



Colorado Department  
of Public Health  
and Environment

**CERTIFICATION TO DISCHARGE  
UNDER  
CDPS GENERAL PERMIT COG840000  
DISCHARGES ASSOCIATED WITH  
PRODUCED WATER TREATMENT FACILITIES**

Certification Number: **COG840007**

**This Certification to Discharge specifically authorizes:**

**Timka Resources**  
to discharge from the facility identified as

**Barnhart #1 Well**

**to: an unnamed stock pond/unnamed tributary to Pawnee Creek**

**Facility Located at:**

NE1/4, NE1/4, Section 29, T8N, R55W, Latitude 40.6394 °N, Longitude  
103.5434°W, Merino, CO, 80741, Logan County

Outfall 001A	Latitude 40.645833 °N, Longitude 103.558333°W, after treatment and prior to entering the unnamed stock pond/unnamed drainage to Rayner Creek
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\*All discharges must comply with the lawful requirements of federal agencies municipalities, counties, drainage districts or other local agencies regarding any discharges to storm drain systems, conveyances, or other water courses under their jurisdiction.

**Permit Limitations and Monitoring Requirements apply consistent with General Permit Part I.B and Part I.C**

**THE FOLLOWING LIMITATIONS ARE EFFECTIVE UNTIL 12/31/2015**

Parameter	ICIS Code	Discharge Limitations Maximum Concentrations				Monitoring Frequency	Sample Type
		30-Day Average	7-Day Average	Daily Max.	2-Year Average		
Flow, MGD	50050	0.3	NA	Report	NA	Monthly	Instantaneous
Total Suspended Solids, mg/l	00530	30	45	NA	NA	Monthly	Grab
Total Dissolved Solids, mg/l	70295	Report	NA	Report	NA	Monthly	Grab
pH, s.u. (Minimum-Maximum)	00400	NA	NA	6.5-9.0	NA	Monthly	Garb
Oil and Grease, mg/l	03582	NA	NA	10	NA	Monthly	Grab
Benzene, ug/l	34030	Report	NA	Report	NA	Monthly	Grab
Toluene, ug/l	34010	Report	NA	Report	NA	Monthly	Grab
Ethylbenzene, ug/l	37371	Report	NA	Report	NA	Monthly	Grab
Xylenes (Total), ug/l	81551	Report	NA	Report	NA	Monthly	Grab
Volatile and Semi-Volatile Organic Compounds, ug/l	51577	Report	NA	Report	NA	Quarterly	Grab
Aluminum, Total Recoverable, ug/l	01104	Report	NA	Report	NA	Monthly	Grab
Antimony, Dissolved, ug/l	01095	Report	NA	Report	NA	Monthly	Grab
Arsenic, Total Recoverable, ug/l	00978	Report	NA	Report	NA	Monthly	Grab
Arsenic, PD, ug/l	01309	Report	NA	Report	NA	Monthly	Grab
Barium, PD, ug/l	01311	Report	NA	Report	NA	Monthly	Grab
Beryllium, Total Recoverable, ug/l	00998	Report	NA	Report	NA	Monthly	Grab
Cadmium, potentially dissolved, ug/l	01313	Report	NA	Report	NA	Monthly	Grab
Trivalent Chromium, PD, ug/l	01314	Report	NA	Report	NA	Monthly	Grab
Hexavalent Chromium, dissolved, ug/l	01220	Report	NA	Report	NA	Monthly	Grab
Copper, PD, ug/l	01306	Report	NA	Report	NA	Monthly	Grab
Iron, Total Recoverable, ug/l	00980	Report	NA	Report	NA	Monthly	Grab
Lead, PD, ug/l	01049	Report	NA	Report	NA	Monthly	Grab
Manganese, PD, ug/l	01319	Report	NA	Report	NA	Monthly	Grab
Mercury, Total, ug/l	71900	Report	NA	Report	NA	Monthly	Grab
Nickel, PD, ug/l	01322	Report	NA	Report	NA	Monthly	Grab
Selenium, PD, ug/l	01323	Report	NA	Report	NA	Monthly	Grab
Silver, PD, ug/l	01304	Report	NA	Report	NA	Monthly	Grab
Thallium, PD, ug/l	01324	Report	NA	Report	NA	Monthly	Grab

Parameter	ICIS Code	Discharge Limitations Maximum Concentrations				Monitoring Frequency	Sample Type
		30-Day Average	7-Day Average	Daily Max.	2-Year Average		
Uranium, PD, ug/l	01326	Report	NA	Report	NA	Monthly	Grab
Zinc, PD, ug/l	01303	Report	NA	Report	NA	Monthly	Grab
Calcium (mg/l)	00918	Report	NA	NA	NA	Monthly	Grab
Magnesium (mg/l)	00921	Report	NA	NA	NA	Monthly	Grab
Sodium (mg/l)	00923	Report	NA	NA	NA	Monthly	Grab
Bicarbonate as HCO <sub>3</sub> (mg/l)	00440	Report	NA	NA	NA	Monthly	Grab
SAR calculated limit*	00931	Report	NA	NA	NA	Monthly	Grab
Adjusted SAR effluent**	00931	Report	NA	NA	NA	Monthly	Grab
EC (dS/m)	00094	Report	NA	NA	NA	Monthly	Grab
Radium 226+228, Total pCi/l	11503	NA	NA	Report	NA	Quarterly	Grab
<b>WET, chronic</b>							
Static Renewal 7 Day Chronic <i>Pimephales promelas</i>	TKP6C	NA	NA	Report NOEC and IC25	NA	Quarterly	Grab
Static Renewal 7 Day Chronic <i>Ceriodaphnia dubia</i>	TKP3B	NA	NA	Report NOEC and IC25	NA	Quarterly	Grab

**THE FOLLOWING LIMITATIONS ARE EFFECTIVE BEGINNING 1/1/2016**

Parameter	ICIS Code	Discharge Limitations Maximum Concentrations				Monitoring Frequency	Sample Type
		30-Day Average			2-Year Average		
Flow, MGD	50050	0.3	NA	Report	NA	Monthly	Instantaneous
Total Suspended Solids, mg/l	00530	30	45	NA	NA	Monthly	Grab
Total Dissolved Solids, mg/l	70295	Report	NA	Report	NA	Monthly	Grab
pH, s.u. (Minimum-Maximum)	00400	NA	NA	6.5-9.0	NA	Monthly	Grab
Oil and Grease, mg/l	03582	NA	NA	10	NA	Monthly	Grab
Benzene, ug/l	34030	NA	NA	5,300	NA	Monthly	Grab
Toluene, ug/l	34010	NA	NA	17,500	NA	Monthly	Grab
Ethylbenzene, ug/l	37371	NA	NA	32,000	NA	Monthly	Grab
Xylenes (Total), ug/l	81551	NA	NA	Report	NA	Monthly	Grab
Volatile and Semi-Volatile Organic Compounds, ug/l	51577	Report	NA	Report	NA	Quarterly	Grab
Aluminum, Total Recoverable, ug/l	01104	1438	NA	10071	NA	Monthly	Grab
Antimony, Dissolved, ug/l	01095	Report	NA	Report	NA	Monthly	Grab
Arsenic, Total Recoverable, ug/l	00978	100	NA	NA	NA	Monthly	Grab
Arsenic, PD, ug/l	01309	NA	NA	340	NA	Monthly	Grab
Barium, PD, ug/l	01311	Report	NA	Report	NA	Monthly	Grab
Beryllium, Total Recoverable, ug/l	00998	100	NA	Report	NA	Monthly	Grab
Cadmium, potentially dissolved, ug/l	01313	1.2	NA	9.1	NA	Monthly	Grab
Trivalent Chromium, PD, ug/l	01314	231	NA	1773	NA	Monthly	Grab
Hexavalent Chromium, dissolved, ug/l	01220	11	NA	16	NA	Monthly	Grab
Copper, PD, ug/l	01306	29	NA	50	NA	Monthly	Grab
Iron, Total Recoverable, ug/l	00980	1000	NA	NA	NA	Monthly	Grab
Lead, PD, ug/l	01049	11	NA	281	NA	Monthly	Grab
Manganese, PD, ug/l	01319	2618	NA	4738	NA	Monthly	Grab
Mercury, Total, ug/l	71900	0.01	NA	NA	NA	Monthly	Grab
Nickel, PD, ug/l	01322	168	NA	1513	NA	Monthly	Grab
Selenium, PD, ug/l	01323	4.6	NA	18.4	NA	Monthly	Grab
Silver, PD, ug/l	01304	3.5	NA	22	NA	Monthly	Grab
Thallium, PD, ug/l	01324	15	NA	NA	NA	Monthly	Grab
Uranium, PD, ug/l	01326	6915	NA	11070	NA	Monthly	Grab
Zinc, PD, ug/l	01303	405	NA	467	NA	Monthly	Grab
Calcium (mg/l)	00918	Report	NA	NA	NA	Monthly	Grab

Parameter	ICIS Code	Discharge Limitations				Monitoring Frequency	Sample Type
		Maximum Concentrations					
		30-Day Average			2-Year Average		
Magnesium (mg/l)	00921	Report	NA	NA	NA	Monthly	Grab
Sodium (mg/l)	00923	Report	NA	NA	NA	Monthly	Grab
Bicarbonate as HCO3 (mg/l)	00440	Report	NA	NA	NA	Monthly	Grab
SAR calculated limit*	00931	Report	NA	NA	NA	Monthly	Grab
Adjusted SAR effluent**	00931	Report	NA	NA	NA	Monthly	Grab
SAR pass/fail ***	51613	Pass/Fail	NA	NA	NA	Monthly	Grab
EC (dS/m)	00094	1.1	NA	NA	NA	Monthly	Grab
Radium 226+228, Total pCi/l	11503	Report	NA	5	NA	Quarterly	Grab
WET, chronic							
Static Renewal 7 Day Chronic <i>Pimephales promelas</i>	TKP6C	NA	NA	NOEC or IC25 ≥ IWC	NA	Quarterly	Grab
Static Renewal 7 Day Chronic <i>Ceriodaphnia dubia</i>	TKP3B	NA	NA	NOEC or IC25 ≥ IWC	NA	Quarterly	Grab

\* This SAR limit is to be calculated using the actual measured EC value (30-day average) of the effluent and substituting this value in to the following equation to solve for SAR. The equation for determining the SAR limit is:  $SAR = (7.1 * EC) - 2.48$ . **This limitation is capped at 5.33**

\*\* The SAR value of the effluent is to be reported as the adjusted SAR. See the definitions section in Part I.C.17 for information on calculating the adjusted SAR value.

\*\*\* The permittee shall compare the SAR value of the effluent (adjusted SAR) to this calculated SAR limitation and report as Pass/Fail whether the effluent SAR meets this value. If the SAR effluent value (adjusted SAR) is less than or equal to the calculated limit, then the permittee will report "Pass" and if it is greater than the calculated limit the permittee will report "Fail."

See the permit for definitions and more information regarding the terms and conditions associated with the above limitations.

### Compliance Schedule

Activities to Final Limits – In order to meet the final limitations, the following schedule will be included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report summarizing the first year of data collected and whether the limitations to be effective 1/1/16 can be met. Include an amendment request to remove parameters that are well below the detection limits or significantly below the permit limits as necessary.	3/1/13
00899	Implementation Schedule	Submit a report documenting the options available to meet the final permit limits, including the chosen option and a schedule of activities to be implemented under this option.	12/31/13
00899	Implementation Schedule	Submit a progress report regarding steps taken to date to meet the final effluent limitations.	12/31/14
CS017	Achieve Final Compliance with Emissions or Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	12/31/15

No later than 14 calendar days following each date identified in the above schedules of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

This certification under the permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the permit.

Signed,

A handwritten signature in black ink, appearing to read "Andrew Neuhart". The signature is fluid and cursive, with a large initial "A" and a long, sweeping underline.

Andrew Neuhart  
Assessment Based Permits Unit Manager  
Water Quality Control Division