State of Utah
GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
Director

October 29, 2019

Kit Pappas, Environmental Manager
Bronco Utah Operations, LLC
PO Box 527
Emery, Utah 84522
Via Email

Subject: **Compliance Evaluation Inspections**, Bronco Utah Operations, LLC
UPDES Permit Nos. UT0022616 & UTG040026

Dear Mr. Pappas:

Attached are the results of the Compliance Evaluation Inspections conducted by the Division of Water Quality on October 2, 2019. No deficiencies were noted and no formal response is required at this time. However, please pay particular attention to the **Recommendations** section of the narrative report for further guidance.

Thank you for facilitating the inspections and site tour. Your continued efforts to remain in compliance with the provisions of your UPDES Permits are appreciated. If you have any questions with regards to this matter, please contact me at (801) 536-4395 or by e-mail at jstudenka@utah.gov.

Sincerely,

for Jeff Studenka, Environmental Scientist
UPDES Surface Water Section

JAS/blj

Enclosures (3):
1. Emery Mine Narrative Report w/photos (DWQ-2019-013660)
2. UPDES Inspection Checklist
3. Hidden Valley Mine Site Report w/photos (DWQ-2019-13624)

Cc: Via Email with Enclosures
Scott Hacking, DEQ SE District Engineer
Orion Rogers, SE Utah Health Department
Steve Christensen, DOGM

DWQ-2019-013658
Files: UPDES Section 6

INSPECTION PROTOCOL

UPDES Permit #: UT0023540 – Bronco Utah Operations Emery Coal Mine
Inspection Type: Compliance Evaluation Inspection (CEI)
Inspection Date: October 2, 2019
Weather Conditions: Clear and sunny, ~58°F

Jeff Studenka and Monique Bridges of the Utah Division of Water Quality (DWQ), along with DEQ District Engineer Scott Hacking, met with Kit Pappas of the Bronco Utah Operations Emery Mine Facility (Bronco Mine). Upon introductions, DWQ first provided NetDMR assistance for future permit reporting requirements to be submitted electronically. After which the purpose and scope of the inspection were explained, the DWQ UPDES Inspection Checklist was completed, and a facility tour was conducted with photos collected as attached. There were no deficiencies from the previous inspection for follow up. The current UPDES permit was issued effective January 1, 2018 and will expire December 31, 2022.

FACILITY DESCRIPTION

Location: Consol Coal Road off Utah Hwy 10 near Emery, Utah
Coordinates: Outfall 001: 38° 51’ 38” latitude, -111° 16’ 09” longitude
Outfall 002: 38° 51’ 34” latitude, -111° 15’ 24” longitude
Outfall 003: 38° 52’ 33” latitude, -111° 16’ 53” longitude
Outfall 004: 38° 52’ 48” latitude, -111° 16’ 51” longitude
Outfall 005: 38° 51’ 34” latitude, -111° 15’ 23” longitude
Outfall 006: 38° 51’ 32” latitude, -111° 15’ 30” longitude
Outfall 007: 38° 51’ 45” latitude, -111° 15’ 45” longitude
Outfall 008: 38° 51’ 45” latitude, -111° 16’ 15” longitude
Outfall 009: 38° 52’ 30” latitude, -111° 14’ 08” longitude

Effluent Flows: 1.5 MGD max per outfall (Only Outfall 003 has discharged in recent years)

Receiving Water: Outfalls 001 thru 008 each discharge to Quitchupah Creek while Outfall 009 discharges to Christiansen Wash first which flows into Quitchupah Creek → Muddy River → Dirty Devil River → Colorado River.

Process: Bronco Mine is an active underground coal mine with Standard Industrial Classification code 1221, for *Bituminous Underground Coal Mining Operations*. Mine water is collected underground at sump locations and pumped as needed to the surface and into sedimentation ponds which then discharge through permitted outfalls when full. Surface water runoff from the disturbed areas is conveyed to above ground settling ponds also, each with a permitted discharge point. Outfalls 001, 003, 004 and 005 are the discharge points from corresponding sedimentation ponds collecting mine water as needed. Outfalls 002, 006, 007, 008, and 009 are discharge points from corresponding sedimentation ponds collecting storm water runoff from the mining areas. In recent years, the primary discharge from Bronco Mine has been from Outfall 003, but has not discharged since spring 2019. There have been no discharges from any of the other outfalls in several years.

