-Annual 2023 Monitoring Report
Blythe Energy Inc.
Blythe, California
January 31, 2024



Project Name/Client **Blythe Energy Inc.** Well Number **MW-2** Date **September 26, 2023**

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
09:20	1	10	29.8	7.08	1.72	Clear, odorless
09:30	1	20	29.7	7.07	1.72	Clear, odorless
09:40	1	30	29.8	7.07	1.72	Clear, odorless
09:50	1	40	29.9	7.06	1.72	Clear, odorless
10:00	1	50	30.0	7.06	1.72	Clear, odorless
10:15	1	65	30.1	7.06	1.72	Clear, odorless

Total Vol. Purged **65** (gal) Casing Vol. Purged **3.22**

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water **Discharged to ground**

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-2-9-26-23	10:15	4	Quarterly	N	NA	Duplicate collected.

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160980
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-3 Date: September 26, 2023 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>338.22</u>	ft. (a)
Elevation of Ground Surface	<u>336.28</u>	ft. (b)
Well Depth (below MP)	<u>115.00</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>90.05</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.17</u>	ft. (f)
Height of Water in Well	<u>24.95</u>	ft.
Volume of Water in Casing	<u>$24.95 \times 0.66 = 16.47$</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Geosub electric submersible pump</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>Rinse</u>	<u></u>	

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

Second Semi-Annual 2023 Monitoring Report
Blythe Energy Inc.
Blythe, California
January 31, 2024



Project Name/Client **Blythe Energy Inc.** Well Number **MW-3** Date **September 26, 2023**

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
07:25	1	10	23.2	6.47	1.87	Clear, odorless
07:35	1	20	23.4	6.53	1.88	Clear, odorless
07:45	1	30	23.6	6.55	1.83	Clear, odorless
07:55	1	40	23.8	6.51	1.80	Clear, odorless
08:15	1	60	23.9	6.51	1.80	Clear, odorless

Total Vol. Purged **60** (gal) Casing Vol. Purged **3.64**

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water **Discharged to ground**

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-3-9-26-23	08:15	2	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160980
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-4 Date: September 26, 2023 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>342.50</u>	ft. (a)
Elevation of Ground Surface	<u>339.95</u>	ft. (b)
Well Depth (below MP)	<u>118.95</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>94.05</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.45</u>	ft. (f)
Height of Water in Well	<u>24.90</u>	ft.
Volume of Water in Casing	<u>24.90 x 0.66 = 16.43</u>	gal.

Sampling/Development System (High-light)	<u>Dedicated</u>	<u>Non-dedicated ✓</u>
Purging Apparatus: Type	<u>Geosub submersible pump</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
<u>Rinse</u>	<u></u>	

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

Second Semi-Annual 2023 Monitoring Report
Blythe Energy Inc.
Blythe, California
January 31, 2024



Project Name/Client **Blythe Energy Inc.** Well Number **MW-4** Date **September 26, 2023**

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
12:00	2	10	30.9	7.25	2.01	Clear, odorless
12:10	2	20	31.9	7.23	2.01	Clear, odorless
12:20	2	30	32.4	7.23	2.00	Clear, odorless
12:30	2	40	32.6	7.23	2.00	Clear, odorless
12:40	2	50	32.7	7.23	2.00	Clear, odorless
12:50	2	60	32.8	7.23	2.00	Clear, odorless

Total Vol. Purged **60** (gal) Casing Vol. Purged **3.65**

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water **Discharged to ground**

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-4-9-26-23	12:50	2	Quarterly	N	NA	

F = Filtered (Y,N), P = Preservative (Type)

Depth to Water Readings:
OW-1 = 92.35 feet
OW-2 = 89.18 feet



WELL SAMPLING/DEVELOPMENT RECORD

Project: Blythe Energy Inc. Project No: NB11160980
Location: Blythe, California Logged by: Ralph De La Parra
Well No.: MW-1 Date: December 6, 2023 Sampler: Ralph De La Parra

Elevation of Measuring Point (MP)	<u>337.27</u>	ft. (a)
Elevation of Ground Surface	<u>337.76</u>	ft. (b)
Well Depth (below MP)	<u>120.0</u>	ft. (c)
Casing Inside Diameter	<u>4.0</u>	in. (d)

CALCULATION OF CASING VOLUME

Depth of Water Below MP	<u>88.90</u>	ft. (e)
Water Level Elevation (a-e)	<u>248.37</u>	ft. (f)
Height of Water in Well	<u>31.10</u>	ft.
Volume of Water in Casing	<u>31.10 x 0.66 = 20.52</u>	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	<u>Geosub electric submersible pump</u>	
Sampling Apparatus: Type	<u>Sampled through pump</u>	
Cleaning Methods	<u>Alconox and potable water wash, double distilled water</u>	
	<u>rinse</u>	

FIELD OBSERVATIONS

Weather Conditions	<u>Clear, warm</u>
Well Head Conditions	<u>Dry, good</u>
Comments	<u></u>
	<u></u>
	<u></u>

Second Semi-Annual 2023 Monitoring Report
Blythe Energy Inc.
Blythe, California
January 31, 2024



Project Name/Client Blythe Energy Inc. Well Number MW-1 Date December 6, 2023

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
14:45	1	10	30.4	7.17	1.93	Clear, odorless
14:55	1	20	30.3	7.18	1.92	Clear, odorless
15:05	1	30	30.4	7.18	1.92	Clear, odorless
15:15	1	40	30.4	7.18	1.92	Clear, odorless
15:25	1	50	30.4	7.18	1.92	Clear, odorless
15:45	1	70	30.5	7.18	1.92	Clear, odorless

Total Vol. Purged 70 (gal) Casing Vol. Purged 3.41

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-1-12-6-23	15:45	3	Annual	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project:	Blythe Energy Inc.	Project No:	NB11160982
Location:	Blythe, California	Logged by:	Ralph De La Parra
Well No.:	MW-2	Date:	December 6, 2023
		Sampler:	Ralph De La Parra

Elevation of Measuring Point (MP)	337.77	ft. (a)
Elevation of Ground Surface	337.17	ft. (b)
Well Depth (below MP)	120.00	ft. (c)
Casing Inside Diameter	4.0	in. (d)

CALCULATION OF CASING VOLUME		
Depth of Water Below MP	89.40	ft. (e)
Water Level Elevation (a-e)	248.37	ft. (f)
Height of Water in Well	30.60	ft.
Volume of Water in Casing	30.60 x 0.66 = 20.19	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	Geosub electric submersible pump	
Sampling Apparatus: Type	Sampled through pump	
Cleaning Methods	Alconox and potable water wash, double distilled water	
	rinse	

FIELD OBSERVATIONS	
Weather Conditions	Clear, warm
Well Head Conditions	Dry, good
Comments	



Project Name/Client Blythe Energy Inc. Well Number MW-2 Date December 6, 2023

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
13:25	1	10	30.2	7.02	1.69	Clear, odorless
13:35	1	20	30.2	7.01	1.69	Clear, odorless
13:45	1	30	30.3	7.01	1.69	Clear, odorless
13:55	1	40	30.4	7.01	1.69	Clear, odorless
14:05	1	50	30.5	7.01	1.69	Clear, odorless
14:25	1	70	30.5	7.01	1.69	Clear, odorless

Total Vol. Purged 70 (gal) Casing Vol. Purged 3.46

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-2-12-26-23	14:25	3	Annual	N	NA	Dup-12-6-23

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project:	Blythe Energy Inc.	Project No:	NB11160982
Location:	Blythe, California	Logged by:	Ralph De La Parra
Well No.:	MW-3	Date:	December 6, 2023
		Sampler:	Ralph De La Parra

Elevation of Measuring Point (MP)	338.22	ft. (a)
Elevation of Ground Surface	336.28	ft. (b)
Well Depth (below MP)	115.00	ft. (c)
Casing Inside Diameter	4.0	in. (d)

CALCULATION OF CASING VOLUME		
Depth of Water Below MP	89.95	ft. (e)
Water Level Elevation (a-e)	248.27	ft. (f)
Height of Water in Well	25.05	ft.
Volume of Water in Casing	25.05 x 0.66 = 16.53	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	Geosub submersible pump	
Sampling Apparatus: Type	Sampled through pump	
Cleaning Methods	Alconox and potable water wash, double distilled water	
	rinse	

FIELD OBSERVATIONS	
Weather Conditions	Clear, warm
Well Head Conditions	Dry, good
Comments	



Project Name/Client Blythe Energy Inc. Well Number MW-3 Date December 6, 2023

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
12:15	1	10	24.9	6.71	1.92	Clear, odorless
12:25	1	20	25.0	6.69	1.92	Clear, odorless
12:35	1	30	25.0	6.69	1.92	Clear, odorless
12:45	1	40	25.0	6.69	1.92	Clear, odorless
13:05	1	70	25.1	6.69	1.92	Clear, odorless

Total Vol. Purged 70 (gal) Casing Vol. Purged 3.62

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-3-12-6-23	13:05	3	Annual	N	NA	

F = Filtered (Y,N), P = Preservative (Type)



WELL SAMPLING/DEVELOPMENT RECORD

Project:	Blythe Energy Inc.	Project No:	NB11160982
Location:	Blythe, California	Logged by:	Ralph De La Parra
Well No.:	MW-4	Date:	December 6, 2023
		Sampler:	Ralph De La Parra

Elevation of Measuring Point (MP)	342.50	ft. (a)
Elevation of Ground Surface	339.95	ft. (b)
Well Depth (below MP)	118.95	ft. (c)
Casing Inside Diameter	4.0	in. (d)

CALCULATION OF CASING VOLUME		
Depth of Water Below MP	93.72	ft. (e)
Water Level Elevation (a-e)	248.78	ft. (f)
Height of Water in Well	25.23	ft.
Volume of Water in Casing	25.23 x 0.66 = 16.65	gal.

Sampling/Development System (High-light)	Dedicated	Non-dedicated <input checked="" type="checkbox"/>
Purging Apparatus: Type	Geosub submersible pump	
Sampling Apparatus: Type	Sampled through pump	
Cleaning Methods	Alconox and potable water wash, double distilled water	
Rinse		

FIELD OBSERVATIONS	
Weather Conditions	Clear, warm
Well Head Conditions	Dry, good
Comments	



Project Name/Client Blythe Energy Inc. Well Number MW-4 Date December 6, 2023

FIELD MEASUREMENTS						
Time	Pump Rate (GPM)	Cumulative Vol. Removed (gal)	Temp (°C)	pH	Spec. Cond. (ms/cm at 25 °C)	Particulates/Odor/Clarity/Color
16:20	1	10	30.8	7.28	1.96	Clear, odorless
16:30	1	20	30.9	7.28	1.96	Clear, odorless
16:40	1	30	30.9	7.29	1.96	Clear, odorless
16:50	1	40	31.0	7.29	1.96	Clear, odorless
17:00	1	50	31.1	7.29	1.96	Clear, odorless
17:10	1	60	31.2	7.29	1.96	Clear, odorless

Total Vol. Purged 60 (gal) Casing Vol. Purged 3.60

Final Water Level After Purging _____ ft. Below MP; Time _____

Fate of Purged Water Discharged to ground

SAMPLE INVENTORY

Label	Time	Number of Bottles	Analysis	F	P	Remarks
MW-4-12-6-23	17:10	3	Annual	N	NA	

F = Filtered (Y,N), P = Preservative (Type)

Depth to Water Readings:
OW-1 = 92.05 feet
OW-2 = 88.90 feet



SECOND SEMI-ANNUAL 2023 MONITORING REPORT

**SECTION 10
LEACHATE COLLECTION AND RECOVERY SYSTEM (LCRS) & WEEKLY LYSIMETER
RECORDS**



LEACHATE COLLECTION AND RECOVERY SYSTEM (LCRS) & WEEKLY LYSIMETER RECORDS

Table 10-1 shows records of weekly inspections performed on the Leachate Collection and Recovery System (LCR) and Lysimeter Records



Table 10-1 Leachate Collection and Recovery System (LCRS) & Weekly Lysimeter Results

Date	East LRS Measurement in inches	East LRS pump Out Yes / No	Lysimeters checked	Water Present	East Pond Level Inches of Free Board	West LRS Measurement in inches	West LRS pump Out Yes / No	Lysimeters checked	Water Present	West Pond Level Inches of Free Board	Comments
1/1/2023	66	Y	Y	N	161	2	N	Y	N	44	Weekly Inspection - East LRS Pumped Residual
1/8/2023	55	N	Y	N	153	4	N	Y	N	44	Weekly Inspection - East LRS Pumped Residual
1/15/2023	8	N	Y	N	363	70	Y	Y	N	45	Weekly Inspection - West LRS Pumped Residual
1/22/2023	62	Y	Y	N	363	24	N	Y	N	43	Weekly Inspection - East LRS Pumped Residual
1/29/2023	68	Y	Y	N	363	28	N	Y	N	45	Weekly Inspection - East LRS Pumped Residual
2/5/2023	66	Y	Y	N	363	29	Y	Y	N	43	Weekly Inspection - East/West LRS Pumped Residual
2/13/2023	72	N	Y	N	144	43	N	Y	N	42	Weekly Inspection
2/21/2023	50	Y	Y	N	134	40	N	Y	N	41	Weekly Inspection - East LRS Pumped Residual
2/26/2023	50	N	Y	N	120	48	N	Y	N	44	Weekly Inspection
3/5/2023	84	Y	Y	N	130	60	N	Y	N	41	Weekly Inspection - East LRS Pumped Residual
3/12/2023	78	Y	Y	N	137	37	Y	Y	N	45	Weekly Inspection - East/West LRS Pumped Residual
3/19/2023	6	N	Y	N	141	65	Y	Y	N	41	Weekly Inspection - West LRS Pumped Residual
3/26/2023	78	N	Y	N	137	4	N	Y	N	41	Weekly Inspection - Pump stuck in LRS piping
4/2/2023	56	N	Y	N	137	8	N	Y	N	41	Weekly Inspection - Pump stuck in LRS piping
4/8/2023	54	N	Y	N	144	10	N	Y	N	41	Weekly Inspection - Pump stuck in LRS piping
4/16/2023	82	N	Y	N	139	32	Y	Y	N	49	Weekly Inspection - Pump stuck in LRS piping
4/23/2023	75	N	Y	N	138	43	N	Y	N	41	Weekly Inspection - Pump stuck in LRS piping
5/7/2023	52	N	Y	N	144	1	N	Y	N	45	Weekly Inspection - Pump stuck in LRS piping
5/14/2023	68	Y	Y	N	145	6	N	Y	N	48	Weekly Inspection - East LRS Pumped Residual
5/21/2023	26	N	Y	N	144	18	N	Y	N	51	Weekly Inspection
5/29/2023	30	N	Y	N	141	87	N	Y	N	44	Weekly Inspection
6/4/2023	12	N	Y	N	144	48	N	Y	N	51	Weekly Inspection
6/10/2023	12	N	Y	N	161	60	N	Y	N	55	Weekly Inspection
6/18/2023	6	N	Y	N	150	46	N	Y	N	54	Weekly Inspection
6/24/2023	10	N	Y	N	155	48	N	Y	N	57	Weekly Inspection



Table 10-1 Leachate Collection and Recovery System (LCRS) & Weekly Lysimeter Results (cont.)

Date	East LRS Measurement in inches	East LRS pump Out Yes / No	Lysimeters checked	Water Present	East Pond Level Inches of Free Board	West LRS Measurement in inches	West LRS pump Out Yes / No	Lysimeters checked	Water Present	West Pond Level Inches of Free Board	Comments
7/2/2023	56	N	Y	N	188	10	N	Y	N	41	Weekly Inspection
7/9/2023	55	N	Y	N	189	48	N	Y	N	63	Weekly Inspection
7/16/2023	5	N	Y	N	363	48	N	Y		65	Weekly Inspection
7/23/2023	15	N	Y	Y	363	50	N	Y	Y	55	Weekly Inspection - Water detected in Lysimeter determined to be rain water
7/30/2023	24	N	Y	N	141	56	N	Y	N	68	Weekly Inspection
8/6/2023	36	N	Y	N	144	60	N	Y	N	68	Weekly Inspection
8/14/2023	36	N	Y	N	363	53	N	Y	N	72	Weekly Inspection
8/19/2023	32	Y	Y	N	363	40	N	Y	N	72	Weekly Inspection - West LRS Pumped Residual
8/27/2023	7	N	Y	N	363	57	N	Y	N	72	Weekly Inspection
9/3/2023	7	N	Y	N	363	55	N	Y	N	68	Weekly Inspection
9/9/2023	35	N	Y	N	363	62	Y	Y	N	71	Weekly Inspection - East LRS Pumped Residual
9/17/2023	12	N	Y	N	103	26	N	Y	N	75	Weekly Inspection
9/24/2023	20	N	Y	Y	363	45	N	Y	Y	70	Weekly Inspection - Water detected in Lysimeter determined to be rain water
10/1/2023	27	N	Y	Y	363	48	N	Y	N	68	Weekly Inspection - Water detected in Lysimeter determined to be rain water
10/8/2023	36	N	Y	N	363	48	N	Y	N	70	Weekly Inspection
10/15/2023	36	N	Y	N	363	48	N	Y	N	72	Weekly Inspection
10/22/2023	39	N	Y	N	363	56	N	Y	N	73	Weekly Inspection
10/29/2023	34	N	Y	N	363	55	N	Y	N	71	Weekly Inspection
11/4/2023	28	N	Y	N	363	58	N	Y	N	73	Weekly Inspection
11/12/2023	27	N	Y	N	363	57	N	Y	N	72	Weekly Inspection
11/19/2023	34	N	Y	N	363	54	N	Y	N	71	Weekly Inspection
11/26/2023	53	N	Y	N	363	60	N	Y	N	72	Weekly Inspection
12/2/2023	48	N	Y	N	363	48	N	Y	N	72	Weekly Inspection
12/10/2023	54	N	Y	N	363	58	N	Y	N	70	Weekly Inspection
12/16/2023	60	N	Y	Y	363	60	Y	Y	N	71	Weekly Inspection - West LRS Pumped Residual - Water detected in Lysimeter determined to be rain water
12/24/2023	40	N	Y	N	363	44	N	Y	N	72	Weekly Inspection
12/30/2023	59	N	Y	N	363	54	N	Y	N	67	Weekly Inspection



SECOND SEMI-ANNUAL 2023 MONITORING REPORT

APPENDIX A

LABORATORY ANALYTICAL DATA SHEETS



ANALYTICAL REPORT

PREPARED FOR

Attn: Arlin Brewster
Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest, California 92630

Generated 10/9/2023 12:04:31 PM

JOB DESCRIPTION

Blythe Energy

JOB NUMBER

570-154386-1

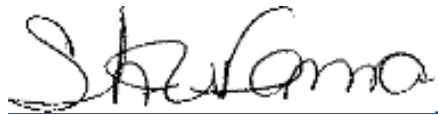
Eurofins Calscience

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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Authorized for release by
Sheri Fama, Project Manager I
Sheri.Fama@et.eurofinsus.com
(657)210-6368

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Definitions/Glossary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Job ID: 570-154386-1

Laboratory: Eurofins Calscience

Narrative

Job Narrative 570-154386-1

Receipt

The samples were received on 9/27/2023 12:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.4° C.

Receipt Exceptions

The following sample was received at the laboratory without a sample collection time documented on the chain of custody MW-4-9-26-23 (570-154386-4) The time of collection was taken from the container labels.

HPLC/IC

Method 300.0: Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 570-368832 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-154386-1	MW-1-9-26-23	Water	09/26/23 11:35	09/27/23 12:45
570-154386-2	MW-2-9-26-23	Water	09/26/23 10:15	09/27/23 12:45
570-154386-3	MW-3-9-26-23	Water	09/26/23 08:15	09/27/23 12:45
570-154386-4	MW-4-9-26-23	Water	09/26/23 12:50	09/27/23 12:45
570-154386-5	DUP-9-26-23	Water	09/26/23 00:00	09/27/23 12:45

Detection Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Client Sample ID: MW-1-9-26-23

Lab Sample ID: 570-154386-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	180		10	mg/L	10		300.0	Total/NA
Sulfate	470		10	mg/L	10		300.0	Total/NA
Specific Conductance	2000		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1300		20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-2-9-26-23

Lab Sample ID: 570-154386-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	130		10	mg/L	10		300.0	Total/NA
Sulfate	410		10	mg/L	10		300.0	Total/NA
Specific Conductance	1700		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1100		20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-3-9-26-23

Lab Sample ID: 570-154386-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	160		10	mg/L	10		300.0	Total/NA
Sulfate	450		10	mg/L	10		300.0	Total/NA
Specific Conductance	1900		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1300		20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-4-9-26-23

Lab Sample ID: 570-154386-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	330		10	mg/L	10		300.0	Total/NA
Sulfate	360		10	mg/L	10		300.0	Total/NA
Specific Conductance	2000		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1200		20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-9-26-23

Lab Sample ID: 570-154386-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	130		10	mg/L	10		300.0	Total/NA
Sulfate	420		10	mg/L	10		300.0	Total/NA
Specific Conductance	1700		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1200		20	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Client Sample ID: MW-1-9-26-23

Lab Sample ID: 570-154386-1

Date Collected: 09/26/23 11:35

Matrix: Water

Date Received: 09/27/23 12:45

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		10	mg/L			09/30/23 08:19	10
Sulfate	470		10	mg/L			09/29/23 09:39	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		09/28/23 07:21	09/28/23 15:12	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	2000		1.0	umhos/cm			10/05/23 12:14	1
Total Dissolved Solids (SM 2540C)	1300		20	mg/L			10/02/23 18:23	1

Client Sample ID: MW-2-9-26-23

Lab Sample ID: 570-154386-2

Date Collected: 09/26/23 10:15

Matrix: Water

Date Received: 09/27/23 12:45

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		10	mg/L			09/30/23 09:09	10
Sulfate	410		10	mg/L			09/29/23 09:59	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		09/28/23 07:21	09/28/23 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1700		1.0	umhos/cm			10/05/23 12:16	1
Total Dissolved Solids (SM 2540C)	1100		20	mg/L			10/02/23 18:23	1

Client Sample ID: MW-3-9-26-23

Lab Sample ID: 570-154386-3

Date Collected: 09/26/23 08:15

Matrix: Water

Date Received: 09/27/23 12:45

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		10	mg/L			09/30/23 09:26	10
Sulfate	450		10	mg/L			09/29/23 10:20	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		09/28/23 07:21	09/28/23 15:47	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1900		1.0	umhos/cm			10/05/23 12:18	1
Total Dissolved Solids (SM 2540C)	1300		20	mg/L			10/02/23 18:23	1

Eurofins Calscience

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Client Sample ID: MW-4-9-26-23

Lab Sample ID: 570-154386-4

Date Collected: 09/26/23 12:50

Matrix: Water

Date Received: 09/27/23 12:45

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		10	mg/L			09/30/23 09:43	10
Sulfate	360		10	mg/L			09/29/23 10:41	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		09/28/23 07:21	09/28/23 15:19	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	2000		1.0	umhos/cm			10/05/23 12:19	1
Total Dissolved Solids (SM 2540C)	1200		20	mg/L			10/02/23 18:23	1

Client Sample ID: DUP-9-26-23

Lab Sample ID: 570-154386-5

Date Collected: 09/26/23 00:00

Matrix: Water

Date Received: 09/27/23 12:45

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		10	mg/L			09/30/23 10:00	10
Sulfate	420		10	mg/L			09/29/23 11:02	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		09/28/23 07:21	09/28/23 15:22	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1700		1.0	umhos/cm			10/05/23 12:21	1
Total Dissolved Solids (SM 2540C)	1200		20	mg/L			10/02/23 18:23	1

Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Client Sample ID: MW-1-9-26-23

Lab Sample ID: 570-154386-1

Date Collected: 09/26/23 11:35

Matrix: Water

Date Received: 09/27/23 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	368832	09/29/23 09:39	YO8L	EET CAL 4
		Instrument ID: IC10								
Total/NA	Analysis	300.0		10	4 mL	4 mL	369227	09/30/23 08:19	U9XB	EET CAL 4
		Instrument ID: IC7								
Total Recoverable	Prep	200.7			50 mL	50 mL	368399	09/28/23 07:21	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			368739	09/28/23 15:12	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Analysis	SM 2510B		1			370945	10/05/23 12:14	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	50 mL	1000 mL	369782	10/02/23 18:23	ZL7L	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: MW-2-9-26-23

Lab Sample ID: 570-154386-2

Date Collected: 09/26/23 10:15

Matrix: Water

Date Received: 09/27/23 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	368832	09/29/23 09:59	YO8L	EET CAL 4
		Instrument ID: IC10								
Total/NA	Analysis	300.0		10	4 mL	4 mL	369227	09/30/23 09:09	U9XB	EET CAL 4
		Instrument ID: IC7								
Total Recoverable	Prep	200.7			50 mL	50 mL	368399	09/28/23 07:21	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			368739	09/28/23 15:14	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Analysis	SM 2510B		1			370945	10/05/23 12:16	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	50 mL	1000 mL	369782	10/02/23 18:23	ZL7L	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: MW-3-9-26-23

Lab Sample ID: 570-154386-3

Date Collected: 09/26/23 08:15

Matrix: Water

Date Received: 09/27/23 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	368832	09/29/23 10:20	YO8L	EET CAL 4
		Instrument ID: IC10								
Total/NA	Analysis	300.0		10	4 mL	4 mL	369227	09/30/23 09:26	U9XB	EET CAL 4
		Instrument ID: IC7								
Total Recoverable	Prep	200.7			50 mL	50 mL	368399	09/28/23 07:21	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			368739	09/28/23 15:47	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Analysis	SM 2510B		1			370945	10/05/23 12:18	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	50 mL	1000 mL	369782	10/02/23 18:23	ZL7L	EET CAL 4
		Instrument ID: BAL100								

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Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Client Sample ID: MW-4-9-26-23

Lab Sample ID: 570-154386-4

Date Collected: 09/26/23 12:50

Matrix: Water

Date Received: 09/27/23 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	368832	09/29/23 10:41	YO8L	EET CAL 4
	Instrument ID: IC10									
Total/NA	Analysis	300.0		10	4 mL	4 mL	369227	09/30/23 09:43	U9XB	EET CAL 4
	Instrument ID: IC7									
Total Recoverable	Prep	200.7			50 mL	50 mL	368399	09/28/23 07:21	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			368739	09/28/23 15:19	P1R	EET CAL 4
	Instrument ID: ICP10									
Total/NA	Analysis	SM 2510B		1			370945	10/05/23 12:19	ZL4M	EET CAL 4
	Instrument ID: ManSciMantech									
Total/NA	Analysis	SM 2540C		1	50 mL	1000 mL	369782	10/02/23 18:23	ZL7L	EET CAL 4
	Instrument ID: BAL100									

Client Sample ID: DUP-9-26-23

Lab Sample ID: 570-154386-5

Date Collected: 09/26/23 00:00

Matrix: Water

Date Received: 09/27/23 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	368832	09/29/23 11:02	YO8L	EET CAL 4
	Instrument ID: IC10									
Total/NA	Analysis	300.0		10	4 mL	4 mL	369227	09/30/23 10:00	U9XB	EET CAL 4
	Instrument ID: IC7									
Total Recoverable	Prep	200.7			50 mL	50 mL	368399	09/28/23 07:21	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			368739	09/28/23 15:22	P1R	EET CAL 4
	Instrument ID: ICP10									
Total/NA	Analysis	SM 2510B		1			370945	10/05/23 12:21	ZL4M	EET CAL 4
	Instrument ID: ManSciMantech									
Total/NA	Analysis	SM 2540C		1	50 mL	1000 mL	369782	10/02/23 18:23	ZL7L	EET CAL 4
	Instrument ID: BAL100									

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 570-368832/5

Matrix: Water

Analysis Batch: 368832

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0	mg/L			09/29/23 05:16	1

Lab Sample ID: LCS 570-368832/6

Matrix: Water

Analysis Batch: 368832

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	53.4		mg/L		107	90 - 110

Lab Sample ID: LCSD 570-368832/7

Matrix: Water

Analysis Batch: 368832

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	50.0	53.4		mg/L		107	90 - 110	0	15

