SAMPLING AND ANALYSIS PLAN (REVISED)

Nix Sand and Gravel Mine

April 2023

2500 East Brannan Way
Denver, Colorado 80229
303.534.1231

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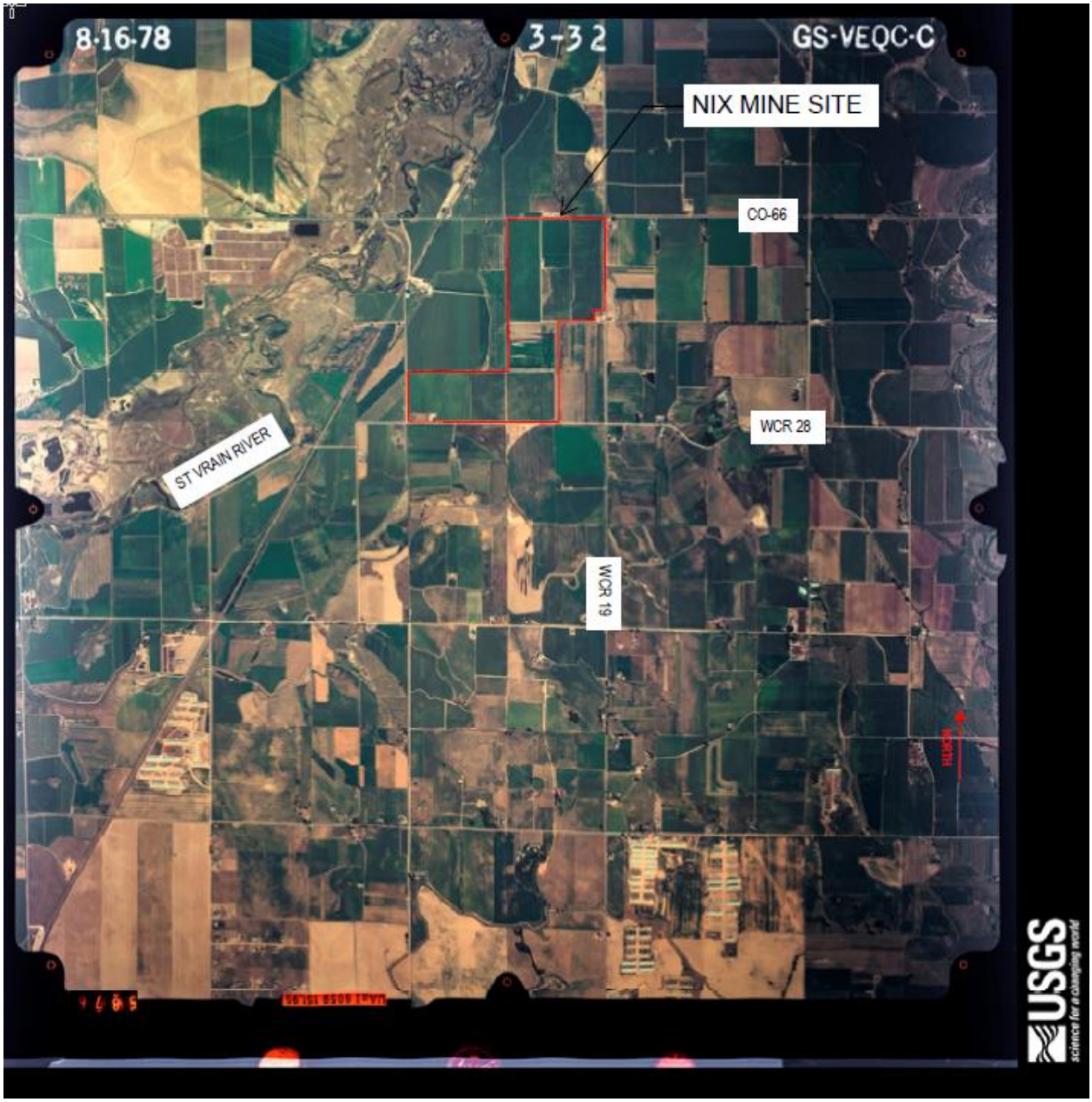
1. BACKGROUND

Ready Mixed Concrete Company, LLC (RMCC, or Operator) plans to operate the Nix Sand and Gravel Mine (Nix) under the authority of the Colorado Division of Reclamation, Mining and Safety (DRMS) Permit M2001-046. Nix is in Weld County, approximately four miles west of Platteville, Colorado. See general vicinity map in **Figure 1**, below.

Figure 1: Nix Mine Site and Vicinity



2. BASELINE GROUNDWATER DATA

RMCC has gathered data from 13 monitoring wells located around the property. This data shows the baseline groundwater condition within the alluvial aquifer of the St. Vrain River. The locations of the sampled and measured wells can be found in **Figure 2**, below. This figure also provides information on the groundwater flow and shows the extensive mining to the south and west of Nix.

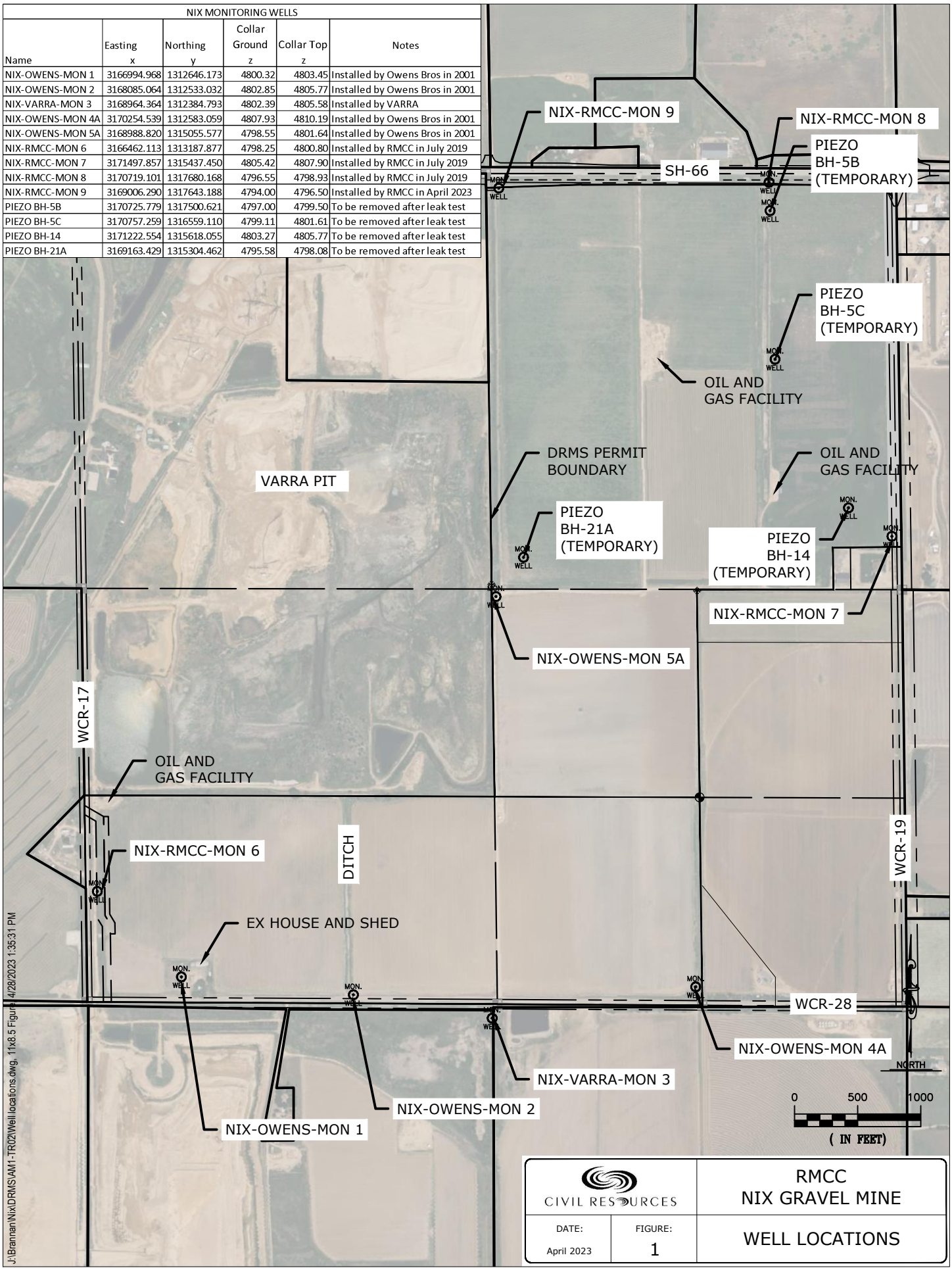
Five monitoring wells are on the southern boundary of the mining area, four are located on the interior of the site within a future slurry-walled area and may be removed when leak testing is complete, and four are in the northern section of the property. Of the latter, two are downgradient including the new Mon-9 drilled at DRMS's request in the northwest corner of the site. Wells Nix-Owens-Mon 1, Nix-Owens-Mon 2, and Nix-Owens-Mon 4A are now dry (likely due to adjacent dewatering); Well Nix-Varra-Mon 3 is only 1" in diameter and is not able to be sampled using standard techniques.

2.1 Baseline Groundwater Quality Data

RMCC's sampling and monitoring program is conducted to thoroughly establish the baseline water quality and quantity for the site, and to allow for long-term water quality and water level monitoring. The purpose of the monitoring is to determine if gravel pit operations have impacted the alluvial aquifer. **Table 1** shows a summary of the initial well sample results from June 2021.

