



Colorado Department  
of Public Health  
and Environment

**CERTIFICATION TO DISCHARGE  
UNDER  
CDPS GENERAL PERMIT COG840000  
DISCHARGES ASSOCIATED WITH  
PRODUCED WATER TREATMENT FACILITIES**  
Certification Number: COG840013

**This Certification to Discharge specifically authorizes:**

**Red Mountain Resources, LLC**  
to discharge from the facility identified as

**Merino Oil Field-State A Battery**

**to: an unnamed tributary to South Platte River**

**Facility Located at:** SE/4, S24, T6N, R54W Logan County, Merino, CO 80741

Outfall 001A	Latitude 40.470556°, Longitude -103.415556°. After completion of all treatment and prior to being released.
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\*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 Code	Discharge Limitations Maximum Concentrations				Monitoring Frequency	Sample Type
		30-Day Average	7-Day Average	Daily Max.	2-Year Average		
Flow, MGD	50050	0.04	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	Report	NA	2 days/month	Grab
Toluene, µg/l	34010	NA	NA	Report	NA	2 days/month	Grab
Ethylbenzene, µg/l	37371	NA	NA	Report	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
Aluminum, Total Recoverable, µg/l	01104	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, Potentially Dissolved, µg/l	01313	Report	NA	Report	NA	2 days/month	Grab
Trivalent Chromium, Potentially Dissolved, µg/l	01314	Report	NA	Report	NA	2 days/month	Grab
Hexavalent Chromium, Dissolved, µg/l	01220	Report	NA	Report	NA	2 days/month	Grab
Copper, Potentially Dissolved, µg/l	01306	Report	NA	Report	NA	2 days/month	Grab
Iron, Total Recoverable, µg/l	00980	Report	NA	NA	NA	2 days/month	Grab
Lead, Potentially Dissolved, µg/l	01318	Report	NA	Report	NA	2 days/month	Grab
Manganese, Potentially Dissolved, µg/l	01319	Report	NA	Report	NA	2 days/month	Grab
Mercury, Total, µg/l	71900	Report	NA	NA	NA	2 days/month	Grab
Nickel, Potentially Dissolved, µg/l	01322	Report	NA	Report	NA	2 days/month	Grab
Selenium, Potentially Dissolved, µg/l	01323	Report	NA	Report	NA	2 days/month	Grab
Silver, Potentially Dissolved, µg/l	01304	Report	NA	Report	NA	2 days/month	Grab
Zinc, Potentially Dissolved, µg/l	01303	Report	NA	Report	NA	2 days/month	Grab
Radium 226+228, Total pCi/l	11503	Report	NA	Report	NA	2 days/month	Grab

EC, dS/m	00094	Report	NA	NA	NA	2 days/month	Grab
Calcium, mg/l	00918	Report	NA	Report	NA	2 days/month	Grab
Magnesium, mg/l	00921	Report	NA	Report	NA	2 days/month	Grab
Sodium, mg/l	00923	Report	NA	Report	NA	2 days/month	Grab
Bicarbonate as HCO <sub>3</sub> , mg/l	00440	Report	NA	Report	NA	2 days/month	Grab
SAR calculated limit*	00931	Report	NA	NA	NA	2 days/month	Calculated
Adjusted SAR Effluent**	00931	Report	NA	NA	NA	2 days/month	Calculated
WET, Chronic							
Static Renewal 7 Day Chronic <i>Pimephales promelas</i>	TKP6C	NA	NA	Report	NA	Quarterly	3 Composites/test
Static Renewal 7 Day Chronic <i>Ceriodaphnia dubia</i>	TKP3B	NA	NA	Report	NA	Quarterly	3 Composites/test

\* 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:  $SAR = (7.1 * EC) - 2.48$ .

\*\*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.

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 Limitations Maximum Concentrations				Monitoring Frequency	Sample Type
		30-Day Average	7-Day Average	Daily Max.	2-Year Average		
Flow, MGD	50050	0.04	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	5	NA	2 days/month	Grab
Nitrite as N, mg/l	00615	NA	NA	0.5	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	20000	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
Aluminum, Total Recoverable, µg/l	01104	1438	NA	10071	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, Potentially Dissolved, µg/l	01313	1.2	NA	9.1	NA	2 days/month	Grab
Trivalent Chromium, Potentially Dissolved, µg/l	01314	231	NA	1773	NA	2 days/month	Grab
Hexavalent Chromium, Dissolved, µg/l	01220	11	NA	16	NA	2 days/month	Grab
Copper, Potentially Dissolved, µg/l	01306	29	NA	50	NA	2 days/month	Grab
Iron, Total Recoverable, µg/l	00980	1000	NA	NA	NA	2 days/month	Grab
Lead, Potentially Dissolved, µg/l	01318	11	NA	281	NA	2 days/month	Grab
Manganese, Potentially Dissolved, µg/l	01319	2618	NA	4738	NA	2 days/month	Grab
Mercury, Total, µg/l	71900	0.01	NA	NA	NA	2 days/month	Grab
Nickel, Potentially Dissolved, µg/l	01322	168	NA	1513	NA	2 days/month	Grab
Selenium, Potentially Dissolved, µg/l	01323	4.6	NA	18.4	NA	2 days/month	Grab
Silver, Potentially Dissolved, µg/l	01304	3.5	NA	22	NA	2 days/month	Grab
Zinc, Potentially Dissolved, µg/l	01303	405	NA	467	NA	2 days/month	Grab
Radium 226+228, Total pCi/l	11503	Report	NA	5	NA	2 days/month	Grab

EC, dS/m	00094	0.7	NA	NA	NA	2 days/month	Grab
Calcium, mg/l	00918	Report	NA	Report	NA	2 days/month	Grab
Magnesium, mg/l	00921	Report	NA	Report	NA	2 days/month	Grab
Sodium, mg/l	00923	Report	NA	Report	NA	2 days/month	Grab
Bicarbonate as HCO <sub>3</sub> , mg/l	00440	Report	NA	Report	NA	2 days/month	Grab
SAR calculated limit*	00931	Report	NA	NA	NA	2 days/month	Calculated
Adjusted SAR Effluent**	00931	Report	NA	NA	NA	2 days/month	Calculated
SAR, pass/fail***	51613	Pass/Fail	NA	NA	NA	2 days/month	Calculated
WET, Chronic							
Static Renewal 7 Day Chronic <i>Pimephales promelas</i>	TKP6C	NA	NA	NOEC or IC25 ≥ IWC	NA	Quarterly	3 Composites/test
Static Renewal 7 Day Chronic <i>Ceriodaphnia dubia</i>	TKP3B	NA	NA	NOEC or IC25 ≥ IWC	NA	Quarterly	3 Composites/test

\* 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:  $SAR = (7.1 * EC) - 2.48$ .

\*\*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 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. 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,

A handwritten signature in blue ink, appearing to read 'Kenan Diker', with a stylized flourish at the end.