Lab Sample ID: 570-154386-1 MS

Matrix: Water

Analysis Batch: 368832

Client Sample ID: MW-1-9-26-23

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	470		50.0	515	4	mg/L		97	80 - 120

Lab Sample ID: 570-154386-1 MSD

Matrix: Water

Analysis Batch: 368832

Client Sample ID: MW-1-9-26-23

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	470		50.0	521	4	mg/L		109	80 - 120	1	20

Lab Sample ID: MB 570-369227/5

Matrix: Water

Analysis Batch: 369227

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	mg/L			09/30/23 07:29	1

Lab Sample ID: LCS 570-369227/6

Matrix: Water

Analysis Batch: 369227

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.1		mg/L		98	90 - 110

Lab Sample ID: LCSD 570-369227/7

Matrix: Water

Analysis Batch: 369227

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	48.2		mg/L		96	90 - 110	2	15

Eurofins Calscience

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 570-154386-1 MS

Matrix: Water

Analysis Batch: 369227

Client Sample ID: MW-1-9-26-23

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	180		50.0	225		mg/L		80	80 - 120

Lab Sample ID: 570-154386-1 MSD

Matrix: Water

Analysis Batch: 369227

Client Sample ID: MW-1-9-26-23

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	180		50.0	226		mg/L		82	80 - 120	1	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 570-368399/1-A

Matrix: Water

Analysis Batch: 368739

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 368399

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		09/28/23 07:21	09/28/23 14:26	1

Lab Sample ID: LCS 570-368399/2-A

Matrix: Water

Analysis Batch: 368739

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 368399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	0.500	0.524		mg/L		105	85 - 115

Lab Sample ID: LCSD 570-368399/3-A

Matrix: Water

Analysis Batch: 368739

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 368399

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	0.500	0.510		mg/L		102	85 - 115	3	20

Lab Sample ID: 570-154386-3 MS

Matrix: Water

Analysis Batch: 368739

Client Sample ID: MW-3-9-26-23

Prep Type: Total Recoverable

Prep Batch: 368399

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	ND		0.500	0.513		mg/L		103	80 - 120

Lab Sample ID: 570-154386-3 MSD

Matrix: Water

Analysis Batch: 368739

Client Sample ID: MW-3-9-26-23

Prep Type: Total Recoverable

Prep Batch: 368399

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	ND		0.500	0.510		mg/L		102	80 - 120	1	20

Eurofins Calscience

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 570-370945/10

Matrix: Water

Analysis Batch: 370945

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	umhos/cm			10/05/23 11:17	1

Lab Sample ID: 570-154994-I-1 DU

Matrix: Water

Analysis Batch: 370945

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	4300		4310		umhos/cm		0.2	25

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 570-369782/1

Matrix: Water

Analysis Batch: 369782

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	mg/L			10/02/23 18:23	1

Lab Sample ID: LCS 570-369782/2

Matrix: Water

Analysis Batch: 369782

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1010		mg/L		101	84 - 108

Lab Sample ID: LCSD 570-369782/3

Matrix: Water

Analysis Batch: 369782

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	978		mg/L		98	84 - 108	3	10

Lab Sample ID: 570-154386-1 DU

Matrix: Water

Analysis Batch: 369782

Client Sample ID: MW-1-9-26-23

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1300		1280		mg/L		1	10

QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

HPLC/IC

Analysis Batch: 368832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-154386-1	MW-1-9-26-23	Total/NA	Water	300.0	
570-154386-2	MW-2-9-26-23	Total/NA	Water	300.0	
570-154386-3	MW-3-9-26-23	Total/NA	Water	300.0	
570-154386-4	MW-4-9-26-23	Total/NA	Water	300.0	
570-154386-5	DUP-9-26-23	Total/NA	Water	300.0	
MB 570-368832/5	Method Blank	Total/NA	Water	300.0	
LCS 570-368832/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-368832/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-154386-1 MS	MW-1-9-26-23	Total/NA	Water	300.0	
570-154386-1 MSD	MW-1-9-26-23	Total/NA	Water	300.0	

Analysis Batch: 369227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-154386-1	MW-1-9-26-23	Total/NA	Water	300.0	
570-154386-2	MW-2-9-26-23	Total/NA	Water	300.0	
570-154386-3	MW-3-9-26-23	Total/NA	Water	300.0	
570-154386-4	MW-4-9-26-23	Total/NA	Water	300.0	
570-154386-5	DUP-9-26-23	Total/NA	Water	300.0	
MB 570-369227/5	Method Blank	Total/NA	Water	300.0	
LCS 570-369227/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-369227/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-154386-1 MS	MW-1-9-26-23	Total/NA	Water	300.0	
570-154386-1 MSD	MW-1-9-26-23	Total/NA	Water	300.0	

Metals

Prep Batch: 368399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-154386-1	MW-1-9-26-23	Total Recoverable	Water	200.7	
570-154386-2	MW-2-9-26-23	Total Recoverable	Water	200.7	
570-154386-3	MW-3-9-26-23	Total Recoverable	Water	200.7	
570-154386-4	MW-4-9-26-23	Total Recoverable	Water	200.7	
570-154386-5	DUP-9-26-23	Total Recoverable	Water	200.7	
MB 570-368399/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-368399/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-368399/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
570-154386-3 MS	MW-3-9-26-23	Total Recoverable	Water	200.7	
570-154386-3 MSD	MW-3-9-26-23	Total Recoverable	Water	200.7	

Analysis Batch: 368739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-154386-1	MW-1-9-26-23	Total Recoverable	Water	200.7 Rev 4.4	368399
570-154386-2	MW-2-9-26-23	Total Recoverable	Water	200.7 Rev 4.4	368399
570-154386-3	MW-3-9-26-23	Total Recoverable	Water	200.7 Rev 4.4	368399
570-154386-4	MW-4-9-26-23	Total Recoverable	Water	200.7 Rev 4.4	368399
570-154386-5	DUP-9-26-23	Total Recoverable	Water	200.7 Rev 4.4	368399
MB 570-368399/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	368399
LCS 570-368399/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	368399
LCSD 570-368399/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	368399
570-154386-3 MS	MW-3-9-26-23	Total Recoverable	Water	200.7 Rev 4.4	368399
570-154386-3 MSD	MW-3-9-26-23	Total Recoverable	Water	200.7 Rev 4.4	368399

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QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

General Chemistry

Analysis Batch: 369782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-154386-1	MW-1-9-26-23	Total/NA	Water	SM 2540C	
570-154386-2	MW-2-9-26-23	Total/NA	Water	SM 2540C	
570-154386-3	MW-3-9-26-23	Total/NA	Water	SM 2540C	
570-154386-4	MW-4-9-26-23	Total/NA	Water	SM 2540C	
570-154386-5	DUP-9-26-23	Total/NA	Water	SM 2540C	
MB 570-369782/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 570-369782/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 570-369782/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
570-154386-1 DU	MW-1-9-26-23	Total/NA	Water	SM 2540C	

Analysis Batch: 370945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-154386-1	MW-1-9-26-23	Total/NA	Water	SM 2510B	
570-154386-2	MW-2-9-26-23	Total/NA	Water	SM 2510B	
570-154386-3	MW-3-9-26-23	Total/NA	Water	SM 2510B	
570-154386-4	MW-4-9-26-23	Total/NA	Water	SM 2510B	
570-154386-5	DUP-9-26-23	Total/NA	Water	SM 2510B	
MB 570-370945/10	Method Blank	Total/NA	Water	SM 2510B	
570-154994-I-1 DU	Duplicate	Total/NA	Water	SM 2510B	

Accreditation/Certification Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-154386-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
SM 2510B	Conductivity, Specific Conductance	SM	EET CAL 4
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAL 4
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Eurofins Calscience Tustin

2841 Dow Avenue, Suite 100

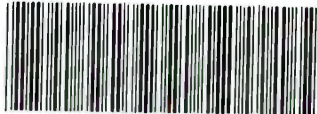
Tustin, CA 92780

Phone (714) 895-5494

Chain of Custody Record

Environment Testing
America

154386

Client Information		Sampler: Ralph DeLa Parra		Lab PM: Fama, Sheri M		Carrier Tracking No(s):		COC No: 440-210767-37763.1		
Client Contact Arlin Brewster		Phone: (949) 702-0568		E-Mail: Sheri.Fama@et.eurofinsus.com		State of Origin:		Page: Page 1 of 1		
Company: Northstar Environmental Remediation		PWSID:		Analysis Requested						
Address: 26225 Enterprise Court		Due Date Requested:		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify) Other:						
City: Lake Forest		TAT Requested (days): Normal								
State, Zip: CA, 92630		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No								
Phone: 949-274-1719(Tel)		PO #: Blythe Energy								
Email: ralphdelaparra@cox.net		WO #:								
Project Name: Blythe Energy		Project #: 44003897		Special Instructions/Note:						
Site: California		SSOW#:								
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Sediment, Air, etc.)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2510B Conductivity, 2540C Calcd TDS, 300 ORGFM, 280 Chloride	200.7 - Se	Total Number of containers
				Preservation Code:		X	N	D		
1 MW-1 - 9-26-23	9-26-23	1135	6	Water	Water	X	X			2
2 MW-2 - "	"	1015	1	Water	Water	X	X			2
3 MW-3 - "	"	0815	1	Water	Water	X	X			2
4 MW-4 - "	"		1	Water	Water	X	X			2
5 DUP - "	"		1	Water	Water	X	X			2
 570-154386 Chain of Custody										
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:				
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:				
Relinquished by: [Signature]		Date/Time: 9-26-23 @ 1245		Company: Northstar		Received by: [Signature]		Date/Time: 9-27-23 12:45		Company: EC
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks: 1.3/1.4 5012				

Login Sample Receipt Checklist

Client: Northstar Environmental Remediation

Job Number: 570-154386-1

Login Number: 154386

List Source: Eurofins Calscience

List Number: 1

Creator: Vitente, Precy

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No time on COC Sample -4, logged in per container labels.
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Arlin Brewster
Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest, California 92630

Generated 12/29/2023 2:16:05 PM

JOB DESCRIPTION

Blythe Energy
Annual

JOB NUMBER

570-163811-1

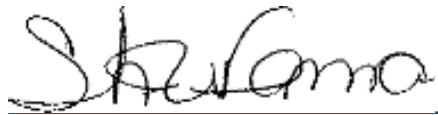
Eurofins Calscience

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

Authorization



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Authorized for release by
Sheri Fama, Project Manager I
Sheri.Fama@et.eurofinsus.com
(657)210-6368

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Definitions/Glossary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Northstar Environmental Remediation
Project: Blythe Energy

Job ID: 570-163811-1

Job ID: 570-163811-1

Eurofins Calscience

Job Narrative 570-163811-1

Receipt

The samples were received on 12/8/2023 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0° C.

HPLC/IC

Method 300.0: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 570-393952 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Chloride and Sulfate in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

Method 300.0: Due to the high concentration of Chloride and Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 570-393952 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 200.7 Rev 4.4: The following sample was diluted due to the nature of the sample matrix: EP-12-06-23 (570-163811-8). Elevated reporting limits (RLs) are provided.

Method 6010D: The following sample was diluted due to the nature of the sample matrix: EP-12-06-23 (570-163811-8). Elevated reporting limits (RLs) are provided.

Method 7471A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample/ laboratory control sample (LCS/LCSD) recovery is within acceptance limits.

Method 7471A: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-392837 and analytical batch 570-394894 recovered outside control limits for the following analytes: Mercury.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Sample Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-163811-1	MW-1-12-06-23	Water	12/06/23 15:45	12/08/23 10:25
570-163811-2	MW-2-12-06-23	Water	12/06/23 14:25	12/08/23 10:25
570-163811-3	MW-3-12-06-23	Water	12/06/23 13:05	12/08/23 10:25
570-163811-4	MW-4-12-06-23	Water	12/06/23 17:10	12/08/23 10:25
570-163811-5	DUP-12-06-23	Water	12/06/23 00:00	12/08/23 10:25
570-163811-6	EP (East) Sludge-12-06-23	Solid	12/06/23 13:50	12/08/23 10:25
570-163811-7	EP (West) Sludge-12-06-23	Solid	12/06/23 15:55	12/08/23 10:25
570-163811-8	EP-12-06-23	Water	12/06/23 16:00	12/08/23 10:25

Detection Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Client Sample ID: MW-1-12-06-23

Lab Sample ID: 570-163811-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	200		10	mg/L	10		300.0	Total/NA
Sulfate	430		10	mg/L	10		300.0	Total/NA
Specific Conductance	1900		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1300		20	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-2-12-06-23

Lab Sample ID: 570-163811-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	130		10	mg/L	10		300.0	Total/NA
Sulfate	390		10	mg/L	10		300.0	Total/NA
Specific Conductance	1700		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1100		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-3-12-06-23

Lab Sample ID: 570-163811-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	150		20	mg/L	20		300.0	Total/NA
Sulfate	430		20	mg/L	20		300.0	Total/NA
Specific Conductance	1800		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1300		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-4-12-06-23

Lab Sample ID: 570-163811-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	290		20	mg/L	20		300.0	Total/NA
Sulfate	320		20	mg/L	20		300.0	Total/NA
Specific Conductance	2000		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1200		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-12-06-23

Lab Sample ID: 570-163811-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	130		10	mg/L	10		300.0	Total/NA
Sulfate	400		10	mg/L	10		300.0	Total/NA
Specific Conductance	1900		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	1100		10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EP (East) Sludge-12-06-23

Lab Sample ID: 570-163811-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.8		3.1	mg/Kg	5		6010B	Total/NA
Barium	22		3.1	mg/Kg	5		6010B	Total/NA
Chromium	2.8		1.0	mg/Kg	5		6010B	Total/NA
Copper	2.9		2.0	mg/Kg	5		6010B	Total/NA
Lead	2.0		2.0	mg/Kg	5		6010B	Total/NA
Molybdenum	13		2.0	mg/Kg	5		6010B	Total/NA
Vanadium	5.1		1.0	mg/Kg	5		6010B	Total/NA
Zinc	20		5.1	mg/Kg	5		6010B	Total/NA

Client Sample ID: EP (West) Sludge-12-06-23

Lab Sample ID: 570-163811-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.4		3.1	mg/Kg	5		6010B	Total/NA
Barium	32		3.1	mg/Kg	5		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

Detection Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Client Sample ID: EP (West) Sludge-12-06-23 (Continued)

Lab Sample ID: 570-163811-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chromium	3.5		1.0	mg/Kg	5		6010B	Total/NA
Molybdenum	2.6		2.1	mg/Kg	5		6010B	Total/NA
Vanadium	2.7		1.0	mg/Kg	5		6010B	Total/NA
Zinc	27		5.1	mg/Kg	5		6010B	Total/NA

Client Sample ID: EP-12-06-23

Lab Sample ID: 570-163811-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	14000		1000	mg/L	1000		300.0	Total/NA
Chloride - DL	110000		2000	mg/L	2000		300.0	Total/NA
Specific Conductance	180000		1.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	220000		2000	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Client Sample ID: MW-1-12-06-23

Lab Sample ID: 570-163811-1

Date Collected: 12/06/23 15:45

Matrix: Water

Date Received: 12/08/23 10:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		10	mg/L			12/16/23 15:18	10
Sulfate	430		10	mg/L			12/16/23 15:18	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		12/13/23 07:38	12/13/23 15:38	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1900		1.0	umhos/cm			12/21/23 15:05	1
Total Dissolved Solids (SM 2540C)	1300		20	mg/L			12/13/23 17:06	1

Client Sample ID: MW-2-12-06-23

Lab Sample ID: 570-163811-2

Date Collected: 12/06/23 14:25

Matrix: Water

Date Received: 12/08/23 10:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		10	mg/L			12/16/23 15:35	10
Sulfate	390		10	mg/L			12/16/23 15:35	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		12/13/23 07:38	12/13/23 15:40	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1700		1.0	umhos/cm			12/21/23 15:03	1
Total Dissolved Solids (SM 2540C)	1100		10	mg/L			12/13/23 17:06	1

Client Sample ID: MW-3-12-06-23

Lab Sample ID: 570-163811-3

Date Collected: 12/06/23 13:05

Matrix: Water

Date Received: 12/08/23 10:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		20	mg/L			12/19/23 07:35	20
Sulfate	430		20	mg/L			12/19/23 07:35	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		12/13/23 07:38	12/13/23 15:48	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1800		1.0	umhos/cm			12/21/23 15:01	1
Total Dissolved Solids (SM 2540C)	1300		10	mg/L			12/13/23 17:06	1

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Client Sample ID: MW-4-12-06-23

Lab Sample ID: 570-163811-4

Date Collected: 12/06/23 17:10

Matrix: Water

Date Received: 12/08/23 10:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		20	mg/L			12/19/23 07:54	20
Sulfate	320		20	mg/L			12/19/23 07:54	20

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		12/13/23 07:38	12/13/23 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	2000		1.0	umhos/cm			12/21/23 14:59	1
Total Dissolved Solids (SM 2540C)	1200		10	mg/L			12/13/23 17:06	1

Client Sample ID: DUP-12-06-23

Lab Sample ID: 570-163811-5

Date Collected: 12/06/23 00:00

Matrix: Water

Date Received: 12/08/23 10:25

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		10	mg/L			12/19/23 08:13	10
Sulfate	400		10	mg/L			12/19/23 08:13	10

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		12/13/23 07:38	12/13/23 15:53	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	1900		1.0	umhos/cm			12/21/23 14:57	1
Total Dissolved Solids (SM 2540C)	1100		10	mg/L			12/13/23 17:06	1

Client Sample ID: EP (East) Sludge-12-06-23

Lab Sample ID: 570-163811-6

Date Collected: 12/06/23 13:50

Matrix: Solid

Date Received: 12/08/23 10:25

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Arsenic	3.8		3.1	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Barium	22		3.1	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Beryllium	ND		0.51	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Cadmium	ND		0.51	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Chromium	2.8		1.0	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Cobalt	ND		1.0	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Copper	2.9		2.0	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Lead	2.0		2.0	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Molybdenum	13		2.0	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Nickel	ND		2.0	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Silver	ND		1.5	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Thallium	ND		10	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Vanadium	5.1		1.0	mg/Kg		12/14/23 09:47	12/16/23 14:24	5
Zinc	20		5.1	mg/Kg		12/14/23 09:47	12/16/23 14:24	5

Eurofins Calscience

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Client Sample ID: EP (East) Sludge-12-06-23

Date Collected: 12/06/23 13:50

Date Received: 12/08/23 10:25

Lab Sample ID: 570-163811-6

Matrix: Solid

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.080	mg/Kg		12/14/23 16:41	12/20/23 18:57	1

Client Sample ID: EP (West) Sludge-12-06-23

Date Collected: 12/06/23 15:55

Date Received: 12/08/23 10:25

Lab Sample ID: 570-163811-7

Matrix: Solid

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Arsenic	4.4		3.1	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Barium	32		3.1	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Beryllium	ND		0.51	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Cadmium	ND		0.51	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Chromium	3.5		1.0	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Cobalt	ND		1.0	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Copper	ND		2.1	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Lead	ND		2.1	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Molybdenum	2.6		2.1	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Nickel	ND		2.1	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Silver	ND		1.5	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Thallium	ND		10	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Vanadium	2.7		1.0	mg/Kg		12/14/23 09:47	12/16/23 14:33	5
Zinc	27		5.1	mg/Kg		12/14/23 09:47	12/16/23 14:33	5

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.080	mg/Kg		12/14/23 16:41	12/20/23 18:58	1

Client Sample ID: EP-12-06-23

Date Collected: 12/06/23 16:00

Date Received: 12/08/23 10:25

Lab Sample ID: 570-163811-8

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	14000		1000	mg/L			12/16/23 14:44	1000

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110000		2000	mg/L			12/19/23 16:55	2000

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.0	mg/L		12/13/23 07:38	12/14/23 11:18	10

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.5	mg/L		12/13/23 07:55	12/28/23 13:31	25
Arsenic	ND		2.5	mg/L		12/13/23 07:55	12/28/23 13:31	25
Barium	ND		0.25	mg/L		12/13/23 07:55	12/28/23 13:31	25
Cadmium	ND		0.25	mg/L		12/13/23 07:55	12/28/23 13:31	25
Chromium	ND		1.3	mg/L		12/13/23 07:55	12/28/23 13:31	25

Eurofins Calscience

Client Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Client Sample ID: EP-12-06-23

Lab Sample ID: 570-163811-8

Date Collected: 12/06/23 16:00

Matrix: Water

Date Received: 12/08/23 10:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		1.3	mg/L		12/13/23 07:55	12/28/23 13:31	25
Copper	ND		1.3	mg/L		12/13/23 07:55	12/28/23 13:31	25
Lead	ND		1.3	mg/L		12/13/23 07:55	12/28/23 13:31	25
Nickel	ND		1.3	mg/L		12/13/23 07:55	12/28/23 13:31	25
Zinc	ND		6.3	mg/L		12/13/23 07:55	12/28/23 13:31	25

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		12/18/23 19:39	12/20/23 20:36	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	180000		1.0	umhos/cm			12/21/23 14:54	1
Total Dissolved Solids (SM 2540C)	220000		2000	mg/L			12/13/23 17:06	1

Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Client Sample ID: MW-1-12-06-23

Lab Sample ID: 570-163811-1

Date Collected: 12/06/23 15:45

Matrix: Water

Date Received: 12/08/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	393421	12/16/23 15:18	UIP1	EET CAL 4
		Instrument ID: IC28								
Total Recoverable	Prep	200.7			50 mL	50 mL	392120	12/13/23 07:38	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			392409	12/13/23 15:38	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Analysis	SM 2510B		1			395454	12/21/23 15:05	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	50 mL	1000 mL	392414	12/13/23 17:06	JB	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: MW-2-12-06-23

Lab Sample ID: 570-163811-2

Date Collected: 12/06/23 14:25

Matrix: Water

Date Received: 12/08/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	393421	12/16/23 15:35	UIP1	EET CAL 4
		Instrument ID: IC28								
Total Recoverable	Prep	200.7			50 mL	50 mL	392120	12/13/23 07:38	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			392409	12/13/23 15:40	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Analysis	SM 2510B		1			395454	12/21/23 15:03	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	392414	12/13/23 17:06	JB	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: MW-3-12-06-23

Lab Sample ID: 570-163811-3

Date Collected: 12/06/23 13:05

Matrix: Water

Date Received: 12/08/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	4 mL	4 mL	393952	12/19/23 07:35	U9XB	EET CAL 4
		Instrument ID: IC31								
Total Recoverable	Prep	200.7			50 mL	50 mL	392120	12/13/23 07:38	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			392409	12/13/23 15:48	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Analysis	SM 2510B		1			395454	12/21/23 15:01	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	392414	12/13/23 17:06	JB	EET CAL 4
		Instrument ID: BAL100								

Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Client Sample ID: MW-4-12-06-23

Lab Sample ID: 570-163811-4

Date Collected: 12/06/23 17:10

Matrix: Water

Date Received: 12/08/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	4 mL	4 mL	393952	12/19/23 07:54	U9XB	EET CAL 4
		Instrument ID: IC31								
Total Recoverable	Prep	200.7			50 mL	50 mL	392120	12/13/23 07:38	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			392409	12/13/23 15:51	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Analysis	SM 2510B		1			395454	12/21/23 14:59	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	392414	12/13/23 17:06	JB	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: DUP-12-06-23

Lab Sample ID: 570-163811-5

Date Collected: 12/06/23 00:00

Matrix: Water

Date Received: 12/08/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	4 mL	4 mL	393952	12/19/23 08:13	U9XB	EET CAL 4
		Instrument ID: IC31								
Total Recoverable	Prep	200.7			50 mL	50 mL	392120	12/13/23 07:38	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		1			392409	12/13/23 15:53	P1R	EET CAL 4
		Instrument ID: ICP10								
Total/NA	Analysis	SM 2510B		1			395454	12/21/23 14:57	ZL4M	EET CAL 4
		Instrument ID: ManSciMantech								
Total/NA	Analysis	SM 2540C		1	100 mL	1000 mL	392414	12/13/23 17:06	JB	EET CAL 4
		Instrument ID: BAL100								

Client Sample ID: EP (East) Sludge-12-06-23

Lab Sample ID: 570-163811-6

Date Collected: 12/06/23 13:50

Matrix: Solid

Date Received: 12/08/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.96 g	50 mL	392626	12/14/23 09:47	GYR8	EET CAL 4
Total/NA	Analysis	6010B		5			393559	12/16/23 14:24	P1R	EET CAL 4
		Instrument ID: ICP11								
Total/NA	Prep	7471A			0.52 g	50 mL	392837	12/14/23 16:41	EV3M	EET CAL 4
Total/NA	Analysis	7471A		1			394894	12/20/23 18:57	CS5Z	EET CAL 4
		Instrument ID: HG7								

Client Sample ID: EP (West) Sludge-12-06-23

Lab Sample ID: 570-163811-7

Date Collected: 12/06/23 15:55

Matrix: Solid

Date Received: 12/08/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.95 g	50 mL	392626	12/14/23 09:47	GYR8	EET CAL 4
Total/NA	Analysis	6010B		5			393559	12/16/23 14:33	P1R	EET CAL 4
		Instrument ID: ICP11								

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Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Client Sample ID: EP (West) Sludge-12-06-23

Lab Sample ID: 570-163811-7

Date Collected: 12/06/23 15:55

Matrix: Solid

Date Received: 12/08/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			0.52 g	50 mL	392837	12/14/23 16:41	EV3M	EET CAL 4
Total/NA	Analysis	7471A		1			394894	12/20/23 18:58	CS5Z	EET CAL 4
Instrument ID: HG7										

Client Sample ID: EP-12-06-23

Lab Sample ID: 570-163811-8

Date Collected: 12/06/23 16:00

Matrix: Water

Date Received: 12/08/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1000	4 mL	4 mL	393421	12/16/23 14:44	UIP1	EET CAL 4
Instrument ID: IC28										
Total/NA	Analysis	300.0	DL	2000	4 mL	4 mL	394093	12/19/23 16:55	URMH	EET CAL 4
Instrument ID: IC7										
Total Recoverable	Prep	200.7			50 mL	50 mL	392120	12/13/23 07:38	JP8N	EET CAL 4
Total Recoverable	Analysis	200.7 Rev 4.4		10			392763	12/14/23 11:18	P1R	EET CAL 4
Instrument ID: ICP10										
Total Recoverable	Prep	3005A			50 mL	50 mL	392131	12/13/23 07:55	JP8N	EET CAL 4
Total Recoverable	Analysis	6010D		25			396904	12/28/23 13:31	P1R	EET CAL 4
Instrument ID: ICP9										
Total/NA	Prep	7470A			25 mL	50 mL	394059	12/18/23 19:39	EV3M	EET CAL 4
Total/NA	Analysis	7470A		1			394949	12/20/23 20:36	CS5Z	EET CAL 4
Instrument ID: HG9										
Total/NA	Analysis	SM 2510B		1			395454	12/21/23 14:54	ZL4M	EET CAL 4
Instrument ID: ManSciMantech										
Total/NA	Analysis	SM 2540C		1	0.5 mL	1000 mL	392414	12/13/23 17:06	JB	EET CAL 4
Instrument ID: BAL100										

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 570-393421/5

Matrix: Water

Analysis Batch: 393421

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	mg/L			12/16/23 07:31	1
Sulfate	ND		1.0	mg/L			12/16/23 07:31	1

Lab Sample ID: LCS 570-393421/6

Matrix: Water

Analysis Batch: 393421

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.4		mg/L		95	90 - 110
Sulfate	50.0	47.6		mg/L		95	90 - 110

Lab Sample ID: LCSD 570-393421/7

Matrix: Water

Analysis Batch: 393421

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	47.5		mg/L		95	90 - 110	0	15
Sulfate	50.0	47.3		mg/L		95	90 - 110	1	15

Lab Sample ID: 570-164956-D-12 MS

Matrix: Water

Analysis Batch: 393421

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	69		50.0	111		mg/L		83	80 - 120
Sulfate	120		50.0	170		mg/L		93	80 - 120

Lab Sample ID: 570-164956-D-12 MSD

Matrix: Water

Analysis Batch: 393421

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	69		50.0	111		mg/L		82	80 - 120	0	20
Sulfate	120		50.0	171		mg/L		94	80 - 120	0	20