Figure 2: Map of Wells on Nix Site (following page)

NIX MONITORING WELLS					
Name	Easting x	Northing y	Collar Ground z	Collar Top z	Notes
NIX-OWENS-MON 1	3166994.968	1312646.173	4800.32	4803.45	Installed by Owens Bros in 2001
NIX-OWENS-MON 2	3168085.064	1312533.032	4802.85	4805.77	Installed by Owens Bros in 2001
NIX-VARRA-MON 3	3168964.364	1312384.793	4802.39	4805.58	Installed by VARRA
NIX-OWENS-MON 4A	3170254.539	1312583.059	4807.93	4810.19	Installed by Owens Bros in 2001
NIX-OWENS-MON 5A	3168988.820	1315055.577	4798.55	4801.64	Installed by Owens Bros in 2001
NIX-RMCC-MON 6	3166462.113	1313187.877	4798.25	4800.80	Installed by RMCC in July 2019
NIX-RMCC-MON 7	3171497.857	1315437.450	4805.42	4807.90	Installed by RMCC in July 2019
NIX-RMCC-MON 8	3170719.101	1317680.168	4796.55	4798.93	Installed by RMCC in July 2019
NIX-RMCC-MON 9	3169006.290	1317643.188	4794.00	4796.50	Installed by RMCC in April 2023
PIEZO BH-5B	3170725.779	1317500.621	4797.00	4799.50	To be removed after leak test
PIEZO BH-5C	3170757.259	1316559.110	4799.11	4801.61	To be removed after leak test
PIEZO BH-14	3171222.554	1315618.055	4803.27	4805.77	To be removed after leak test
PIEZO BH-21A	3169163.429	1315304.462	4795.58	4798.08	To be removed after leak test



J:\Brannan\Nix\DRMS\AM1-TR02\Well locations.dwg, 11x8.5 Figure, 4/28/2023 1:35:31 PM

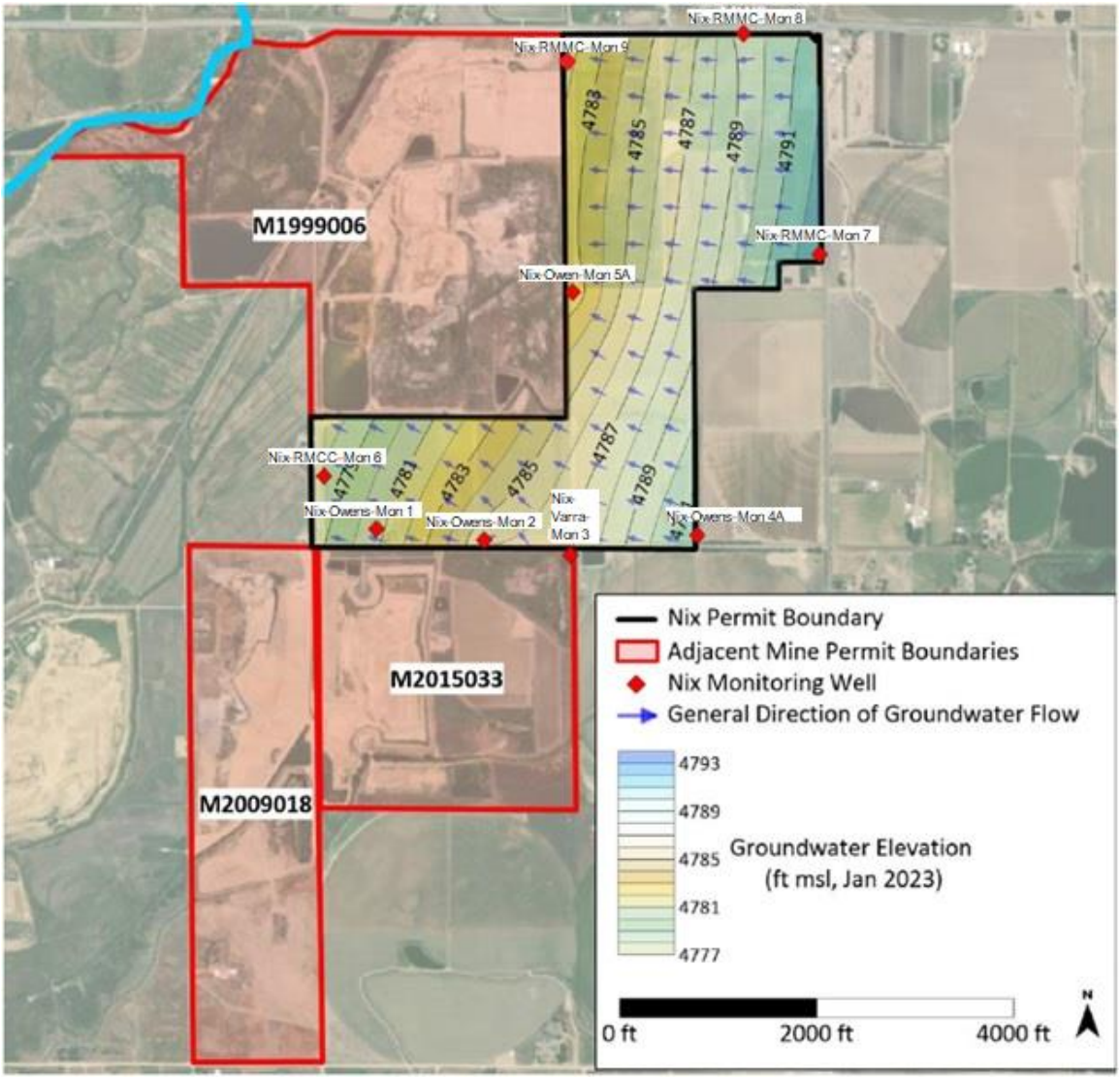
CIVIL RESOURCES	RMCC NIX GRAVEL MINE
DATE: April 2023 / FIGURE: 1	WELL LOCATIONS

Table 1: Baseline Groundwater Quality Data[1]

	Compliance Standard		Nix-Owens Mon 4 (ug/L)	Nix-RMCC Mon 7 (ug/L)	Nix-RMCC Mon 6 (ug/L)	Nix-RMCC Mon 8 (ug/L)	Nix-Owens Mon 5A (ug/L)	Method Used	Detection Limit(ug/L)	Notes
Aluminum (Al)	5000	ug/L	309	220	1150	3460	3930	EPA 200.8	50	
Antimony(Sb)	6	ug/L	0.0805	ND	0.831	0.173	0.419	EPA 200.8	0.05	
Arsenic (As)	10	ug/L	ND	ND	0.692	0.967	0.857	EPA 200.8	0.6	
Asbestos	$7.0x10^6$	fibers/L						TBD	TBD	Analyte not reported, RMCC to sample prior to May annual Report
Barium(Ba)	2000	ug/L	54.7	43.7	36.8	93.5	74.1	EPA 200.8	1	
Beryllium (Be)	4	ug/L	ND	ND	ND	0.106	ND	EPA 200.8	0.1	
Boron (B)	750	ug/L	204	243	201	212	245	EPA 200.8	10	
Cadmium(Cd)	5	ug/L	ND	ND	ND	ND	0.0512	EPA 200.8	0.05	
Chlorophenol	0.2	ug/L	ND	ND	ND	ND	ND	EPA 8270D	10	
Chloride (Cl)	250000	ug/L	145000	157000	89600	136000	94000	EPA 300.0	6000	
Chromium(Cr)	100	ug/L						EPA 200.8	TBD	Recovering 2021 data from lab, will sample prior to May Report
Cobalt (Co)	50	ug/L	ND	ND	ND	ND	ND	EPA 200.8	1	
Copper (Cu)	200	ug/L	1.41	ND	4.43	1.54	4.02	EPA 200.8	1	
Cyanide [Free](CN)	200	ug/L	ND	ND	ND	ND	ND	EPA 335.4	50	
Fluoride(F)	2000	ug/L	631	697	1210	1360	1750	EPA 300.0	40	
Iron (Fe)	300	ug/L	214	159	771	2060	1640	EPA 200.8	10	Above domestic water supply standards, below agricultural
Lead(Pb)	50	ug/L	ND	ND	1.55	1.83	1.37	EPA 200.8	0.5	
Lithium (Li)	2500	ug/L	20.9	28.5	14.9	23.2	43.6	EPA 200.7	5	
Nickel (Ni)	100	ug/L	1.69	2.57	1.2	5.56	3.13	EPA 200.8	1	
Nitrate(NO3)	10000	ug/L	11500	3630	3720	12900	13900	EPA 300.0	0.05	Above domestic water supply standards
Nitrite (NO2)	1000	ug/L	6820	7450	3830	6680	4570	EPA 300.0	0.06	Above domestic water supply standards, below agricultural
Nitrite & Nitrate (NO2+NO3)	10000	ug/L	18320	11080	7550	19580	18470	EPA 300.0	NA	Above domestic water supply standards/ below AG
Manganese (Mn)	50	ug/L	4.1	3.88	108	54.8	81.2	EPA 200.8	1	
Mercury (Hg)	2	ug/L	ND	ND	ND	ND	ND	EPA 245.1	0.2	
Molybdenum(Mo)	210	ug/L	2.79	3.7	7.68	5.34	6.23	EPA 200.8	1	
Selenium(Se)	50	ug/L	1.42	ND	1.2	5.56	1.69	EPA 200.8	1	
Silver(Ag)	50	ug/L	ND	ND	ND	ND	ND	EPA 200.8	0.25	
Sulfate (SO 4)	250000	ug/L	294000	348000	331000	290000	402000	EPA 300.0	30	Above domestic water supply standards
Thallium(Tl)	2	ug/L						EPA 200.8	TBD	Recovering 2021 data from lab, will sample prior to May Report
Uranium(U)	16.8	ug/L	6.08	7.66	13	16.1	16.5	EPA 200.8	0.5	
Vanadium (V)	100	ug/L	1.62	1.23	3.07	5.84	5.06	EPA 200.8	0.05	
Zinc (Zn)	2000	ug/L	ND	1.46	28.1	8.32	6.96	EPA 200.8	1	
Foaming Agents	500	ug/L	ND	ND	ND	ND	ND	SM 5540C	100	
pH	0	6.5-8.5	7.39	7.3	7.47	7.43	7.32	SM4500	NA	
Phenol	300	ug/L	ND	ND	ND	ND	ND	EPA 8270D	10	
Color	15	color units						TBD	NA	Analyte not reported, RMCC to sample prior to May annual Report
Corrosivity	Non-Corrosive							TBD	NA	Analyte not reported, RMCC to sample prior to May annual Report
Total Coliforms(MPL/100ML)	2.2 org/100mL (30 day avg)		>2400	>2400	ND	ND	ND	SMEWW 9223B(b)	1	Above domestic water supply standards
TDS	1.25 x background (mg/L)		696	730	594	667	770	SM2540C	10 mg/L	

[1] For the accompanying report, please see RMCC's March 31, 2023, Response to TR2, Adequacy Review 1.