INSPECTION SUMMARY

Sampling & Recordkeeping: Monthly monitoring is conducted as per the UPDES permit requirements and has been consistently reported on paper DMR forms. Bronco Mine is now set up to start e-reporting via NetDMR going forward as required. When discharging, monthly samples are routinely collected for TSS, TDS, sulfate, total iron, and oil & grease, and are delivered to the SGS North America, Inc. labs in Huntington, Utah for analyses. Effluent flow and pH are instantaneously measured on site. Calibration checks for pH are to be performed prior to each measurement and recorded in a sampling log book. Holding times and effluent limitations have been consistently met with the appropriate number of samples collected for each parameter as specified in the permit.

Flow: Effluent flows from mine water discharges via Outfall 003 are measured by a dedicated concrete channel with a Parshall flume and staff gauge immediately following the outlet of the corresponding sedimentation pond #6. Currently there are no secondary flow measurement capabilities in place for the mine water discharges. Any effluent flows from the other outfalls would be measured by utilizing a bucket and stopwatch to obtain gallons per minute.

Site Reconnaissance: A facility tour was conducted observing the above ground mine operations, including the sedimentation ponds and discharge locations for all Outfalls.

Effluent and Receiving Waters: None of the permitted outfalls were discharging at the time of the inspection. The primary discharge point from the Bronco Mine is from Outfall 003 when mine dewatering occurs, but has not happened since spring 2019. There have been no discharges from any of the other outfalls in many years. The receiving water of Quitchupah Creek was observed near the discharging outfalls with no deficiencies or concerns identified.

DEFICIENCIES

None

CORRECTIVE ACTIONS REQUIRED

None

RECOMMENDATIONS

1. Be sure to collect a quarterly WET sample, in addition to the monthly monitoring parameters, upon future discharging events as per the permit requirements.
2. Contact DWQ with any NetDMR questions, or when you need further assistance.

LIST OF ATTACHMENTS

- Photos
- DWQ UPDES Inspection Checklist

Photo 1
One of several storm water sedimentation ponds.

Photo 2
Christiansen Wash near Outfall 009.

Photo 3
Quitchupah Creek along the background.

Photo 4
Sedimentation pond along the conveyor belt.

Photo 5
Active mine portals (newer).

Photo 6
Active mine portals in box cut canyon from above.

Photo 7
Undisturbed area above mine portals.

Photo 8
Former active mine portals area and sed. pond.

	
Photo 9 Sedimentation pond for Outfall 003.	**Photo 10** Sedimentation pond outlet to Outfall 003.
	
Photo 11 Outfall 003 discharge channel.	**Photo 12** Outfall 003 Parshall flume and staff gauge.

DWQ-2019-013660

UTAH DIVISIOIN OF WATER QUALITY
UPDES INSPECTION CHECKLIST

UPDES PERMIT # UT0022616 **INSPECTION DATE:** 10-2-2019

FACILITY: Bronco Emery Mine **INSPECTOR:** T. Studenka, M. Bridges

Permit Effective Date: 1-1-2018 **Permit Expires** 12-31-2022

PART I. VERIFICATION, RECORDKEEPING, AND REPORTING EVALUATION CHECKLIST

A. PERMIT VERIFICATION

Responsible Official: JOHN KIT PAPPAS, ENVIRONMENTAL MANAGER

Mailing Address: Po Box 527
EMERY, UT 84522
Facility located on Consol Coal Rd just SE of EMERY.

Brief Facility Description: Active underground Coal Mining operations. Mine dewatering into sedimentation ponds prior to any discharges. No discharges since spring 2019.

(Yes)	No	N/A	1. Inspection observations verify information contained in permit.
(Yes)	No	N/A	2. Current copy of permit is onsite.
(Yes)	No	N/A	3. Name and mailing address of permittee are correct.
(Yes)	No	N/A	4. Facility is as described in permit. If not, what is different?
Yes	No	(N/A)	5. Notification was given to EPA/State of new, different, or increased discharges.
Yes	No	(N/A)	6. Facility maintains accurate records of influent volume, when appropriate
(Yes)	No	N/A	7. Number and location of discharge points are as described in permit.
(Yes)	No	N/A	8. Name and of receiving waters correct. Name: Dutchman Creek + Christiansen Wash
(Yes)	No	N/A	9. All discharges are permitted.
Yes	No	(N/A)	10. The facility used Federal/State Construction Grant funds to build the plant.

Notes:

B. RECORDKEEPING AND REPORTING EVALUATION

Yes No N/A 1. Records and reports maintained as required by permit.

Yes No N/A 2. All required information is available, complete, and current.

Yes No N/A 3. Information is maintained for a minimum of 3 years (5 years for sewage sludge).