Lab Sample ID: MB 570-393952/5

Matrix: Water

Analysis Batch: 393952

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	mg/L			12/18/23 18:26	1
Sulfate	ND		1.0	mg/L			12/18/23 18:26	1

Lab Sample ID: LCS 570-393952/6

Matrix: Water

Analysis Batch: 393952

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	52.0		mg/L		104	90 - 110
Sulfate	50.0	51.3		mg/L		103	90 - 110

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QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 570-393952/7

Matrix: Water

Analysis Batch: 393952

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	52.0		mg/L		104	90 - 110	0	15
Sulfate	50.0	51.4		mg/L		103	90 - 110	0	15

Lab Sample ID: 570-164956-E-26 MS

Matrix: Water

Analysis Batch: 393952

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2500	E	50.0	2520	E 4	mg/L		-34	80 - 120		
Sulfate	4500	E	50.0	4460	E 4	mg/L		-116	80 - 120		

Lab Sample ID: 570-164956-E-26 MSD

Matrix: Water

Analysis Batch: 393952

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2500	E	50.0	2520	E 4	mg/L		-39	80 - 120	0	20
Sulfate	4500	E	50.0	4450	E 4	mg/L		-128	80 - 120	0	20

Lab Sample ID: MB 570-394093/5

Matrix: Water

Analysis Batch: 394093

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	mg/L			12/19/23 07:34	1

Lab Sample ID: LCS 570-394093/6

Matrix: Water

Analysis Batch: 394093

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	51.3		mg/L		103	90 - 110		

Lab Sample ID: LCSD 570-394093/7

Matrix: Water

Analysis Batch: 394093

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	51.2		mg/L		102	90 - 110	0	15

Lab Sample ID: 570-164977-D-1 MS

Matrix: Water

Analysis Batch: 394093

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	6.8		50.0	62.0		mg/L		111	80 - 120		

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 570-164977-D-1 MSD

Matrix: Water

Analysis Batch: 394093

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	6.8		50.0	62.3		mg/L		111	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 570-392120/1-A

Matrix: Water

Analysis Batch: 392409

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 392120

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.10	mg/L		12/13/23 07:38	12/13/23 14:44	1

Lab Sample ID: LCS 570-392120/2-A

Matrix: Water

Analysis Batch: 392409

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 392120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	0.500	0.495		mg/L		99	85 - 115

Lab Sample ID: LCSD 570-392120/3-A

Matrix: Water

Analysis Batch: 392409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 392120

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	0.500	0.496		mg/L		99	85 - 115	0	20

Lab Sample ID: 570-163704-C-10-B MS

Matrix: Water

Analysis Batch: 392409

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 392120

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	ND		0.500	0.506		mg/L		99	80 - 120

Lab Sample ID: 570-163704-C-10-C MSD

Matrix: Water

Analysis Batch: 392409

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 392120

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	ND		0.500	0.519		mg/L		101	80 - 120	3	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-392626/1-A ^5

Matrix: Solid

Analysis Batch: 393559

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 392626

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		9.8	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Arsenic	ND		2.9	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Barium	ND		2.9	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Beryllium	ND		0.49	mg/Kg		12/14/23 09:47	12/16/23 14:14	5

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QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 570-392626/1-A ^5

Matrix: Solid

Analysis Batch: 393559

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 392626

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.49	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Chromium	ND		0.98	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Cobalt	ND		0.98	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Copper	ND		2.0	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Lead	ND		2.0	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Molybdenum	ND		2.0	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Nickel	ND		2.0	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Silver	ND		1.5	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Thallium	ND		9.8	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Vanadium	ND		0.98	mg/Kg		12/14/23 09:47	12/16/23 14:14	5
Zinc	ND		4.9	mg/Kg		12/14/23 09:47	12/16/23 14:14	5

Lab Sample ID: LCS 570-392626/2-A ^5

Matrix: Solid

Analysis Batch: 393559

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 392626

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.5	56.0		mg/Kg		111	80 - 120
Arsenic	50.5	49.1		mg/Kg		97	80 - 120
Barium	50.5	49.2		mg/Kg		97	80 - 120
Beryllium	50.5	49.2		mg/Kg		97	80 - 120
Cadmium	50.5	49.9		mg/Kg		99	80 - 120
Chromium	50.5	50.1		mg/Kg		99	80 - 120
Cobalt	50.5	49.7		mg/Kg		98	80 - 120
Copper	50.5	48.7		mg/Kg		96	80 - 120
Lead	50.5	50.2		mg/Kg		99	80 - 120
Molybdenum	50.5	50.4		mg/Kg		100	80 - 120
Nickel	50.5	49.8		mg/Kg		99	80 - 120
Silver	25.3	24.2		mg/Kg		96	80 - 120
Thallium	50.5	48.8		mg/Kg		97	80 - 120
Vanadium	50.5	49.2		mg/Kg		97	80 - 120
Zinc	50.5	49.7		mg/Kg		98	80 - 120

Lab Sample ID: LCSD 570-392626/3-A ^5

Matrix: Solid

Analysis Batch: 393559

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 392626

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	49.8	53.9		mg/Kg		108	80 - 120	4	20
Arsenic	49.8	47.1		mg/Kg		95	80 - 120	4	20
Barium	49.8	47.7		mg/Kg		96	80 - 120	3	20
Beryllium	49.8	47.8		mg/Kg		96	80 - 120	3	20
Cadmium	49.8	48.3		mg/Kg		97	80 - 120	3	20
Chromium	49.8	48.7		mg/Kg		98	80 - 120	3	20
Cobalt	49.8	48.3		mg/Kg		97	80 - 120	3	20
Copper	49.8	47.3		mg/Kg		95	80 - 120	3	20
Lead	49.8	48.8		mg/Kg		98	80 - 120	3	20
Molybdenum	49.8	48.9		mg/Kg		98	80 - 120	3	20
Nickel	49.8	48.6		mg/Kg		98	80 - 120	2	20

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QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 570-392626/3-A ^5
Matrix: Solid
Analysis Batch: 393559

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 392626

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	24.9	23.5		mg/Kg		94	80 - 120	3	20
Thallium	49.8	48.3		mg/Kg		97	80 - 120	1	20
Vanadium	49.8	47.7		mg/Kg		96	80 - 120	3	20
Zinc	49.8	48.2		mg/Kg		97	80 - 120	3	20

Lab Sample ID: 570-163811-6 MS
Matrix: Solid
Analysis Batch: 393559

Client Sample ID: EP (East) Sludge-12-06-23
Prep Type: Total/NA
Prep Batch: 392626

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		50.3	43.3		mg/Kg		86	75 - 125		
Arsenic	3.8		50.3	53.0		mg/Kg		98	75 - 125		
Barium	22		50.3	70.4		mg/Kg		97	75 - 125		
Beryllium	ND		50.3	47.3		mg/Kg		94	75 - 125		
Cadmium	ND		50.3	46.1		mg/Kg		92	75 - 125		
Chromium	2.8		50.3	51.1		mg/Kg		96	75 - 125		
Cobalt	ND		50.3	46.2		mg/Kg		90	75 - 125		
Copper	2.9		50.3	49.6		mg/Kg		93	75 - 125		
Lead	2.0		50.3	48.6		mg/Kg		93	75 - 125		
Molybdenum	13		50.3	59.9		mg/Kg		94	75 - 125		
Nickel	ND		50.3	47.4		mg/Kg		91	75 - 125		
Silver	ND		25.1	23.5		mg/Kg		94	75 - 125		
Thallium	ND		50.3	44.9		mg/Kg		89	75 - 125		
Vanadium	5.1		50.3	53.5		mg/Kg		96	75 - 125		
Zinc	20		50.3	68.0		mg/Kg		95	75 - 125		

Lab Sample ID: 570-163811-6 MSD
Matrix: Solid
Analysis Batch: 393559

Client Sample ID: EP (East) Sludge-12-06-23
Prep Type: Total/NA
Prep Batch: 392626

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		50.5	41.5		mg/Kg		82	75 - 125	4	20
Arsenic	3.8		50.5	51.1		mg/Kg		94	75 - 125	3	20
Barium	22		50.5	68.9		mg/Kg		93	75 - 125	2	20
Beryllium	ND		50.5	45.8		mg/Kg		90	75 - 125	3	20
Cadmium	ND		50.5	44.7		mg/Kg		88	75 - 125	3	20
Chromium	2.8		50.5	49.2		mg/Kg		92	75 - 125	4	20
Cobalt	ND		50.5	44.4		mg/Kg		86	75 - 125	4	20
Copper	2.9		50.5	48.1		mg/Kg		90	75 - 125	3	20
Lead	2.0		50.5	46.5		mg/Kg		88	75 - 125	4	20
Molybdenum	13		50.5	57.1		mg/Kg		88	75 - 125	5	20
Nickel	ND		50.5	45.7		mg/Kg		87	75 - 125	4	20
Silver	ND		25.3	22.7		mg/Kg		90	75 - 125	4	20
Thallium	ND		50.5	43.6		mg/Kg		86	75 - 125	3	20
Vanadium	5.1		50.5	51.8		mg/Kg		92	75 - 125	3	20
Zinc	20		50.5	66.6		mg/Kg		92	75 - 125	2	20

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 570-392131/1-A
Matrix: Water
Analysis Batch: 396904

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 392131

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.10	mg/L		12/13/23 07:55	12/28/23 12:59	1
Arsenic	ND		0.10	mg/L		12/13/23 07:55	12/28/23 12:59	1
Barium	ND		0.010	mg/L		12/13/23 07:55	12/28/23 12:59	1
Cadmium	ND		0.010	mg/L		12/13/23 07:55	12/28/23 12:59	1
Chromium	ND		0.050	mg/L		12/13/23 07:55	12/28/23 12:59	1
Cobalt	ND		0.050	mg/L		12/13/23 07:55	12/28/23 12:59	1
Copper	ND		0.050	mg/L		12/13/23 07:55	12/28/23 12:59	1
Lead	ND		0.050	mg/L		12/13/23 07:55	12/28/23 12:59	1
Nickel	ND		0.050	mg/L		12/13/23 07:55	12/28/23 12:59	1
Zinc	ND		0.25	mg/L		12/13/23 07:55	12/28/23 12:59	1

Lab Sample ID: LCS 570-392131/2-A
Matrix: Water
Analysis Batch: 396904

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 392131

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.500	0.554		mg/L		111	80 - 120
Arsenic	0.500	0.523		mg/L		105	80 - 120
Barium	0.500	0.534		mg/L		107	80 - 120
Cadmium	0.500	0.526		mg/L		105	80 - 120
Chromium	0.500	0.533		mg/L		107	80 - 120
Cobalt	0.500	0.529		mg/L		106	80 - 120
Copper	0.500	0.527		mg/L		105	80 - 120
Lead	0.500	0.527		mg/L		105	80 - 120
Nickel	0.500	0.535		mg/L		107	80 - 120
Zinc	0.500	0.522		mg/L		104	80 - 120

Lab Sample ID: LCSD 570-392131/3-A
Matrix: Water
Analysis Batch: 396904

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 392131

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.500	0.542		mg/L		108	80 - 120	2	20
Arsenic	0.500	0.512		mg/L		102	80 - 120	2	20
Barium	0.500	0.526		mg/L		105	80 - 120	2	20
Cadmium	0.500	0.514		mg/L		103	80 - 120	2	20
Chromium	0.500	0.526		mg/L		105	80 - 120	1	20
Cobalt	0.500	0.524		mg/L		105	80 - 120	1	20
Copper	0.500	0.514		mg/L		103	80 - 120	3	20
Lead	0.500	0.517		mg/L		103	80 - 120	2	20
Nickel	0.500	0.531		mg/L		106	80 - 120	1	20
Zinc	0.500	0.510		mg/L		102	80 - 120	2	20

Lab Sample ID: 570-164264-H-1-B MS ^5
Matrix: Water
Analysis Batch: 396904

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 392131

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		0.500	0.565		mg/L		113	72 - 132

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QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 570-164264-H-1-B MS ^5
Matrix: Water
Analysis Batch: 396904

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 392131

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		0.500	0.541		mg/L		108	80 - 140
Barium	0.13		0.500	0.682		mg/L		110	87 - 123
Cadmium	ND		0.500	0.526		mg/L		105	82 - 124
Chromium	ND		0.500	0.517		mg/L		103	86 - 122
Cobalt	ND		0.500	0.530		mg/L		106	83 - 125
Copper	ND		0.500	0.519		mg/L		104	78 - 126
Lead	ND		0.500	0.510		mg/L		102	84 - 120
Nickel	ND		0.500	0.546		mg/L		109	84 - 120
Zinc	ND		0.500	ND		mg/L		107	89 - 131

Lab Sample ID: 570-164264-H-1-C MSD ^5
Matrix: Water
Analysis Batch: 396904

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 392131

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		0.500	0.560		mg/L		112	72 - 132	1	10
Arsenic	ND		0.500	0.532		mg/L		106	80 - 140	2	11
Barium	0.13		0.500	0.648		mg/L		103	87 - 123	5	6
Cadmium	ND		0.500	0.516		mg/L		103	82 - 124	2	7
Chromium	ND		0.500	0.509		mg/L		102	86 - 122	2	8
Cobalt	ND		0.500	0.522		mg/L		104	83 - 125	1	7
Copper	ND		0.500	0.510		mg/L		102	78 - 126	2	7
Lead	ND		0.500	0.508		mg/L		102	84 - 120	0	7
Nickel	ND		0.500	0.571		mg/L		114	84 - 120	5	7
Zinc	ND		0.500	ND		mg/L		105	89 - 131	2	8

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 570-394059/1-A
Matrix: Water
Analysis Batch: 394949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 394059

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	mg/L		12/18/23 19:39	12/20/23 19:40	1

Lab Sample ID: LCS 570-394059/2-A
Matrix: Water
Analysis Batch: 394949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 394059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00800	0.00803		mg/L		100	80 - 120

Lab Sample ID: LCSD 570-394059/3-A
Matrix: Water
Analysis Batch: 394949

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 394059

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00800	0.00830		mg/L		104	80 - 120	3	10

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QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 570-163522-A-1-C MS
Matrix: Water
Analysis Batch: 394949

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 394059

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00800	0.00810		mg/L		101	80 - 120

Lab Sample ID: 570-163522-A-1-D MSD
Matrix: Water
Analysis Batch: 394949

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 394059

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00800	0.00825		mg/L		103	80 - 120	2	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 570-392837/1-A
Matrix: Solid
Analysis Batch: 394894

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 392837

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.082	mg/Kg		12/14/23 16:41	12/20/23 18:32	1

Lab Sample ID: LCS 570-392837/2-A
Matrix: Solid
Analysis Batch: 395299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 392837

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.392	0.422		mg/Kg		108	80 - 120

Lab Sample ID: LCSD 570-392837/3-A
Matrix: Solid
Analysis Batch: 394894

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 392837

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.408	0.489	*1	mg/Kg		120	80 - 120	15	10

Lab Sample ID: 570-164263-D-6-A MS
Matrix: Solid
Analysis Batch: 394894

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 392837

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.18	F1	0.392	0.698	F1	mg/Kg		131	80 - 120

Lab Sample ID: 570-164263-E-6-A MSD
Matrix: Solid
Analysis Batch: 394894

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 392837

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.18	F1	0.400	0.702	F1	mg/Kg		129	80 - 120	1	20

QC Sample Results

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 570-395454/10
Matrix: Water
Analysis Batch: 395454

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	umhos/cm			12/21/23 14:24	1

Lab Sample ID: 570-165531-B-1 DU
Matrix: Water
Analysis Batch: 395454

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	8300		8350		umhos/cm		0.1	25

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 570-392414/1
Matrix: Water
Analysis Batch: 392414

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	mg/L			12/13/23 17:06	1

Lab Sample ID: LCS 570-392414/2
Matrix: Water
Analysis Batch: 392414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1040		mg/L		104	84 - 108

Lab Sample ID: LCSD 570-392414/3
Matrix: Water
Analysis Batch: 392414

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	1030		mg/L		103	84 - 108	1	10

Lab Sample ID: 570-163811-1 DU
Matrix: Water
Analysis Batch: 392414

Client Sample ID: MW-1-12-06-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1300		1300		mg/L		0.2	10

QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

HPLC/IC

Analysis Batch: 393421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-1	MW-1-12-06-23	Total/NA	Water	300.0	
570-163811-2	MW-2-12-06-23	Total/NA	Water	300.0	
570-163811-8	EP-12-06-23	Total/NA	Water	300.0	
MB 570-393421/5	Method Blank	Total/NA	Water	300.0	
LCS 570-393421/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-393421/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-164956-D-12 MS	Matrix Spike	Total/NA	Water	300.0	
570-164956-D-12 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 393952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-3	MW-3-12-06-23	Total/NA	Water	300.0	
570-163811-4	MW-4-12-06-23	Total/NA	Water	300.0	
570-163811-5	DUP-12-06-23	Total/NA	Water	300.0	
MB 570-393952/5	Method Blank	Total/NA	Water	300.0	
LCS 570-393952/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-393952/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-164956-E-26 MS	Matrix Spike	Total/NA	Water	300.0	
570-164956-E-26 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 394093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-8 - DL	EP-12-06-23	Total/NA	Water	300.0	
MB 570-394093/5	Method Blank	Total/NA	Water	300.0	
LCS 570-394093/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 570-394093/7	Lab Control Sample Dup	Total/NA	Water	300.0	
570-164977-D-1 MS	Matrix Spike	Total/NA	Water	300.0	
570-164977-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 392120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-1	MW-1-12-06-23	Total Recoverable	Water	200.7	
570-163811-2	MW-2-12-06-23	Total Recoverable	Water	200.7	
570-163811-3	MW-3-12-06-23	Total Recoverable	Water	200.7	
570-163811-4	MW-4-12-06-23	Total Recoverable	Water	200.7	
570-163811-5	DUP-12-06-23	Total Recoverable	Water	200.7	
570-163811-8	EP-12-06-23	Total Recoverable	Water	200.7	
MB 570-392120/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 570-392120/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 570-392120/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
570-163704-C-10-B MS	Matrix Spike	Total Recoverable	Water	200.7	
570-163704-C-10-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7	

Prep Batch: 392131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-8	EP-12-06-23	Total Recoverable	Water	3005A	
MB 570-392131/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 570-392131/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 570-392131/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

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QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Metals (Continued)

Prep Batch: 392131 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-164264-H-1-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
570-164264-H-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 392409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-1	MW-1-12-06-23	Total Recoverable	Water	200.7 Rev 4.4	392120
570-163811-2	MW-2-12-06-23	Total Recoverable	Water	200.7 Rev 4.4	392120
570-163811-3	MW-3-12-06-23	Total Recoverable	Water	200.7 Rev 4.4	392120
570-163811-4	MW-4-12-06-23	Total Recoverable	Water	200.7 Rev 4.4	392120
570-163811-5	DUP-12-06-23	Total Recoverable	Water	200.7 Rev 4.4	392120
MB 570-392120/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	392120
LCS 570-392120/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	392120
LCSD 570-392120/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	392120
570-163704-C-10-B MS	Matrix Spike	Total Recoverable	Water	200.7 Rev 4.4	392120
570-163704-C-10-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.7 Rev 4.4	392120

Prep Batch: 392626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-6	EP (East) Sludge-12-06-23	Total/NA	Solid	3050B	
570-163811-7	EP (West) Sludge-12-06-23	Total/NA	Solid	3050B	
MB 570-392626/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 570-392626/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-392626/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	3050B	
570-163811-6 MS	EP (East) Sludge-12-06-23	Total/NA	Solid	3050B	
570-163811-6 MSD	EP (East) Sludge-12-06-23	Total/NA	Solid	3050B	

Analysis Batch: 392763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-8	EP-12-06-23	Total Recoverable	Water	200.7 Rev 4.4	392120

Prep Batch: 392837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-6	EP (East) Sludge-12-06-23	Total/NA	Solid	7471A	
570-163811-7	EP (West) Sludge-12-06-23	Total/NA	Solid	7471A	
MB 570-392837/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-392837/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-392837/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
570-164263-D-6-A MS	Matrix Spike	Total/NA	Solid	7471A	
570-164263-E-6-A MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 393559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-6	EP (East) Sludge-12-06-23	Total/NA	Solid	6010B	392626
570-163811-7	EP (West) Sludge-12-06-23	Total/NA	Solid	6010B	392626
MB 570-392626/1-A ^5	Method Blank	Total/NA	Solid	6010B	392626
LCS 570-392626/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	392626
LCSD 570-392626/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	6010B	392626
570-163811-6 MS	EP (East) Sludge-12-06-23	Total/NA	Solid	6010B	392626
570-163811-6 MSD	EP (East) Sludge-12-06-23	Total/NA	Solid	6010B	392626

QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Metals

Prep Batch: 394059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-8	EP-12-06-23	Total/NA	Water	7470A	
MB 570-394059/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-394059/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-394059/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
570-163522-A-1-C MS	Matrix Spike	Total/NA	Water	7470A	
570-163522-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 394894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-6	EP (East) Sludge-12-06-23	Total/NA	Solid	7471A	392837
570-163811-7	EP (West) Sludge-12-06-23	Total/NA	Solid	7471A	392837
MB 570-392837/1-A	Method Blank	Total/NA	Solid	7471A	392837
LCSD 570-392837/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	392837
570-164263-D-6-A MS	Matrix Spike	Total/NA	Solid	7471A	392837
570-164263-E-6-A MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	392837

Analysis Batch: 394949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-8	EP-12-06-23	Total/NA	Water	7470A	394059
MB 570-394059/1-A	Method Blank	Total/NA	Water	7470A	394059
LCS 570-394059/2-A	Lab Control Sample	Total/NA	Water	7470A	394059
LCSD 570-394059/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	394059
570-163522-A-1-C MS	Matrix Spike	Total/NA	Water	7470A	394059
570-163522-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	394059

Analysis Batch: 395299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-392837/2-A	Lab Control Sample	Total/NA	Solid	7471A	392837

Analysis Batch: 396904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-8	EP-12-06-23	Total Recoverable	Water	6010D	392131
MB 570-392131/1-A	Method Blank	Total Recoverable	Water	6010D	392131
LCS 570-392131/2-A	Lab Control Sample	Total Recoverable	Water	6010D	392131
LCSD 570-392131/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010D	392131
570-164264-H-1-B MS ^5	Matrix Spike	Total Recoverable	Water	6010D	392131
570-164264-H-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6010D	392131

General Chemistry

Analysis Batch: 392414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-1	MW-1-12-06-23	Total/NA	Water	SM 2540C	
570-163811-2	MW-2-12-06-23	Total/NA	Water	SM 2540C	
570-163811-3	MW-3-12-06-23	Total/NA	Water	SM 2540C	
570-163811-4	MW-4-12-06-23	Total/NA	Water	SM 2540C	
570-163811-5	DUP-12-06-23	Total/NA	Water	SM 2540C	
570-163811-8	EP-12-06-23	Total/NA	Water	SM 2540C	
MB 570-392414/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 570-392414/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 570-392414/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

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QC Association Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

General Chemistry (Continued)

Analysis Batch: 392414 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-1 DU	MW-1-12-06-23	Total/NA	Water	SM 2540C	

Analysis Batch: 395454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-163811-1	MW-1-12-06-23	Total/NA	Water	SM 2510B	
570-163811-2	MW-2-12-06-23	Total/NA	Water	SM 2510B	
570-163811-3	MW-3-12-06-23	Total/NA	Water	SM 2510B	
570-163811-4	MW-4-12-06-23	Total/NA	Water	SM 2510B	
570-163811-5	DUP-12-06-23	Total/NA	Water	SM 2510B	
570-163811-8	EP-12-06-23	Total/NA	Water	SM 2510B	
MB 570-395454/10	Method Blank	Total/NA	Water	SM 2510B	
570-165531-B-1 DU	Duplicate	Total/NA	Water	SM 2510B	

Accreditation/Certification Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Laboratory: Eurofins Calscience

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0		Water	Chloride
300.0		Water	Sulfate
SM 2510B		Water	Specific Conductance
SM 2540C		Water	Total Dissolved Solids

Method Summary

Client: Northstar Environmental Remediation
Project/Site: Blythe Energy

Job ID: 570-163811-1
SDG: Annual

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET CAL 4
200.7 Rev 4.4	Metals (ICP)	EPA	EET CAL 4
6010B	Metals (ICP)	SW846	EET CAL 4
6010D	Metals (ICP)	SW846	EET CAL 4
7470A	Mercury (CVAA)	SW846	EET CAL 4
7471A	Mercury (CVAA)	SW846	EET CAL 4
SM 2510B	Conductivity, Specific Conductance	SM	EET CAL 4
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CAL 4
200.7	Preparation, Total Recoverable Metals	EPA	EET CAL 4
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAL 4
3050B	Preparation, Metals	SW846	EET CAL 4
7470A	Preparation, Mercury	SW846	EET CAL 4
7471A	Preparation, Mercury	SW846	EET CAL 4

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Login Sample Receipt Checklist

Client: Northstar Environmental Remediation

Job Number: 570-163811-1

SDG Number: Annual

Login Number: 163811

List Number: 1

Creator: Gutierrez, Rebecca

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

MOJAVE DESERT
AIR QUALITY MANAGEMENT DISTRICT

Final Determination/Decision - Statement of Basis
for Renewal of

FOP Number: 130202262

For:

BLYTHE ENERGY, INC.

Facility:

BLYTHE ENERGY PROJECT

Facility Address:

385 N. Buck Blvd.

Blythe, CA 92226

Document Date: September 5, 2023

Submittal date to EPA/CARB for review: September 5, 2023

EPA/CARB 45-day Commenting Period ends: October 21, 2023

Public Notice Posted: September 5, 2023

Public Commenting Period ends: October 6, 2023

Permit Issue date: November 1, 2023

Permitting Engineer:
Roseana Brasington

14306 PARK AVENUE, VICTORVILLE, CALIFORNIA 92392
PHONE: (760) 245-1661 • FAX: (760) 245-2022 • EMAIL: ENGINEERING@MDAQMD.CA.GOV

A. Introduction

1. Application and Setting

BACKGROUND:

Federal Operating Permit (FOP) number 130202262 is for Blythe Energy, Inc. (BEP). BEP uses two F-Class Siemens V84.3A combustion turbine generators (CTGs) with dedicated heat recovery steam generators (HRSGs) to produce electricity. Inlet air to the CTGs is filtered and, during seasonally warm conditions, conditioned with chilled air supported by a mechanical draft wet cooling tower (chiller). Compressed air and natural gas are mixed and combusted in the turbine combustion chamber. Lean pre-mixed air and low-NOx combustors are used to minimize NOx formation during combustion. Exhaust gas from the combustion chamber is expanded through a multi-stage power turbine, which drives both the air compressor and electric power generator. Heat from the exhaust gas is then recovered in the HRSG.

Each HRSG is equipped with a duct burner to provide supplementary firing during high ambient temperatures to maintain constant steam production to the condensing steam turbine generator (STG). A Selective Catalytic Reduction (SCR) system is used to reduce NOx emissions. An Oxidation Catalyst is used to reduce CO and VOC. Steam is produced in each HRSG and flows to the STG. The STG drives an electric generator to produce electricity. STG exhaust steam is condensed in a surface condenser with water from the main cooling tower.

BEP also has a 303 bhp emergency diesel-fueled internal combustion engine that drives a water pump for fire suppression and a propane fueled 114 bhp internal combustion engine that drives an emergency electrical power generator.

BEP is located in a “Zone B” area as defined by Rule 1201(S)(2) which means that the area is designated Federal Attainment or Unclassified for Ozone.