Figure 3: Nix Groundwater Levels, Groundwater Flow, and Adjacent Mine Sites[2]

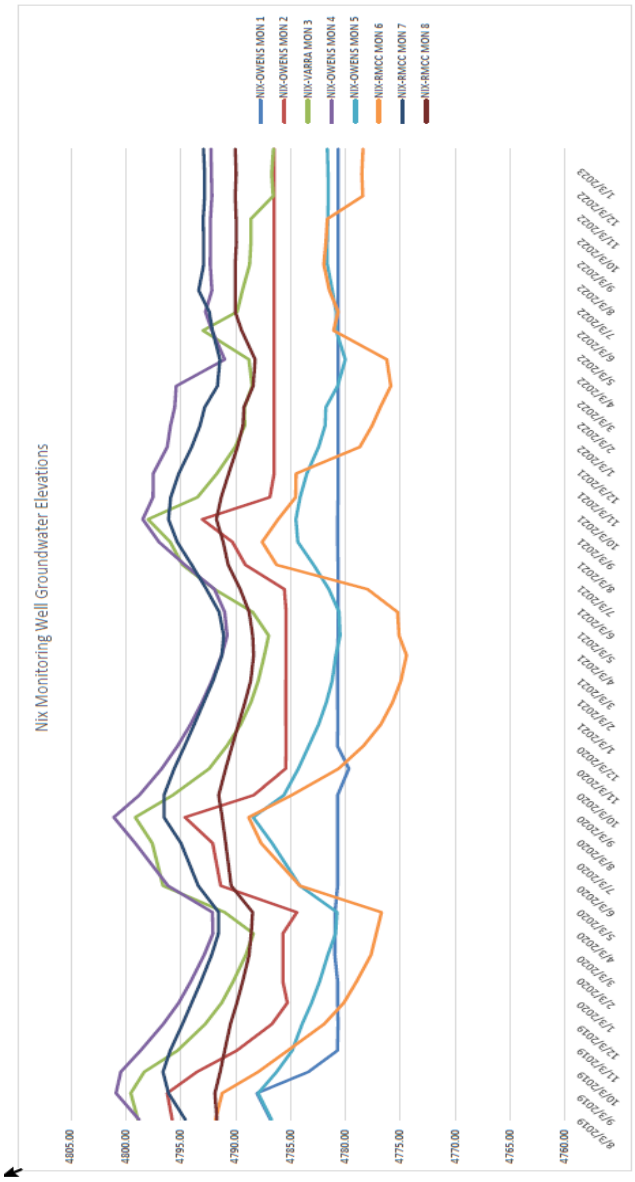


2.2 Baseline Groundwater Quantity Data

RMCC has been monitoring groundwater levels since August 2019, as shown in **Figure 3** (some measurements commenced long before 2019 but are not shown here). The seasonality of groundwater levels is noted. Several wells (see, e.g., Nix-Owens-Mon 1, Nix-Owens-Mon 2, Nix-Owens-Mon 4A) have run dry around the same time as the nearby Raptor Materials pit was dewatered for mining; RMCC will continue to test those wells for water.

[2] For the full figure and accompanying report, please see RMCC's March 31, 2023, Response to TR2, Adequacy Review 1. Figure 3 has been modified since the adequacy review to include Nix-RMCC-Mon 9.

Figure 4: Groundwater Hydrographs[3]



3. WATER QUALITY MONITORING

3.1 Introduction

As part of this Sampling and Analysis Plan (Plan), the Operator will test for water quality at Nix. The purpose of this Plan is to protect the integrity of the region's groundwater quality and to meet the requirements set forth in DRMS rules and regulations and the Colorado Department of Public Health and Environment (CDPHE) Regulation No. 41.

[3] For the accompanying report, please see RMCC's March 31, 2023, Response to TR2, Adequacy Review 1.

More specifically, the Plan will provide baseline and long-term water quality data for surface and groundwater conditions at the site. Long-term monitoring results will be compared to baseline conditions to determine if gravel pit operations have impacted water quality either from mining activity or from trucks moving mined material offsite.

The Plan provides for the collection of pre-operational water quality data (baseline data) that will ultimately be used to compare with results from continuing long-term water quality monitoring. Collection of pre-operational groundwater levels has also occurred as part of the Plan.

3.2 Sampling Methodology

This section identifies the groundwater sampling locations, selected parameters, frequency of tests, analytical techniques, the method of interpreting the results of the tests, and general program operation.

3.2.1 Background Monitoring and Point of Compliance (POC) Locations

Seven water quality sampling wells have been identified to evaluate pre-operational water quality and potential impacts to surface and groundwater. An additional six wells will be monitored for groundwater elevations, but not sampled for water quality. The location of the monitoring locations is shown above in **Figure 2**; the locations and their purpose are summarized in **Table 2**. Available well construction and yield estimate reports are provided, as is available, in **Attachment B**. Note: Not all monitoring wells were either constructed by RMCC or registered with the Division of Water Resources, so construction diagrams are not available.

Table 2: Groundwater Monitoring Stations

Station	Type	POC Well	Top of Casing Elevations	Location	Purpose
Nix-Owens-Mon 1	Water Elevation	No	4803.45	Southwestern perimeter of site.	To establish groundwater flow direction, not used for water quality sample collection. Included in monthly water level sampling.
Nix-Owens-Mon 2	Water Quality & Water Elevation	No	4805.77	Southwestern perimeter of site.	To establish upgradient water quality in the southwest corner of the site. Can be compared against other downstream wells to determine potential influence from mining operations.
Nix-Varra-Mon 3	Water Elevation	No	4805.58	Southwestern perimeter of site.	To establish groundwater flow direction, not used for water quality sample collection. Included in monthly water level sampling.
Nix-Owens-Mon 4A	Water Quality & Water Elevation	No	4810.19	Southeastern corner of site.	To monitor the groundwater upgradient of the central portion of gravel pit. Can compare results to the downgradient station results to determine if any impacts to groundwater have occurred.
Nix-Owens-Mon 5A	Water Quality & Water Elevation	Yes	4801.64	Western perimeter of site.	To monitor the groundwater downgradient of the gravel pit & influence from nearby mining operations. Can compare results to the upgradient station results to determine if any impacts to groundwater have occurred.
Nix-RMCC-Mon 6	Water Quality & Water Elevation	Yes	4800.80	Western perimeter of site.	To monitor the groundwater downgradient of the gravel pit. Can compare results to the upgradient station results to determine if any impacts to groundwater have occurred
Nix-RMCC-Mon 7	Water Quality & Water Elevation	No	4807.90	Eastern perimeter of site.	To monitor the groundwater upgradient of the mining operation. Can compare results to the downgradient station results to determine if any impacts to groundwater have occurred.
Nix-RMCC-Mon 8	Water Quality & Water Elevation	No	4798.93	Northern perimeter of site.	To monitor the groundwater upgradient of the mining operation. Can compare results to the downgradient station results to determine if any impacts to groundwater have occurred.
Nix-RMCC-Mon 9	Water Quality & Water Elevation	Yes	4794.00	Northwest corner of site.	To monitor the groundwater downgradient of the gravel pit. Installed in April 2023. Can compare results to the upgradient station results to determine if any impacts to groundwater have occurred.
Piezo BH-5B	Water Elevation	No	4797.00	North of Piezo BH-5C, in cell 2.	To establish groundwater flow direction, not used for water quality sample collection. Included in monthly water level sampling.
Piezo BH-5C	Water Elevation	No	4799.11	Northwestern mining envelope, in cell 2.	To establish groundwater flow direction, not used for water quality sample collection. Included in monthly water level sampling.
Piezo BH-14	Water Elevation	No	4803.27	On eastern site perimeter, in cell 2.	To establish groundwater flow direction, not used for water quality sample collection. Included in monthly water level sampling.
Piezo BH-21A	Water Elevation	No	4795.58	Central western perimeter, on southern perimeter of cell 3.	To establish groundwater flow direction, not used for water quality sample collection. Included in monthly water level sampling.

The following wells have been identified as the POC wells: Nix-Owens-Mon 5A, Nix-RMCC-Mon 6 and Nix-RMCC-Mon 9. Note: Nix-RMCC-Mon 9, in the northwest corner of the site, was installed in April 2023 at DRMS's request to provide data in the most downgradient point in that area of the permit.

Wells Nix-Owens-Mon 2 and Nix-RMCC-Mon 6, located upstream and downstream, respectively, of the southwest mining envelope (including Cell 1, Cell 6, the proposed plant, siltation pond, and freshwater pond) will allow characterization of groundwater impacts of operations to the groundwater quality. Wells Nix-Owens-Mon 4A and Nix-Owens Mon 5A, located upstream and downstream of the southern mining envelop will allow determination of groundwater impacts from Cells 4 and 5. Similarly, wells Nix-RMCC-Mon 7 and Nix-RMCC-Mon 5A, located upstream and downstream of the northwestern mining envelope will allow determination of groundwater impacts across Cell 2 and Cell 3. Nix-RMCC-Mon 9 will be compared against Nix-RMCC-Mon 8 to evaluate influence across the northern perimeter of the site. Because Nix will use slurry walls, any water quality effects on groundwater are expected to be negligible.

3.2.2 Monitoring Frequency

The Plan has two phases: Baseline and Operational. Baseline Phase consists of sample collection that has already occurred prior to, or will occur subsequent to and in conjunction with, mining activity on the site; that is, after consultation with and approval by DRMS, the Operator will continue to develop its baseline dataset at the same time it commences mining operations. Operational Phase will occur on an ongoing basis once the baseline data is acquired; and will continue until mining ceases.