Yes No N/A 4. If the facility monitors more frequently than required by permit (using approved methods), these are results reported

Yes No N/A 5. DMR's submitted as required by the permit. NetDMR user as of 10/2/19

Yes No N/A 6. Monitoring records are adequate and include:

Yes No N/A a. Flow, pH, DO, etc., as required by permit.

Yes No N/A b. Monitoring charts kept for 3 years (or 5 years for sewage sludge).

Yes No N/A c. Flow meter calibration records kept.

Yes No N/A d. Location data (latitude and longitude) of each outfall.

Yes No N/A 7. Laboratory equipment calibration and maintenance records are adequate.

Yes No N/A 8. Plant records* are adequate and include:

Yes No N/A a. O & M Manual

Yes No N/A b. "As built" Engineering Drawings

Yes No N/A c. Schedules and dates of equipment maintenance repairs

Yes No N/A d. Equipment supplies manual

Yes No N/A e. Equipment data cards?

*Required only for facilities built with Federal/State Construction Grant funds.

Yes No N/A 9. Pretreatment records are adequate and contain inventory of industrial waste contributors, including:

Yes No N/A a. Monitoring Data

Yes No N/A b. Inspection Reports

Yes No N/A c. Compliance Status Records

Yes No N/A d. Enforcement Actions

C. PERMITTEE SELF-MONITORING EVALUATION

Yes No N/A 1. Samples are taken at the sites requited by the permit.

Yes No N/A 2. Sample type adequate for representative samples. Type: Grab/Composite

Yes No N/A 3. Flow proportioned samples obtained when required by the permit.

Yes No N/A 4. If applicable, automatic sampler used?

Type/Model: _____

Yes No N/A 5. Composite samples refrigerated during collecton. NONE Yet as required for WET

a. Composite samples refrigerated during collecton.

b. Proper preservation techniques

c. Containers in conformance with *40 CFR 136*

Specify any problems: _____

Industrial facility, NON-POTW

Yes No N/A 6. Analytical results are consistent with data reported on DMRs.

Yes No N/A a. The data moves accurately from the bench sheets to the DMR's.

Yes No N/A b. The calculations are performed properly TSS only required for calcs.

Yes No N/A 7. All effluent data collected are summarized on the DMR

Yes No N/A 8. Sampling and analyses data are adequate and include:

Yes No N/A d. Dates, times, and location of sampling

Yes No N/A e. Name of individual performing sampling

Yes No N/A f. Analytical methods and techniques

Yes No N/A g. Results of analyses and calibration

Yes No N/A h. Dates of analyses

Yes No N/A i. Name of person performing analyses

Yes No N/A j. Instantaneous flow at grab sample stations.

Yes No N/A k. Monthly and weekly averaging is calculated properly and reported on the DMR where required by the permit TSS

Yes No N/A l. Maximum and minimum values are reported properly and on the DMR. pH

Yes No N/A m. Loading values are calculated using daily loading information.

Yes No N/A n. Bacterial data are summarized as a geometric mean where required by the permit

Yes No N/A o. Number of exceedences completed properly

D. WHOLE EFFLUENT TOXICITY TESTING AND REPORTING

Yes No N/A 1. WET sampling by permittee adequate to meet the conditions of the permit.

Yes No N/A 2. Chain of Custody used.

3. Method of shipment. _____

Yes No N/A 4. Preservation Adequate (Iced to 4° C)

Yes No N/A 5. Lab reports/Chain of custody sheets indicate temperature of samples at time of receipt by lab.

6. Indicate Temperature _____

Yes No N/A 7. Permittee has copy of latest edition of testing methods or Region VIII protocol (July 1993)

Yes No N/A 8. Permittee reviews WET lab reports for adherence to test protocols.

Yes No N/A 9. Lab has provided quality control data. (*i.e.* Reference toxicant control charts)

Yes No N/A 10. Permittee has asked lab for Q/C data.

Yes No N/A 11. Permittee maintains copies of WET lab reports on site for the required 3 year period and makes them available to review by inspectors.

Yes No N/A 12. Evaluation and review of WET data by permittee adequate such that no follow up at lab is necessary.

NOTES:

No WET Sampling to date

PART II. FACILITY SITE REVIEW CHECKLIST

A. OPERATION AND MAINTENANCE EVALUATION

Sed. ponds - Industrial facility

Yes No N/A 1. Facility properly operates and maintains treatment units

Yes No N/A 2. Facility has standby power or other equivalent provision.

Yes No N/A 3 Adequate alarm system for power or equipment failures is available.

4 Sludge disposal procedures are appropriate:

Yes No N/A A: Disposal of sludge according to regulations

Yes No N/A B: State approval for sludge disposal received.

Yes No N/A 5. All treatment units, other than backup units, are in service.