POLLUTANT	STATE AREA DESIGNATION	FEDERAL AREA DESIGNATION
OZONE Precursors: NOx, VOC	NONATTAINMENT	UNCLASSIFIED/ATTAINMENT
NO2	ATTAINMENT	UNCLASSIFIED/ATTAINMENT
CO	ATTAINMENT	UNCLASSIFIED/ATTAINMENT
PM10 Precursors: SOx, NOx, VOC	NONATTAINMENT	NONATTAINMENT
PM2.5	NONATTAINMENT	UNCLASSIFIED/ATTAINMENT
SO2	ATTAINMENT	UNCLASSIFIED

BEP is defined as a Major Facility pursuant to District Rule 1201 – *Federal Operating Permit Definitions*, section 1201(S) and also pursuant to PSD Program, as this facility has a Potential to Emit (PTE) as shown below:

POLLUTANT	BEP PTE	REGULATION XIII - NSR THRESHOLD	REGULATION XIII - NSR FACILITY STATUS	REGULATION XII - TV THRESHOLD	REGULATION XII - TV FACILITY STATUS	PSD THRESHOLD	PSD STATUS
NO _x	97	25	MAJOR	100	NON MAJOR	100	NON MAJOR
VOC	24	25	NON MAJOR	100	NON MAJOR	100	NON MAJOR
PM ₁₀	56.9	15	MAJOR	100	NON MAJOR	100	NON MAJOR
SO _x	12	25	NON MAJOR	100	NON MAJOR	100	NON MAJOR
CO	175.0	100	MAJOR	100	MAJOR	100	MAJOR
HAP		10 ANY HAP 25 ANY COMBINATION OF HAP	AREA	10 ANY HAP 25 ANY COMBINATION OF HAP	AREA	NONE HAP IS NOT A PSD POLLUTANT	NA

2. Description of Proposed Action

BEP proposes to renew the FOP and to make changes to the monitoring requirements related to the Continuous Emissions Monitoring System. The Mojave Desert Air Quality Management District (MDAQMD or District) received the following applications:

- June 2, 2021 application to renew Acid Rain Permit
- October 8, 2021 application to renew the current Title V Federal Operating Permit (FOP) for BEP.
- September 12, 2022 application for modification. The proposed administrative modification changes the facility primary and alternate contacts.

This document serves as the final determination to revise the permit as necessary to renew it pursuant to Rule 1203(B). This final determination will be submitted to USEPA, CARB, and the public for review and comment. Please refer to the cover page of this document for the noticing and comment period timeframes.

The FOP will be formatted to conform with new District guidelines and minor typographical and spelling errors will be corrected. The permit has been updated to include citations from PSD permit SE 02-01. BEP has proposed to revise the permit conditions related to the CO CEMS, harmonizing the monitoring requirements of Part 60 and Part 75 and to establish in the Operating Permit ongoing quality assurance requirements for the CEMS. None of these changes alter any emissions limitations or relax any monitoring, recordkeeping, or reporting requirements.

Pursuant to Regulation XII, *Federal Operating Permits*, the District has reviewed the terms and conditions of this Federal Operating Permit. This review included an analysis of federal, state, and local applicability determinations for all sources, including those that have been modified or permitted since the original issuance of the Federal Operating Permit. The review also included an assessment of all monitoring in the permit for sufficiency to determine compliance. This *Statement of Legal and Factual Basis*, pursuant to Rule 1203(B)(1)(a)(i), is intended to assess the adequacy of the proposed Title V Permit renewal and explain the District's basis in composing the proposed Title V Permit renewal.

B. Title V Permit/FOP

1. Proposed Changes to FOP

The proposed changes to the FOP are indicated in the red-line version of the draft. Additionally, a description and explanation of those changes are indicated below:

PART I: INTRODUCTORY INFORMATION

This section of the Federal Operating Permit contains general information about the BEP facility, including facility identifying information (section A), a description of the facility (section B), and a description of the facility's equipment (section C).

Changes made to this section of the FOP:

- Update of Responsible Official, facility primary and alternate contacts
- Added language indicating what pollutants trigger Title V applicability
- Updated Model/Serial Numbers for cooling tower under permit B007958

PART II: FACILITYWIDE APPLICABLE REQUIREMENTS; EMISSIONS LIMITATIONS; MONITORING, RECORDKEEPING, REPORTING AND TESTING REQUIREMENTS; COMPLIANCE CONDITIONS; COMPLIANCE PLANS

This section of the Federal Operating Permit contains requirements applicable to the entire facility and equipment (section A), facility-wide monitoring, recordkeeping, and reporting requirements (section B), and facility-wide compliance conditions (section C).

Changes made to this section of the FOP:

- Section A
 - Added Rule 201 language in accordance with current permitting standards as it is an applicable requirement
 - Updated Rule 203 language to current permitting standards
 - Updated Rule 204 language to current permitting standards
 - Updated Rule 206 language to current permitting standards
 - Updated Rule 207 language to current permitting standards
 - Updated Rule 209 language to current permitting standards
 - Updated Rule 217 language to current permitting standards
 - Updated Rule 219 language to current permitting standards
 - Updated Rule 221 language to current permitting standards
 - Updated Rule 301 language to current permitting standards
 - Updated Rule 312 language to current permitting standards
 - Updated Rule 401 language to reflect current rule requirements
 - Added Rule 402 language in accordance with current permitting standards as it is an applicable requirement
 - Updated Rule 403 language to reflect current rule requirements
 - Updated Rule 403.2 language to reflect current rule requirements
 - Updated Rule 404 language to reflect current rule requirements
 - Added Rule 431 language in accordance with current permitting standards as it is an applicable requirement
 - Added Rule 441 language in accordance with current permitting standards as it is an applicable requirement
 - Updated Rule 442 language to reflect current rule requirements

- Added Rule 462 language in accordance with current permitting standards as it is an applicable requirement
- Added Rule 463 language in accordance with current permitting standards as it is an applicable requirement
- Added Rule 900 language in accordance with current permitting standards as it is an applicable requirement
- Added Rule 1104 language in accordance with current permitting standards
- Updated Rule 1113 language to reflect current rule requirements
- Updated Rule 1114 language to reflect current rule requirements
- Updated Rule 1115 language to reflect current rule requirements
- Added Rule 1116 language in accordance with current permitting standards as it is an applicable requirement
- Added Rule 1159 in accordance with current permitting standards as it is an applicable requirement
- Added Rule 1168 in accordance with current permitting standards as it is an applicable requirement
- Added Rule 1211 in accordance with current permitting standards as it is an applicable requirement
- Added requirement for deadlines pertaining to the submission of Title V Permit Renewal per District Rule 1202.
- Updated citation of regulatory requirements related to Comprehensive Emission Inventory reporting
- Updated Rule 1203 and 1208 related to Compliance Certification to current permitting standards
- Section B updated rule citations, added requirements and citations associated with PSD permit SE 02-01 4/07
- Section C
 - Updated 40 CFR 61 Subparts A and M language to current permitting standards
 - Added 40 CFR 63 Subpart ZZZZ as it is an applicable requirement
 - Added 40 CFR 60 Subpart GG as it is an applicable requirement
 - Added 40 CFR 60 Subpart Db as it is an applicable requirement

PART III: EQUIPMENT SPECIFIC APPLICABLE REQUIREMENTS; EMISSIONS LIMITATIONS; MONITORING, RECORDKEEPING, REPORTING AND TESTING REQUIREMENTS; COMPLIANCE CONDITIONS; COMPLIANCE PLANS

This section of the Federal Operating Permit contains equipment-specific applicable requirements including emission limitations, monitoring and recordkeeping, reporting and testing, and compliance plans.

Changes made to this section of the FOP:

- Sections A and B related to the combustion turbines:

- updated rule citations, added requirements and citations associated with PSD permit SE 02-01 4/07
- revised permit condition related to the monitoring requirements for the CO CEMS
- added references to 40 CFR 60 Subparts A and Db and Title IV Acid Rain Program
- Updated conditions 11 and 13 to reference the District Compliance Test Procedural Manual
- Modified Condition 16 to add ongoing NO_x, O₂ and CO CEMS QA requirements and to clarify how each analyzer is certified (NO_x and O₂ by 40 CFR 75, CO by 40 CFR 60 Appendix B, PS-4).
- For the NO_x and CO CEMS, the current permit references only analyzer performance specifications from 40 CFR 60 Appendix B. This condition was updated to specify that the NO_x and O₂ analyzers are certified in accordance with 40 CFR 75 and to add ongoing CEMS QA requirements for NO_x, O₂ and CO. Since ongoing CEMS QA is not currently specified by permit, Blythe would like to document that the NO_x and O₂ analyzers follow 40 CFR 75 and the CO analyzers follows 40 CFR 60 Appendix F with certain provisions adopted from 40 CFR 75. This hybrid approach for CO enables Blythe to conduct quarterly audits on the same schedule. Harmonizing 40 CFR 60 with 40 CFR 75 monitoring provisions has been the subject of many EPA and State/local monitoring petition approvals. Also, in 2007, EPA harmonized certain 40 CFR 60 subparts to allow for data from certified 40 CFR 75 monitors to be used to demonstrate compliance with 40 CFR 60 emissions limits. For example, 40 CFR 60 Subpart GG allows for alternative testing and monitoring procedures harmonizing the requirements of Subpart GG with the monitoring provisions of 40 CFR 75. A comparison of the 40 CFR 60 and 40 CFR 75 differences specific to Blythe's QA program are shown below.
 - QA Test Schedules and Grace Periods:
 - RATAs: 40 CFR 60 Appendix F QA RATAs are required once every four calendar quarters with an option to extend if the fourth quarter is a non-operating quarter. 40 CFR 75 QA RATAs are required at least once every four QA operating quarters (a "QA operating quarter" is a calendar quarter in which the unit operated in at least 168 hours; "four QA operating quarters" assumes the incentive criteria is satisfied, which is common; otherwise, the standard frequency is every two QA operating quarters) but no less frequently than once every eight calendar quarters, plus a 720-unit operating hour grace period following the expiration of the standard deadline.
 - Linearity Checks / CGAs: 40 CFR 60 Appendix F CGAs are required in all quarters in which a RATA is not conducted with an exclusion for non-operating quarters. 40 CFR 75 linearity checks

(analogous to the 40 CFR 60 CGA) are required at least once during each QA operating quarter, not to exceed four calendar quarters, plus a 168-unit operating hour grace period following the expiration of the standard deadline.

- Analyzer Range Exemptions for CGAs: 40 CFR 60 does not contain CGA exemptions for low-emitting sources, while 40 CFR 75 contains linearity check exemptions for analyzer ranges with span values less than or equal to 30 ppm. Blythe uses this exemption for the NO_x and CO low ranges.
- RATA Load: 40 CFR 60 specifies that RATAs are to be conducted while operating at more than 50 percent of normal load while 40 CFR 75 specifies that testing shall be conducted at a normal load level(s) as determined in accordance with 40 CFR 75 Appendix A Section 2.3.1.3(a).
 - added permit condition specifying Comprehensive Emission Inventory Requirements
- Sections C and D related to the duct burners:
 - Clarified and expanded citation of 40 CFR 60 Subpart Db
 - updated rule citations, added requirements and citations associated with PSD permit 02-01
 - added permit condition specifying Comprehensive Emission Inventory Requirements
- Sections E and F related to the SCR Units
 - updated rule citations, added requirements and citations associated with PSD permit 02-01
- Sections G & H related to the oxidation catalysts
 - updated rule citations, added requirements and citations associated with PSD permit 02-01
- Section I related to the main cooling tower
 - updated rule citations, added requirements and citations associated with PSD permit 02-01
- Section J related to the chiller cooling tower
 - Updated equipment details to correct model/serial numbers
 - updated rule citations, added requirements and citations associated with PSD permit 02-01
- Section K related to the diesel emergency fire pump and Section L related to the propane emergency generator
 - Updated rule citations
 - Updated permit condition 4 of permits E007961 and E009492 removing the vacated provision of 40 CFR 63 Subpart ZZZZ Section 63.6640(f)(1)(ii) Added condition to permit for E008159 which clarifies appropriate non-emergency use as allowed under 40 CFR 63.6640(f) at an area HAP source.
 - Clarified citation for permit condition 5 for E007961 with respect to operating for the purposes of compliance with NFPA 25 requirements.

- Updated recordkeeping requirements in accordance with 40 CFR 63.6655(f)
- Added requirements 40 CFR 63.6603(a)
- added permit condition specifying Comprehensive Emission Inventory Requirements

PART IV: STANDARD FEDERAL OPERATING PERMIT CONDITIONS

No changes were made to this section

PART V: OPERATIONAL FLEXIBILITY

No changes were made to this section

PART VI: ACID RAIN PERMIT

- Updated Title IV Acid Rain Permit with current designated representative and facility contact person.

PART VII: CONVENTIONS, ABBREVIATIONS, DEFINITIONS

Changes made to this section of the FOP:

- Updated SIP table

5. Rules and Regulations Applicable to the Proposed Project

District Rules

Rules 203 – Permit to Operate. Any equipment which may cause the issuance of air contaminants must obtain authorization for such construction from the Air Pollution Control Officer. BEP is in compliance with this rule as they maintain District permits for all residing equipment per Part II, section A of their FOP.

Rule 204 – Permit Conditions. To assure compliance with all applicable regulations, the Air Pollution Control Officer may impose written conditions on any permit. BEP complies with all applicable regulations per Part II, section A of their FOP.

Rule 206 – Posting of Permit to Operate. Equipment shall not operate unless the entire permit is affixed upon the equipment or kept at a location for which it is issued and will be made available to the District upon request. BEP complies with this regulation per Part II, section A of their FOP.

Rule 207 – Altering or Falsifying of Permit. A person shall not willfully deface, alter, forge, or falsify any issued permit. BEP complies with this regulation per Part II, section A of their FOP.

Rule 209 – Transfer and Voiding of Permits. BEP shall not transfer, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another. When equipment which has been granted a permit is altered, changes location, or no longer will be operated, the permit shall become void. BEP complies with this regulation per Part II, section A of their FOP.

Rule 217 – Provisions for Sampling and Testing Facilities. This rule requires the applicant to provide and maintain requirements for sampling and testing. BEP is in compliance with this rule per Part II, section A of their FOP.

Rule 219 – Equipment not Requiring a Permit. This rule exempts certain equipment from District Permit. BEP is in compliance with this rule per Part II, section A.

Rule 221 – Federal Operating Permit Requirement. BEP is in compliance with this rule, as they currently hold and maintain a Federal Operating Permit.

Rule 301/312 – Permit Fees/Fees for Federal Operating Permits. BEP annual permit fees are due by the applicable dates. BEP is currently not delinquent for any fees.

Rule 401 – Visible Emissions. This rule limits visible emissions opacity to less than 20 percent (or Ringlemann No. 1). In normal operating mode, visible emissions are not expected to exceed 20 percent opacity. BEP has specific operating conditions that enforce compliance with this rule, specifically Part II, section A.

Rule 403 – Fugitive Dust. This rule prohibits fugitive dust beyond the property line of any emission source. BEP has specific operating conditions to ensure compliance with this condition, specifically Part II, section A.

Rule 404 – Particulate Matter Concentration. BEP shall not discharge into the atmosphere from this facility, particulate matter (PM) except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).

(a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.

(b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.

(c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

BEP adheres to this rule per Part II, section A of their FOP

Rule 405 – Solid Particulate Matter, Weight. BEP shall not discharge into the atmosphere from

this facility, solid PM including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a):

(a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.

(b) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

BEP adheres to this rule per Part II, section A of their FOP.

Rule 406 – Specific Contaminants. This rule limits single source of emissions of specific compounds. BEP meets this requirement by complying with operating condition listed in Part II, section A of their FOP.

Rule 407 – Liquid and Gaseous Air Contaminants. This rule limits CO emissions from facilities. BEP meets this requirement by complying with operating condition listed in Part II, section A of their FOP.

Rule 408 – Circumvention. This rule prohibits hidden or secondary rule violations. The proposed renewal is not expected to violate Rule 408. BEP meets this requirement by complying with operating condition listed in Part II, section A of their FOP.

Rule 409 – Combustion Contaminants. This rule limits the emissions of combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard averaged over a minimum of 15 consecutive minutes. BEP meets this requirement by complying with operating condition listed in Part II, section A of their FOP.

Rule 430 – Breakdown Provisions. Any Breakdown which results in a violation to any rule or regulation as defined by Rule 430 shall be properly addressed pursuant to this rule. BEP meets this requirement by complying with operating condition listed in Part II, section A of their FOP.

Rule 431 – *Sulfur Content of Fuels*. This rule limits the sulfur content allowed in fuels burned at the facility. BEP meets this requirement by complying with operating condition listed in Part II, Section A of their FOP.

Rule 442 – Usage of Solvents. This rule reduces VOC emissions from VOC containing materials or equipment that is not subject to any other rule in Regulation XI. BEP meets the requirement by complying with operating condition listed in Part II, section A of their FOP.

Rule 900 – *Standards of Performance for New Stationary Sources (NSPS)*. Rule 900 adopts all applicable provisions regarding standards of performance for new stationary sources as set forth in 40 CFR 60. The provisions of applicable NSPS's have been incorporated into the conditions of the District Permits for applicable units in Part III of the FOP.

Rule 1000 – *National Emission Standards for Hazardous Air Pollutants (NESHAP)*. Rule 1000 adopts all applicable provisions regarding standards of performance for new stationary sources as set forth in 40 CFR 61. The provisions of applicable NESHAPS’s have been incorporated into the conditions of the District Permits for applicable units in Part III of the FOP.

Rule 1104 – *Organic Solvent Degreasing Operations*. This rule limits the emission of VOCs from wipe cleaning and degreasing operations using organic solvents. BEP meets this requirement by complying with operating condition listed in Part II, Section A of their FOP.

Rule 1113 – *Architectural Coatings*. This rule limits the quantity of VOC in Architectural Coatings. BEP meets the requirements of this rule by complying with operating condition listed in Part II, Section A of their FOP.

Rule 1114 – *Wood Products Coatings*. This rule limits the emission of VOC from coatings associated with Wood Products. BEP meets the requirements of this rule by complying with operating condition listed in Part II, Section A of their FOP.

Rule 1115 – *Metal Parts and Products Coatings*. This rule limits the emission of VOC from coatings associated with Metal Parts and Products. BEP meets the requirements of this rule by complying with operating condition listed in Part II, Section A of their FOP.

Rule 1168 - *Adhesives and Sealants*. This rule limits the emission of VOC from adhesives and sealants. The requirements are largely placed on the adhesive and sealant manufacture as the product categories regulated by this rule are largely consumer products. BEP meets the requirements of this rule by complying with the requirements of Part II.A.

Regulation XII – *Federal Operating Permits*. This regulation contains requirements for sources which must have a FOP. BEP currently has a FOP and is expected to comply with all applicable rules and regulations.

Rule 1201 – *Federal Operating Permit Definitions*. BEP is defined as a federal Major Facility pursuant to this rule.

Rule 1203 – *Federal Operating Permits*. This rule outlines the permit term, issuance, restrictions, content, operational flexibility, compliance certification, permit shield, and violations of Federal Operating Permits. BEP complies with this rule per Part II, Sections B and C, and Part IV and V of their FOP.

Rule 1205 – *Modifications of Federal Operating Permits*. The proposed equipment classifies as a Modification to the Federal Operating Permit (FOP), and subsequently, this permit modification is issued in accordance with the provisions of District Rule 1203.

Rule 1207 – *Notice and Comment*. This rule outlines the noticing requirements for Notice and Comment. BEP will properly notice their renewal pursuant to this rule.

Rule 1208 – *Certification*. BEP included a Certification of Responsible Official as required with the submitted application for the proposed modification.

Rule 1211 – *Greenhouse Gas Provisions of Federal Operating Permits*. BEP is a Major GHG Facility pursuant to Rule 1211. BEP meets the requirements of this rule by complying with operating condition listed in Part II, Section A of their FOP.

Regulation XIII – *New Source Review* This regulation sets forth requirements for the preconstruction review of all new or modified facilities. This permitting action does not constitute any NSR actions.

Regulation XVII – *Prevention of Significant Deterioration*. Please take notice that this regulation is not currently implemented by the MDAQMD because the USEPA has not delegated authority for the PSD Program to the District at this time. However, this facility is a major stationary source for CO under the language in the applicability procedures of 40 CFR 52.21 (a)(2)(i) and (ii). The proposed renewal does not result in a new major stationary source and do not constitute a major modification of any existing major stationary source, the proposed Title V permit renewal is not subject to PSD. This facility operates under existing PSD permit SE 02-01. The PSD permit requirements have been added as operating conditions under the proposed renewal of the FOP.

State Regulations

CCR §93115 – Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engines. The purpose of this airborne toxic control measure (ATCM) is to reduce diesel particulate matter (PM) and criteria pollutant emissions from stationary diesel-fueled compression ignition (CI) engines. The provisions of this ATCM have been incorporated into the conditions of the District Permits for applicable units in Part III of the FOP.

Federal Regulations

40 CFR 60, Subpart A – NSPS General Provisions – this facility is subject to Subpart A because it operates equipment subject to Subparts Db and GG.

40 CFR 60 Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units – this facility is subject to the NSPS because it owns and operates natural gas fired duct burners which are capable of combusting more than 100 MMbtu/hour heat input.

40 CFR 60 Subpart GG New Source Performance Standard for Stationary Gas Turbines – this facility is subject to the NSPS because it owns and operates stationary gas turbines with a heat input greater than 10 MMBtu/hr which were constructed after October 3, 1977. This facility complies with the NO_x emission limits set forth in 60.332(a)(1) and (a)(3) and the SO₂ emissions limits set forth in 60.333. Permit conditions have been included that specify recordkeeping requirements and fuel certification as required by the NSPS.

40 CFR 61, Subpart M – National Emission Standard for Asbestos - BEP complies with 40 CFR 61, Subpart M – per conditions in Part II, section C.

40 CFR 63 Subpart ZZZZ – National Emissions Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines - BEP is an area source for HAP and complies with this regulation via operating conditions listed in Part III for each applicable IC engine.

40 CFR 64, Compliance Assurance Monitoring - The Compliance Assurance Monitoring (CAM) rule (40 CFR 64) applies to each Pollutant Specific Emissions Unit (PSEU) when it is located at a Major Facility that is required to obtain Title V, Part 70 or 71 permit and it meets all of the following criteria. “PSEU” means an emissions unit considered separately with respect to each regulated air pollutant. The PSEU must:

- a. Be subject to an emission limitation or standard [40 CFR 64; AND,
- b. Use a control device to achieve compliance [40 CFR 64.2(a)(2)]; AND,
- c. Have the potential pre-control emissions that exceed or are equivalent to the major source threshold. [40 CFR 64.2(a)(3)]

The combustion turbines each have a pre-control PTE which is in excess of the major source threshold. The turbines each vent through a selective catalytic reduction control and an oxidation catalyst control. The turbine emissions are monitored by a Continuous Emissions Monitor (CEMS). **40 CFR 64.2(b)(1)(vi) specifically exempts the turbines and their associated controls from CAM because the CEMS is required in the Part 70 (Title V) permit.** There is no other equipment at the facility which satisfies the criteria specified in “a”, “b”, and “c” above; therefore, none of the other facility equipment is subject to CAM either. See the CAM Plan applicability determination, included in the renewal application materials included in Appendix A.

40 CFR 75 Acid Rain Program – The combustion turbines and duct burners are subject the Acid Rain Program. Pursuant to 40 CFR Part 72.6(a)(3)(i), the affected units specified above meet the 72.2 definition for a new utility unit and are subject to the acid rain permit requirements of 72.9(a). The affected units do not qualify for a new unit exemption pursuant to 40 CFR 72.7(b)(1) since each serves a generator with a nameplate capacity greater than 25 MW. The affected units specified above are not listed in table-2 of 40 CFR Part 73, therefore, the operator

is not required to obtain SO₂ allowances under the Acid Rain Program. This unit is not subject to the NO_x requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.

7. Conclusion and Recommendation

The District has reviewed the applications for the proposed renewal of the BEP Federal Operating Permit and conducted a written analysis as required by District Rule 1203, section (B)(1)(a). The District has determined that the proposed renewal is compliant with all applicable District, State, and Federal rules and regulations as projected when operated in the terms of the permit conditions given herein, and the attached revised FOP. The proposed permit and corresponding statement of legal and factual basis will be released for public comment and publicly noticed pursuant to District Rule 1207. To view the public notice please refer to Appendix B of this document. Please refer to the cover sheet of this document for noticing and review dates.

8. Public Comment and Notifications:

a. Public Comment

The preliminary determination was publicly noticed for the required 30-Day Public commenting period. Noticing Methods include the following, per District Rule 1207 (A)(1)(a):

- Publish in newspapers of general circulation - Press Enterprise and the Daily Press.
- Mail and/or email to MDAQMD contact list of persons requesting notice of actions (see the contact list following the Public Notice in Appendix B).
- Posted on the MDAQMD Website at the following link:
<https://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting>

b. Notifications/USEPA & CARB Review The preliminary determination was submitted via e-mail to EPA and CARB pursuant to District Rule 1207 for a forty-five (45) day review period. The final renewed FOP shall be issued after the review period is over, provided there are no comments that require resubmission. All correspondence as required by District Rule 1207 were forwarded electronically to the following recipients. Please refer to the cover page for noticing dates. No comments were received on the preliminary determination. This final decision/determination will be submitted to USEPA, CARB and the facility.

Please refer to the cover page of this document for the noticing and comment period timeframes.

Director, Office of Air Division
United States EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105
Notified via electronic reporting to cdx.epa.gov (EPA Central Data Exchange)

Chief, Stationary Source Division
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Notified via email to permits@arb.ca.gov

Mary Dyas, Project Manager
California Energy Commission

715 P Street

Sacramento, CA 95814

Notified via email to: CME@energy.ca.gov

Mike Ludwin, Senior Director Operations - Power

Blythe Energy Project

P.O. Box 1210

Blythe, CA 92226

Appendix A Application

Title V Operating Permit Renewal Application

Blythe Energy Inc.

Federal Operating Permit 130202262

Blythe, CA

October 8, 2021

Submitted to:

Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392-2383

Submitted by:

Blythe Energy Inc.
385 N. Buck Blvd
Blythe, CA 92225

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4	MDAQMD Form 1202E2-E: Potential Emissions Report, Criteria Pollutants and HAPs, Potential Greenhouse Gas Emission Report
5	MDAQMD Form 1202E2-F: Compliance Assurance Monitoring Applicability Determination
6	40 CFR 75 and 40 CFR 60 Monitoring Clarifications
7	Redlined Copy of Current Operating Permit

SECTION 1: MDAQMD Form 1202E2-A

General Facility Information

Mojave Desert Air Quality Management District

TITLE V PERMIT RENEWAL APPLICATION – GENERAL FACILITY INFORMATION

1. FACILITY ID: _____	FACILITY SIC CODE: _____
TITLE V PERMIT NUMBER: _____	PERMIT EXPIRATION DATE: _____
2. COMPANY NAME: _____	
3. COMPANY MAILING ADDRESS:	
STREET/P.O. BOX: _____	
CITY: _____	STATE: _____ 9-DIGIT ZIP CODE: _____
4. FACILITY NAME: _____	
5. FACILITY MAILING ADDRESS:	
STREET/P.O. BOX: _____	
CITY: _____	STATE: _____ 9-DIGIT ZIP CODE: _____
6. RESPONSIBLE OFFICIAL (AS DEFINED IN 40 CFR 70.2 AND MDAQMD RULE 1201)	
NAME: _____	TITLE: _____ PHONE NUMBER: _____
7. TITLE V PERMIT CONTACT PERSON	
NAME: _____	TITLE: _____ PHONE NUMBER: _____
8. TYPE OF ORGANIZATION:	
<input type="checkbox"/> CORPORATION <input type="checkbox"/> SOLE OWNERSHIP <input type="checkbox"/> GOVERNMENT <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> UTILITY	
9. CAM (COMPLIANCE ASSURANCE MONITORING) PLANS	
Are you required to submit a CAM plan for any emissions unit at this facility? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, submit a CAM plan for each emissions unit as an attachment to the application. See attached CAM plan instructions for more detail.	

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10. ALTERNATE OPERATING SCENARIOS

Does this application request alternative operating scenarios pursuant to Rule 1203(E)? ☐ Yes ☒ No
If yes, submit an Alternate Operating Scenarios form, as applicable.

11. RISK MANAGEMENT PLAN

Has this facility been required to prepare a federal Risk Management Plan pursuant to Section 112(r) of the federal Clean Air Act and 40 CFR Part 68? ☒ Yes ☐ No

If yes, has the federal Risk Management Plan been submitted to the implementing agency? ☒ Yes ☐ No

If a federal Risk Management Plan is required but has not been submitted to the implementing agency, provide a detailed explanation as an attachment to the application.