3.2.2.1 Baseline Phase (Prior to Mining Activity)

RMCC has initiated its pre-operational water quality sampling program. Groundwater levels have been measured monthly since August of 2019 or before. Initial baseline water quality samples were collected in June 2021 at the following locations: Nix-Owens-Mon 4A, Nix-Owens-Mon 5A, Nix-RMCC-Mon 6, Nix-RMCC-Mon 7, and Nix-RMCC-Mon 8.

RMCC Environmental Manager Scott Legg has discussed the 2021 results with DRMS Environmental Protection Specialist Eric Scott. RMCC sampled four wells again in April 2023. Though results are pending, the testing will confirm any exceedances and will provide results for analytes missed in 2021. Further, RMCC will continue monitoring for quality until it has five quarters worth of data, then proceed in the future with annual testing every June.

The first round of subsequent samples was collected on April 17, 2023. Sample collections were attempted at the following dry wells: Nix-Owens-Mon 1, Nix-Owens-Mon 2, and Nix-Owens Mon 4. Nix-Varra-Mon 3 is a 1" well and is deemed not suitable for water quality sampling. Nix-RMCC-Mon 9, was installed on April 12, 2023, and will be included in future sampling events. Additional subsequent sampling events at all seven

water quality locations will be conducted in June 2023, August 2023, and October 2023. Two additional sampling events at Nix-RMCC-Mon 9 will be conducted if deemed necessary by DRMS to collect up to five baseline samples at each well. At the end of the baseline phase, RMCC will submit a Baseline Data Summary report as a Technical Revision.

3.2.2.2 Operational Phase (Long-Term Operation)

Water quality samples will be taken annually in June at each of the seven water quality wells for the duration of mining operations. The frequency of sampling for long-term monitoring can be modified in the future if water quality impacts are detected. Monthly water levels will continue to be collected at each monitoring well, however the Piezo wells may be removed after leak testing occurs.

3.2.3 Monitoring Parameters

The Operator will conduct field and laboratory analysis on 37 different water quality parameters at each site, based on CDPHE Regulation 41, Tables 1-4. A proposed list of the 37 parameters is shown in **Table 3**. **Table 4** includes the list of omitted analytes and justifications as previously discussed with and approved by DRMS staff. All analysis of "non-field" measurements will be performed by a State of Colorado-certified laboratory that follows accepted industry standards and quality assurance/quality control (QA/QC) procedures.

Table 3: Baseline and Operational Water Quality Parameters

Analyte	Phase	Analytical Methodology	Standard	Standard Reference
Aluminum (Al)	Dissolved – lab filtered	M200.8 ICP	5 mg/L	5 CCR 1002-41; Table 3
Antimony (Sb)	Dissolved – lab filtered	M200.8 ICP	0.006 mg/L	5 CCR 1002-41; Table 1
Arsenic (As)	Dissolved – lab filtered	M200.8 ICP	0.01 mg/L	5 CCR 1002-41; Table 1
Barium (Ba)	Dissolved – lab filtered	M200.8 ICP	2.0 mg/L	5 CCR 1002-41; Table 1
Beryllium (Be)	Dissolved – lab filtered	M200.8 ICP	0.004 mg/L	5 CCR 1002-41; Table 1
Boron (B)	Dissolved – lab filtered	M200.8 ICP	0.75 mg/L	5 CCR 1002-41; Table 3
Cadmium (Cd)	Dissolved – lab filtered	M200.8 ICP	0.005 mg/L	5 CCR 1002-41; Table 1
Chloride (Cl)	Dissolved – lab filtered	EPA 300.0	250 mg/L	5 CCR 1002-41; Table 2
Chlorophenol	Total	SM8270	0.0002 mg/L	5 CCR 1002-41; Table 2
Chromium (Cr)	Dissolved – lab filtered	M200.8 ICP	0.1 mg/L	5 CCR 1002-41; Table 1
Cobalt (Co)	Dissolved – lab filtered	M200.8 ICP	0.05 mg/L	5 CCR 1002-41; Table 3
Copper (Cu)	Dissolved – lab filtered	M200.8 ICP	0.2 mg/L	5 CCR 1002-41; Table 3
Conductivity	Field	SM4500	N/A	N/A
Cyanide [Free]	Free	4500-CN-E	0.2 mg/L	5 CCR 1002-41; Table 1
Fluoride (F)	Dissolved – lab filtered	M200.8 ICP	2.0 mg/L	5 CCR 1002-41; Table 3
Iron (Fe)	Dissolved – lab filtered	M200.8 ICP	5 mg/L	5 CCR 1002-41; Table 3
Lead (Pb)	Dissolved – lab filtered	M200.8 ICP	0.05 mg/L	5 CCR 1002-41; Table 1
Lithium (Li)	Dissolved – lab filtered	M200.8 ICP	2.5 mg/L	5 CCR 1002-41; Table 3
Manganese (Mn)	Dissolved – lab filtered	M200.8 ICP	0.2 mg/L	5 CCR 1002-41; Table 3

Mercury (Hg) (inorganic)	Dissolved – lab filtered	M200.8 ICP / EPA 245.1	0.002 mg/L	5 CCR 1002-41; Table 1
Mercury (Hg)	Dissolved – lab filtered	M200.8 ICP / EPA 245.1	0.01 mg/L	5 CCR 1002-41; Table 3
Molybdenum (Mo)	Dissolved – lab filtered	M200.8 ICP	0.21 mg/L	5 CCR 1002-41; Table 1
Nickel (Ni)	Dissolved – lab filtered	M200.8 ICP	0.1 mg/L	5 CCR 1002-41; Table 1
Nitrate (NO2)	Dissolved – lab filtered	EPA 300.0	10.0 mg/L	5 CCR 1002-41; Table 1
Total Nitrite & Nitrate (NO2 +NO3)	Dissolved – lab filtered	EPA 300.0	10.0 mg/L	5 CCR 1002-41; Table 1
Nitrite (NO3)	Dissolved – lab filtered	EPA 300.0	1.0 mg/L	5 CCR 1002-41; Table 1
pH	Total	SM4500	6.5 s.u. - 8.5 s.u.	5 CCR 1002-41; Tables 2 & 3
Phenol	Total	SM8270	0.3 mg/L	5 CCR 1002-41; Table 2
Selenium (Se)	Dissolved – lab filtered	M200.8 ICP	0.02 mg/L	5 CCR 1002-41; Table 3
Silver (Ag)	Dissolved – lab filtered	M200.8 ICP	0.05 mg/L	5 CCR 1002-41; Table 1
Sulfate (SO4)	Dissolved – lab filtered	EPA 300.0	250 mg/L	5 CCR 1002-41; Table 2
Thallium (Tl)	Dissolved – lab filtered	M200.8 ICP	0.002 mg/L	5 CCR 1002-41; Table 1
Total Dissolved Solids (TDS)	Dissolved – lab filtered	SM2540	TBD*	5 CCR 1002-41; Table 4
Uranium (U)	Dissolved – lab filtered	M200.8 ICP	0.0168 mg/L	5 CCR 1002-41; Table 1
Vanadium (V)	Dissolved – lab filtered	M200.8 ICP	0.1 mg/L	5 CCR 1002-41; Table 3
Zinc (Zn)	Dissolved – lab filtered	M200.8 ICP	2 mg/L	5 CCR 1002-41; Table 3

*Per 5 CCR 1002-41; Table 4, Maximum Allowable TDS Concentrations are based on background levels. Previous sampling results from 6/2021 were 500-1,000mg/L making the limit 1.25x background concentration.

Table 4: Omitted Parameters from CDPHE Regulation 41, Tables 1-4

Analyte	CDPHE Reg 41 Citation	Justification
Total Coliforms	Table 1 - Domestic Water Standards - Human Health Standards	Mining operations are not expected to impact bacteriological coliform levels nor can be reasonably attributed to mining operations.
Asbestos	Table 1 - Domestic Water Standards - Human Health Standards	Asbestos will not be used in mining operations and cannot be reasonably attributed to mining operations.
Radiological Elements	Table 1 - Domestic Water Standards - Human Health Standards	Mining operations are not expected to impact radiological levels; levels of this parameter cannot be reasonably attributed to mining operations.
Color	Table 2 - Domestic Water Standards - Drinking Water Standards	Mining operations are not expected to affect aquifer color; changes of this parameter cannot be reasonably attributed to mining operations.
Corrosivity	Table 2 - Domestic Water Standards - Drinking Water Standards	Mining operations are not expected to affect aquifer corrosivity; pH will be analyzed.
Foaming Agents	Table 2 - Domestic Water Standards - Drinking Water Standards	Mining operations are not expected to affect aquifer foaming, no large-scale use of surfactants is planned, and cannot be reasonably attributed to mining operations.
Odor	Table 2 - Domestic Water Standards - Drinking Water Standards	Mining operations are not expected to affect aquifer odor. Olfactory observations will be noted during sample collection; changes of this parameter cannot be reasonably attributed to mining operations.

3.2.4 Sampling Protocol

The following protocol will be used to collect water samples:

3.2.4.1 Bottles

Specific bottles will be ordered from the analytical laboratory to collect the water samples. The laboratory will be notified they will be responsible for filtering dissolved samples prior to placing a bottle order.

3.2.4.2 Static Water Levels

Static water levels in the wells will be measured and recorded using a water level well sounder prior to any pumping of the well. The measurement location at the top edge of the casing will be marked with permanent ink pen and should be touched up with fresh ink at each sampling event. All water levels, and observation well elevations should be measured to at least 0.01' (hundredth of a foot).

3.2.4.3 Purging

Monitoring wells will be purged prior to sample collection. Either a low-flow submersible pump or polyurethane bailers will be used to purge the wells and collect samples, depending on the required purge volume. Pumps will be decontaminated prior to being placed in each well, whereas new bailers will be used and disposed of for each well. Removal of three well casing volumes will occur prior to sampling. The static volume of water in the well will be calculated using the following equation:

$$V = r^2h(0.163)$$

Where

V = static volume of water in well (in gallons)

r = inner radius of well casing (in inches)

h = length of water column (in feet) which is equal to the total well depth minus depth to water.