Yes No N/A 6. Facility follows procedures for facility operation and maintenance.

Yes No N/A 7. Sufficient sludge is disposed of to maintain treatment process equilibrium.

Yes No N/A 8. Organizational Plan (chart) for operation and maintenance is provided.

Yes No N/A 9. Plan establishes operating schedules.

Yes No N/A 10. Facility has written emergency plan for treatment control.

11. Maintenance record system exists and includes:

Yes No N/A a. As-built drawings

Yes No N/A b. Shop drawings

Yes No N/A c. Construction specifications

Yes No N/A d. Maintenance history

Yes No N/A e. Maintenance costs

Yes No N/A f. Repair history

Yes No N/A g. Records of equipment repair and timely return to service.

Yes No N/A 12. Adequate number of qualified operators on-hand.

Treatment
Grade I _____ Grade II _____ Grade III _____ Grade IV _____ Not Required _____

Collections
Grade I _____ Grade II _____ Grade III _____ Grade IV _____ Not Required _____

Yes No N/A 13. Facility has established procedures for training new operators.

Yes No N/A 14. Facility maintains adequate spare parts and supplies inventory.

Yes No N/A 15. Facility keeps instruction files for operation and maintenance of each item of major equipment.

Yes No N/A 16. Operation and maintenance manual is available.

Yes No N/A 17. Regulatory agency is notified of any bypassing.

18. How Many days in the past year was there a bypass, overflow or basement flooding by untreated wastewater in the system due to storm events?

(Dates) _____ _____

Yes No N/A 19. a. Hydraulic overflows and/or organic overloads are experienced.

Yes No N/A b. Untreated bypass discharge occurs during power failure.

Yes No N/A c. Untreated overflows occurred since last inspection.

Reason: _____

Yes No N/A d. Flows were observed in overflow or bypass channels.

Yes No N/A e. Checking for overflows is performed routinely.

Yes No N/A f. Overflows are reported to EPA or to the appropriate State agency as specified in the permit.

Yes No N/A 20. Will you or have you completed the annual Municipal Wastewater Planning Program (MWPP) for calendar year _____?

Yes No 21. Are there any new major developments (industrial, commercial, or residential) planned in the next 2-3 years such that flow in the system could significantly increase (10-20%) or >25,000 gal/day?

Yes No 22. Do you have a state approved pretreatment program?
(If no ask additional question if yes go to question 23.)
a. What industries currently discharge to your system?

Yes No b. Does any industry currently discharge >25,000 gpd?
Yes No c. Does any industry have to ability to upset your system?
Yes No d. Does any industry contribute more than 5% of your BOD/TSS load?
Yes No e. Does any industry pre-treat their wastewater?

23. Describe the physical condition of the sewer collection system: (lift stations, ect. included)

24. What sewage system improvements does the community have under consideration for the nex 10 years?

25. Explain what problems, other than plugging you have experienced during the last year.

Yes No N/A 26. Is your community presently involved in formal planning for sewer syster expansion/upgrading? If yes, explain.

27. How many times in the last year was there sewage in basements at any point in the collectio system for any reason, except plugging of the lateral connections?

28. Do you have other communities connected to your system/facility? If so list.

Yes No N/A 29. Do you have an approved storm water prevention plan?

30. When was it last updated? _____

Notes: Stormwater not evaluated as part of this CEI.