12. STRATOSPHERIC OZONE

Does the facility conduct any activities that are regulated by the federal protection of stratospheric ozone requirements in 40 CFR Part 82? ☒ Yes ☐ No

13. ACID RAIN

Is this facility subject to the acid rain requirement in 40 CFR Part 72 through 40 CFR Part 78? ☒ Yes ☐ No

14. MAJOR SOURCE STATUS

Is this facility a major source of greenhouse gases, as defined in MDAQMD Rule 1211? ☒ Yes ☐ No

Is this facility a major source of any of the following pollutants:

☐ VOCs ☐ Particulate Matter ☒ Carbon Monoxide ☐ Nitrogen Oxides ☐ Sulfur Dioxides
☐ Lead ☐ HAP

15. PERMIT SHIELDS

Does the current Title V permit for this facility include any permit shields? ☒ Yes ☐ No

If yes, is the basis for each permit shield still correct? ☒ Yes ☐ No

If the current Title V permit contains any permit shield for which the basis is no longer correct, provide a detailed explanation as an attachment to the application. If you are requesting an additional permit shield, complete the attached Permit Shield Request form.

16. CERTIFICATION BY RESPONSIBLE OFFICIAL

Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete. I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Signature:  _____

Date: 10-8-2021 _____

SECTION 2: MDAQMD Form 1202E2-B

Application Certification

Mojave Desert Air Quality Management District

TITLE V PERMIT RENEWAL APPLICATION – APPLICATION CERTIFICATION

I. FACILITY INFORMATION

1. FACILITY NAME: Blythe Energy Project
2. FACILITY ID: 2262
3. TITLE V PERMIT #: 130202262

II. TITLE V PERMIT CERTIFICATION (Read each statement carefully and check one):

- ☒ * The current Title V permit has been reviewed and it has been determined that equipment descriptions are correct, and all requirements are still applicable.
*The current Title V permit is included in this application with proposed redline changes to clarify CEMS monitoring requirements.
- ☐ The current Title V permit has been reviewed and errors have been found in equipment descriptions and/or permit requirements. A copy of the Title V permit is attached with redline changes. Permit application and/or modification forms are enclosed, as applicable.

III. COMPLIANCE CERTIFICATION (Read each statement carefully and check all for confirmation):

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s), except for those requirements listed in the "Title V Non-Compliant Operations Report". -All equipment currently in compliance
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis, except for those requirements listed in the "Title V Non-Compliant Operations Report". -N/A
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete. I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true.



Signature of Responsible Official

10-8-2021

Date

Aaron Honor

Name of Responsible Official (please print)

Plant General Manager

Title of Responsible Official (please print)

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SECTION 3: MDAQMD Form 1202E2-D

List of Exempt Equipment

Mojave Desert Air Quality Management District

TITLE V PERMIT RENEWAL APPLICATION – LIST OF EXEMPT EQUIPMENT

I. FACILITY INFORMATION

1. FACILITY NAME: Blythe Energy Project
2. FACILITY ID: 2262
3. TITLE V PERMIT #: 130202262

II. SUMMARY OF EQUIPMENT EXEMPT FROM PERMIT REQUIREMENTS (INCLUDING PORTABLE)

4. EXEMPT EQUIPMENT DESCRIPTION	5. VENTING TO CONTROL (PERMIT #)	6. CONTROL DEVICE DESCRIPTION	7. BASIS FOR EXEMPTION (e.g. Rule 219(D)(2)(b))
Internal combustion engines less than 50 hp			MDAQMD Rule 219(E)(2)(a)
Natural gas and/or LPG combustion units less than 2 MMBtu/hr			MDAQMD Rule 219 (E)(2)(b)
Portable internal combustion engines in the Statewide Registration Program			MDAQMD 219 (E)(2)(d)
Aqueous and anhydrous ammonia storage tanks		Tanks are not vented to atmosphere	MDAQMD 219(d)
Refrigeration units			MDAQMD 219 (E)(4)(b)
Space heaters			MDAQMD 219 (E)(4)(e)
Lubricating oil transfer and storage			MDAQMD 219(E)(15)(h)
Machining equipment and associated control devices			MDAQMD Rule 219 (E)(7)
Oil/water separators			MDAQMD Rule 219(E)(13)(y)
Sulfuric acid storage tank			MDAQMD 219(E)(15)(a)(i)
Propane tanks (Liquefied gas)			MDAQMD 219(E)(15)(b)
Diesel transfer and storage			MDAQMD 219(E)(15)(c)(i)
Used oil transfer and storage equipment less than 793-gallon capacity			MDAQMD 219(E)(15)(e)

SECTION 4: MDAQMD Form 1202E2-E

Potential Emissions Report, Criteria Pollutants HAPs

Potential Greenhouse Gas Emission Report

Mojave Desert Air Quality Management District

TITLE V PERMIT RENEWAL APPLICATION – POTENTIAL EMISSIONS REPORT, CRITERIA POLLUTANTS & HAPs

I. FACILITY INFORMATION

1. FACILITY NAME: Blythe Energy Project
2. FACILITY ID: 2262
3. TITLE V PERMIT #: 130202262

II. POTENTIAL ANNUAL EMISSIONS

4. EMISSION UNIT (APPLICATION OR PERMIT #)	5. EQUIPMENT DESCRIPTION	6. POTENTIAL ANNUAL EMISSIONS							
		NOx (TPY)	VOC (TPY)	PM10 (TPY)	PM2.5 (TPY)	SOx (TPY)	CO (TPY)	Other: HAPs (TPY)	Other: (TPY)
B007953	natural gas fueled combustion turbine generator	97	24	56.9	--	12	175	3.78	--
B007954	natural gas fueled combustion turbine generator	97	24	56.9	--	12	175	3.78	--
B007955	natural gas burners w/in HRSG	combined with B007953	combined with B007953	combined with B007953	--	combined with B007953	combined with B007953	combined with B007953	--
B007956	natural gas burners w/in HRSG	combined with B007954	combined with B007954	combined with B007954	--	combined with B007954	combined with B007954	combined with B007954	--
B007957	wet cooling tower	--	--	2.4	--	--	--	0.0034	--
B007958	air and water circulation, treatment & handling equipment	--	--	2.4	--	--	--	0.0007	--
E007961	IC engine, emergency fire pump	0.24	0.02	0.02	--	0.02	--	0.199	--
E009492	propane IC Engine, emergency generator	0.003	0.002	0.0001	0.0001	0.000009	0.003	2.36	--
	facility-wide limits	97	24	56.9	--	12	175	--	--

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Mojave Desert Air Quality Management District

TITLE V PERMIT RENEWAL APPLICATION – POTENTIAL GREENHOUSE GAS EMISSIONS REPORT

I. FACILITY INFORMATION

1. FACILITY NAME: Blythe Energy Project
2. FACILITY ID: 2262
3. TITLE V PERMIT #: 130202262

II. POTENTIAL ANNUAL EMISSIONS

4. EMISSION UNIT (APPLICATION OR PERMIT #)	5. EQUIPMENT DESCRIPTION	6. POTENTIAL ANNUAL EMISSIONS							
		CO ₂ (TPY)	N ₂ O (TPY)	CH ₄ (TPY)	HFCs (TPY)	PFCs (TPY)	SF ₆ (TPY)	Other: (TPY)	CO ₂ (e) (TPY)
B007953	natural gas fueled combustion turbine generator	924,575.5	1.7	17.2	--	--	--	--	925,467.2
B007954	natural gas fueled combustion turbine generator	924,575.5	1.7	17.2	--	--	--	--	925,467.2
B007955	natural gas burners w/in HRSG	62,471.3	0.1	1.2	--	--	--	--	62,531.5
B007956	natural gas burners w/in HRSG	62,471.3	0.1	1.2	--	--	--	--	62,531.5
B007957	wet cooling tower	--	--	--	--	--	--	--	--
B007958	air and water circulation, treatment & handling equipment	--	--	--	--	--	--	--	--
E007961	IC engine, emergency fire pump	1,379.8	0.0	0.1	--	--	--	--	1,384.4
E009492	propane IC engine, emergency generator	779.9	0.0	0.0	--	--	--	--	782.5

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HAP Emission Rates for Single CTG/Duct Burner (Combined)

Pollutant Name	Emission Factor (lb/MMCF) ¹	Potential Emission Rate (Ton/yr)
Acetaldehyde	3.61E-02	0.31
Acrolein	5.78E-03	0.05
Arsenic	1.19E-05	0.00
Benzene	1.08E-02	0.09
Beryllium	7.15E-07	0.00
1,3-Butadiene	3.88E-04	0.00
Cadmium	6.55E-05	0.00
Chromium	8.34E-05	0.00
Ethyl benzene	2.89E-02	0.25
Formaldehyde ²	4.26E-02	0.37
Hexane	1.07E-01	0.92
Lead	2.98E-05	0.00
Manganese	2.26E-05	0.00
Mercury	1.55E-05	0.00
Nickel	1.25E-04	0.00
PAHs/POMs	2.03E-03	0.02
Naphthalene [PAH, POM]	1.17E-03	0.01
Propylene oxide	2.62E-02	0.23
Selenium	1.43E-06	0.00
Toluene	1.17E-01	1.01
Xylenes	5.78E-02	0.50
Total		3.76
(1) All emission factors from WEBFIRE, except as noted.		
(2) Formaldehyde emission rate is based on source test data.		

HAP Emission Rates for Cooling Tower B007957

Pollutant Name	Emission Factor (lb/mmgal) ¹	Potential Emission Rate (Ton/yr)
Arsenic	1.63E-06	0.000
Cadmium	4.06E-06	0.000
Copper	4.06E-06	0.000
Lead	2.02E-06	0.000
Manganese	4.06E-05	0.001
Mercury	4.06E-07	0.000
Nickel	4.06E-06	0.000
Selenium	4.06E-06	0.000
Zinc	4.06E-05	0.001
Total		0.0034
(1) Emission factors from Supplemental Health Risk Assessment (HRA) dated December 2003.		

HAP Emission Rates for Propane IC Engine, 114 bhp

Pollutant Name	Emission Factor (lb/kgal) ¹	Potential Emission Rate (Ton/yr)
Acetaldehyde	7.23E+00	0.38
Acrolein	6.06E+00	0.32
Benzene	1.45E+00	0.08
1,3-Butadiene	8.04E-01	0.04
Ethyl benzene	6.14E-02	0.00
Ethylene dibromide	5.34E-02	0.00
Formaldehyde	2.73E+01	1.44
Hexane	7.78E-01	0.04
PAHs/POMs	1.48E-01	0.01
Toluene	7.44E-01	0.04
Xylenes	2.81E-01	0.01
Total		2.36
(1) Emission factors sourced from EPA AP-42 as summarized in "MDAQMD DEFAULT EMISSION FACTORS FOR INTERNAL COMBUSTION ENGINES (ICE)" spreadsheet		

Summary of Total HAP Emission Rates for Permitted Equipment

Pollutant Name	Potential Emission Rate (Ton/yr)
Acetaldehyde	1.05E+00
Acrolein	4.20E-01
Arsenic	8.04E-04
Benzene	2.75E-01
Beryllium	1.23E-05
1,3-Butadiene	6.23E-02
Cadmium	1.49E-03
Chromium	1.44E-03
Copper	5.25E-04
Ethyl benzene	5.02E-01
Ethylene dibromide	2.81E-03
Formaldehyde	2.28E+00
Hexane	1.89E+00
Lead	9.02E-04
Manganese	3.58E-03
Mercury	4.35E-04
Nickel	2.67E-03
PAHS/POMS	4.61E-02
Propylene oxide	4.51E-01
Naphthalene	2.02E-02
Selenium	9.25E-04
Toluene	2.07E+00
Xylenes	1.01E+00
Zinc	4.37E-03
Total	10.09
Potential Emission Rate represents the sum of the two combustion turbines with duct burners, one emergency fire pump chiller, cooling tower, and propane emergency generator.	

SECTION 5: MDAQMD Form 1202E2-F

Compliance Assurance Monitoring Applicability Determination

Mojave Desert Air Quality Management District

TITLE V PERMIT RENEWAL APPLICATION – COMPLIANCE ASSURANCE MONITORING APPLICABILITY DETERMINATION FORM

I. FACILITY INFORMATION

1. FACILITY NAME: Blythe Energy Project
2. FACILITY ID: 2262
3. TITLE V PERMIT #: 130202262

II. CAM STATUS SUMMARY FOR EMISSION UNITS

4. Based on the criteria in the instructions (check one and attach additional pages as necessary):

a. ☐ There are no emission units with control devices at this Title V facility.

b. ☒ There are emission units with control devices at this Title V facility, and the CAM applicability is shown below for each unit. A CAM plan is attached for each affected emissions unit. (None)

5. EMISSION UNIT (APPLICATION OR PERMIT #)	6. EQUIPMENT DESCRIPTION	UNCONTROLLED EMISSIONS		9. UNCONTROLLED POTENTIAL EMISSIONS EXCEED THE MAJOR SOURCE THRESHOLD AND USE A CONTROL DEVICE?	10. EXEMPT FROM CAM BY 40 CFR 64.2(b)(1)? (ENTER YES OR NO. IF YES, STATE THE REASON FOR EXEMPTION)	11. IS A CAM PLAN REQUIRED?
		7. POLLUTANT TYPE	8. PTE (tons/year)			
C007959	selective catalytic reduction system	NOx	5,680.3	yes	40 CFR 64.2(b)(1)(vi)	No
C007960	selective catalytic reduction system	NOx	5,630.4	yes	40 CFR 64.2(b)(1)(vi)	No

Note: Uncontrolled NOx PTE is calculated by applying the P75 Monitoring Plan Maximum Emission Rate (MER) of 0.6840 lb/mmBtu for CT-1/DB-1 and 0.6780 lb/mmBtu for CT-2/DB-2 over a maximum of 8760 annual operating hours with the maximum heat input of the combined combustion turbine and duct burner system.

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SECTION 6

40 CFR 75 and 40 CFR 60 Monitoring Clarifications

40 CFR 75 and 40 CFR 60 Monitoring Clarifications
Blythe Energy
09/30/2021

Blythe Energy consists of two combustion turbine generators (“CTGs”) for electrical generation, Unit 1 and Unit 2, that were issued a renewed Operating Permit (130202262) on 11/18/17. A renewed Acid Rain Program Permit (ORIS Code 55295) was issued on 12/5/16. A Final Prevention of Significant Deterioration Permit (SE 02-01) was issued on 4/25/07. The combustion turbines are equipped with Continuous Emission Monitoring Systems (“CEMS”) that measure NO_x, CO, and NH₃, as well as O₂, which serves as the diluent.

The NO_x and CO analyzers are each configured with two scale ranges with a span value equal to the corresponding upper range value. The low range for the NO_x analyzer is set to 0-10 ppm, and the high range is set to 0-100 ppm. The low range for the CO analyzer is set to 0-20 ppm, and the high range is set to 0-1200 ppm. The O₂ analyzer range is set to 0-25%. The NH₃ analyzer is a tunable Diode Laser (“TDL”). In accordance with the Operating Permit, the facility follows a District approved procedure for NH₃ as defined in the facility’s QA/QC Plan and is not further discussed in this document.

40 CFR 75 and 40 CFR 60 contain parallel monitoring requirements that are similar but not identical; also, 40 CFR 75 contains more monitoring provisions and options than 40 CFR 60. This document summarizes the use of 40 CFR 75 QA test schedules, grace periods, and RATA load requirements in lieu of certain 40 CFR 60 specifications, or lack thereof.

The NO_x CEMS utilizes the 40 CFR 75 harmonization provisions of 40 CFR 60.334(b) for Subpart GG compliance. In addition to the Subpart GG NO_x limit, the NO_x CEMS utilizes 40 CFR 75 Appendix B provisions for monitoring compliance with other permit limits according to the PSD Permit. CO CEMS are used to demonstrate compliance with various emission limits specified in the Operating Permit, and it is monitoring for these limits that the facility adopts certain 40 CFR 75 provisions, as outlined below.

1. Cylinder Gas Audits (“CGAs”) / Linearity Checks

A CGA is a two-point audit, conducted with low- and mid-level calibration gases, required by 40 CFR 60 Appendix F Procedure 1. CGAs are conducted each calendar quarter, with the exception of the quarter in which the RATA is performed. Ongoing QA audits (i.e. CGAs and RATAs) shall occur no closer than 2 months. A linearity check is conducted with low-, mid- and high-level calibration gases, required by 40 CFR 75 Appendix B Section 2.2.1. 40 CFR 75 Appendix A Section 6.2 exempts low analyzer ranges (i.e. less than or equal to 30 ppm) from the linearity check. For the CO CEMS, the facility utilizes the Part 60 CGA requirements with the following exceptions:

- a. The CGA frequency shall follow 40 CFR 75 Appendix B Sections 2.2.1 and 2.2.4. Specifically, a CGA shall be required at least once during each QA operating quarter, not to exceed four calendar quarters, plus a 168-unit operating hour grace period following the expiration of a required CGA. CGAs will be conducted no less than 30 days apart, to the extent practicable.

- b. Analyzer ranges less than or equal to 30 ppm (i.e. CO low range) are exempt from CGA requirements [40 CFR 75 Appendix A Section 6.2].

QA operating quarter means a calendar quarter in which there are at least 168 unit operating hours. *Unit operating hour* means a clock hour during which a unit combusts any fuel, either for part of the hour or for the entire hour.

2. Relative Accuracy Test Audits (RATAs)

The Part 60 RATA is required once every four calendar quarters while operating at more than 50 percent of normal load. In lieu of these requirements, the facility adopts the following Part 75 RATA requirements:

- a. All RATA testing shall be conducted at least once every four QA operating quarters but no less frequently than once every eight calendar quarters as provided in 40 CFR 75 App. B, §2.3.1.1. If RATA testing is not completed within this timeframe, a 720 unit operating hour grace period may be used, as provided in 40 CFR 75 App. B, §2.3.3.
- b. All RATA testing shall be conducted at the normal load level(s) as determined in accordance with 40 CFR 75 Appendix A Section 2.3.1.3(a) in lieu of 40 CFR 60 Appendix B Performance Specification 2 Section 8.4.1 that specifies to conduct the RATA “while operating at more than 50 percent of normal load”.

Basis for Harmonizing

The 40 CFR 75 Appendix B timelines take into account intermittent operating usage in determining the frequency of QA testing while the older and less refined 40 CFR 60 Appendix F provisions are based solely on elapsed calendar time. Conformance with 40 CFR 60 Appendix F RATA and CGA timelines, then, can cause significant economic and logistical difficulties, particularly during limited operating quarters. The procedures for determining normal load levels for RATA testing that are described in 40 CFR 75 Appendix A ensure that RATA testing occurs under representative operating conditions and emission concentrations when tested.

SECTION 7

Red-lined Copy of Current Operating Permit



FEDERAL OPERATING PERMIT

Permit No.: **130202262**

Company: **Blythe Energy, LLC**

Facility: **Blythe Energy Project**

Issue date: **11/18/17**

Expiration date: **11/18/22**

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue
Victorville, CA 92392-2310
760.245.1661 • Fax 760.245.2022
Email: permitting@MDAQMD.ca.gov

www.MDAQMD.ca.gov • @MDAQMD

Signed and issued by

BRAD POIRIEZ

EXECUTIVE DIRECTOR/

AIR POLLUTION CONTROL OFFICER

PERMIT REVISIONS

November 6, 2019 Administrative Modification

Update of responsible official, alternate facility “site” contact and Facility “Site” Contact phone number.

November 1, 2019 Significant Modification

Processed by Roseana Brasington

Part III, page III-X condition 15: Condition modified to remove VOC emissions testing of the turbines every 5 years under hot, warm, cold startup conditions. Requirement proposed for removal is replaced by hard emissions rates based on approved historical test data.

November 18, 2017 Permit Renewal & Significant Modification

Processed by Roseana Brasington

Cover page updated with renewal dates and executive director

Part I updated to include new responsible official and facility contact, updated permit descriptions and removal of permit units no longer existing at the facility

Part II updated for consistency with current applicable requirements

Part III, page III-44 (significant modification) condition 7, CO limit increased to include CO emissions from SEP. SEP permits have been cancelled. Condition 8 which referenced combined emissions from BEP & SEP (one facility under Regulation XIII) has been removed in its entirety.

Part III, rule cites and formatting updated, permit descriptions updated, permit unit which no longer exists at facility removed from Part III.

Parts IV and V not substantively changed

Part VI Acid Rain Permit and application updated to current.

Part VII SIP Rule table updated

December 18, 2015 Significant Modification:

Processed by Roseana Brasington

Page I-5 Updated Alternative Facility “Site” Contact

Pages III-25 through III-27

Modified permit conditions for combustion turbines B007953 and B007954

Condition 2: reduced maximum permitted fuel sulfur content

Condition 4: reduced lb/hr PM₁₀ emissions limit

Condition 6: reduced lb/day PM₁₀ emissions limit

Condition 7: reduced ton/year SO_x and PM₁₀ emission limits

April 24, 2015 Significant Modification:

Processed by Roseana Brasington

Page I-5: Removed reference to model/serial numbers for the steam generator and steam

condensing turbine. Model and serial numbers for the combustion turbines have been provided and are reflected in the current permits.

Page III-25: Removed reference to model/serial numbers for the steam generator and steam condensing turbine. Model and serial numbers for the combustion turbines have been provided and are reflected in the current permits.

Pages III-26-III-27: added annual average emission concentration limit for NO_x, annual average mass emission limits for CO and 12-month rolling fuel use limit for the gas turbines, reduced annual NO_x, CO and PM₁₀ emission limits and clarified that the emissions limits include all Blythe Energy Project permitted equipment and updated condition language for consistency with District permit. Facility name typographical error corrected.

Page III-29: Removed Authority to Construct permit condition which required the surrender of emission reduction credits. The facility has satisfied the offset requirement.

Page III-34. E007961, permit condition updated and corrected to reflect testing and maintenance hours allowed under CCR Section 93115.6

July 29, 2014 Administrative Modification:

Processed by R.N. Brasington

Updated the following: owner/company name, owner mailing address, facility name, responsible official, facility site contact and alternative facility site contact.

July 2, 2012 Administrative Title V Renewal and Title IV Acid Rain Permit revision (by: Samuel J Oktay, PE); Revised Rule 1113 references, Page II-15 through II-16; added Rule SIP History Reference, Page VII-48; Revised Rule 442 references; Page II-13; Page II-23 added 40 CFR 98 reference for GHG reporting; added 40 CFR 63 Subpart ZZZZ requirements to permits E007961, E008981, and E009492; Pages I-7; III-33 through III-34, III-34 through III-36, and III-36 through III-38 respectively; page III-25 clarified conditions 6 & 7 for permits B007953 & B007954 regarding VOC limits; page III-26 clarified condition 10 for permits B007953 & B007954; changed Permit # C010833, Pages I-7 and III-38 to read Unit 2; Title IV Acid Rain Permit revisions VI-44 through VI-46; Phase II Application added to pages VI-47 through VI-49.

April 11, 2011 Administrative Modification:

Updated physical address due to incorporation into City of Blythe city limits (no change to location of facility), and updated responsible official.

April 8, 2010 Administrative Modification described as follows:

Intro; Addition of oxidation catalyst to each Combustion Turbine Generator/Heat Recovery Steam Generator unit. The design of the units are accommodating to the retrofit of the oxidation catalyst. An emission decrease is anticipated but current permit limits will remain unchanged. Permit is revised as follows:

Part I

-Description revised to include two oxidation catalysts.

-Section 1.PART III, ITEM A- added Oxidation Catalyst description.

Part III

-Permits B007953 and B007954, revised condition #10 to include reference to Oxidation Catalyst. Deleted reference to future installation of OC (condition #28), renumbered following condition.

-Permits B007955 and B007956, updated condition #3 specifying OC installed and applicable permit numbers thereof.

-Added permit units C010832 (“new” subpart L) and C010833, creating subparts L and M respectively.

Changes made by C. Anderson

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PART I INTRODUCTORY INFORMATION

A. **FACILITY IDENTIFYING INFORMATION:**

<u>Owner/Company Name:</u>	Blythe Energy, Inc.
<u>Facility Names:</u>	Blythe Energy Project
<u>Facility Location:</u>	385 N Buck Blvd, Blythe, CA 92225
<u>Mailing Address:</u>	P.O. Box 1210, Blythe, CA 92226
<u>Federal Operating Permit Number:</u>	130202262
<u>MDAQMD Company Number:</u>	1302
<u>MDAQMD Facility Number:</u>	2262
<u>Responsible Official:</u>	Steve Brussee Sr. Manager, Environment & Safety - Power ASUS 909-622-3308
<u>Facility "Site" Contact(s):</u>	Ramon Campos Compliance Manager 760-921-1364 ramon.campos@altagas.ca
<u>Alternate Facility "Site" Contact(s):</u>	Aaron Honor Plant General Manager 760-921-1360 aaron.honor@altagas.ca
<u>Nature of Business:</u>	Electric Power Generation
<u>SIC/NAICS Code:</u>	4911/221112- Electric Power Generation
<u>Facility Coordinates</u>	UTM (m) 714609 (E) / 3721719 (N)

B. **FACILITY DESCRIPTION:**

The plant uses two F-Class Siemens V84.3A combustion turbine generators (CTGs) with dedicated heat recovery steam generators (HRSGs) to produce electricity. Inlet air to the CTGs is filtered and, during seasonally warm conditions, conditioned with chilled air supported by a mechanical draft wet cooling tower (chiller). Compressed air and natural gas are mixed and combusted in the turbine combustion chamber. Lean pre-mixed air and low-NOx combustors are used to minimize NOx formation during combustion. Exhaust gas from the combustion chamber is expanded through a multi-stage power turbine, which drives both the air compressor and electric power generator. Heat from the exhaust gas is then recovered in the HRSG.

Each HRSG is equipped with a duct burner to provide supplementary firing during high ambient temperatures to maintain constant steam production to the condensing steam turbine generator (STG). A Selective Catalytic Reduction (SCR) system is used to reduce NOx emissions. An Oxidation Catalyst is used to reduce CO and VOC. Steam is produced in each HRSG and flows to the STG. The STG drives an electric generator to produce electricity. STG exhaust steam is condensed in a surface condenser with water from the main cooling tower.

The project site has a 303 bhp emergency diesel-fueled internal combustion engine that drives a water pump for fire suppression and a propane fueled 114 bhp internal combustion engine that drives an emergency electrical power generator.