0.163 = a constant conversion factor that compensates for the conversion of the casing radius from inches to feet for 2-inch diameter wells and the conversion of cubic feet to gallons, and pi (A). This factor would change for different diameter wells.

The purged volume of water will be measured using a five-gallon bucket to verify that the static volumes in the wells are evacuated prior to sample collection. Should the well purge dry prior to three casing volumes being removed, samples will be collected first draw after appropriate recharge.

3.2.4.4 Field Measurements

Measurement of pH, temperature, and specific conductivity will be collected in the field. Visual and olfactory observations will be documented on field sheets. The meters will be cleaned and calibrated prior to measurements. Sample field and instrument calibration sheets are shown in **Appendix A**.

3.2.4.5 Handling of Sample Bottles

Water will be pumped or collected directly into sample bottles. The date and time of sample collection will be marked on the bottle along with who collected the sample and the site location. Samples will then be placed in a cooler with ice.

3.2.4.6 Chain of Custody

A chain of custody form will be completed and will indicate what analysis needs to be run, the date and time collected, sample identification, and who assembled the sample. The samples will be delivered to the lab on the day of sample collection, or stored below 6ºC in a refrigerator until delivery is available on the following day. Dissolved parameters are to be filtered by the laboratory.

3.3 Analytical Procedures: Comparison to State Water Quality Standards

The analytical results will be compared to the regulatory limits established by the Colorado Water Quality Control Commission. The groundwater water quality data from these wells will be compared to standard values in Tables 1-4 of CDPHE Regulation 41. In the case of multiple standards, the more stringent standard will apply. Analytical results from baseline water quality sample collection will be used to determine if the above standards are appropriate for all parameters. Should it be determined that background concentrations of any parameters are elevated due to prior existing activity or ambient conditions, the Operator will work with DRMS to propose modified standards, considering pre-mining land use activity. After final standards are established, if exceedances of any of the water quality standards are detected in POC wells, the Operator will notify DRMS and initiate a water quality mitigation plan as discussed in more detail below.

3.4 Water Quality Mitigation Plan

If limits are exceeded, the Operator will implement the following mitigation procedures:

- Notify DRMS of the exceedance within seven days of either receiving the analytical report from the laboratory or completing the described regression analysis.

- Identify the potential causes/sources of the exceedance parameters.

- Implement supplemental water quality sampling. If exceedances are

detected, the Operator will collect samples to confirm the exceedance as soon as practicable, but no longer than 14 days after receiving the exceedance. If confirmed, the Operator will work with DRMS to establish an appropriate supplemental sampling schedule. Only parameter(s) which exceed the regulatory limits will be analyzed and will continue to be monitored until the parameter(s) drop below the allowable limit.

The Operator will begin implementing one or more mitigation measures if mining and reclamation activity is determined to be a significant factor to groundwater changes requiring mitigation. Mitigation measures may include, but are not limited to:

- Review chemical inventory for elevated analytes and develop plans for chemical containment, abatement, reduction and/or substitution. Confirm effectiveness of appropriate controls surrounding chemical spill.

- Review effectiveness of slurry walls and source area containment.

- Collect additional samples of stockpiled materials and review placement and containment of stockpiles if identified analytes are detected in elevated rates.

- Remove suspected contaminated materials and replace with clean fill or another suitable material.

3.5 Annual Report

A water quality summary report will be prepared annually and submitted with the Operator's annual DRMS report. The report will present summaries of the data collected during the previous year and compare such data to State water quality standards and the baseline monitoring results.

4. WATER LEVEL MONITORING PLAN

4.1 Monthly Monitoring

The Operator's water level monitoring plan submitted in June 2021 has been approved by DRMS. Consistent with that plan, the Operator will continue to monitor its groundwater level wells monthly to improve the operator's knowledge of the water table on- and off-site during operations.

4.2 Criteria and Trigger Values

Certain water level deviation observed during monthly water level monitoring may initiate additional investigation. Specifically, once mining operations commence, if RMCC observes water levels in a monitoring well that are more than two feet above or below

historic maximum or minimum levels observed for that well for more than two consecutive months, the Operator will take steps consistent with the Groundwater Monitoring Plan previously submitted and approved. Some of those steps include:

- The Operator will evaluate the cause and will notify DRMS within seven days.

- After the DRMS has been notified, the Operator will review the data and available information and submit a report to DRMS within 30 days. The evaluation will include discussions with the well owner who has contacted the operator regarding a concern, if any, and review of baseline data from the well and vicinity to evaluate whether changes may be due to seasonal variations, climate, mining, slurry wall lining or other factors. The report will identify the extent of potential or actual impacts associated with the changes.

- If the extent of groundwater changes due to mining or reclamation activities is determined to be a significant contributing factor that has or may create adverse impacts, the mining-associated impacts will be addressed to the satisfaction of DRMS.

- The Operator will begin implementing one or more mitigation measures if mining and reclamation activity is determined to be a significant factor to groundwater changes requiring mitigation.

- Mitigation measures may include, but are not limited to:

    - Placing water in a recharge pond to raise groundwater levels around the well.

    - Constructing a local clay liner at the edge of the mine Cell (i.e., between the dewatering point and the well) in order to raise water levels on the well side of the liner and mitigate dewatering effects.

    - Cleaning the well to improve efficiency.

    - Providing an alternative source of water or purchasing additional water to support historic well use in terms of water quantity and quality. If needed, water quality parameters will be checked in affected wells to ensure alternative sources support historic use.

    - Modifying a well to operate under lower groundwater conditions. This could include deepening the well or lowering pumps. All work would be done at the operator’s expense with the exception of replacing equipment that was non-functional prior to mining.

Attachment A: Field Sheets and Instrument Calibration Sheet

Well Sampling Log--SAMPLE
Nix Sand and Gravel Mine
Groundwater Monitoring Field Sheet

Sample Point: **SAMPLE** Date: _____

Sampler Name: _____ Time: _____

Weather/Field Conditions:

_____

_____

Groundwater Monitoring Well Purging/Sampling:

Total Well Depth (TD) = _____ feet
Initial Depth to Water (DTW)= _____ feet

Casing Volume = 0.163gal (for 2" diam. well) x (TD – DTW) = _____ gallons
Purge Volume = (Casing Volume x 3) = _____ gallons

Purge Method: ☐ Bailer ☐ Pump

Time	Volume Removed (gal)	pH (s.u.)	Temp (°C)	Sp. Cond. (µS/cm.)	Odor	Color / Sediment	Bubbles / Effervescence	Comments

Final Field Parameters:

Time	Volume Removed (gal)	pH (s.u.)	Temp (°C)	Sp. Cond. (µS/cm.)	Odor	Color / Sediment	Bubbles / Effervescence	Comments

Analysis Requested:
Dissolved Metals: Ag, Al, As, Ba, Be, B, Cd, Cr, Co, Cu, F, Fe, Pb, Li, Mn, Hg, Mo, Ni, Sb, Se, Tl, U, V, Zn (Lab filtered)
Anions: Cl, NO2, NO3, NO2 + NO3, SO4 (Lab filtered)
SVOC: Phenol, Chlorophenol
Misc.: pH, TDS, Free Cyanide

Field Instrument Calibration Sheet

Instrument:

Make: Oakton Model: PCTSTestr 50 Serial : 2897197

Date:_____

Pre-Sampling Time:_____ **Post Sampling Time:**_____

Performed By: _____

Calibration

The multimeter must be calibrated/verified **before and after** sample collection. In addition, the meter must be calibrated/verified for **all** field parameters that are to be measured and recorded.

Perform a three-point pH calibration. Record measured value for each buffer solution after calibration has been completed. In addition, record pH mV values.

Calibration/Standard	Pre-Sampling Value		Post Sampling Value	
	Temp (^{o}C)	Result (s.u.)	Temp (^{o}C)	Result (s.u.)
pH 4.0 Buffer Lot#: 2GI306 Exp Date: 9/2024				
pH 7.0 Buffer Lot#: 3ga766 Exp Date: 1/2025				
pH 10.0 Buffer Lot#: 3GA1134 Exp Date: 1/2025				
Conductivity Standard 1413 (µS/cm) Lot#: 3GB162 Exp Date: 2/2024				

Attachment B: Well Construction and Yield Estimate Reports

FORM NO. GWS-31 4/2012

WELL CONSTRUCTION AND TEST REPORT

STATE OF COLORADO, OFFICE OF THE STATE ENGINEER
1313 Sherman St., Ste 821, Denver, CO 80203
Main (303) 866-3581 Fax (303) 866-3589 www.water.state.co.us

For Office Use Only

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WATER RESOURCES
STATE ENGINEER
COLO

1. WELL PERMIT NUMBER: 299537 Identified as: NIX-VARRA-Mon 3

2. WELL OWNER INFORMATION

NAME OF WELL OWNER: Varra Companies, Inc.

MAILING ADDRESS: 8120 Gage Street

CITY: Frederick STATE: CO ZIP CODE: 80516

TELEPHONE NUMBER w/area code:

3. WELL LOCATION AS DRILLED: NE 1/4, NW 1/4, Sec., 33 Twp 3 [x] N or S, [ ] Range 67 [ ] E or W [x]
DISTANCES FROM SEC. LINES: 179 ft. from [x] N or [ ] S section line and 2592 ft. from [ ] E or [x] W section line.
SUBDIVISION: _____, LOT____, BLOCK____, FILING (UNIT) ____

Optional GPS Location: GPS Unit must use the following settings: Format must be **UTM**, Units must be **meters**, Datum must be **NAD83**, Unit must be set to **true N**, [ ] Zone 12 or [ ] Zone 13

Owner's Well Designation: P-11
Easting: _____
Northing: _____

STREET ADDRESS AT WELL LOCATION: None assigned

4. GROUND SURFACE ELEVATION 4802.18 feet DRILLING METHOD Direct Push
DATE COMPLETED 08/06/2013 TOTAL DEPTH 44 feet DEPTH COMPLETED 44 feet

5. GEOLOGIC LOG:

Depth	Type	Grain Size	Color	Water Loc.