NON-POTW facility

PART II. FACILITY SITE REVIEW CHECKLIST

B. SAFETY EVALUATION

Yes	No	N/A	1 Facility uses diked/bermed oil/chemical storage tanks.
Yes	No	N/A	2. Facility maintains up-to-date equipment repair records.
Yes	No	N/A	3. Dated tags show out-of-service equipment
Yes	No	N/A	a. facility/unit lock-out and tag-out procedures are being followed.
Yes	No	N/A	4. Facility schedules/performs routine and preventive maintenance on time.
Yes	No	N/A	5. Facility provides personal protective clothing (safety helmets, ear protectors, goggles, gloves, rubber boots with steel toes, SCBA, eyewashes in labs) (Circle all that apply)
Yes	No	N/A	6 Safety devices are readily available
Yes	No	N/A	a. Fire extinguishers
Yes	No	N/A	b. Oxygen deficiency/explosive gas indicator
Yes	No	N/A	c. Self-contained breathing apparatus near entrance to chlorine room
Yes	No	N/A	d. Safety harness
Yes	No	N/A	e. First aid kits
Yes	No	N/A	f. Ladders to enter manholes or wet wells
Yes	No	N/A	g. Traffic control cones
Yes	No	N/A	h. Safety buoy at activated sludge plants
Yes	No	N/A	i. Life preservers for lagoons/tanks
Yes	No	N/A	j. Fiberglass or wooden ladders for electrical work
Yes	No	N/A	k. Portable cranes/hoists.
Yes	No	N/A	7. Plant has general safety structures such as rails around or covers over tanks, pits, or wells.
Yes	No	N/A	8. Emergency phone numbers are listed, including EPA and State.
Yes	No	N/A	9. Plant is generally clean, free from open trash areas.
Yes	No	N/A	10 All plant personnel are immunized for typhoid, tetanus, and hepatitis B.
Yes	No	N/A	11 No cross connections exist between a potable water supply and nonpotable source
Yes	No	N/A	12 Anaerobic Digester Safety adequate
Yes	No	N/A	a. Gas/explosion controls such as pressure-vacuum relief values
Yes	No	N/A	b. No smoking signs
Yes	No	N/A	c. Explosimeters
Yes	No	N/A	d. Drip Traps
Yes	No	N/A	e. Enclosed screening, de-gritting chambers
Yes	No	N/A	f. Enclosed sludge-piping or gas-piping structures.
Yes	No	N/A	13 Facility has enclosed and identified all electrical circuitry
Yes	No	N/A	14 Personnel are trained in electrical work to be performed as well as safety procedures

Non-Potw Facility

Yes	No	N/A	15 Chlorine safety precautions are followed:
Yes	No	N/A	a. NIOSH-approved 30-minute air pack
Yes	No	N/A	b. All standing chlorine cylinders chained in place
Yes	No	N/A	c. All personnel trained in the use of chlorine
Yes	No	N/A	d. Chlorine repair kit available
Yes	No	N/A	e. Chlorine leak detector tied into plant alarm system
Yes	No	N/A	f. Chlorine cylinders stored in adequately ventilated areas?
Yes	No	N/A	g. Ventilation fan with an outside switch
Yes	No	N/A	h. Posted safety precautions
Yes	No	N/A	i. Existing emergency SOP and/or RMP or SPCC?
Yes	No	N/A	17. Emergency Action Plan on file with local fire department and appropriate emergency agency.
Yes	No	N/A	18. Laboratory safety devices (eyewash and shower, fume hood, proper labeling and storage, pipette suction bulbs) available.
Yes	No	N/A	19. Facility post warning signs (no smoking, high voltage, non potable water, chlorine hazard, watch-your-step, and exit).

Notes: Industrial, NON-POTW facility, has safety features throughout, including signage, fencing, etc.
No permit related deficiencies observed.
No Discharge occurring at any outfall.
Receiving waters at low flow conditions.

PART III. FLOW MEASUREMENT INSPECTION CHECKLIST

A: GENERAL Outfall 003

Type of Primary Flow Measurement Device: Parshall flume & Staff guage

Yes No N/A 1. Primary flow measuring device properly installed and maintained.
Where: Outfall 003 concrete channel

Yes No N/A 2. Flow measured at each outfall? as needed
Number of outfalls? 9

Yes No N/A 3. Proper flow tables used by facility personnel

4. Design flow: 1.5 MGD at each outfall

Yes No N/A 5. Flow records properly kept.
Yes No N/A 6. All charts maintained in a file.
Yes No N/A 7. All calibration data kept.
Yes No N/A 8. Influent flow measured before all return lines.
Yes No N/A 9. Effluent flow measured after all return lines.
Yes No N/A 10. Secondary instruments (totalizers, recorders, etc.) properly operated and maintained.
Yes No N/A 11. Spare parts stocked
Yes No N/A 12. Effluent loadings calculated using effluent flow

13. Frequency of routine inspection of primary flow device by operator
As needed / Day / Week / Month / Year

14. Frequency of routine cleaning of primary flow device by operator
As needed / Day / Week / Month / Year

Notes: Flume + guage appeared in good condition, no discharges since earlier in 2019.

B. Flumes

Type and Size: Outfall 003 Parshall Flume Influent / Effluent

Yes No N/A 1. Flow entering flume reasonably well-distributed across the channel and free of turbulence, boils, or other disturbances.
Yes No N/A 2. Cross-sectional velocities at entrance relatively uniform.
Yes No N/A 3. Flume clean and free of debris and deposits.
Yes No N/A 4. All dimensions of flume accurate and level.
Yes No N/A 5. Side walls of flume vertical and smooth.
Yes No N/A 6. Sides of flume throat vertical and parallel.
Yes No N/A 7. Flume head being measured at proper location.
Yes No N/A 8. Measurement of flume head zeroed to flume crest.
Yes No N/A 9. Flume properly sized to measure range of existing flow.