C. FACILITY PERMITTED EQUIPMENT:

1. PERMIT B007953 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT1) consisting of: Natural gas fueled Siemens F Class Model V84.3A(2) Serial No. 800436 combustion turbine generator power block producing approximately 260 MW(e) with a connected heat recovery steam generator and a steam condensing turbine (shared with B007954), maximum turbine heat input of 1776 MMBtu/hr.
2. PERMIT B007954 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT2) consisting of: Natural gas fueled Siemens F Class Model V84.3A(2) Serial No. 800437 combustion turbine generator power block producing approximately 260 MW(e) with a connected heat recovery steam generator and a steam condensing turbine (shared with B007953), maximum turbine heat input of 1776 MMBtu/hr.
3. PERMIT B007955 DUCT BURNER UNIT 1: Natural gas burner located within the heat recovery steam generator covered by B007953, maximum heat input of 120 MMBtu/hr. Manufacturer is Forney, model # 1002-WPS-C1 and serial #17130.
4. PERMIT B007956 DUCT BURNER UNIT 2: Natural gas burner located within the heat recovery steam generator covered by B007954, maximum heat input of 120 MMBtu/hr. Manufacturer is Forney, model # 1002-WPS-C1 and serial #17202.
5. PERMIT B007957 A Marathon Model 9B 445TTFN4573AA wet cooling tower with water circulation, treatment and handling equipment and air circulation equipment, including the following:

Capacity	Equipment Name	Order
250.00	Cooling Cell Fan #8, Motor Serial No. MU402450-2/22-02	1
250.00	Cooling Cell Fan #7, Motor Serial No. MU402450-2/22-01	2
250.00	Cooling Cell Fan #6, Motor Serial No. MU402450-2/22-05	3

Capacity	Equipment Name	Order
250.00	Cooling Cell Fan #5, Motor Serial No. MU402450-2/22-03	4
250.00	Cooling Cell Fan #4, Motor Serial No. MU402450-2/22-06	5
250.00	Cooling Cell Fan #3, Motor Serial No. MU402450-2/22-07	6
250.00	Cooling Cell Fan #2, Motor Serial No. MU402450-2/22-04	7
250.00	Cooling Cell Fan #1, Motor Serial No. MU402450-2/22-08	8
1000.00	Circulating Water Pump #12, Johnson Serial No. 01JB1129B	9
1000.00	Circulating Water Pump #11, Johnson Serial No. 01JB1129A	10

6. PERMIT B007958 Water circulation, treatment and handling equipment and air circulation equipment, including units as follows:

Capacity	Equipment Name	Order
250.00	Cooling Cell Fan #12, BAC Model CXV-T08 Serial No. U025323712	1
250.00	Cooling Cell Fan #11, BAC Model CXV-T08 Serial No. U025323711	2
250.00	Cooling Cell Fan #10, BAC Model CXV-T08 Serial No. U025323710	3
250.00	Cooling Cell Fan #9, BAC Model CXV-T08 Serial No. U025323709	4
250.00	Cooling Cell Fan #8, BAC Model CXV-T08 Serial No. U025323708	5
250.00	Cooling Cell Fan #7, BAC Model CXV-T08 Serial No. U025323707	6
250.00	Cooling Cell Fan #6, BAC Model CXV-T08 Serial No. U025323706	7
250.00	Cooling Cell Fan #5, BAC Model CXV-T08 Serial No. U025323705	8
250.00	Cooling Cell Fan #4, BAC Model CXV-T08 Serial No. U025323704	9
250.00	Cooling Cell Fan #3, BAC Model CXV-T08 Serial No. U025323703	10
250.00	Cooling Cell Fan #1, BAC Model CXV-T08 Serial No. U025323701	11
250.00	Cooling Cell Fan #2, BAC Model CXV-T08 Serial No. U025323702	12
750.00	Chiller Recirculating Pump #4, Cascade Serial No. 16061	13
750.00	Chiller Recirculating Pump #3, Cascade Serial No. 16060	14
750.00	Chiller Recirculating Pump #2, Cascade Serial No. 16059	15
750.00	Chiller Recirculating Pump #1, Cascade Serial No. 16058	16

7. PERMIT C007959 SCR UNIT 1 consisting of: SELECTIVE CATALYTIC REDUCTION system with a catalyst located within the power train covered by B007953 and an ammonia injection system. Manufacturer is Haldor Topsoe; model H05.331cpsi MODULE.
8. PERMIT C007960 SCR UNIT 2 consisting of: SELECTIVE CATALYTIC REDUCTION system with a catalyst located within the power train covered by B007954 and an ammonia injection system. Manufacturer is Haldor Topsoe; model H05.331cpsi MODULE.
9. PERMIT C010832 OXIDATION CATALYST UNIT 1 consisting of: Oxidation Catalyst located within the duct burner covered by B007955. Manufacturer is Johnson Matthey; model is Honeycat, serial number 200cpsi.

10. PERMIT C010833 OXIDATION CATALYST UNIT 2 consisting of: Oxidation Catalyst located within the duct burner covered by B007956. Manufacturer is Johnson Matthey; model is Honeycat, serial number 200cpsi.
11. PERMIT E007961 NON-CERTIFIED DIESEL IC ENGINE, EMERGENCY FIRE PUMP consisting of: Year of Manufacture 2002; USEPA Family Name NA; CARB Executive Order NA; Tier 0, One John Deere, Diesel fired internal combustion engine, Model No. 6081HF001 and Serial No. RG6081H145432, Direct Injected, Turbo Charged, producing 303 bhp with 6 cylinders at 2200 rpm while consuming a maximum of 14 gal/hr. This equipment powers a Pump.
12. PERMIT E009492 PROPANE IC ENGINE, EMERGENCY GENERATOR (CHILLER BLDG) consisting of: One Ford, Propane fired internal combustion engine, Model No. WSG106816005E-NA and Serial No. 01-11- 012316, Direct Injected, Inter Cooled, producing 114 bhp with 4 cylinders at 1800 rpm while consuming a maximum of 12 gal/hr. This equipment powers a Generator.

PART II
FACILITYWIDE APPLICABLE REQUIREMENTS; EMISSIONS
LIMITATIONS; MONITORING, RECORDKEEPING,
REPORTING AND TESTING REQUIREMENTS; COMPLIANCE
CONDITIONS; COMPLIANCE PLANS

A. REQUIREMENTS APPLICABLE TO ENTIRE FACILITY AND EQUIPMENT:

1. A permit is required to operate this facility.
[Rule 203 - *Permit to Operate*]
2. The equipment at this facility shall not be operated contrary to the conditions specified in the District Permit to Operate.
[Rule 203 - *Permit to Operate*]
3. The Air Pollution Control Officer (APCO) may impose written conditions on any permit.
[Rule 204 - *Permit Conditions*]
4. Commencing work or operation under a permit shall be deemed acceptance of all the conditions so specified.
[Rule 204 - *Permit Conditions*]
5. Posting of the Permit to Operate is required on or near the equipment or as otherwise approved by the APCO/District.
[Rule 206 - *Posting of Permit to Operate*]
6. Owner/Operator shall not willfully deface, alter, forge, or falsify any permit issued under District rules.
[Rule 207 - *Altering or Falsifying of Permit*]
7. Permits are not transferable.
[Rule 209 - *Transfer and Voiding of Permit*;
8. The APCO may require the Owner/Operator to provide and maintain such facilities as are necessary for sampling and testing.
[Rule 217 - *Provision for Sampling And Testing Facilities*]
9. The equipment at this facility shall not require a District permit or be listed on the Title V permit if such equipment is listed in Rule 219 and meets the applicable criteria contained in Rule 219 (B). However, any exempted insignificant activities/equipment are still subject to all applicable facility-wide requirements.
[SIP Pending: Rule 219 - *Equipment Not Requiring a Written Permit*]
10. The Owner/Operator of this facility shall obtain a Federal Operating Permit for operation of this facility.

[Rule 221 - *Federal Operating Permit Requirement*]

11. Owner/Operator shall pay all applicable MDAQMD permit fees.
[Rule 301 - *Permit Fees*]
 12. Owner/Operator shall pay all applicable MDAQMD Title V Permit fees.
[Rule 312 - *Fees for Federal Operating Permits*]
 13. Stack and point source visible emissions from this facility, of any air contaminant (including smoke) into the atmosphere, shall not equal or exceed Ringelmann No. 1 for a period or periods aggregating more than three minutes in any one hour:
 - (a) While any unit is fired on Public Utilities Commission (PUC) grade natural gas, Periodic Monitoring for combustion equipment is not required to validate compliance with the Rule 401 Visible Emissions limit. However, the Owner/Operator shall comply with the recordkeeping requirements stipulated elsewhere in this permit regarding the logging of fuel type, amount, and suppliers' certification information.
 - (b) While any unit is fired on diesel fuel, Periodic Monitoring, in addition to required recordkeeping, is required to validate compliance with Rule 401 Visible Emissions limit as indicated below:
 - (i). Reciprocating engines equal or greater than 1000 horsepower, firing on only diesel with no restrictions on operation, a visible emissions inspection is required every three (3) months or during the next scheduled operating period if the unit ceases firing on diesel/distillate within the 3-month time frame.
 - (ii). Diesel Standby and emergency reciprocating engines using California low sulfur fuels require no additional monitoring for opacity.
 - (iii). Diesel/Distillate-Fueled Boilers firing on California low sulfur fuels require a visible emissions inspection after every 1 million gallons diesel combusted, to be counted cumulatively over a 5-year period.
 - (iv). On any of the above, if a visible emissions inspection documents opacity, an U.S. Environmental Protection Agency (EPA) Method 9 "Visible Emissions Evaluation" shall be completed within 3 working days, or during the next scheduled operating period if the unit ceases firing on diesel/distillate within the 3 working day time frame.
- [Rule 204 - *Permit Conditions*]
[Rule 401 - *Visible Emissions*]
14. Owner/Operator is limited to use of the following quality fuels for fuel types specified elsewhere in this permit: PUC quality natural gas fuel - sulfur compounds shall not exceed 800 parts per million (ppm) calculated as hydrogen sulfide at standard conditions; diesel fuel - sulfur content shall not exceed 0.0015 percent by weight. Compliance with Rule 431 fuel sulfur limits is assumed for PUC quality natural gas fuel and CARB certified diesel fuel. Records shall be kept on-site and available for review by District, state, or federal personnel at any time. The sulfur content of non-CARB certified diesel fuel shall be determined by use of American Society for Testing and Materials (ASTM) method D 2622-82 or ASTM method D 2880-71, or equivalent.

[40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements]

[Rule 431 - Sulfur Content of Fuels;]

15. Emissions of fugitive dust from any transport, handling, construction, or storage activity at this facility shall not be visible in the atmosphere beyond the property line of the facility.
[Rule 403 - Fugitive Dust;]
16. Owner/Operator shall comply with the applicable requirements of Rule 403.2 unless an “Alternative PM₁₀ Control Plan” (ACP) pursuant to Rule 403.2(G) has been approved.
[Rule 403.2 - Fugitive Dust Control for the Mojave Desert Planning Area]
17. Owner/Operator shall not discharge into the atmosphere from this facility, particulate matter (PM) except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
 - (a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
 - (b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
 - (c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.[Rule 404 - Particulate Matter Concentration]
18. Owner/Operator shall not discharge into the atmosphere from this facility, solid PM including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a).
 - (a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
 - (b) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.[Rule 405 - Solid Particulate Matter, Weight]
19. Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO₂), greater than or equal to 500 ppm by volume.
[Rule 406 - Specific Contaminants]
20. Owner/Operator shall not discharge into the atmosphere from this facility, carbon monoxide (CO) exceeding 2000 ppm measured on a dry basis, averaged over a minimum of 15 consecutive minutes.
 - (a) The provisions of this condition shall not apply to emissions from internal combustion engines.[Rule 407 - Liquid and Gaseous Air Contaminants]
21. Owner/Operator shall not build, erect, install, or use any equipment at this facility, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation

of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the Health and Safety Code or of District Rules.

- (a) This condition shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code, or of District Rule 402.

[Rule 408 - *Circumvention*]

22. Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions averaged over a minimum of 25 consecutive minutes.

[Rule 409 - *Combustion Contaminants*;

23. APCO, at his/her discretion, may refrain from enforcement action against an Owner/Operator of any equipment that has violated a technology-based emission limitation, including but not limited to conditions contained in any permit issued by the District establishing such emission limitation, provided that a Breakdown has occurred and:

- (a) Any breakdown that results in emissions exceeding a technology-based emission limitation is reported to the District within one hour of such breakdown or within one hour of the time a person knew or reasonably should have known of the occurrence of such breakdown; and
- (b) An estimate of the repair time is provided to the District as soon as possible after the report of the breakdown; and
- (c) All reasonable steps are immediately taken to minimize the levels of emissions and to correct the condition leading to the excess emissions.
- (d) The equipment is operated only until the end of a cycle or twenty-four (24) hours, whichever is sooner, at which time it shall be shut down for repairs unless a petition for an emergency variance has been filed with the clerk of the Hearing Board in accordance with Regulation V.
- (e) If the breakdown occurs outside normal District working hours, the intent to file an emergency variance shall be transmitted to the District in a form and manner prescribed by the APCO.

[Rule 430 - *Breakdown Provisions*]

24. Owner/Operator of this facility shall not discharge into the atmosphere emissions in excess of the following from VOC containing materials or from organic solvents which are not VOCs unless such emissions have been reduced by at least 85%:

- (a) VOCs from all VOC containing materials, Emissions Units, equipment or processes subject to this rule, in excess of 540 kilograms (1,190 pounds) per month per Facility.
- (b) a non-VOC organic solvent in excess of 272 kilograms (600 pounds) per day as calculated on a thirty (30) day rolling average.
- (c) The provisions of this condition shall not apply to:
- (1) The manufacture of organic solvents, or the transport or storage of organic solvents, or the transport or storage of materials containing organic solvents.

- (2) The emissions of VOCs from VOC-containing materials or equipment which are subject to the rules of Regulation IV or which are exempt from air pollution control requirements by said rules.
 - (3) The spraying or other employment of organic solvents as insecticides, pesticides or herbicides.
 - (4) The use of equipment or materials for which other requirements are specified in source specific rules of Regulation XI after the compliance dates specified in such source specific rules.
 - (5) The use of 1-1-1 Trichloroethane.
 - (6) Aerosol products
[Rule 442 – *Usage of Solvents*]
25. Owner/Operator shall not set open outdoor fires unless in compliance with Rule 444. Outdoor fires burned according to an existing District permit are not considered “open outdoor fires” for the purposes of Rule 444 (reference Rule 444(B)(10)).
[Rule 444 – *Open Outdoor Fires*]
26. Owner/Operator of this facility shall comply with the Organic Solvent Degreasing Operations requirements of Rule 1104 when engaged in wipe cleaning, cold solvent cleaning, and/or vapor cleaning (degreasing) operations for metal/non-metal parts/products. These requirements are listed as follows:
- (a) All degreasers shall be equipped with a cover, which reduces solvent evaporation and minimizes disturbing the vapor zone.
 - (b) A permanent, conspicuous label summarizing the applicable operating requirements contained in Rule 1104. In lieu of a label, operating instructions may be posted near the degreaser where the operators can access the proper operating requirements of this rule.
 - (c) Cold Solvent Degreasers - Freeboard Requirements:
 - (i) Cold solvent degreasers using only low volatility solvents, which are not agitated, shall operate with a freeboard height of not less than 6 inches.
 - (ii) Cold solvent degreasers using only low volatility solvents may operate with a freeboard ratio equal to or greater than 0.50 when the cold solvent degreaser has a cover, which remains closed during the cleaning operation.
 - (iii) Any cold solvent degreasers using solvent which is agitated, or heated above 50°C (120°F) shall operate with a freeboard ratio equal to or greater than 0.75.
 - (iv) A water cover may be used as an acceptable control method to meet the freeboard requirements, when the solvent is insoluble in water and has a specific gravity greater than one.
 - (d) Cold Solvent Degreasers - Cover Requirements:
 - (i) Cold solvent degreasers using high volatility solvent shall have a cover that is a sliding, rolling or guillotine (bi-parting) type, which is designed to easily open and close without disturbing the vapor zone.
 - (e) Cold Solvent Degreasers - Solvent Level Identification:
 - (i) A permanent, conspicuous mark locating the maximum allowable solvent level conforming to the applicable freeboard requirements.

- (f) All Degreasers shall comply with the following operating requirements:
- (i) Any solvent cleaning equipment and any emission control device shall be operated and maintained in strict accord with the recommendations of the manufacturer.
 - (ii) Degreasers shall not be operating with any detectable solvent leaks.
 - (iii) All solvent, including waste solvent and waste solvent residues, shall be stored in closed containers at all times. All containers for any solvent(s) shall have a label indicating the name of the solvent/material they contain.
 - (iv) Waste solvent and any residues shall be disposed of by one of the following methods: a commercial waste solvent reclamation service licensed by the State of California; **or** a federally or state licensed facility to treat, store or dispose of such waste; **or** the originating facility may recycle the waste solvent and materials in conformance with requirements of Section 25143.2 of the California Health and Safety Code.
 - (v) Degreasers shall be covered to prevent fugitive leaks of vapors, except when processing work or to perform maintenance.
 - (vi) Solvent carry-out shall be minimized by the following methods:
 - (a) Rack workload arranged to promote complete drainage
 - (b) Limit the vertical speed of the power hoist to 3.3 meters per minute (11 ft/min) or less when such a hoist is used.
 - (c) Retain the workload inside of the vapor zone until condensation ceases.
 - (d) Tip out any pools of solvent remaining on the cleaned parts before removing them from the degreaser if the degreasers are operated manually.
 - (e) Do not remove parts from the degreaser until the parts are visually dry and not dripping/leaking solvent. (This does not apply to an emulsion cleaner workload that is rinsed with water within the degreaser immediately after cleaning.)
 - (vii) The cleaning of porous or absorbent materials such as cloth, leather, wood or rope is prohibited.
 - (viii) Except for sealed chamber degreasers, all solvent agitation shall be by either pump recirculation, a mixer, or ultrasonics.
 - (ix) The solvent spray system shall be used in a manner such that liquid solvent does not splash outside of the container. The solvent spray shall be a continuous stream, not atomized or shower type, unless, the spray is conducted in a totally enclosed space, separated from the environment.
 - (x) For those degreasers equipped with a water separator, no solvent shall be visually detectable in the water in the separator.
 - (xi) Wipe cleaning materials containing solvent shall be kept in closed containers at all times, except during use.
 - (xii) A degreaser shall be located so as to minimize drafts being directed across the cleaning equipment, the exposed solvent surface, or the top surface of the vapor blanket.
 - (xiii) A method for draining cleaned material, such as a drying rack suspended above the solvent and within the freeboard area, shall be used so that the

drained solvent is returned to the degreaser or container.

- (g) Rule 442 Applicability: Any solvent using operation or facility which is not subject to the source-specific Rule 1104 shall comply with the provisions of Rule 442. Any solvent using operation or facility which is exempt from all or a portion of the volatile organic compound (VOC) limits, equipment limits or the operational limits of Rule 1104 shall be subject to the applicable provisions of Rule 442.
- (h) Solvent Usage Records: Owner/Operator subject to Rule 1104 or claiming any exemption under Rule 1104, Section (E), shall comply with the following requirements:
- (1) Maintain and have available during an inspection, a current list of solvents in use at the facility which provides all of the data necessary to evaluate compliance, including the following information separately for each degreaser, as applicable:
 - (i) product name(s) used in the degreaser, and
 - (ii) the mix ratio of solvent compounds mixtures of solvents are used, and
 - (iii) VOC content of solvent or mixture of compounds as used, and
 - (iv) the total volume of the solvent(s) used for the facility, on a monthly basis, and
 - (v) the name and total volume applied of wipe cleaning solvent(s) used, on a monthly basis.
 - (2) Additionally, for any degreaser utilizing an add-on emission control device/system as a means of complying with provisions of Rule 1104 shall, on a monthly basis, maintain records of key system operating and maintenance data. Such data are recorded for the purpose of demonstrating continuous compliance during periods of emission producing activities. The data shall be recorded in a manner as prescribed by the District.
 - (3) Documentation shall be maintained on site of the disposal or on-site recycling of any waste solvent or residues.
 - (4) Records shall be retained (at facility) and available for inspection by District, state or federal personnel for the previous 5-year period as required by this Title V / Federal Operating Permit (Reference Rule 1203(D)(1)(d)(ii)).

[Rule 1104 - *Organic Solvent Degreasing Operations*]

27. Owner/Operator's use of *Architectural Coatings* at this facility shall comply with the applicable requirements of Rule 1113, including the VOC limits specified in Rule 1113, part C, Table of Standards, as listed below:

[Rule 1113 - *Architectural Coatings*]

Coating Category	Limit
Primary Coatings	
Flat Coatings	50
Nonflat Coatings	100
Nonflat-High Gloss Coatings	150
Specialty Coatings	
Aluminum Roof Coatings	400
Basement Specialty Coatings	400
Bituminous Roof Coatings	50
Bituminous Roof Primers	350
Bond Breakers	350
Concrete Curing Compounds	350
Concrete/Masonry Sealers	100
Driveway Sealers	50
Dry Fog Coatings	150
Faux Finishing Coatings	350
Fire Resistive Coatings	350
Floor Coatings	100
Form-Release Compounds	250
Graphic Arts Coatings (Sign Paints)	500
High Temperature Coatings	420
Industrial Maintenance Coatings	250
Low Solids Coatings	120 _a
Magnesite Cement Coatings	450
Mastic Texture Coatings	100
Metallic Pigmented Coatings	500
Multi-Color Coatings	250
Pre-Treatment Wash Primers	420
Primers, Sealers, and Undercoaters	100
Reactive Penetrating Sealers	350
Recycled Coatings	250
Roof Coatings	50
Rust Preventative Coatings	250
Shellacs:	
Clear	730
Opaque	550
Specialty Primers, Sealers, and Undercoaters	100
Stains	250

Stone Consolidants	450
Swimming Pool Coatings	340
Traffic Marking Coatings	100
Tub and Tile Refinish Coatings	420
Waterproofing Membranes	250
Wood Coatings	275
Wood Preservatives	350
Zinc-Rich Primers	340

28. Owner/Operator's use of *Wood Products Coatings* at this facility shall comply with the applicable requirements of Rule 1114, including the VOC limits specified in Rule 1114, part C, Table of Standards, as listed below:

(1) VOC Content of Coatings & Adhesives

- (a) Any Owners and/or Operators of Wood Products Coating Application Operations shall not apply any Coating or Adhesive to a Wood Product which has a VOC Content, including any VOC-containing material added to the original Coating supplied by the manufacturer, which exceeds the applicable limit specified below, unless emissions to the atmosphere are controlled by air pollution abatement equipment with an Overall Control Efficiency of at least 85 percent. Any Coating subject to this rule that meets either of the two VOC Content limit formats (grams per liter or pounds per gallon [lb/gal]) is in compliance with this subsection.

LIMITS
 Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds (VOC Content)

Coating	Current Limit g/L (lb/gal)	On and After 7/1/97		On and After 7/1/2005
		Column I or g/L (lb/gal)	Column II g/L (lb/gal)	g/L (lb/gal)
Clear Sealers	680 (5.7)	550 (4.6)	680 (5.7)	275 (2.3)
Clear Topcoat	680 (5.7)	550 (4.6)	275 (2.3)	275 (2.3)
Pigmented Primers, Sealers and Undercoats	600 (5.0)	550 (4.6)	600 (5.0)	275 (2.3)
Pigmented Topcoats	600 (5.0)	550 (4.6)	275 (2.3)	275 (2.3)

- (i) Effective July 1, 1997, a person or facility shall use Coatings on Wood Products that comply with either all VOC Content limits in Column I or all VOC Content limits in Column II. A person or facility that applies a Pigmented Primer, Sealer or Undercoat, but not a Clear Topcoat or Pigmented Topcoat, to a Wood Product shall be subject to column I for that product.

- (ii) Notwithstanding the requirements of subsection (C)(1)(a)(i), a person or facility that applies a topcoat and a primer, sealer or undercoat to a Shutter may, until July 1, 2005, choose to comply with the VOC Content limits specified below for that Shutter:

(b) LIMITS
 Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds (VOC Content)

Coating	g/L (lb/gal)
Clear Sealers	275 (2.3)
Clear Topcoat	680 (5.7)
Pigmented Primers, Sealers & Undercoats	275 (2.3)
Pigmented Topcoats	600 (5.0)

(c) LIMITS
 Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds (VOC Content)

Coating	Current Limit g/L (lb/gal)	On and After 7/1/97	On and After 7/1/2005
		g/L (lb/gal)	g/L (lb/gal)
Fillers	500 (4.2)	500 (4.2)	275 (2.3)
High-Solid Stains	700 (5.8)	550 (4.6)	350 (2.9)
Inks	500 (4.2)	500 (4.2)	500 (4.2)
Mold-Seal Coatings	750 (6.3)	750 (6.3)	750 (6.3)
Multi-Colored Coatings	685 (5.7)	685 (5.7)	275 (2.3)
Low-Solids Stains, Toners and Washcoats	800 (6.7)	480 (4.0)	120 (1.0)
Adhesives	250 (2.1)	250 (2.1)	250 (2.1)

[Rule 1114 - *Wood Products Coating Operations*]

29. Owner/Operator's use of *Metal Parts and Products Coatings* at this facility shall comply with the applicable requirements of Rule 1115, including the VOC limits specified in Rule 1115, as listed below:

Owner/Operator shall not apply to metal parts and products any coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, which

contain VOC in excess of the limits specified below unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with a capture and control system Combined Efficiency of at least 85 percent:

LIMITS

(Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds)

<u>Coating</u>	<u>Air Dried</u>		<u>Baked</u>	
	g/L	(lb/gal)	g/L	(lb/gal)
General	420	(3.5)	360	(3.0)
Military Specification	420	(3.5)	360	(3.0)
Etching Filler	420	(3.5)	420	(3.5)
Solar-Absorbent	420	(3.5)	360	(3.0)
Heat-Resistant	420	(3.5)	360	(3.0)
High-Gloss	420	(3.5)	360	(3.0)
Extreme High-Gloss	420	(3.5)	360	(3.0)
Metallic	420	(3.5)	420	(3.5)
Extreme Performance	420	(3.5)	360	(3.0)
Prefabricated Architectural				
Component	420	(3.5)	275	(2.3)
Touch Up	420	(3.5)	360	(3.0)
Repair	420	(3.5)	360	(3.0)
Silicone-Release	420	(3.5)	420	(3.5)
High Performance				
Architectural	420	(3.5)	420	(3.5)
Camouflage	420	(3.5)	420	(3.5)
Vacuum-Metalizing	420	(3.5)	420	(3.5)
Mold-Seal	420	(3.5)	420	(3.5)
High-Temperature	420	(3.5)	420	(3.5)
Electric-Insulating Varnish	420	(3.5)	420	(3.5)
Pan-Backing	420	(3.5)	420	(3.5)
Pretreatment Wash Primer	420	(3.5)	420	(3.5)
Clear Coating	520	(4.3)	520	(4.3)

[Rule 1115 - *Metal Parts and Products Coating Operations*]

30. Owner/Operator shall comply with all requirements of the District's Title V Program, MDAQMD Rules 1200 through 1210.
[Regulation XII - *Federal Operating Permits*]
31. Owner/Operator shall comply with all applicable requirements of 40 CFR Part 68; Risk Management Program.
[40 CFR 68]

B. FACILITY-WIDE MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS:

1. Any data and records generated and/or kept pursuant to the requirements in this federal operating permit (Title V Permit) shall be kept current and on site for a minimum of five (5) years from the date generated. Any records, data, or logs shall be supplied to District, state, or federal personnel upon request.
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
2. Any Compliance/Performance testing required by this Federal Operating Permit shall follow the administrative procedures contained in the District's *Compliance Test Procedural Manual*. Any required annual Compliance and/or Performance Testing shall be accomplished by obtaining advance written approval from the District pursuant to the District's *Compliance Test Procedural Manual*. All emission determinations shall be made as stipulated in the *Written Test Protocol* accepted by the District. When proposed testing involves the same procedures followed in prior District approved testing, then the previously approved *Written Test Protocol* may be used with District concurrence.
[Rule 204 - Permit Conditions]
3. Owner/Operator of permit units subject to Comprehensive Emissions Inventory Report / Annual Emissions Determinations for District, state, and federal required Emission Inventories shall monitor and record the following for each unit:
 - (a) The cumulative annual usage of each fuel type. The cumulative annual usage of each fuel type shall be monitored from utility service meters, purchase or tank fill records.
 - (b) Fuel suppliers' fuel analysis certification/guarantee including fuel sulfur content shall be kept on site and available for inspection by District, state or federal personnel upon request. The sulfur content of diesel fuel shall be determined by use of ASTM method D2622-82, or (ASTM method D 2880-71, or equivalent). Vendor data meeting this requirement are sufficient.
[40 CFR 70.6(a)(3)(B) – Periodic Monitoring Requirements]
[Rule 204 - Permit Conditions]
[Federal Clean Air Act: §110(a)(2)(F, K & J); §112; §172(c)(3); §182(a)(3)(A & B); §187(a)(5); § 301(a) and in California Clean Air Act, Health and Safety Code §§39607 and §§44300 et seq.]
4. (a) Owner/Operator shall submit Compliance Certifications as prescribed by Rule 1203(F)(1) and Rule 1208, in a format approved by MDAQMD. Compliance Certifications by a Responsible Official shall certify the truth, accuracy and completeness of the document submitted and contain a statement to the effect that the certification is based upon information and belief, formed after a reasonable inquiry; the statements and information in the document are true, accurate, and complete.
[40 CFR 70.6(c)(5)(i); Rule 1208; Rule 1203(D)(1)(vii-x)]

- (b) Owner/Operator shall include in any Compliance Certification the methods used for monitoring such compliance.

[40 CFR 70.6(c)(5)(ii); Rule 1203(D)(1)(g)(viii)]

- (c) Owner/Operator shall comply with any additional certification requirements as specified in 42 United States Code (U.S.C.) §7414(a)(3), Recordkeeping, Inspections, Monitoring and Entry (Federal Clean Air Act §114(a)(3)) and 42 U.S.C. §7661c(b), Permit Requirements and Conditions (Federal Clean Air Act §503(b)), or in regulations promulgated thereunder.