6. HOLE DIAM (in.)

	From (ft)	To (ft)
2	0	44

7. PLAIN CASING:

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
1.05	PVC	0.133	0	5

PERFORATED CASING: Screen Slot Size (in): 0.010

1.05	PVC	0.133	5	44

8. FILTER PACK:
Material: Silica Sand
Size: 10-20
Interval: 4-44

9. PACKER PLACEMENT:
Type: _____
Depth: _____

10. GROUTING RECORD

Material	Amount	Density	Interval	Placement
Ben			2-4	positive
Cement			0-2	positive

Remarks: direct push - no cuttings recovered general conditions 0-3 feet topsoil - sand and gravel to completion

11. DISINFECTION: Type N/A Amt. Used N/A

12. WELL TEST DATA: [ ] Check box if Test Data is submitted on Form Number GWS 39 Supplemental Well Test.

TESTING METHOD N/A - Monitoring Well Only

Static Level____ ft. Date/Time measured:_____, Production Rate____ gpm.
Pumping Level____ ft. Date/Time measured_____, Test Length (hrs)____.
Remarks:

13. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed (or name entered if filing online) and certified in accordance with Rule 17.4 of the Water Well Construction Rules, 2 CCR 402-2. The filing of a document that contains false statements is a violation of section 37-91-108(1)(e), C.R.S., and is punishable by fines up to $5000 and/or revocation of the contracting license. If filing online the State Engineer considers entering of licensed contractor name to be compliance with Rule 17.4

Company Name:	Phone w/area code:	License Number:
DrillPro Services, Inc.	303-280-5380	N/A

Mailing Address: 2220 E. 74th Pl., Unit A, Denver, CO 80229

Sign (or enter name if filing online)	Print Name and Title	Date
Blake Jones	Blake Jones - President	11/05/2015

Form No. GWS-31
02/2017

WELL CONSTRUCTION AND YIELD ESTIMATE REPORT

State of Colorado, Office of the State Engineer
1313 Sherman St., Room 821, Denver, CO 80203 303.866.3581
www.water.state.co.us and dwrpermitsonline@state.co.us

For Office Use Only

1. **Well Permit Number:** MH-059597 **Receipt Number:**
2. **Owner's Well Designation:** RMCC-MW-6 (Nix-RMCC-Mon 6)
3. **Well Owner Name:** Ready Mixed Concrete Company
4. **Well Location Street Address:** 8133 County Road 28, Platteville, CO 80651
5. **As Built GPS Well Location (required):** ☐ Zone 12 ☒ Zone 13 Easting: 508159.0 Northing: 4449047
6. **Legal Well Location:** SW 1/4, SW 1/4, Sec., 28 Twp. 3 ☒ N or S ☐, Range 67 ☐ E or W ☒, 6 P.M.
   County: Weld
   Subdivision: _____, Lot ____, Block ____, Filing (Unit) ____
7. **Ground Surface Elevation:** 4801 feet **Date Completed:** 06/11/2019 **Drilling Method:** Hollow Stem Auger
8. **Completed Aquifer Name :** Alluvial **Total Depth:** 52 feet **Depth Completed:** 52 feet
9. **Advance Notification:** Was Notification Required Prior to Construction? ☒ Yes ☐ No, Date Notification Given: 05/10/2019
10. **Aquifer Type:** (Check one) ☐ Type I (One Confining Layer) ☐ Type I (Multiple Confining Layers) ☐ Laramie-Fox Hills ☐ Type II (Not overlain by Type III) ☐ Type II (Overlain by Type III) ☒ Type III (alluvial/colluvial)

11. **Geologic Log:**

Depth	Type	Grain Size	Color	Water Loc.
0-2	Overburden sand	clayey sand	Brown	
2-51	sand, some gravl		tan	17.8'
51-52	claystone		grey	

12. **Hole Diameter (in.)**

	From (ft)	To (ft)
8	0	52

13. **Plain Casing**

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	42	2.5 ag

Perforated Casing Screen Slot Size (in): 0.010

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	52	42

14. **Filter Pack:** Material: Native; Size: ; Interval: 52-5

15. **Packer Placement:** Type: NA; Depth: ____

16. **Grouting Record**

Material	Amount	Density	Interval	Method
Bentonite	75 lbs		5-1	place & hydrate
cement	1 sack		1-0	place & trowel

Remarks: water measured below ground on 6-13-19

17. **Disinfection:** Type NA Amt. Used NA
18. **Well Yield Estimate Data:** ☐ Check box if Test Data is submitted on Form Number GWS-39, Well Yield Test Report
    Well Yield Estimate Method: NA
    Static Level: 10
    Date/Time measured: time of drilling
    Estimated Yield (gpm) NA
    Estimate Length (hrs) NA

Remarks:

19. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed (or name entered if filing online) and certified in accordance with Rule 17.4 of the Water Well Construction Rules, 2 CCR 402 2. The filing of a document that contains false statements is a violation of section 37 91 108(1)(e), C.R.S., and is punishable by fines up to $1,000 and/or revocation of the contracting license. If filing online the State Engineer considers the entry of the licensed contractor's name to be compliance with Rule 17.4.

Company Name:	Email:	Phone w/area code:	License Number:
Civil Resources, LLC	gary@civilresources.com	(720) 684-7221	NA

Mailing Address: P. O. Box 680 Frederick, CO 80530

Sign (or enter name if filing online)	Print Name and Title	Date:
Gary Linden	Gary Linden Sr Engineering Geologist	06/12/2019

Form No. GWS-31
02/2017

WELL CONSTRUCTION AND YIELD ESTIMATE REPORT

State of Colorado, Office of the State Engineer
1313 Sherman St., Room 821, Denver, CO 80203 303.866.3581
www.water.state.co.us and dwrpermitsonline@state.co.us

For Office Use Only

1. Well Permit Number: MH-059597 **Receipt Number:**

2. Owner's Well Designation: RMCC-MW-7 (Nix-RMCC-Mon 7)

3. Well Owner Name: Ready Mixed Concrete Company

4. Well Location Street Address: 13505 County Road 19, Platteville, CO 80651

5. As Built GPS Well Location (required): ☐ Zone 12 ☒ Zone 13 Easting: 509697.0 Northing: 4449696

6. Legal Well Location: SE 1/4, NE 1/4, Sec., 28 Twp. 3 ☒ N or S ☐, Range 67 ☐ E or W ☒, 6 P.M.
County: Weld
Subdivision: _____, Lot ____, Block ____, Filing (Unit) ____

7. Ground Surface Elevation: 4811 feet **Date Completed:** 06/21/2019 **Drilling Method:** Hollow Stem Auger

8. Completed Aquifer Name : Alluvial **Total Depth:** 33 feet **Depth Completed:** 33 feet

9. Advance Notification: Was Notification Required Prior to Construction? ☒ Yes ☐ No, Date Notification Given: 05/10/2019

10. Aquifer Type: (Check one)
☐ Type I (One Confining Layer) ☐ Type I (Multiple Confining Layers) ☐ Laramie-Fox Hills
☐ Type II (Not overlain by Type III) ☐ Type II (Overlain by Type III) ☒ Type III (alluvial/colluvial)

11. Geologic Log:

Depth	Type	Grain Size	Color	Water Loc.
0-3	sandy clay		Brown	
3-6	silty sand		tan	
6-12	sandy clay		brown	
12-32	sand and gravel		tan	12.8
32-33	claystone		tan-grey	

12. Hole Diameter (in.)

	From (ft)	To (ft)
8	0	33

13. Plain Casing

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	23	2.5 ag

Perforated Casing Screen Slot Size (in): 0.010

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	33	23

14. Filter Pack:
Material: Native
Size:
Interval: 33-5

15. Packer Placement:
Type: NA
Depth:

16. Grouting Record

Material	Amount	Density	Interval	Method
Bentonite	100 lbs		5-1	place & hydrate
cement	1 sack		1-0	place & trowel

Remarks: water measured below ground on 6-21-19 approx. 6 hours after drilling

17. Disinfection: Type NA Amt. Used NA

18. Well Yield Estimate Data: ☐ Check box if Test Data is submitted on Form Number GWS-39, Well Yield Test Report
Well Yield Estimate Method: NA
Static Level:
Date/Time measured:
Estimated Yield (gpm) NA
Estimate Length (hrs) NA

Remarks:

19. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed (or name entered if filing online) and certified in accordance with Rule 17.4 of the Water Well Construction Rules, 2 CCR 402 2. The filing of a document that contains false statements is a violation of section 37 91 108(1)(e), C.R.S., and is punishable by fines up to $1,000 and/or revocation of the contracting license. If filing online the State Engineer considers the entry of the licensed contractor's name to be compliance with Rule 17.4.