NOT Discharging

Yes No N/A 10. Flume operating under free-flow conditions over existing range of flows.
Yes No N/A 11. Flume submerged under certain flow conditions.
Yes No N/A 12. Flume operation invariably free-flow.

C. WEIRS

Type and Size: _____ Influent / Effluent

Yes No N/A 1. Weir exactly level
Yes No N/A 2. Weir plate plumb and its top and edges sharp and clean.
Yes No N/A 3. Downstream edge of weir is chamfered at 45°.
Yes No N/A 4. Free access for air below the nappe of the weir.
Yes No N/A 5. Upstream channel of weir straight for at least four times the depth of water level and free from disturbances.
Yes No N/A 6. Distance from sides of weir to side of channel at least 2H.
Yes No N/A 7. Area of approach channel at least (8 × nappe area) for upstream distance of 15H.
Yes No N/A 8. If not, is velocity of approach too high?
Yes No N/A 9. Head measurements properly made by facility personnel.
Yes No N/A 10. Leakage does not occur around weir.
Yes No N/A 11. Use of proper flow tables by facility personnel.
Yes No N/A 12. The stilling basin of the weir is of sufficient size and clear of debris

D. ELECTROMAGNETIC METERS

Type and Size: _____ Influent / Effluent

Yes No N/A 1. Is there a straight length of pipe or channel before and after the flowmeter of at least 6 diameters?
Yes No N/A 2. If a magnetic flowmeter is used, are there sources of electric noise in the near vicinity?
Yes No N/A 3. Magnetic flowmeter is properly grounded.
Yes No N/A 4. Is the full pipe requirement met?

E. VENTURI METERS

Type and Size: _____ Influent / Effluent

Yes No N/A 1. Venturi meter is installed downstream from a straight and uniform section of pipe.

F. OTHER TYPES OF FLOW DEVICES

Type: FLOAT / BUBBLER / ULTRASONIC / ELECTRICAL METERS /

Location: Influent / Effluent

Manufacturer : _____

Model: _____

What are the most common problems that the operator has had with the flowmeter?

_____

Type: FLOAT / BUBBLER / ULTRASONIC / ELECTRICAL METERS /

Location: Influent / Effluent

Manufacturer: _____

Model: _____

What are the most common problems that the operator has had with the flowmeter?

_____

G. CALIBRATION AND MAINTENANCE OF TOTALIZERS AND SECONDARY FLOW MEASUREMENT DEVICES

Yes No N/A 1. Flow totalizer properly calibrated.

Yes No N/A 2. Flow measurement equipment adequate to handle expected ranges of flow rates.

Yes No N/A 3. Frequency of routine inspection by proper operator:

_____/ Day / Week / Month / Year

Yes No N/A 5. Frequency of maintenance inspections by plant personnel:

_____/ Day / Week / Month / Year

Yes No N/A 5. Flowmeter calibration records kept. calibration: _____/Year

Yes No N/A 6. Calibration frequency adequate.

7. What is the most common problem(s) that the facility has had with the secondary flow measurement device?

_____

_____

Accuracy of Flow Measurement
(Secondary Device against Primary Device)

Size and Type of Primary Device: _____

Reading from Primary Device (Feet / inches): _____

Equivalent to Actual Flow (MGD): _____

Facility Recorded Flow From Secondary Device: _____

Percent Error: _____ Correction Error: _____

Fill in the above only if the primary device has been correctly installed, or if the correction factor is know.

Notes: _____

Primary device only.

PART IV. LABORATORY QUALITY ASSURANCE CHECKLIST

A. LABORATORY INFO

Yes No N/A Commercial laboratory used

Name: SGS Labs

Address: Huntington, UT

Contact: on file

Phone: _____

Parameters: All but pH, Flow + WET

_____

B. SAMPLE HANDLING PROCEDURES Lab not evaluated as part of CEI.

Yes No N/A 1. Laboratory has sample custodian and a back-up custodian.

Yes No N/A 2. Access to laboratory area restricted to authorized personnel only.

Yes No N/A 3. Sample security area available within laboratory that is dry, clean, and isolated; has sufficient refrigerated space; and can be locked securely.

Yes No N/A 4. Lab personnel receive and log in all incoming samples.

Yes No N/A 5. Established chain-of-custody procedures followed.

Yes No N/A 6. Samples properly stored by lab personnel.

C. LABORATORY PROCEDURES

Yes No N/A 1. Written laboratory QA manual available.

Yes No N/A 2. EPA-approved written analytical testing procedures used and protocols are easily accessible by laboratory personnel.

Yes No N/A 3. Calibration and maintenance of instruments and equipment satisfactory.

4. Samples are analyzed in accordance to *40 CRF 136.*

Yes No N/A Results of last DMR / QA test available. Date: _____

Yes No N/A Facility lab does analyses for other permittees. If yes, list the facilities and permit numbers.

Facility: _____ Permit # _____

D. LABORATORY FACILITIES AND EQUIPMENT

Yes No N/A 1. Proper grade laboratory pure water available for specific analysis.

Yes No N/A 2. Adequate bench, instrumentation, storage, and recordkeeping spaceavailable.

Yes No N/A 3. Clean and orderly work area available to help avoid contamination.

Yes No N/A 4. Instruments/equipment in good condition.

Yes No N/A 5. Use proper safety equipment (lab coats, gloves, safety glasses,goggles, and fume hoods) when necessary.

Yes No N/A 6. Proper volumetric glassware used.

Yes No N/A 7. Glassware properly cleaned.

Yes No N/A 8. Discard standards after recommended shelf-life has expired.

NOTES:

E. LABORATORY'S PRECISION, ACCURACY, AND CONTROL PROCEDURES

Yes No N/A 1. Analyzed multiple replicates (blanks, duplicates, spikes, and splits) for each type of control check and information recorded.

Yes No N/A 2. Plotted precision and accuracy control methods used to determine whether valid, questionable, or invalid data are being generated from day to day.

F. DATA HANDLING AND REPORTING

Yes No N/A 1. Uniformly apply round-off rules.

Yes No N/A 2. Establish significant figures for each analysis.

Yes No N/A 3. Report forms developed to provide complete data documentation and permanent records and to facilitate data processing.

Yes No N/A 4. Data reported in proper form and units

Yes No N/A 5. Laboratory records readily available to regulatory agency for required time of 3 years.

Yes No N/A 6. Laboratory notebook or pre-printed data forms bound permanently to provide good documentation.

G. LABORATORY PERSONNEL

Yes No N/A 1. Enough analysts present to perform the analyses necessary.

Yes No N/A 2. Analysts have on hand the necessary references for EPA procedures being used.

Yes No N/A 3. Analysts trained in procedures performed through formal or informal training or certification programs.

V. COMPLIANCE SCHEDULE STATUS REVIEW

(Yes) No N/A 1. The Permittee is meeting the terms of the compliance schedule

(Yes) No N/A 2. Is the facility subject to a compliance schedule in it's permit or by an Order?

If the facility is subject to an Order, note Docket Number I19-01

3. What Milestones remain in the schedule? NONE. Closeout letter coming soon. NFA required.

No (N/A) 4. Facility in compliance with unachieved milestones?

(No) N/A 5. Facility has missed milestone dates.

(Yes) No N/A 6. Facility will still meet final compliance date. 10-7-19 end compliance date.

PART V. WHOLE EFFLUENT TOXICITY (WET)

Yes No N/A 1. Whole Effluent Toxicity (WET) testing is required by the permit.

2. Are species required by permit used? Indicate below

____ Daphina magna

✓ Ceriodaphnia dubia

✓ Pimephales promelas (fathead minnow)

____ Other List: _____

Yes No N/A 3. Has approval for alternating species been granted?

4. Test Type: Acute: _____ Chronic: Quarterly (Indicate frequency required)

5. Dilution water source: lab

Yes No N/A a. Dilution water meets EPA requirements

Yes No N/A b. if reconstituted, is water same hardness as receiving water(s)?

Yes No N/A 6. Any modification authorization?

____ CO2 Headspace ____ Chronic Sampling Frequency

____ Dechlorination ____ Zeolite resin (ammonia removal)

Yes No N/A 7. Results indicate an absence of toxicity? If not indicate dates of failures and species:

Dates	Species

Yes No N/A 8. Evidence of accelerated testing if toxicity present?

Yes No N/A 9. TIE/TRE in progress?

Yes No N/A 10. Whole Effluent Toxicity (WET) testing is conducted by the laboratory.

Yes No N/A 11. Commercial laboratory used for WET

Name: To be used upon discharges

Address: _____

_____

Contact: _____

Phone: _____

Yes No N/A 12. WET testing protocols are clearly described.

Yes No N/A 13. Whole Effluent Toxicity (WET) culturing procedures are adequately documented for each organism tested.

Yes No N/A 14. Report format meets EPA requirements? (See *Weber el al.* 1988, 1989)

Yes No N/A 15. Does lab report indicate which statistical method was used for chronic tests?

Yes No N/A 16. Does permittee submit complete WET lab report to EPA/State?

Yes No N/A 17. Is the Lab State Certified? Certification Date _____

F. GUIDE - VISUAL OBSERVATION - UNIT PROCESS

Rating Codes: S = Satisfactory U = Unsatisfactory M = Marginal
IN = In Operation Out = Out of Operation N/A = Not Applicable

	Condition or Appearance	Rating	Comments
GENERAL	Grounds	S	
	Buildings	S	
	Potable water supply protection	S	
	Safety features	S	
	By-passes	S	
PRELIMINARY	Maintenance of collection lines	S	
	Pump stations	S	
	Ventilation	S	
	Bar screen(s)	NA	
	Comminutor	↓	
	Grit chamber		
	Disposal of screenings and grit		
PRIMARY	Settling tanks	NA	
	Scum removal	NA	
	Sludge removal	NA	
	Effluent	S	
SLUDGE	Digesters	NA	
	Sludge pumps	↓	
	Drying beds		
	Disposal of sludge		
OTHER	Flow meter and recorder	NA	
	Records	S	
	Lab controls	NA	
	Treatment lagoons	↓	
	Chlorinators		
	Contact tank and contact time		

G. NOTATIONS BY EVALUATOR

Check each of the following items in terms of their estimated adverse affect on the performance of the plant

Item	Major	Minor	None	Item	Major	Minor	None
Staff complement				Overloads			
Personnel training				Hydraulic			
Operating budget				Periodic			
Laboratory control				Continuous			
Instrumentation				Organic			
Industrial waste				Periodic			
Equipment failure				Continuous			
Treatment process				Overload causes			
Sludge handling				Infiltration			
Equipment maintenance				Combined sewers			
Spare parts inventory				Rapid population growth			
Power failure				Increased service area			
Other				Other			

Describe briefly the major problems indicated above or other pertinent information:

No problems identified.

Photo Log

Photo Number	File Name	Description	Date/ Time	Photographer
1	N/A	First of several Storm Water Sed. ponds	10/2/19	JAS
2		Christiansen wash near outfall 9		
3		Quitchupah Creek stream channel		
4		Sed. pond along conveyor belt		
5		Newer Mine portals		
6		Mine portals from above		
7		undisturbed area above mine portals		
8		Former active Mine portals area/Sed pond		
9		Sed. pond for outfall 003		
10		Sed. pond outlet to 003		
11		outfall 003 discharge channel		
12		outfall 003 Parshall Flume/Staff gage		
END				

INSPECTION PROTOCOL

UPDES Permit #: UTG040026 – Hidden Valley Mine Site (proposed)
Inspection Type: Reconnaissance Inspection
Inspection Date: October 2, 2019
Weather Conditions: Clear and sunny, ~58°F

Jeff Studenka and Monique Bridges of the Division of Water Quality (DWQ) visited the Bronco Utah Operations Hidden Valley Mine Site, while already in the area, to perform an inspection of the inactive proposed mine site in Emery County, UT. Because the proposed facility is not yet constructed and without personnel on site, the inspection was limited to a site visit and file review. Photos were collected as attached. Although not required, the permittee has elected to maintain permit coverage in the event of any future site activity.

FACILITY DESCRIPTION

Location: East of S.R.10, 4 miles north of I-70 in Emery County, UT
Coordinates: Proposed Outfall 001 – 38° 48' 57" latitude, -111° 16' 19" longitude
Proposed Outfall 002 – 38° 49' 14" latitude, -111° 16' 43" longitude

Effluent Flows: None to date and none expected in the foreseeable future.

Receiving Water: Ivie Creek

Process (Proposed): No structures and no activity on site at this proposed coal mining operation. Water from the proposed mine is not expected to be encountered and/or discharged. Surface water from the proposed disturbed areas would be conveyed to two sedimentation ponds each with a corresponding discharge point (Outfalls 001 & 002) into Ivie Creek drainage. Discharge from these two outfalls is not expected, excepting major storm events. Discharge flows will likely be minimal and manually calculated as needed.

INSPECTION SUMMARY

The proposed site location was observed as well as the receiving waters of Ivie Creek. Permittee is aware of the sampling requirements upon any future discharges and will likely use SGS Labs of Huntington, Utah for analyzing samples in accordance with permit requirements. Flows and pH are to be measured on site, while, TSS, TDS, total iron, and oil & grease will be analyzed by the laboratory.

DEFICIENCIES

No deficiencies with respect to the UPDES permit were noted during the inspection.

CORRECTIVE ACTIONS REQUIRED

None.

PHOTOS

Photo 1: Looking southwest, Ivie Creek in background.

Photo 2: Looking southeast, Ivie Creek in background.