[Rule 1203 (D)(1)(g)(x)]

- (d) On an annual basis, of any given year, Owner/Operator shall submit a *Compliance Certification Report* to the APCO/District pursuant to District Rule 1203 on the following schedule:

Report covering June 5 – June 4	Due by July 5
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Each report shall be certified to be true, accurate, and complete by “The Responsible Official” and a copy of this annual report shall also be contemporaneously submitted to the EPA Region IX Administrator. Compliance Certification Form/Format shall be obtained from MDAQMD Compliance Section.

[40 CFR 72.90.a and Rule 1203 (D)(1)(g)(v - x)]

5. Owner/Operator shall submit, on a semi-annual basis, a *Monitoring Report* to the Air Pollution Control Officer (APCO) / District. Each *Monitoring Report* shall be submitted each semi-annual compliance period on the following schedule:

Report covering June 5 – December 5	Due by January 5
Report covering December 4 – June 4	Due by July 5

This *Monitoring Report* shall be certified to be true, accurate, and complete by “The Responsible Official” and shall include the following information and/or data:

- (a) Summary of deviations from any federally enforceable requirement in this permit.
- (b) Summary of all emissions monitoring and analysis methods required by any Applicable Requirement / federally - enforceable requirement.
- (c) Summary of all periodic monitoring, testing or record keeping (including test methods sufficient to yield reliable data) to determine compliance with any Applicable Requirement / federally - enforceable requirement that does not directly require such monitoring.

An alternate Monitoring Report format may be used upon prior approval by MDAQMD.

[Rule 1203(D)(1)(e)(i)]

6. Owner/Operator shall promptly report all deviations from Federal Operating Permit

requirements including, but not limited to, any emissions in excess of permit conditions, deviations attributable to breakdown conditions, and any other deviations from permit conditions. Such reports shall include the probable cause of the deviation and any corrective action or preventative measures taken as a result of the deviation. [Rule 1203(D)(1)(e)(ii) and Rule 430(C)]

Prompt reporting shall be determined as follows:

- (a) For deviations involving emissions of air contaminants in excess of permit conditions including but not limited to those caused by a breakdown, prompt reporting shall be within one hour of the occurrence of the excess emission or within one hour of the time a person knew or reasonably should have known of the excess emission. Documentation and other relevant evidence regarding the excess emission shall be submitted to the District within sixty (60) days of the date the excess emission was reported to the District. [SIP Pending: Rule 430 - Breakdown Provisions as amended 12/21/94 and submitted 2/24/95]
 - (b) For other deviations from permit conditions not involving excess emissions of air contaminants shall be submitted to the District with any required monitoring reports at least every six (6) months. [Rule 1203(D)(1)(e)(i)]
7. If any facility unit(s) should be determined not to be in compliance with any federally-enforceable requirement during the 5-year permit term, then Owner/Operator shall obtain a *Schedule of Compliance* approved by the District Hearing Board pursuant to the requirements of MDAQMD Regulation 5 (Rules 501 - 518). In addition, Owner/Operator shall submit a *Progress Report* on the implementation of the *Schedule of Compliance*. The *Schedule of Compliance* shall contain the information outlined in (b), below. The *Progress Report* shall contain the information outlined in (c), below. The *Schedule of Compliance* shall become a part of this Federal Operating Permit by administrative incorporation. The *Progress Report* and *Schedule of Compliance* shall comply with Rule 1201(I)(3)(iii) and shall include:
- (a) A narrative description of how the facility will achieve compliance with such requirements; and
 - (b) A *Schedule of Compliance* which contains a list of remedial measures to be taken for the facility to come into compliance with such requirements, an enforceable sequence of actions, with milestones, leading to compliance with such requirements and provisions for the submission of *Progress Reports* at least every six (6) months. The *Schedule of Compliance* shall include any judicial order, administrative order, and/or increments of progress or any other schedule as issued by any appropriate judicial or administrative body or by the District Hearing Board pursuant to the provisions of Health & Safety Code §42350 et seq.; and
 - (c) *Progress Reports* submitted under the provisions of a *Schedule of Compliance* shall include: Dates for achieving the activities, milestone, or compliance required in the schedule of compliance; and dates when such activities, milestones or compliance were achieved; and an explanation of why any dates in the schedule

of compliance were not or will not be met; and any preventive or corrective measures adopted due to the failure to meet dates in the schedule of compliance.
[Rule 1201 (I)(3)(iii); Rule 1203 (D)(1)(e)(ii); Rule 1203 (D)(1)(g)(v)]

C. FACILITY-WIDE COMPLIANCE CONDITIONS:

1. Owner/Operator shall allow an authorized representative of the MDAQMD to enter upon the permit holder's premises at reasonable times, with or without notice.
[40 CFR 70.6(c)(2)(i); Rule 1203(D)(1)(g)(i)]
2. Owner/Operator shall allow an authorized representative of the MDAQMD to have access to and copy any records that must be kept under condition(s) of this Federal Operating Permit.
[40 CFR 70.6(c)(2)(ii); Rule 1203(D)(1)(g)(ii)]
3. Owner/Operator shall allow an authorized representative of the MDAQMD to inspect any equipment, practice or operation contained in or required under this Federal Operating Permit.
[40 CFR 70.6(c)(2)(iii); Rule 1203(D)(1)(g)(iii)]
4. Owner/Operator shall allow an authorized representative of the MDAQMD to sample and/or otherwise monitor substances or parameters for the purpose of assuring compliance with this Federal Operating Permit or with any Applicable Requirement.
[40 CFR 70.6(c)(2)(iv); Rule 1203(D)(1)(g)(iv)]
5. Owner/Operator shall remain in compliance with all Applicable Requirements / federally enforceable requirements by complying with all compliance, monitoring, record-keeping, reporting, testing, and other operational conditions contained in this Federal Operating Permit. Any noncompliance constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; the termination, revocation and re-issuance, or modification of this Federal Operating Permit; and/or grounds for denial of a renewal application.
[1203 (D)(1)(f)(ii)]
6. Owner/Operator shall comply in a timely manner with all applicable requirements / federally - enforceable requirements that become effective during the term of this permit.
[Rule 1201 (I)(2); Rule 1203(D)(1)(g)(v)]
7. Owner/Operator shall insure that all applicable subject processes comply with the provisions of 40 CFR 61, *National Emission Standards for Hazardous Air Pollutants*, subpart A, *General Provisions*, and subpart M, *Asbestos*.
[40 CFR 61, subparts A and M]. Note: Blythe Energy, Inc. Power Plant is an asbestos-free facility and will remain so.
8. Owner/Operator shall comply with all applicable requirements of 40 CFR 98, the

Mandatory Greenhouse Gas Reporting rule. [40 CFR 98]

PART III
EQUIPMENT SPECIFIC APPLICABLE REQUIREMENTS; EMISSIONS
LIMITATIONS; MONITORING, RECORDKEEPING,
REPORTING AND TESTING REQUIREMENTS; COMPLIANCE
CONDITIONS; COMPLIANCE PLANS

EQUIPMENT DESCRIPTIONS:

PERMIT CONDITIONS; (UNLESS OTHERWISE STATED ALL CONDITIONS RESULT FROM RULE 204 - PERMIT CONDITIONS; VERSION IN SIP = CARB EX. ORDER G-73, 40 CFR 52.220(C)(39)(II)(B) - 11/09/78 43 FR 52237; CURRENT RULE VERSION = 07/25/77:

A. PERMIT B007953 COMBUSTION TURBINE GENERATOR POWER BLOCK

(CT1) consisting of: Natural gas fueled Siemens F Class Model V84.3A(2) Serial No. 800436 combustion turbine generator power block producing approximately 260 MW(e) with a connected heat recovery steam generator and a steam condensing turbine (shared with B007954), maximum turbine heat input of 1776 MMBtu/hr.

B. PERMIT B007954 COMBUSTION TURBINE GENERATOR POWER BLOCK

(CT2) consisting of: Natural gas fueled Siemens F Class Model V84.3A(2) Serial No. 800437 combustion turbine generator power block producing approximately 260 MW(e) with a connected heat recovery steam generator and a steam condensing turbine (shared with B007953), maximum turbine heat input of 1776 MMBtu/hr.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be exclusively fueled with pipeline quality natural gas with a sulfur content not exceeding 0.5 grains per 100 dscf on a twenty-four hour basis and not exceeding 0.25 grains per 100 dscf on a rolling twelve month average basis, and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
3. This equipment is subject to the federal NSPS codified at 40 CFR Part 60, Subparts A (General Provisions) and GG (Standards of Performance for Stationary Gas Turbines). This equipment is also subject to the Prevention of Significant Deterioration (40 CFR 51.166) and Federal Acid Rain (Title IV) programs. Compliance with all applicable provisions of these regulations is required.
4. Emissions from this equipment (including its associated duct burner) shall not exceed the following emission limits at any firing rate, except for CO, NO_x, and VOC during

periods of startup, shutdown and malfunction:

- a. Hourly rate, computed every 15 minutes, verified by CEMS and annual compliance tests:
 - i. NO_x as NO₂ – the most stringent of 19.80 lb/hr or 2.5 ppmvd corrected to 15% oxygen and averaged over one hour
 - ii. NO_x as NO₂ – effective May 7, 2016, 2.0 ppmvd corrected to 15% oxygen and averaged over a rolling 12 month period.
 - iii. CO – the most stringent of 17.5 lb/hr or 4.0 ppmvd corrected to 15% oxygen and averaged over three hours
 - iv. CO – 10 lb/hr averaged over a rolling 12-month period
 - b. Hourly rates, verified by annual compliance tests or other compliance methods in the case of SO_x:
 - i. VOC as CH₄ - 2.9 lb/hr (based on 1 ppmvd corrected to 15% oxygen)
 - ii. SO_x as SO₂ - 2.7 lb/hr (based on 0.5 grains/100 dscf fuel sulfur)
 - iii. PM₁₀ - 6.2 lb/hr
5. Emissions of CO and NO_x from this equipment shall only exceed the limits contained in Condition 4 during startup and shutdown periods as follows:
- a. Startup is defined as the period beginning with ignition and lasting until either the equipment complies with all Condition 4 operating permit limits for two consecutive 15-minute averaging periods or four hours after ignition, whichever occurs first. Shutdown is defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased.
 - b. The emissions from each startup or shutdown event shall not exceed the following, verified by CEMS:
 - i. NO_x - 376 lb
 - ii. CO - 3600 lb
 - c. Effective May 7, 2016, the CO emissions from all startup and shutdown events at both power blocks, averaged over a rolling 12-month period, shall not exceed 750 lb/event, verified by CEMS.
6. Aggregate emissions from B007953 and B007954, including the associated duct burners, shall not exceed the following emission limits, based on a calendar day summary:
- a. NO_x - 5762 lb/day, verified by CEMS
 - b. CO - 8004 lb/day, verified by CEMS
 - c. VOC as CH₄ - 239 lb/day, verified by compliance tests and hours of operation in steady-state, pre-mix mode.
 - d. SO_x as SO₂ - 130 lb/day, verified by fuel sulfur content and fuel use data
 - e. PM₁₀ - 298.5 lb/day, verified by compliance tests and hours of operation
7. Emissions from all Blythe Energy Project I permit units at this facility (as listed in Part I.A.1 of this Permit), including the cooling towers, shall not exceed the following emission limits, based on a rolling 12 month summary:
- a. NO_x - 97 tons/year, verified by CEMS
 - b. CO - 175 tons/year, verified by CEMS

- c. VOC as CH₄ - 24 tons/year, verified by compliance tests and hours of operation in steady-state, pre-mix mode
 - d. SO_x as SO₂ - 12 tons/year, verified by fuel sulfur content and fuel use data
 - e. PM₁₀ - 56.9 tons/year, verified by compliance tests and hours of operation
- These limits shall apply to all emissions from all Blythe Energy Project permit units at this facility (as listed in Part I.A.1, of the Federal Operating Permit), and shall include emissions during all modes of operation, including startup, shutdown and malfunction.
- 8. Particulate emissions from this equipment shall not exceed opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water vapor.
 - 9. This equipment shall exhaust through a stack at a minimum height of 130 feet.
 - 10. ***For Permit B007953 only:*** The owner/operator (o/o) shall not operate this equipment after the initial commissioning period without the selective catalytic NO_x reduction system with valid District permit C007959, as well as the oxidation catalyst with valid District permit C010832 installed and fully functional.
 - 10. ***For Permit B007954 only:*** The owner/operator (o/o) shall not operate this equipment after the initial commissioning period without the selective catalytic NO_x reduction system with valid District permit C007960 as well as the oxidation catalyst with valid District permit C010833 installed and fully functional.
 - 11. The o/o shall provide stack sampling ports and platforms necessary to perform source tests required to verify compliance with District rules, regulations and permit conditions. The location of these ports and platforms shall be subject to District approval.
 - 12. Emissions of NO_x, CO, oxygen and ammonia slip shall be monitored using a Continuous Emissions Monitoring System (CEMS). Each CEMS shall be operational whenever the associated combustion turbine generator is in operation, including during periods of startup, shutdown and malfunction. Turbine fuel consumption shall be monitored using a continuous monitoring system. Stack gas flow rate shall be monitored using either a Continuous Emission Rate Monitoring System (CERMS) meeting the requirements of 40 CFR Part 75 Appendix A or a stack flow rate calculation method. The o/o shall install, calibrate, maintain, and operate these monitoring systems according to a District-approved monitoring plan and MDAQMD Rule 218, and they shall be installed prior to initial equipment startup. Six (6) months prior to installation the operator shall submit a monitoring plan for District review and approval.
 - 13. The o/o shall conduct all required compliance/certification tests in accordance with a District-approved test plan. Thirty (30) days prior to the compliance/certification tests the o/o shall provide a written test plan for District review and approval. Written notice of the compliance/certification test shall be provided to the District ten (10) days prior to the tests so that an observer may be present. A written report with the results of such compliance/certification tests shall be submitted to the District within forty-five (45) days

after testing.

14. The o/o shall perform the following annual compliance tests in accordance with the MDAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the expiration date of this permit. The following compliance tests are required:
- NO_x as NO₂ in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Methods 19, 20, or 7E). If testing is performed at 90%-100% of rated capacity, then the annual calibration RATA associated with the NO_x CEMS in use on these units may be used in lieu of the required annual EPA Reference Method 20, as long as all of the requirements of prior test notification, proper test result submittal, etc., are followed.
 - VOC as CH₄ in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).
 - SO_x as SO₂ in ppmvd at 15% oxygen and lb/hr.
 - CO in ppmvd at 15% oxygen and lb/hr (measured per USEPA Reference Method 10).
 - PM₁₀ in mg/m³ at 15% oxygen and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5)
 - Flue gas flow rate in dscfm.
 - Opacity (measured per USEPA Reference Method 9).
 - Ammonia slip in ppmvd at 15% oxygen.
15. VOC emissions during startup and shutdown periods will be calculated by the CEMS using the following emissions factors:

For Permit B007953 CTG1 only:

- startup events: 0.0048 lb/mmBtu
- shutdown events: 0.0220 lb/mmBtu

For Permit B007954 CTG2 only:

- startup events: 0.0056 lb/mmBtu
- shutdown events: 0.0107 lb/mmBtu

16. Continuous monitoring systems shall be installed, calibrated, certified, maintained, and operated in accordance with the following: meet the following acceptability testing requirements from 40 CFR 60 Appendix B:
- For NO_x and oxygen, 40 CFR 75 appendices A and B Performance Specification 2.
 - For oxygen, Performance Specification 3.
 - For CO, 40 CFR 60 Appendix B Performance Specification 4 and 40 CFR 60 Appendix F except that:
 - The CGA frequency will follow 40 CFR 75 Appendix B Sections 2.2.1 and 2.2.4. Specifically, a CGA will be required at least once during each QA operating quarter, not to exceed four calendar quarters, plus a 168-unit operating hour grace period will apply following the expiration of a required CGA. CGAs will be conducted no less than 30 days apart, to the extent practicable.
 - Analyzer ranges less than or equal to 30 ppm (i.e. CO low range) will be exempt from CGA requirements.
 - All RATA testing shall be conducted at least once every four QA operating quarters but no less frequently than once every eight calendar quarters as provided in 40 CFR 75 App. B, §2.3.1.1. If RATA testing is not completed within this timeframe, a 720 unit operating hour grace period may be used, as provided in 40 CFR 75 App. B, §2.3.3.b. All RATA testing shall be conducted at the normal load level(s) as determined in accordance with 40 CFR 75 Appendix A Section 2.3.1.3(a).
 - ~~For stack gas flow rate, Performance Specification 6 (if CERMS is installed).~~
 - For ammonia, a District approved procedure that is to be submitted by the o/o.

17. The o/o shall submit to the Air Pollution Control Officer (APCO) and USEPA Region IX the following information for the preceding calendar quarter by January 30, April 30, July 30 and October 30 of each year this permit is in effect. Each January 30 submittal shall include a summary of the reported information for the previous year. This information shall be maintained on site for a minimum of five (5) years and shall be provided to District personnel on request:

- a. Operating parameters of emission control equipment, including but not limited to ammonia injection rate, NO_x emission rate and ammonia slip.
- b. Total plant operation time (hours), number of startups, hours in startup, and hours in shutdown period.
- c. Date and time of the beginning and end of each startup and shutdown period.
- d. Average plant operation schedule (hours per day, days per week, weeks per year).
- e. All continuous emissions data reduced and reported in accordance with the District-approved CEMS protocol.
- f. Maximum hourly, maximum daily, total quarterly, and total calendar year emissions of NO_x, CO, PM₁₀, VOC and SO_x (including calculation protocol).
- g. Total monthly and rolling 12-month emissions of NO_x, CO and PM₁₀ from all permit units.
- h. Total monthly and rolling 12-month fuel use in the gas turbines and duct burners.
- i. Average NO_x concentration and average CO mass emission rate, for all operating periods except during startup, shutdown and malfunction, for each gas turbine and associated duct burner, calculated on a rolling 12-month basis.
- j. Average CO emissions from all startups and shutdowns of the gas turbines, on a per event basis, calculated on a rolling 12-month basis.
- k. Fuel sulfur content (monthly laboratory analyses, monthly natural gas sulfur content reports from the natural gas supplier(s), or the results of a custom fuel monitoring schedule approved by USEPA for compliance with the fuel monitoring provisions of 40 CFR 60 Subpart GG).
- l. A log of all excess emissions, including the information regarding malfunctions/breakdowns required by Rule 430.
- m. Any permanent changes made in the plant process or production, which would affect air pollutant emissions, and indicate when changes were made.
- n. Any maintenance to any air pollutant control system (recorded on an as-performed basis).

18. Effective May 7, 2016, total fuel use in the two gas turbines and two duct burners (Permit #B007953 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT1), Permit #B007954 COMBUSTION TURBINE GENERATOR POWER BLOCK (CT2), Permit #B007955 DUCT BURNER UNIT 1 and Permit #B007956 DUCT BURNER UNIT 2) shall not exceed 31,852,800 MMBtu in any rolling 12-month period.

- C. **PERMIT B007955 DUCT BURNER UNIT 1:** Natural gas burner located within the heat recovery steam generator covered by B007953, maximum heat input of 120 MMBtu/hr. Manufacturer is Forney, model # 1002-WPS-C1 and serial #17130.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless

otherwise noted below.

2. This equipment shall be exclusively fueled with natural gas and shall be operated and maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.
3. This duct burner shall not be operated unless the combustion turbine generator with valid District permit B007953, selective catalytic reduction system with valid District permit C007959, and oxidation catalyst C010832 are in operation.
4. Fuel use by this equipment shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

- D. PERMIT B007956 DUCT BURNER UNIT 2:** Natural gas burner located within the heat recovery steam generator covered by B007954, maximum heat input of 120 MMBtu/hr. Manufacturer Forney, model # 1002-WPS-C1 and serial #17202.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be exclusively fueled with natural gas and shall be operated and maintained in strict accord with the recommendations of the manufacturer/supplier and/or sound engineering principles.
3. This duct burner shall not be operated unless the combustion turbine generator with valid District permit B007954, selective catalytic reduction system with valid District permit C007960, and oxidation catalyst C010833 are in operation.
4. Fuel use by this equipment shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

- E. PERMIT C007959 SCR UNIT 1 consisting of:** Selective Catalytic Reduction system with a catalyst located within the power train covered by B007953 and an ammonia injection system. Manufacturer is Haldor Topsoe; model HO5.331cpsi.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
3. This equipment shall be operated concurrently with the combustion turbine generator with valid MDAQMD permit B007953.
4. Ammonia shall be injected whenever the selective catalytic reduction system has reached or exceeded 550 deg Fahrenheit. Except during periods of startup and shutdown, ammonia slip shall not exceed 10 ppmvd (corrected to 15% oxygen), averaged over three hours.
5. Ammonia injection by this equipment in pounds per hour shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

- F. **PERMIT C007960 SCR UNIT 2** consisting of: SELECTIVE CATALYTIC REDUCTION system with a catalyst located within the power train covered by B007954 and an ammonia injection system. Manufacturer is Haldor Topsoe; model HO5.331cpsi

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
3. This equipment shall be operated concurrently with the combustion turbine generator with valid MDAQMD permit B007954.
4. Ammonia shall be injected whenever the selective catalytic reduction system has reached or exceeded 550 deg Fahrenheit. Except during periods of startup and shutdown, ammonia slip shall not exceed 10 ppmvd (corrected to 15% oxygen), averaged over three hours.
5. Ammonia injection by this equipment in pounds per hour shall be recorded and maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.

- G. **PERMIT C010832 OXIDATION CATALYST, UNIT 1** consisting of: Oxidation Catalyst System with a catalyst located within the power train covered by B007953. Johnson Matthey, Honeycat, serial number 200cpsi.

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
3. This equipment shall be operated concurrently with the combustion turbine generator with valid District permit B007953.

H. PERMIT C010833 OXIDATION CATALYST, UNIT 2 consisting of: Oxidation Catalyst System with a catalyst located within the power train covered by B007954. Johnson Matthey, Honeycat, serial number 200cpsl.

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
3. This equipment shall be operated concurrently with the combustion turbine generator with valid District permit B007954.

I. PERMIT B007957 (Main Cooling Tower) consisting of: A Marathon Model 9B 445TTFN4573AA wet cooling tower with water circulation, treatment and handling equipment and air circulation equipment, including the following:

Capacity	Equipment Name	Order
250.00	Cooling Cell Fan #8, Motor Serial No. MU402450-2/22-02	1
250.00	Cooling Cell Fan #7, Motor Serial No. MU402450-2/22-01	2
250.00	Cooling Cell Fan #6, Motor Serial No. MU402450-2/22-05	3
250.00	Cooling Cell Fan #5, Motor Serial No. MU402450-2/22-03	4

Capacity	Equipment Name	Order
250.00	Cooling Cell Fan #4, Motor Serial No. MU402450-2/22-06	5
250.00	Cooling Cell Fan #3, Motor Serial No. MU402450-2/22-07	6
250.00	Cooling Cell Fan #2, Motor Serial No. MU402450-2/22-04	7
250.00	Cooling Cell Fan #1, Motor Serial No. MU402450-2/22-08	8
1000.00	Circulating Water Pump #12, Johnson Serial No. 01JB1129B	9
1000.00	Circulating Water Pump #11, Johnson Serial No. 01JB1129A	10

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
3. The drift rate shall not exceed 0.0006 percent with a maximum circulation rate of 146,000 gallons per minute for the Main Cooling Tower. The maximum hourly PM10 emission rate shall not exceed 0.546 pounds per hour from both the Main and the Chiller Cooling Towers, as calculated per the written District-approved protocol.
4. Whenever the power plant is in operation, the operator shall perform tests of the blow-down water quality once in every seven day period at a minimum; to clarify, if at any time during that same seven day period the power plant has run, then the owner operator shall perform blow-down water quality tests. The operator shall maintain a log, which contains the date and result of each blow-down water quality test, and the resulting mass emission rate. This log shall be maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.
5. The operator shall conduct all required cooling tower water quality tests in accordance with a District-approved test and emissions calculation protocol.
6. A maintenance procedure shall be established that states how often and what procedures will be used to ensure the integrity of the drift eliminators. This procedure shall be submitted to the District for approval at least thirty (30) days prior to construction and shall be kept on-site and available to District personnel on request.

- J. PERMIT B007958 (Chiller Cooling Tower)** consisting of: A Water circulation, treatment and handling equipment and air circulation equipment, including units as follows:

Capacity	Equipment Name	Order
250.00	Cooling Cell Fan #12, BAC Model CXV-T08 Serial No. U025323712	1
250.00	Cooling Cell Fan #11, BAC Model CXV-T08 Serial No. U025323711	2
250.00	Cooling Cell Fan #10, BAC Model CXV-T08 Serial No. U025323710	3
250.00	Cooling Cell Fan #9, BAC Model CXV-T08 Serial No. U025323709	4
250.00	Cooling Cell Fan #8, BAC Model CXV-T08 Serial No. U025323708	5
250.00	Cooling Cell Fan #7, BAC Model CXV-T08 Serial No. U025323707	6
250.00	Cooling Cell Fan #6, BAC Model CXV-T08 Serial No. U025323706	7
250.00	Cooling Cell Fan #5, BAC Model CXV-T08 Serial No. U025323705	8
250.00	Cooling Cell Fan #4, BAC Model CXV-T08 Serial No. U025323704	9
250.00	Cooling Cell Fan #3, BAC Model CXV-T08 Serial No. U025323703	10
250.00	Cooling Cell Fan #1, BAC Model CXV-T08 Serial No. U025323701	11
250.00	Cooling Cell Fan #2, BAC Model CXV-T08 Serial No. U025323702	12
750.00	Chiller Recirculating Pump #4, Cascade Serial No. 16061	13
750.00	Chiller Recirculating Pump #3, Cascade Serial No. 16060	14
750.00	Chiller Recirculating Pump #2, Cascade Serial No. 16059	15
750.00	Chiller Recirculating Pump #1, Cascade Serial No. 16058	16

PERMIT CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

3. The drift rate shall not exceed 0.0006 percent with a maximum circulation rate of 22,000 gallons per minute for the Chiller Cooling Tower. The maximum hourly PM10 emission rate shall not exceed 0.546 pounds per hour from both the Main and the Chiller Cooling Towers, as calculated per the written District-approved protocol.
4. Whenever the power plant is in operation, the operator shall perform weekly tests of the blow-down water quality. The operator shall maintain a log, which contains the date and result of each blow-down water quality test, and the resulting mass emission rate. This log shall be maintained on site for a minimum of five (5) years and shall be provided to District, State or Federal personnel on request.
5. The operator shall conduct all required cooling tower water quality tests in accordance with a District-approved test and emissions calculation protocol. Thirty (30) days prior to the first such test the operator shall provide a written test and emissions calculation protocol for District review and approval.
6. A maintenance procedure shall be established that states how often and what procedures will be used to ensure the integrity of the drift eliminators. This procedure shall be submitted to the District for approval at least thirty (30) days prior to construction and shall be kept on-site and available to District personnel on request.

- K. **PERMIT E007961 NON-CERTIFIED DIESEL IC ENGINE, EMERGENCY FIRE PUMP** consisting of: Year of Manufacture 2002; USEPA Family Name NA; CARB Executive Order NA; Tier 0, One John Deere, Diesel fired internal combustion engine, Model No. 6081HF001 and Serial No. RG6081H145432, Direct Injected, Turbo Charged, producing 303 bhp with 6 cylinders at 2200 rpm while consuming a maximum of 14 gal/hr. This equipment powers a Pump.

PERMIT CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR Part 63, Subpart ZZZZ]
2. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.
[Title 17 CCR 93115]
3. A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on this unit to indicate elapsed engine operating time.