Company Name:	Email:	Phone w/area code:	License Number:
Civil Resources, LLC	gary@civilresources.com	(720) 684-7221	NA

Mailing Address: P. O. Box 680 Frederick, CO 80530

Sign (or enter name if filing online)	Print Name and Title	Date:
Gary Linden	Gary Linden Sr Engineering Geologist	06/21/2019

Form No. GWS-31
02/2017

WELL CONSTRUCTION AND YIELD ESTIMATE REPORT

State of Colorado, Office of the State Engineer
1313 Sherman St., Room 821, Denver, CO 80203 303.866.3581
www.water.state.co.us and dwrpermitsonline@state.co.us

For Office Use Only

1. **Well Permit Number:** MH-059597 **Receipt Number:**
2. **Owner's Well Designation:** RMCC-MW-8 (Nix-RMCC-Mon 8)
3. **Well Owner Name:** Ready Mixed Concrete Company
4. **Well Location Street Address:** 13505 County Road 19, Platteville, CO 80651
5. **As Built GPS Well Location (required):** ☐ Zone 12 ☒ Zone 13 Easting: 509465.0 Northing: 4450382
6. **Legal Well Location:** NE 1/4, NE 1/4, Sec., 28 Twp. 3 ☒ N or S ☐, Range 67 ☐ E or W ☒, 6 P.M.
   County: Weld
   Subdivision: _____, Lot ____, Block ____, Filing (Unit) ____
7. **Ground Surface Elevation:** 4799 feet **Date Completed:** 06/11/2019 **Drilling Method:** Hollow Stem Auger
8. **Completed Aquifer Name :** Alluvial **Total Depth:** 36.5 feet **Depth Completed:** 36.5 feet
9. **Advance Notification:** Was Notification Required Prior to Construction? ☒ Yes ☐ No, Date Notification Given: 05/10/2019
10. **Aquifer Type:** (Check one) ☐ Type I (One Confining Layer) ☐ Type I (Multiple Confining Layers) ☐ Laramie-Fox Hills ☐ Type II (Not overlain by Type III) ☐ Type II (Overlain by Type III) ☒ Type III (alluvial/colluvial)

11. **Geologic Log:**

Depth	Type	Grain Size	Color	Water Loc.
0-4	Overburden sand		Brown	
4-35.5	sand, some gravl		tan	10.7'
35.5-36.5	claystone		grey	

12. **Hole Diameter (in.)**

	From (ft)	To (ft)
8	0	36.5

13. **Plain Casing**

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	26.5	2.5 ag

Perforated Casing Screen Slot Size (in): 0.010

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	36.5	26.5

14. **Filter Pack:** Material: Native; Size: ; Interval: 36.5-5

15. **Packer Placement:** Type: NA; Depth: ____

16. **Grouting Record**

Material	Amount	Density	Interval	Method
Bentonite	75 lbs		5-1	place & hydrate
cement	1 sack		1-0	place & trowel

Remarks: water measured below ground on 6-13-19

17. **Disinfection:** Type NA Amt. Used NA
18. **Well Yield Estimate Data:** ☐ Check box if Test Data is submitted on Form Number GWS-39, Well Yield Test Report
    Well Yield Estimate Method: NA
    Static Level: 10
    Date/Time measured: time of drilling
    Estimated Yield (gpm) NA
    Estimate Length (hrs) NA

Remarks:

19. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed (or name entered if filing online) and certified in accordance with Rule 17.4 of the Water Well Construction Rules, 2 CCR 402 2. The filing of a document that contains false statements is a violation of section 37 91 108(1)(e), C.R.S., and is punishable by fines up to $1,000 and/or revocation of the contracting license. If filing online the State Engineer considers the entry of the licensed contractor's name to be compliance with Rule 17.4.

Company Name:	Email:	Phone w/area code:	License Number:
Civil Resources, LLC	gary@civilresources.com	(720) 684-7221	NA

Mailing Address: P. O. Box 680 Frederick, CO 80530

Sign (or enter name if filing online)	Print Name and Title	Date:
Gary Linden	Gary Linden Sr Engineering Geologist	06/11/2019

Form No. GWS-31
02/2017

WELL CONSTRUCTION AND YIELD ESTIMATE REPORT

State of Colorado, Office of the State Engineer
1313 Sherman St., Room 821, Denver, CO 80203 303.866.3581
www.water.state.co.us and dwrpermitsonline@state.co.us

For Office Use Only

1. Well Permit Number: MH-64704 **Receipt Number:**

2. Owner's Well Designation: NIX-RMCC-MON 9

3. Well Owner Name: Ready Mixed Concrete Company

4. Well Location Street Address: 8500-8764 SH-66 Platteville, CO 80651

5. As Built GPS Well Location (required): ☐ Zone 12 ☒ Zone 13 Easting: 508949.1 Northing: 4450379.11

6. Legal Well Location: NW 1/4, NE 1/4, Sec., 28 Twp. 3 ☒ N or S ☐, Range 67 ☐ E or W ☒, 6 P.M.
County: WELD
Subdivision: Parcel: 120928100011, Lot ____, Block ____, Filing (Unit) 28

7. Ground Surface Elevation: 4798 feet **Date Completed:** 04/13/2023 **Drilling Method:** 8" O.D. Hollow stem Auger

8. Completed Aquifer Name : alluvial **Total Depth:** 50 feet **Depth Completed:** 50 feet

9. Advance Notification: Was Notification Required Prior to Construction? ☒ Yes ☐ No, Date Notification Given: 04/10/2023

10. Aquifer Type: (Check one) ☐ Type I (One Confining Layer) ☐ Type I (Multiple Confining Layers) ☐ Laramie-Fox Hills ☐ Type II (Not overlain by Type III) ☐ Type II (Overlain by Type III) ☒ Type III (alluvial/colluvial)

11. Geologic Log:

Depth	Type	Grain Size	Color	Water Loc.
0	Overburden		Brown	
5	Sand		Brown	
10	Sand & Gravel		Brown	-10
15	Gravel & Cobble		Brown	
20	Gravel & Cobble		Grey/ Brown	
25	Gravel & Cobble		Grey/Brown	
30	Sand & Gravel		Brown	
35	Sand & Gravel		Brown	
40	Sand & Gravel		Brown	
45	Sand,Gravel,cobbl		Brown	
50	Sand & Sandstone		Brown	

12. Hole Diameter (in.)

	From (ft)	To (ft)
8	0	50

13. Plain Casing

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	SCH.40	0	30

Perforated Casing Screen Slot Size (in): 20 Slot

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	SCH.40	30	50

14. Filter Pack:
Material: Silica Sand
Size: 10/20
Interval: 5-50

15. Packer Placement:
Type: N/A
Depth: N/A

16. Grouting Record

Material	Amount	Density	Interval	Method
bentonite Chips	100lbs		1-5	Poured & Hydrated
Concrete	40lbs		0-1	Placed & Formed

Remarks: Bedrock at approx. 49ft.

17. Disinfection: Type N/A Amt. Used N/A

18. Well Yield Estimate Data: ☐ Check box if Test Data is submitted on Form Number GWS-39, Well Yield Test Report
Well Yield Estimate Method: ____
Static Level: ____ Estimated Yield (gpm) ____
Date/Time measured: ____ Estimate Length (hrs) ____

Remarks:

19. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed (or name entered if filing online) and certified in accordance with Rule 17.4 of the Water Well Construction Rules, 2 CCR 402 2. The filing of a document that contains false statements is a violation of section 37 91 108(1)(e), C.R.S., and is punishable by fines up to $1,000 and/or revocation of the contracting license. If filing online the State Engineer considers the entry of the licensed contractor's name to be compliance with Rule 17.4.

Company Name:	Email:	Phone w/area code:	License Number:
Civil Resources, LLC.	Noah@civilresources.com	(720) 245-4338	N/A

Mailing Address:

Sign (or enter name if filing online)	Print Name and Title	Date:
Noah Hagen	Noah Hagen, Field Engeneering Tech.	04/14/2023

Form No. GWS-31 02/2017	**WELL CONSTRUCTION AND YIELD ESTIMATE REPORT** State of Colorado, Office of the State Engineer 1313 Sherman St., Room 821, Denver, CO 80203 303.866.3581 www.water.state.co.us and dwrpermitsonline@state.co.us	For Office Use Only

1. Well Permit Number: MH-060094 **Receipt Number:**

2. Owner's Well Designation: RMCC-MW-9 (Piezo BH-5B)

3. Well Owner Name: Ready Mixed Concrete Company

4. Well Location Street Address: 13505 County Road 19, Platteville, CO 80651

5. As Built GPS Well Location (required): ☐ Zone 12 ☒ Zone 13 Easting: 509463.7 Northing: 4450358

6. Legal Well Location: NE 1/4, NE 1/4, Sec., 28 Twp. 3 ☒ N or S ☐, Range 67 ☐ E or W ☒, 6 P.M.
County: Weld
Subdivision: _____, Lot ____, Block ____, Filing (Unit) ____

7. Ground Surface Elevation: 4798 feet **Date Completed:** 10/16/2019 **Drilling Method:** Hollow Stem Auger

8. Completed Aquifer Name : Alluvial **Total Depth:** 31.5 feet **Depth Completed:** 31 feet

9. Advance Notification: Was Notification Required Prior to Construction? ☒ Yes ☐ No, Date Notification Given: 10/02/2019

10. Aquifer Type: (Check one)
☐ Type I (One Confining Layer) ☐ Type I (Multiple Confining Layers) ☐ Laramie-Fox Hills
☐ Type II (Not overlain by Type III) ☐ Type II (Overlain by Type III) ☒ Type III (alluvial/colluvial)

11. Geologic Log:

Depth	Type	Grain Size	Color	Water Loc.
0-4	Overburden sand		Brown	
	with clay			
4-35.5	sand, some gravl		tan	4'
31-31.5	sandstone		grey	

12. Hole Diameter (in.)

	From (ft)	To (ft)
8	0	31

13. Plain Casing

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	11	3.0 ag

Perforated Casing Screen Slot Size (in): 0.010

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	31	11

14. Filter Pack:
Material: Native
Size:
Interval: 31-5

15. Packer Placement:
Type: NA
Depth:

16. Grouting Record

Material	Amount	Density	Interval	Method
Bentonite	75 lbs		5-1	place & hydrate
cement	1 sack		1-0	place & trowel

Remarks: water measured below ground on 10-16-19

17. Disinfection: Type NA Amt. Used NA

18. Well Yield Estimate Data: ☐ Check box if Test Data is submitted on Form Number GWS-39, Well Yield Test Report
Well Yield Estimate Method: NA
Static Level: 4
Date/Time measured: time of drilling
Estimated Yield (gpm) NA
Estimate Length (hrs) NA

Remarks:

19. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed (or name entered if filing online) and certified in accordance with Rule 17.4 of the Water Well Construction Rules, 2 CCR 402 2. The filing of a document that contains false statements is a violation of section 37 91 108(1)(e), C.R.S., and is punishable by fines up to $1,000 and/or revocation of the contracting license. If filing online the State Engineer considers the entry of the licensed contractor's name to be compliance with Rule 17.4.

Company Name:	Email:	Phone w/area code:	License Number:
Civil Resources, LLC	gary@civilresources.com	(720) 684-7221	NA

Mailing Address: P. O. Box 680 Frederick, CO 80530

Sign (or enter name if filing online)	Print Name and Title	Date:
Gary Linden	Gary Linden Sr Engineering Geologist	10/23/2019

Form No. GWS-31
02/2017

WELL CONSTRUCTION AND YIELD ESTIMATE REPORT

State of Colorado, Office of the State Engineer
1313 Sherman St., Room 821, Denver, CO 80203 303.866.3581
www.water.state.co.us and dwrpermitsonline@state.co.us

For Office Use Only

1. Well Permit Number: MH-060094 **Receipt Number:**

2. Owner's Well Designation: RMCC-MW-10 (Piezo BH-5C)

3. Well Owner Name: Ready Mixed Concrete Company

4. Well Location Street Address: 13505 County Road 19, Platteville, CO 80651

5. As Built GPS Well Location (required): ☐ Zone 12 ☒ Zone 13 Easting: 509469.4 Northing: 4450033

6. Legal Well Location: NE 1/4, NE 1/4, Sec., 28 Twp. 3 ☒ N or S ☐, Range 67 ☐ E or W ☒, 6 P.M.
County: Weld
Subdivision: _____, Lot ____, Block ____, Filing (Unit) ____

7. Ground Surface Elevation: 4799 feet **Date Completed:** 10/17/2019 **Drilling Method:** Hollow Stem Auger

8. Completed Aquifer Name : Alluvial **Total Depth:** 54.5 feet **Depth Completed:** 54 feet

9. Advance Notification: Was Notification Required Prior to Construction? ☒ Yes ☐ No, Date Notification Given: 10/02/2019

10. Aquifer Type: (Check one)
☐ Type I (One Confining Layer) ☐ Type I (Multiple Confining Layers) ☐ Laramie-Fox Hills
☐ Type II (Not overlain by Type III) ☐ Type II (Overlain by Type III) ☒ Type III (alluvial/colluvial)

11. Geologic Log:

Depth	Type	Grain Size	Color	Water Loc.
0-4	Overburden sand		Brown	
	with clay			
4-54	sand, some gravl		tan	8'
54-54.5	silty sandstone		grey	

12. Hole Diameter (in.)

From (ft)	To (ft)
0	54

13. Plain Casing

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	34	3.0 ag

Perforated Casing Screen Slot Size (in): 0.010

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	54	34

14. Filter Pack:
Material: Native
Size:
Interval: 54-9.5

15. Packer Placement:
Type: NA
Depth:

16. Grouting Record

Material	Amount	Density	Interval	Method
Bentonite	75 lbs		9.5-1	place & hydrate
cement	1 sack		1-0	place & trowel

Remarks: water measured below ground on 10-17-19

17. Disinfection: Type NA Amt. Used NA

18. Well Yield Estimate Data: ☐ Check box if Test Data is submitted on Form Number GWS-39, Well Yield Test Report
Well Yield Estimate Method: NA
Static Level: 8
Date/Time measured: time of drilling
Estimated Yield (gpm) NA
Estimate Length (hrs) NA

Remarks:

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Company Name:	Email:	Phone w/area code:	License Number:
Civil Resources, LLC	gary@civilresources.com	(720) 684-7221	NA

Mailing Address: P. O. Box 680 Frederick, CO 80530

Sign (or enter name if filing online)	Print Name and Title	Date:
Gary Linden	Gary Linden Sr Engineering Geologist	10/23/2019

Form No. GWS-31 02/2017	**WELL CONSTRUCTION AND YIELD ESTIMATE REPORT** State of Colorado, Office of the State Engineer 1313 Sherman St., Room 821, Denver, CO 80203 303.866.3581 www.water.state.co.us and dwrpermitsonline@state.co.us	For Office Use Only

1. Well Permit Number: MH-060094 **Receipt Number:**

2. Owner's Well Designation: RMCC-MW-11 (Piezo BH-14)

3. Well Owner Name: Ready Mixed Concrete Company

4. Well Location Street Address: 13505 County Road 19, Platteville, CO 80651

5. As Built GPS Well Location (required): ☐ Zone 12 ☒ Zone 13 Easting: 509636.3 Northing: 4449730

6. Legal Well Location: SE 1/4, NE 1/4, Sec., 28 Twp. 3 ☒ N or S ☐, Range 67 ☐ E or W ☒, 6 P.M.
County: Weld
Subdivision: _____, Lot ____, Block _____, Filing (Unit) _____

7. Ground Surface Elevation: 4805 feet **Date Completed:** 10/17/2019 **Drilling Method:** Hollow Stem Auger

8. Completed Aquifer Name : Alluvial **Total Depth:** 52.3 feet **Depth Completed:** 52 feet

9. Advance Notification: Was Notification Required Prior to Construction? ☒ Yes ☐ No, Date Notification Given: 10/02/2019

10. Aquifer Type: (Check one)
☐ Type I (One Confining Layer) ☐ Type I (Multiple Confining Layers) ☐ Laramie-Fox Hills
☐ Type II (Not overlain by Type III) ☐ Type II (Overlain by Type III) ☒ Type III (alluvial/colluvial)

11. Geologic Log:

Depth	Type	Grain Size	Color	Water Loc.
0-10.5	Overburden sand		Brown	
	with clay			
10.5-52	sand, some gravl		tan	6'
52-52.3	silty sandstone		grey	

12. Hole Diameter (in.)

	From (ft)	To (ft)
8	0	52

13. Plain Casing

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	32	2.5ag

Perforated Casing Screen Slot Size (in): 0.010

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	52	32

14. Filter Pack:
Material: Native
Size:
Interval: 52-5.5

15. Packer Placement:
Type: NA
Depth:

16. Grouting Record

Material	Amount	Density	Interval	Method
Bentonite	75 lbs		5.5-1	place & hydrate
cement	1 sack		1-0	place & trowel

Remarks: water measured below ground on 10-17-19

17. Disinfection: Type NA Amt. Used NA

18. Well Yield Estimate Data: ☐ Check box if Test Data is submitted on Form Number GWS-39, Well Yield Test Report
Well Yield Estimate Method: NA
Static Level: 6
Date/Time measured: time of drilling
Estimated Yield (gpm) NA
Estimate Length (hrs) NA

Remarks:

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Company Name:	Email:	Phone w/area code:	License Number:
Civil Resources, LLC	gary@civilresources.com	(720) 684-7221	NA

Mailing Address: P. O. Box 680 Frederick, CO 80530

Sign (or enter name if filing online)	Print Name and Title	Date:
Gary Linden	Gary Linden Sr Engineering Geologist	10/23/2019

Form No. GWS-31
02/2017

WELL CONSTRUCTION AND YIELD ESTIMATE REPORT

State of Colorado, Office of the State Engineer
1313 Sherman St., Room 821, Denver, CO 80203 303.866.3581
www.water.state.co.us and dwrpermitsonline@state.co.us

For Office Use Only

1. Well Permit Number: MH-060094 **Receipt Number:**

2. Owner's Well Designation: RMCC-MW-12 (Piezo BH-21A)

3. Well Owner Name: Ready Mixed Concrete Company

4. Well Location Street Address: 13505 County Road 19, Platteville, CO 80651

5. As Built GPS Well Location (required): ☐ Zone 12 ☒ Zone 13 Easting: 508957.5 Northing: 4449622

6. Legal Well Location: SW 1/4, NE 1/4, Sec., 28 Twp. 3 ☒ N or S ☐, Range 67 ☐ E or W ☒, 6 P.M.
County: Weld
Subdivision: _____, Lot ____, Block ____, Filing (Unit) ____

7. Ground Surface Elevation: 4800 feet **Date Completed:** 10/17/2019 **Drilling Method:** Hollow Stem Auger

8. Completed Aquifer Name : Alluvial **Total Depth:** 52.5 feet **Depth Completed:** 52 feet

9. Advance Notification: Was Notification Required Prior to Construction? ☒ Yes ☐ No, Date Notification Given: 10/02/2019

10. Aquifer Type: (Check one)
☐ Type I (One Confining Layer) ☐ Type I (Multiple Confining Layers) ☐ Laramie-Fox Hills
☐ Type II (Not overlain by Type III) ☐ Type II (Overlain by Type III) ☒ Type III (alluvial/colluvial)

11. Geologic Log:

Depth	Type	Grain Size	Color	Water Loc.
0-3	Overburden sand		Brown	
	with clay			
3-52	sand, some gravl		tan	10'
52-52.5	silty sandstone		grey	

12. Hole Diameter (in.)

From (ft)	To (ft)
0	52

13. Plain Casing

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	32	2.5ag

Perforated Casing Screen Slot Size (in): 0.010

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2	PVC	Sch 40	52	32

14. Filter Pack:
Material: Native
Size:
Interval: 52-8

15. Packer Placement:
Type: NA
Depth:

16. Grouting Record

Material	Amount	Density	Interval	Method
Bentonite	250 lbs		8-1	place & hydrate
cement	1 sack		1-0	place & trowel

Remarks: water measured below ground on 10-17-19

17. Disinfection: Type NA Amt. Used NA

18. Well Yield Estimate Data: ☐ Check box if Test Data is submitted on Form Number GWS-39, Well Yield Test Report
Well Yield Estimate Method: NA
Static Level: 10
Date/Time measured: time of drilling
Estimated Yield (gpm) NA
Estimate Length (hrs) NA

Remarks:

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Company Name:	Email:	Phone w/area code:	License Number:
Civil Resources, LLC	gary@civilresources.com	(720) 684-7221	NA

Mailing Address: P. O. Box 680 Frederick, CO 80530

Sign (or enter name if filing online)	Print Name and Title	Date:
Gary Linden	Gary Linden Sr Engineering Geologist	10/23/2019