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

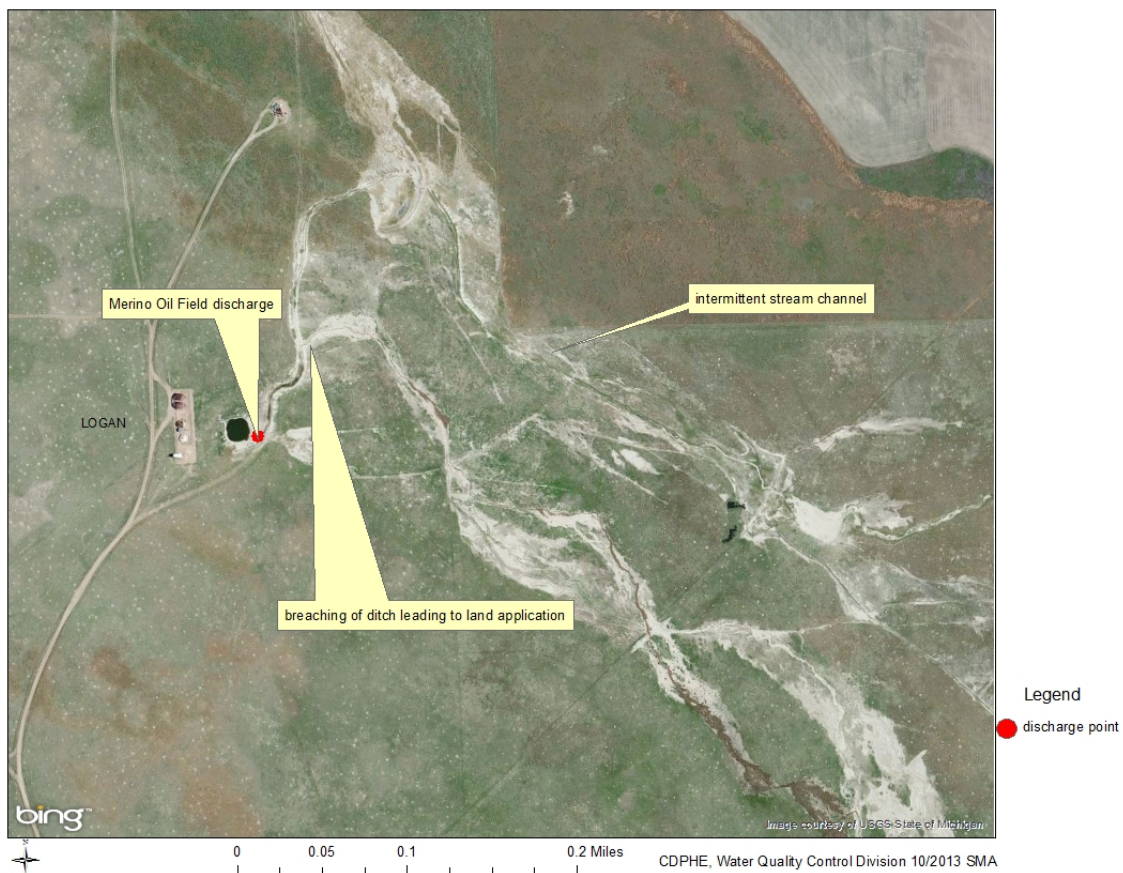


Figure 1

The above aerial image details the visual scarring of the landscape seemingly created by the lack of containment from the Merino Oil discharge. It also provides locational relationships between the facility discharge location and the intermittent stream channel.

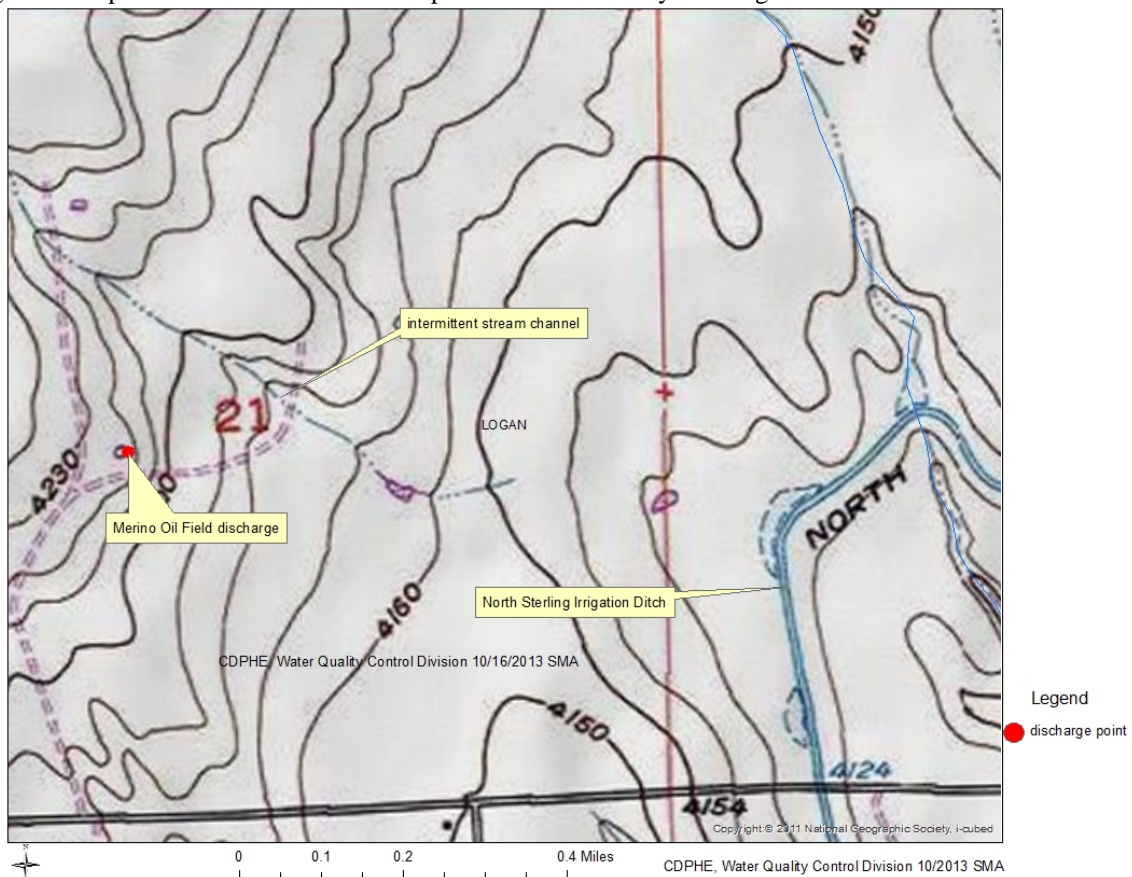


Figure 2

The above topographic map details the location of the intermittent stream, at least one pond and the location of the North Sterling Irrigation Ditch.