[Title 17 CCR 93115; 40 CFR §63.6625(f)]

4. This unit shall be limited to use for emergency power, defined as in response to a fire or due to low fire water pressure. In addition, this unit shall be operated no more than 20 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 20 hour per year limit.
[Title 17 CCR 93115.6]
5. The requirements of section 93115.6, the hour limits indicated above, do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.
[Title 17 CCR 93115.3]
6. The owner/operator (o/o) shall maintain an operations log for this unit current and on-site, either at the engine location or at an on-site location, for a minimum of five (5) years, and provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:
 - a. Date of each use and duration of each use (in hours), using the engines hour meter;
 - b. Reason for use (testing & maintenance, emergency, required emission testing);
 - c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours;
 - d. Monthly and rolling 12-month total CO, NO_x and PM₁₀ emissions, calculated based on monthly fuel use and District-approved emission factors;
 - e. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).

[40 CFR §63.6655(f); Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77]
7. The owner/operator shall conduct inspections in accord with the following schedule. All inspections must occur at least annually regardless of operating hours.
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, or use an oil change analysis program to extend oil change frequencies per the requirements in 40 CFR 63.6625(i);
 - b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR Part 63.6630(a); Table 2d.4.; Subpart ZZZZ]
8. The owner/operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of

the engine, not to exceed 30 minutes.
[40 CFR 63.6625(h)].

9. This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines Title 17 CCR 93115 and 40 CFR 63 Subpart ZZZZ (RICE NESHAPs). In the event of conflict between conditions and the referenced regulatory citations, the more stringent requirements shall govern.
[Title 17 CCR 93115; 40 CFR 63, Subpart ZZZZ]

- L. **PERMIT E009492 PROPANE IC ENGINE, EMERGENCY GENERATOR (CHILLER BLDG)** consisting of: One Ford, Propane fired internal combustion engine, Model No. WSG106816005E-NA and Serial No. 01-11- 012316, Direct Injected, Inter Cooled, producing 114 bhp with 4 cylinders at 1800 rpm while consuming a maximum of 12 gal/hr. This equipment powers a Generator.

PERMIT CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR Part 63, Subpart ZZZZ]
2. This ICE shall only be fired on propane (LPG).
[District Rule 1302]
3. A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on this unit to indicate elapsed engine operating time.
[40 CFR §63.6625(f)]
4. This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 100 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 100 hour per year limit.
[40 CFR Part 63, Subpart ZZZZ]
5. The o/o shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:
 - a. Date of each use and duration of each use (in hours);
 - b. Reason for use (testing & maintenance, emergency, required emission testing);
 - c. Monthly and calendar year operation in terms of fuel consumption (in gallons)

- and total hours;
- d. Monthly and rolling 12-month total CO, NO_x and PM₁₀ emissions, calculated based on monthly fuel use and District-approved emission factors.
[40 CFR §63.6655(f)]
6. The owner/operator shall conduct inspections in accord with the following schedule. All inspections must occur at least annually regardless of operating hours.
- a. Change oil and filter every 500 hours of operation or annually, whichever comes first; or use an oil change analysis program to extend oil change frequencies per the requirements in 40 CFR 63.6625(i);
 - b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first;
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR Part 63.6640; Table 2d.5, Subpart ZZZZ]
7. The owner/operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
[40 CFR 63.6625(h)]
8. This unit is subject to the requirements of 40 CFR 63 Subpart ZZZZ (RICE NESHAPs). In the event of conflict between conditions and the referenced regulatory citation, the more stringent requirements shall govern.
[40 CFR 63, Subpart ZZZZ]

PART IV STANDARD FEDERAL OPERATING PERMIT CONDITIONS

A. **STANDARD CONDITIONS:**

1. If any portion of this Federal Operating Permit is found to be invalid by the final decision of a court of competent jurisdiction the remaining portion(s) of this Federal Operating Permit shall not be affected thereby.
[40 CFR 70.6(a)(5); Rule 1203(D)(1)(f)(i)]
2. Owner/Operator shall comply with all condition(s) contained herein. Noncompliance with any condition(s) contained herein constitutes a violation of the Federal Clean Air Act and of MDAQMD Regulation XII and is grounds for enforcement action; termination, revocation and re-issuance, or modification of this Federal Operating Permit; and/or grounds for denial of a renewal of this Federal Operating Permit.
[40 CFR 70.6(a)(6)(i); Rule 1203(D)(1)(f)(ii)]
3. It shall not be a defense in an enforcement action brought for violation(s) of condition(s) contained in this Federal Operating Permit that it would have been necessary to halt or reduce activity to maintain compliance with those condition(s).
[40 CFR 70.6(a)(6)(ii); Rule 1203(D)(1)(f)(iii)]
4. This Federal Operating Permit may be modified, revoked, reopened or terminated for cause.
[40 CFR 70.6(a)(6)(iii); Rule 1203(D)(1)(f)(iv)]
5. The filing of an application for modification; a request for revocation and re-issuance; a request for termination; notifications of planned changes; or anticipated noncompliance with condition(s) does not stay the operation of any condition contained in this Federal Operating Permit.
[40 CFR 70.6(a)(6)(iii); Rule 1203(D)(1)(f)(v)]
6. The issuance of this Federal Operating Permit does not convey any property rights of any sort nor does it convey any exclusive privilege.
[40 CFR 70.6(a)(6)(iv); Rule 1203(D)(1)(f)(vi)]
7. Owner/Operator shall furnish to the MDAQMD, within a reasonable time as specified by the MDAQMD, any information that the MDAQMD may request in writing.
[40 CFR 70.6(a)(6)(v); Rule 1203(D)(1)(f)(vii)]

8. Owner/Operator shall furnish to District, state or federal personnel, upon request, copies of any records required to be kept pursuant to condition(s) of this Federal Operating Permit.
[40 CFR 70.6(a)(6)(v); Rule 1203(D)(1)(f)(viii)]
9. Any records required to be generated and/or kept by any portion of this Federal Operating Permit shall be retained by the facility Owner/Operator for at least five (5) years from the date the records were created.
[40 CFR 70.6(a)(3)(ii)(B); Rule 1203(D)(1)(d)(ii)]
10. Owner/Operator shall pay all applicable fees as specified in MDAQMD Regulation III, including those fees related to permits as set forth in Rules 301 and 312.
[40 CFR 70.6(a)(7); Rule 1203(D)(1)(f)(ix)]
11. Owner/Operator shall not be required to revise this permit for approved economic incentives, marketable permits, emissions trading or other similar programs provided for in this permit.
[40 CFR 70.6(a)(8); Rule 1203(D)(1)(f)(x)]
12. Compliance with condition(s) contained in this Federal Operating Permit shall be deemed compliance with the Applicable Requirement underlying such condition(s). The District clarifies that “only” Applicable Requirements listed & identified elsewhere in this Title V Permit are covered by this Permit Shield and does not extend to any unlisted/unidentified conditions pursuant to the requirements of 40 CFR 70.6(f)(1)(i).
[40 CFR 70.6(f)(1)(i); Rule 1203(G)(1)]
13. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit the emergency powers of USEPA as set forth in 42 U.S.C. §7603.
[40 CFR 70.6(f)(3)(i); Rule 1203(G)(3)(a)]
14. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit liability for violations, which occurred prior to the issuance of this Federal Operating Permit.
[40 CFR 70.6(f)(3)(ii); Rule 1203(G)(3)(b)]
15. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to alter any Applicable Requirement Contained in the Acid Rain Program.
[40 CFR 70.6(f)(3)(iii); Rule 1203(G)(3)(c)]
16. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to limit the ability of USEPA or the MDAQMD to obtain information pursuant to other provisions of law including but not limited to 42 U.S.C. §7414. [40 CFR 70.6(f)(3)(iv); Rule 1203(G)(3)(d)]
17. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to apply to emissions trading pursuant to provisions contained in an applicable State

Implementation Plan.

[40 CFR 70.4(b)(12)(ii)(B); Rule 1203(G)(3)(e)]

18. The Permit Shield set forth above, in condition 12 of Part IV, shall not be construed to apply to changes made which are not expressly allowed by this Federal Operating Permit.
[40 CFR 70.4(b)(14)(iii); Rule 1203(G)(3)(f)]
19. The Permit Shield set forth in Part IV, condition 12, shall not be construed to apply to changes made pursuant to the Significant Permit Modification provisions until such changes are included in this Federal Operating Permit.
[40 CFR 70.5(a)(1)(ii), 70.7(e)(2)(vi); Rule 1203 (G)(3)(g)]
20. If Owner/Operator performs maintenance on, or services, repairs, or disposes of appliances, Owner/Operator shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. These requirements are Federally Enforceable through this Title V Permit.
[40 CFR Part 82, Subpart F]
21. If Owner/Operator performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), Owner/Operator shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. These requirements are Federally Enforceable through this Title V Permit.
[40 CFR Part 82, Subpart B]
22. Notwithstanding the testing requirements contained elsewhere in this Title V Permit, any credible evidence may be used to establish violations, including but not limited to; reference test methods, engineering calculations, indirect estimates of emissions, CEMS data, and parametric monitoring data. Data need not be required to be collected in a Title V permit in order to be considered credible.
[Section 113(a) of the Clean Air Act]
23. Owner/operator desiring to renew this Federal Operating Permit shall submit an application for renewal at least six (6) months, but no earlier than eighteen (18) months, prior to the expiration date of this Federal Operating Permit.
[40 CFR 70, Rule 1202(B)(3)(b)]

PART V OPERATIONAL FLEXIBILITY

A. ALTERNATIVE OPERATING SCENARIO(S):

B. OFF PERMIT CHANGES:

I. Permittee may make a proposed change to equipment covered by this permit that is not expressly allowed or prohibited by this permit if:

A. Permittee has applied for and obtained all permits and approvals required by MDAQMD Regulation II and Regulation XII unless the equipment involved in the change is exempt from obtaining such permits and approvals pursuant to the provisions of Rule 219; and

1. The proposed change is not:

- a. Subject to any requirements under Title IV of the Federal Clean Air Act; or *[See 1203(E)(1)(c)(i)d]*
- b. A modification under Title I of the Federal Clean Air Act; or
- c. A modification subject to Regulation XIII; and *[See 1203(E)(1)(c)(i) d]*
- d. The change does not violate any Federal, State or Local requirement, including an applicable requirement; and *[See 1203(E)(1)(c)(i)c]*
- e. The change does not result in the exceedance of the emissions allowable under this permit (whether expressed as an emissions rate or in terms of total emissions). *[See 1203(E)(1)(c)(i)e]*

II. Procedure for “Off Permit” Changes

A. If a proposed “Off Permit Change” qualifies under Part V, Section (B)(I)(A)(1) above, permittee shall implement the change as follows:

1. Permittee shall apply for an Authority To Construct permit pursuant to the provisions of Regulation II. *[See 1203(E)(1)(c)(i)b]*

2. In addition to the information required pursuant to the provisions of Regulation II and Regulation XIII such application shall include:

- a. A notification that this application is also an application for an “Off Permit” Change pursuant to this condition; and *[See 1203(E)(1)(c)(i)b]*
- b. A list of any new Applicable Requirements which would apply as a result of the change; and *[See 1203(E)(1)(c)(i)b.]*
- c. A list of any existing Applicable Requirements, which would cease to apply as a result of the change. *[See 1203(E)(1)(c)(i)c]*

3. Permittee shall forward a copy of the application and notification to USEPA upon submitting it to the District. *[See 1203(E)(1)(c)(i)a]*

B. Permittee may make the proposed change upon receipt from the District of the Authority to Construct Permit or thirty (30) days after forwarding the copy of the notice and application to USEPA whichever occurs later. *[See 1203(E)(1)(c)(i)a]*

and g]

- C. Permittee shall attach a copy of the Authority to Construct Permit and any subsequent Permit to Operate, which evidences the Off Permit Change to this Title V permit. *[See 1203(E)(1)(c)(i)f]*
- D. Permittee shall include each Off-Permit Change made during the term of the permit in any renewal application submitted pursuant to Rule 1202(B)(3)(b). *[See 1203(E)(1)(c)(i)f]*

III. Other Requirements:

- A. The provisions of Rule 1205 – Modifications do not apply to an Off Permit Change made pursuant to this condition.
- B. The provisions of Rule 1203(G) – Permit Shield do not apply to an Off Permit Change made pursuant to this condition. *[See 40 CFR 70.4(b)(i)(B)]*
[Rule 1203(E)(1)(c)]

PART VI
Title IV Acid Rain Permit

Effective Dates: December 5, 2016 to December 5, 2021

Issued to: BLYTHE ENERGY, INC.

Plant Site Location: 385 N. Buck Blvd.
Blythe, CA 92225

Type of Facility: Combined Cycle Generation Facility

SIC Code: 4911 – Electric Power Generation

ORIS Code: 55295

DESIGNATED REPRESENTATIVE

Name: Jason Allen

Title: Vice President of Operations - Power

FACILITY CONTACT PERSONS

Name: Bill Cotton

Title: Plant General Manager

Name: Ramon Campos

Title: Compliance Manager

ACID RAIN PERMIT CONTENTS

- 1) PERMIT APPLICATION - see page VI-46
The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application submitted for this source.
- 2) Applicable Requirements
 - a. SO₂ allowance allocated under this permit and NO_x requirements for each affected unit:

	12/5/16-12/5/21
SO2 allowances under Table 2 of 40 CFR Part 73	None
NOx limit, 40 CFR Part 76	none

b. Standard Requirements

Citation	Requirement
40 CFR 72 Rule 1210	Owner/Operator of Blythe Energy Project shall comply with all applicable provisions of 40 CFR 72, Permits Regulation (Title IV) and their Title IV permit application as indicated in this combined, Federal Operating Permit / Title IV Acid Rain Permit, Part VIII.
40 CFR 72 Rule 1210	Owner / Operator shall comply with <i>all listed compliance conditions contained within this Title IV Acid Rain Permit and associated Title V Permit.</i>
40 CFR 70.6(a)(1)(ii)	Where an applicable requirement of the Act is more stringent than an applicable requirement of Title IV regulations, both provisions shall be incorporated into the permit and is enforceable by the Administrator.
Monitoring, 40 CFR Part 72, Section 72.9(b)	<p>1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in part 75 of this chapter.</p> <p>(2) The emissions measurements recorded and reported in accordance with part 75 of this chapter shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.</p> <p>(3) The requirements of part 75 of this chapter shall not affect the responsibility of the owners and operators to monitor emissions of other</p>

	pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
Reporting, 40 CFR Part 72, Section 72.9(f)(2)	The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under subpart I of this part and part 75 of this chapter.
Recordkeeping, 40 CFR Part 72, Section 72.9(f)(1)	<p>(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority.</p> <p>(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with §72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.</p> <p>(ii) All emissions monitoring information, in accordance with part 75 of this chapter; provided that to the extent that part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.</p> <p>(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program.</p>

	(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
Section 113(a) of the Clean Air Act	Notwithstanding the testing requirements contained elsewhere in this combined Title IV / V Permit, any credible evidence may be used to establish violations, including but not limited to; reference test methods, engineering calculations, indirect estimates of emissions, CEMS data, and parametric monitoring data. Data need not be required to be collected in a Title V permit in order to be considered credible.

3) Statement of Basis

The Mojave Desert Air Quality Management District issues this permit pursuant to Regulation XII, Rule 1210 and Titles IV and V of the Clean Air Act. Questions or comments regarding this permit should be addressed to:

Brad Poiriez, Executive Director
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392
760-245-1661
760-245-2022 (fax)

This Acid Rain Permit applies to the following units:

MDAQMD PERMIT NUMBER	DESCRIPTION	BASIS
B007953 B007956	COMBUSTION TURBINE GENERATOR POWER BLOCK (CT1) DUCT BURNER UNIT 1	40 CFR Part 72.6(a)(3)(i)
B007954 B007956	COMBUSTION TURBINE GENERATOR POWER BLOCK (CT2) DUCT BURNER UNIT 2	40 CFR Part 72.6(a)(3)(i)

Comments, notes and justifications regarding this Acid Rain Program permit

- Pursuant to 40 CFR Part 72.6(a)(3)(i), the affected units specified above meet the 72.2 definition for a new utility unit and are subject to the acid rain permit requirements of 72.9(a). The affected units do not qualify for a new unit exemption pursuant to 40 CFR 72.7(b)(1) since each serves a generator with a nameplate capacity greater than 25 MW.
- The affected units specified above are not listed in table-2 of 40 CFR Part 73, therefore, the operator is not required to obtain SO₂ allowances under the Acid Rain Program.
- This unit is not subject to the NO_x requirements from 40 CFR Part 76 as this unit is not capable of firing on coal

**United States
Environmental Protection Agency
Acid Rain Program**

STEP 3**Read the standard requirements.****Permit Requirements**

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

STEP 3, Cont'd.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

STEP 3, Cont'd.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

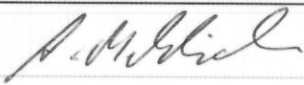
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

**Read the
certification
statement, sign,
and date.**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Andreas Mehlich	
Signature		Date 06/02/2021



Instructions for the Acid Rain Program Permit Application

The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA before the permit application is submitted to the Title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the Title V permitting authority either issues a permit to the source or disapproves the application.

Please type or print. If assistance is needed, contact the Title V permitting authority.

STEP 1 A Plant Code is a 4 or 5 digit number assigned by the Department of Energy's (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, send an email to the EIA. The email address is EIA-860@eia.gov.

STEP 2 In column "a," identify each unit at the facility by providing the appropriate unit identification number, consistent with the identifiers used in the Certificate of Representation and with submissions made to DOE and/or EIA. Do not list duct burners. For new units without identification numbers, owners and operators must assign identifiers consistent with EIA and DOE requirements. Each Acid Rain Program submission that includes the unit identification number(s) (e.g., Acid Rain permit applications, monitoring plans, quarterly reports, etc.) should reference those unit identification numbers in exactly the same way that they are referenced on the Certificate of Representation.

Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the Title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a Title V permit, or such longer time as provided for under the Title V permitting authority's operating permits regulation.

Submission Instructions

Submit this form to the appropriate Title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Clean Air Markets Hotline at (202) 343-9620.

Paperwork Burden Estimate

The public reporting and record keeping burden for this collection of information is estimated to average 8 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. **Do not send the completed form to this address.**

PART VII CONVENTIONS, ABBREVIATIONS, DEFINITIONS

A. CONVENTIONS:

The following referencing conventions are used in this federal operating permit:

40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS)
40 CFR Part 60, Appendix F, Quality Assurance Procedures
40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants
(NESHAPS)
40 CFR Part 61, Subpart M, National Emission Standards for Asbestos
40 CFR Part 63--National Emission Standards For Hazardous Air Pollutants For
Affected Source Categories
40 CFR Part 72, Permits Regulation (Acid Rain Program)
40 CFR Part 73, Sulfur Dioxide Allowance System
40 CFR Part 75, Continuous Emission Monitoring
40 CFR Part 75, Subpart D, Missing Data Substitution Procedures
40 CFR Part 75, Appendix B, Quality Assurance and Quality Control Procedures
40 CFR Part 75, Appendix C, Missing Data Estimating Procedures
40 CFR Part 75, Appendix D, Optional SO₂ Emissions Data Protocol
40 CFR Part 75, Appendix F, Conversion Procedures
40 CFR Part 75, Appendix G, Determination of CO₂ Emissions

B. OTHER CONVENTIONS:

1. Unless otherwise noted, a “day” shall be considered a 24-hour period from midnight to midnight (i.e., calendar day).
2. The process unit identifications represent the District permit number designations. These numbers are not sequential. The use of District permit numbers provides continuity between the District and Federal Operating Permit systems.

C. ABBREVIATIONS

Abbreviations used in this permit are as follows:

CFR	Code of Federal Regulations
APCO	Air Pollution Control Officer
bhp	brake horsepower
Btu	British thermal units
CCR	California Code of Regulations
CEMS	continuous emissions monitoring system
CO	carbon monoxide
CO ₂	carbon dioxide
District	Mojave Desert Air Quality Management District (formed July 1993)
MDAQMD	Mojave Desert Air Quality Management District (formed July 1993)

MD	Mojave Desert Air Quality Management District (formed July 1993)
SB	San Bernardino County APCD (1975 to formation of MDAQMD)
gr/dscf	grains per dry standard cubic foot
gpm	gallons per minute
gph	gallons per hour
hp	horse power
H&SC	California Health and Safety Code
lb	pounds
lb / hr	pounds per hour
lb / MM Btu	pounds per million British thermal units
MM Btu	million British thermal units
MM Btu/hr	million British thermal units per hour
MW	Megawatt electrical power
MW(e) net	net Megawatt electrical power
NH ₃	ammonia
NMOC	non-methane organic compounds
NO _x	oxides of nitrogen
NO ₂	nitrogen dioxide
O ₂	oxygen
pH	pH (acidity measure of solution)
PM ₁₀	particulate matter less than 10 microns aerodynamic diameter
ppmv	parts per million by volume
psig	pounds per square inch gauge pressure
QA	quality assurance
rpm	revolutions per minute
RVP	Reid vapor pressure
SCAQMD	South Coast Air Quality Management District
scfm	standard cubic feet per minute
scfh	standard cubic feet per hour
SIC	Standard Industrial Classification
SIP	State of California Implementation Plan
SO _x	oxides of sulfur
SO ₂	sulfur dioxide
tpy	tons per year
TVP	true vapor pressure

D. MDAQMD RULE SIP HISTORY

SIP Rule Citations for Mojave Desert Air Quality Management District Rules

District Rule Number	District Rule Title	SIP Rule Version	SIP Citation	Federally Enforceable
203	<i>Permit to Operate</i>	1/7/77	Approved 11/9/78, 43 FR 52237, 40 CFR 52.220(c)(39)(ii)(B) and 40 CFR 52.220(c)(31)(vi)(C)	Y
204	<i>Permit Conditions</i>	1/9/76	Approved 11/9/78, 43 FR 52237, 40 CFR 52.220(c)(39)(ii)(B) and 40 CFR 52.220(c)(31)(vi)(C)	Y
206	<i>Posting of Permit to Operate</i>	1/9/76	Approved 11/9/78, 43 FR 52237, 40 CFR 52.220(c)(39)(ii)(B) and 40 CFR 52.220(c)(31)(vi)(C)	Y
207	<i>Altering or Falsifying of Permit</i>	1/9/76	Approved 11/09/78, 43 FR 52237, 40 CFR 52.220(c)(39)(ii)(B) and 52.220(c)(31)(vi)(C)	Y
209	<i>Transfer and Voiding of Permit</i>	1/9/76	Approved 11/9/78, 43 FR 52237, 40 CFR 52.220(c)(39)(ii)(B) and 40 CFR 52.220(c)(31)(vi)(C)	Y
217	<i>Provision for Sampling And Testing Facilities</i>	1/9/76	Approved 11/9/78, 43 FR 52237, 40 CFR 52.220(c)(39)(ii)(B) and 40 CFR 52.220(c)(31)(vi)(C)	Y
218	<i>Stack Monitoring</i>	7/25/79	Approved 9/28/81, 46 FR 47451, 40 CFR 52.220(c)(65)(ii)	Y

219	<i>Equipment Not Requiring a Written Permit</i>	6/6/77	Approved 11/9/78, 43 FR, 52237, 40 CFR 52.220(c)(31)(vi)(C), 40 CFR 52.220(c)(32)(iv)(C), and 40 CFR 52.220(c)(39)(ii)(B)	Y
221	<i>Federal Operating Permit Requirement</i>	12/21/94	Approved 2/5/96, 61 FR 4217, 40 CFR 52.220(c)(216)(i)(A)(2)	Y
301	<i>Permit Fees</i>	Not in SIP	Applicable Version = Most current amendment, Applicable via Title V Program interim approval 02/05/96 61 FR 4217	Y
312	<i>Fees for Federal Operating Permits</i>	Not in SIP	Applicable Version = Amended: 12/21/94, Applicable via Title V Program interim approval 02/05/96 61 FR 4217	Y
401	<i>Visible Emissions</i>	7/25/1977	Approved 9/8/78, 43 FR 4001, 40 CFR 52.220(c)(39)(ii)(C)	Y
403	<i>Fugitive Dust</i>	7/25/1977	Approved 9/8/78, 43 FR 4001, 40 CFR 52.220(c)(39)(ii)(B)	Y

403.2	<i>Fugitive Dust Control for the Mojave Desert Planning Area</i>	9/22/96	Approved 12/9/98, 63 FR 67784, 40 CFR 52.220(c)(194)(i)(H)(1)	Y
404	<i>Particulate Matter Concentratio n</i>	7/25/77	Approved 12/21/78, 43 FR 59489, 40 CFR 52.220(c)(42)(xiii)(A)	Y
405	<i>Solid Particulate Matter, Weight</i>	7/25/77	Approved 12/21/78, 43 FR 59489, 40 CFR 52.220(c)(42)(xiii)(A) ; Approved 6/14/78, 43 FR 25684, 40 CFR 52.220(c)(32)(iv)(A)	Y
406	<i>Specific Contaminants</i>	7/25/1977 (sub divis ion (a))	Approved, 12/21/78, 43 FR 59489, 40 CFR 52.220(c)(42)(xiii)(A)	Y
407	<i>Liquid and Gaseous Air Contaminants</i>	5/7/76	Approved 9/8/78, 43 FR 40011; 40 CFR 52.220(c)(39)(ii)(C)	Y
408	<i>Circumvention</i>	5/7/76	Approved 9/8/78, 43 FR 40011; 40 CFR 52.220(c)(39)(ii)(C); Approved 6/14/78, 43 FR 25684, 40 CFR 52.220(c)(32)(iv)(A)	Y
409	<i>Combustion Contaminants</i>	5/7/76	Approved 9/8/78; 43 FR 40011; 40 CFR 52.220(c)(39)(ii)(C); Approved 6/14/78, 43 FR 25684, 40 CFR 52.220(c)(32)(iv)(A)	Y

430	<i>Breakdown Provisions</i>	Not in SIP	Applicable Version = Amended: 12/21/94, Applicable via Title V Program interim approval 02/05/96 61 FR 4217	Y
431	<i>Sulfur Content of Fuels</i>	10/8/1976	Approved 9/8/1978, 43 FR 40011, 40 CFR 52.220(c)(37)(i)(B) and 40 CFR 52.220(c)(39)(ii)(B)	Y
442	<i>Usage of Solvents</i>	2/27/06	Approved 09/17/2007, 72 FR 52791, 40 CFR 52.220(c)(347)(i)(C)(1)	Y
900	<i>Standards of Performance for New Stationary Sources</i>	2/28/11	Delegated by USEPA	Y
1000	<i>National Emissions Standards from Hazardous Air Pollutants</i>	2/28/11	Delegated by USEPA	Y
1104	<i>Organic Solvent Degreasing Operations</i>	9/28/94	Approved: 4/30/96, 61 FR 18962, 40 CFR 52.220(c)(207)(I)(D)(2)	Y
1113	<i>Architectural Coatings</i>	4/23/12	Approved: 1/03/14, 79 FR 364, 40 CFR 52.220(c)(428)(i)(C)	Y

1115	<i>Metal Parts and Products Coating Operations</i>	4/22/96	Approved 12/23/97, 62 FR 67002, 40 CFR 52.220(c)(239)(i)(A)(2)	Y
1161	<i>Cement Kilns</i>	3/25/02	Approved 1/2/02, 67 FR 19, 40 CFR 52.220(c)(287)(i)(A)(1)	Y
1302	<i>NSR - Procedure</i>	3/25/96	Approved 11/13/1996, 61 FR 58133, 40 CFR 52.220(c)(239)(i)(A)(1)	Y
Regulation XII	<i>Federal Operating Permits</i>	1201- 1210 : 9/26/ 05 1200 & 1211 : 2/28/ 11	SIP: Not SIP. Final Title V Program Approval 11/21/03 68 FR 65637; Partial Withdrawal of approval 10/15/02 67 FR 63551; Notice of Deficiency 05/22/02 67 FR 35990; Approval 12/17/01 66 FR 63503; Interim Approval 02/05/96 61 FR 4217	

Appendix B Public Notice

Noticing Methods include the following, per District Rule 1207 (A)(1)(a) and District Rule 1302(D)(2)and(3):

- Published in newspapers of general circulation - *Riverside Press Enterprise* (Riverside County) and the *Daily Press* (San Bernardino County).
- Mailed and/or emailed to MDAQMD contact list of persons requesting notice of actions (see the contact list following the Public Notice in this Appendix.
- Posted on the MDAQMD Website at the following link:
<https://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting>