

Colorado Department of Public Health and Environment

CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COG840000 DISCHARGES ASSOCIATED WITH PRODUCED WATER TREATMENT FACILITIES Certification Number: COG840016

This Certification to Discharge specifically authorizes:

Ritchie Exploration Inc. to discharge from the facility identified as

Ann Allison #1

to: an unnamed tributary to Vega Creek - tributary to South Platte River

Facility Located at:

S22, T3S, R54W Washington County, near Town of Lindon, CO

Outfall 001A	Latitude 39.779704°, Longitude -103.420669°. After completion of all treatment
	and prior to being released.

*All discharges must comply with the lawful requirements of federal agencies municipalities, counties, drainage districts and 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 the General Permit Part I.B and Part I.C

THE FOLLOWING LIMITATIONS ARE EFFECTIVE UNTIL 8/31/2016

Parameter	ICIS		Discharge Maximum Co	Monitoring	Comula Toma		
i didineter	Code	30-Day Average	7-Day Average	Daily Max.	2-Year Average	Frequency	Sample Type
Flow, MGD	50050	0.0076	NA	Report	NA	Continuous	Recorder
Total Suspended Solids, mg/l	00530	30	45	NA	NA	2 days/month	Grab
Total Dissolved Solids, mg/l	70295	Report	NA	NA	NA	2 days/month	Grab
pH, s.u. (Minimum-Maximum)	00400	NA	NA	6.5-9.0	NA	2 days/month	Grab
Oil and Grease (visual)	84066	NA	NA	NA	NA	2 days/month	Visual
Oil and Grease, mg/l	03582	NA	NA	35	NA	2 days/month	Grab
CN, WAD, μg/l	00718	NA	NA	Report	NA	2 days/month	Grab
Nitrite as N, mg/l	00615	NA	NA	Report	NA	2 days/month	Grab
Nitrate as N, mg/l	00620	NA	NA	Report	NA	2 days/month	Grab
Boron, mg/l	82057	Report	NA	NA	NA	2 days/month	Grab
Benzene, μg/l	34030	NA	NA	5300	NA	2 days/month	Grab
Toluene, μg/l	34010	NA	NA	17,500	NA	2 days/month	Grab
Ethylbenzene, μg/l	37371	NA	NA	32,000	NA	2 days/month	Grab
Xylenes (Total), μg/l	81551	NA	NA	Report	NA	2 days/month	Grab
1,2 Dichloroethane, μg/l	32103	Report	NA	Report	NA	2 days/month	Grab
2, 4 Dimethylphenol, μg/l	34606	NA	NA	Report	NA	2 days/month	Grab
Naphthalene, µg/l	34445	Report	NA	Report	NA	2 days/month	Grab
Phenol, μg/l	34694	Report	NA	Report	NA	2 days/month	Grab
Antimony, Total Recoverable, µg/l	01268	Report	NA	Report	NA	2 days/month	Grab
Arsenic, Total Recoverable, µg/l	00978	Report	NA	NA	NA	2 days/month	Grab
Beryllium, Total Recoverable, μg/l	00998	Report	NA	Report	NA	2 days/month	Grab
Cadmium, Total Recoverable, μg/l	01113	Report	NA	Report	NA	2 days/month	Grab
Trivalent Chromium, Total Recoverable, µg/l	04262	Report	NA	Report	NA	2 days/month	Grab
Hexavalent Chromium, Total Recoverable, µg/l	78247	Report	NA	Report	NA	2 days/month	Grab
Copper, Total Recoverable, μg/l	01119	Report	NA	Report	NA	2 days/month	Grab
Lead, Total Recoverable, µg/l	01114	Report	NA	Report	NA	2 days/month	Grab
Nickel, Total Recoverable, µg/l	01074	Report	NA	Report	NA	2 days/month	Grab
Selenium, Total Recoverable, μg/l	00981	Report	NA	Report	NA	2 days/month	Grab
Zinc, Total Recoverable, μg/l	01094	Report	NA	Report	NA	2 days/month	Grab
Radium 226+228, Total pCi/l	11503	Report	NA	Report	NA	2 days/month	Grab
WET, Chronic							
Static Renewal 7 Day Chronic Pimephales promelas	ТКР6С	NA	NA	Report	NA	Quarterly	3 Composites/test
Static Renewal 7 Day Chronic Ceriodaphnia dubia	ТКРЗВ	NA	NA	Report	NA	Quarterly	3 Composites/test

See the permit for definitions and more information regarding the terms and conditions associated with the above limitations. Note, monitoring frequencies are determined from the general permit and from the Division's Baseline Monitoring Frequency policy (WQP-20) when not directly referenced.

THE FOLLOWING LIMITATIONS ARE EFFECTIVE BEGINNING 9/1/2016

Parameter	ICIS Code		Discharge Maximum C	Monitoring			
		30-Day Average	7-Day Average	Daily Max.	2-Year Average	Frequency	Sample Type
Flow, MGD	50050	0.0076	NA	Report	NA	Continuous	Recorder
Total Suspended Solids, mg/l	00530	30	45	NA	NA	2 days/month	Grab
Total Dissolved Solids, mg/l	70295	3500	NA	NA	NA	2 days/month	Grab
pH, s.u. (Minimum-Maximum)	00400	NA	NA	6.5-9.0	NA	2 days/month	Grab
Oil and Grease (visual)	84066	NA	NA	NA	NA	2 days/month	Visual
Oil and Grease, mg/l	03582	NA	NA	35	NA	2 days/month	Grab
CN, WAD, μg/l	00718	NA	NA	200	NA	2 days/month	Grab
Nitrite as N, mg/l	00615	NA	NA	10	NA	2 days/month	Grab
Nitrate as N, mg/l	00620	NA	NA	100	NA	2 days/month	Grab
Boron, mg/l	82057	0.75	NA	NA	NA	2 days/month	Grab
Benzene, μg/l	34030	NA	NA	5300	NA	2 days/month	Grab
Toluene, μg/l	34010	NA	NA	17,500	NA	2 days/month	Grab
Ethylbenzene, μg/l	37371	NA	NA	32,000	NA	2 days/month	Grab
Xylenes (Total), μg/l	81551	NA	NA	Report	NA	2 days/month	Grab
1,2 Dichloroethane, μg/l	32103	20,000	NA	118,000	NA	2 days/month	Grab
2, 4 Dimethylphenol, μg/l	34606	NA	NA	2120	NA	2 days/month	Grab
Naphthalene, μg/l	34445	620	NA	2300	NA	2 days/month	Grab
Phenol, μg/l	34694	2560	NA	10,200	NA	2 days/month	Grab
Antimony, Total Recoverable, μg/l	01268	5.6	NA	Report	NA	2 days/month	Grab
Arsenic, Total Recoverable, μg/l	00978	100	NA	NA	NA	2 days/month	Grab
Beryllium, Total Recoverable, μg/l	00998	100	NA	Report	NA	2 days/month	Grab
Cadmium, Total Recoverable, μg/l	01113	10	NA	Report	NA	2 days/month	Grab
Trivalent Chromium, Total Recoverable, μg/l	04262	100	NA	Report	NA	2 days/month	Grab
Hexavalent Chromium, Total Recoverable, µg/l	78247	100	NA	Report	NA	2 days/month	Grab
Copper, Total Recoverable, μg/l	01119	200	NA	Report	NA	2 days/month	Grab
Lead, Total Recoverable, μg/l	01114	100	NA	Report	NA	2 days/month	Grab
Nickel, Total Recoverable, μg/l	01074	200	NA	Report	NA	2 days/month	Grab
Selenium, Total Recoverable, μg/l	00981	20	NA	Report	NA	2 days/month	Grab
Zinc, Total Recoverable, μg/l	01094	2000	NA	Report	NA	2 days/month	Grab
Radium 226+228, Total pCi/l	11503	Report	NA	5	NA	2 days/month	Grab
WET, Chronic							
Static Renewal 7 Day Chronic Pimephales promelas	ТКР6С	NA	NA	NOEC or IC25 ≥ IWC	NA	Quarterly	3 Composites/tes
Static Renewal 7 Day Chronic Ceriodaphnia dubia	ТКРЗВ	NA	NA	NOEC or IC25 ≥ IWC	NA	Quarterly	3 Composites/tes

See the permit for definitions and more information regarding the terms and conditions associated with the above limitations. Note, monitoring frequencies are determined from the general permit and from the Division's Baseline Monitoring Frequency policy (WQP-20) when not directly referenced.

Compliance Schedule

Activities to Meet Final Limits - In order to meet the final limitations, the following schedule is included.

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 9/1/16 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.	1/1/15
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.	8/31/15
00899	Implementation Schedule	Submit a progress report regarding steps taken to date to meet the final effluent limitations.	1/31/16
CS017	Achieve Final Compliance with Emissions or Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	8/31/16

Issued: December 18, 2013

Effective: January 1, 2014

Expiration: August 31, 2014

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,

Kenan Diker Manager, Permits Unit #2 Water Quality Control Division

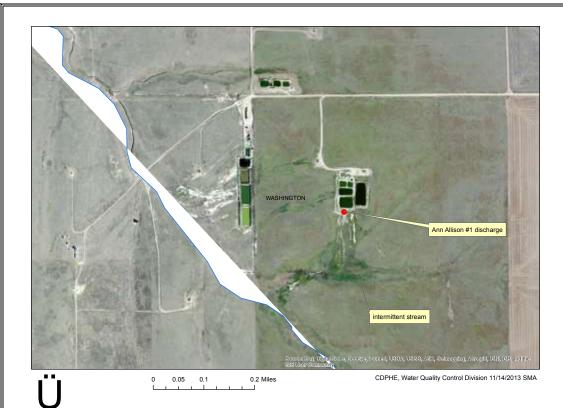
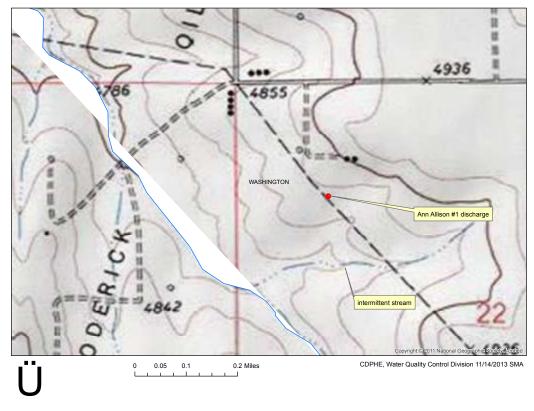


Figure 1

The above aerial image details visual disturbance of the landscape seemingly created by the lack of containment from the Ann Allison #1 discharge. It also provides locational relationships between the facility discharge location and the intermittent stream channel.





The above topographic map details the location of the intermittent stream in relation to the discharge location.