

CORVUS NEVADA GOLD INC. NORTH BULLFROG PROJECT PUMPING TESTS: WW-21-02 & WW-21-03 NOVEMBER 2023 – FEBRUARY 2024

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PREPARED FOR:

Nevada Division of Water Resources & Beatty Water and Sanitation District



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1. INTRODUCTION

To further support hydrogeologic characterization studies at the North Bullfrog Project (NBP) nine miles north of Beatty, NV, Corvus Gold Nevada Inc, (CGN) proposed and conducted two 28-day pumping tests to assess hydrogeologic conditions and potential groundwater impacts between the area of planned mining operations and surrounding NBP region.

The specific purposes and needs for the two 28-day pumping tests were to:

- further inform conceptual site-specific, local-scale interpretations made during shorter duration pumping tests conducted earlier in 2021 for the purpose of developing a dewatering system and well design for mine operations;
- evaluate responses at more distant groundwater monitoring locations to validate the regional-scale, conceptual site model of water resources;
- revise the current numerical groundwater flow model for projecting the potential impacts of the proposed mining operation.

The context and complete background details for the test were presented in the Monitoring Plan ('Plan'). The Plan was provided to the Nevada Division of Water Resources (NDWR) as part of the temporary water rights for the testing. The temporary water rights were leased from the Beatty Water and Sanitation District (BWSD).

The Plan is included as Attachment A to this report. Attached Figure 1 shows the key details of the 2023-2024 testing. Supplemental figures for this report also will be found in the Plan.

2. PUMPING WELLS

2.1. Objectives

As noted above, and in the Plan, pumping and drawdown the local aquifer was conducted to assess connectivity within and between stratigraphic units and across geologic faults and other structural features.

2.2. WW-21-02

WW-21-02 was the first pumping test. The location is noted in Figure 1 of this report and Figures 2-2 and 5.2 of the Plan. The test was authorized for 75 acre-feet of temporary, untreated discharge of groundwater.

At the time of pump installation and after the short systems check of pump and generator performance, it was observed that WW-21-02 had biofouling of the well screen intervals. Likely this was an iron bacteria growth commonly observed in groundwater wells. The biofouling occurred while the well was idle since the last pumping test in 2021. The implication to the test was that well efficiency (ratio of drawdown in the well casing from pumping to the actual drawdown in the aquifer) was lower than expected due to the impaired flow from the aquifer through the clogged screen into the well. The observed drawdowns are discussed in section 2.2.7. The impact to the test was a lower than targeted pumping rate (section 2.2.5). Outside the biofouled well screen and in the native bedrock the aquifer response to the withdrawal of water was measured by the monitor wells and Vibrating Wire Pressure Transducers (VWPs). This will be discussed in Section 3.

2.2.1. Well depth and completion details

The WW-21-02 well is 481 feet deep. The NDWR log is attached as Attachment B to this report. Additional completion details are in the Plan (Attachment A).



2.2.2. Pumping setup

A 6-inch diameter pump and approximate 60hp motor assembly was installed in the well. The pump was installed to a depth of 455 feet. The pumping specifications are provided in Attachment C.

An earlier consideration for the pumping rate was up to 600 gpm. This ultimately was not a feasible pumping rate with the pump that was available to CGN at the time of the test.

The pump was powered by a CAT generator (with backup generator present) which was designed for variable frequency control. This provided continuous control of the pumping rate and near continuous operation of the pump (minor crossover time to switch generators). The pump and generator installation was temporary. Environmental containment and 24-hour equipment supervision were implemented throughout the testing. Figure 2 shows the site configuration and the operational summary.

2.2.3. Pump on

The pumping commenced on November 8, 2023 at 11am.

2.2.4. Pump off

The pumping stopped on December 6, 2023 at 11am. The duration of pumping was 28 days.

2.2.5. Pumping rate

Flow was measured at the well head by two totalizing flow meters. The meters output the instantaneous flow rate and the cumulative gallons pumped.

The measured flow rate varied from 188 gpm to 200 gpm. The flow recording data are presented in Figure 3. There was a slight decline over time.

2.2.6. Total pumped

The total discharge from the well over the 28-day test was 7,652,988 gallons at an average pumping rate of 189.9 gpm. The total volume of the test was 23.49 acre-feet. Two short duration step tests were conducted before the constant rate pump test and discharged approximately 0.172 acre-feet.

2.2.7. Water level measurement

Water level in the well was measured and recorded by a water level sensor (pressure transducer or probe) and integrated datalogger according to the proposed Plan. Additional manual measures by an electric tape were collected throughout the duration of testing for verification of water level measurements. The measurements cover the pre-pumping, pumping, and recovery periods. The water level data over the course of the test and recovery are presented in Figure 4.

2.2.8. Water quality

Three water quality samples were collected from the well during the test. The sample intervals were 1, 21, and 28 days. A summary table and the laboratory data are included in Attachment D1.

2.2.9. Test discharge

The groundwater discharge from the tests was routed to a location noted in Figure 5. The figure also includes a summary of concurrent conditions. Occasional spray evaporation of the water was carried during the daylight hours.

Based on the decreasing flow rates along the flow path (whether spray evaporation was occurring) and the ultimate disappearance of water at the terminus of flow, the test water infiltrated to the shallow colluvium and basin fill deposits along the flow path.



The supervisory staff monitored the discharge conditions daily and recorded the flow extent and other relevant details as necessary. No issues were noted.

2.2.10. Discussion

No environmental issues occurred at the well location.

The pumping and monitoring at the well were executed as noted in the Plan.

2.3. WW-21-03

WW-21-03 was the second pumping test. The location is noted in Figure 1 of this report and Figures 2-2 and 5-2 of the Plan. The test was authorized for 75 acre-feet of temporary, untreated discharge of groundwater.

Prior to the pump installation, this well was cleaned and swabbed to remove any potential biofouling. The results were increased well efficiency.

2.3.1. Well depth and completion details

The WW-21-03 well is 520 feet deep. The NDWR log is attached as Attachment B to this report. Additional completion details are in the Plan (Attachment A).

2.3.2. Pumping setup

The same pump and motor were used. The pump was installed to a depth of 494 feet. The pumping specifications are provided in Attachment C.

An earlier consideration for the pumping rate was up to 600 gpm. This ultimately was not a feasible pumping rate with the pump that was available to CGN at the time of the test.

As with WW-21-02, the pump was powered by a CAT generator (with backup generator present) which was designed for variable frequency control. This provided continuous control of the pumping rate and near continuous operation of the pump (minor crossover time to switch generators). The pump and generator installation was temporary. Environmental containment and 24-hour equipment supervision were implemented. Figure 6 shows the site configuration and the operational summary.

2.3.3. Pump on

The pumping commenced on January 23, 2024 at 2pm.

2.3.4. Pump off

The pumping stopped on February 20, 2024 at 2pm. The duration of pumping was 28 days.

2.3.5. Pumping rate

Flow was measured at the well head by two totalizing flow meters. The meters output the instantaneous flow rate and the cumulative gallons pumped.

The measured flow rate varied from 248 gpm to 251 gpm. The flow recording data are presented in Figure 7. There was a slight decline over time.

2.3.6. Total pumped

The total discharge from the well over the 28-day test was 10,103,390 gallons at an average pumping rate of 250.6 gpm. The total volume of the test was 31.01 acre-feet. A short duration step test was conducted before the constant-rate pumping test and discharged approximately 0.256 acre-feet.



2.3.7. Water level measurement

Water level in the well was measured and recorded by a probe and integrated datalogger according to the proposed Plan. Additional manual measurements by an electric tape were collected throughout the duration of testing. The measurements cover the pre-pumping, pumping, and recovery periods. The water level data over the course of the test and recovery are presented in Figure 8.

2.3.8. Water quality

Two water quality samples were collected from the well during the test. The sample intervals were 1 and 28 days. A summary table and the laboratory data are included in Attachment D2.

2.3.9. Test discharge

The groundwater discharge from the testing phases of the well was routed to a location noted in Figure 9. The figure also includes a short summary of concurrent conditions. This is a natural drainage. Based on the decreasing flow rates along the flow path and the ultimate disappearance of water at the terminus of flow, the test water infiltrated to the shallow colluvium and basin fill deposits along the flow path.

The supervisory staff monitored the discharge conditions daily and recorded the flow extent and other relevant details as necessary. No issues were noted.

2.3.10. Discussion

No environmental issues occurred at the well location.

The pumping and monitoring at the well were executed as proposed in the Plan.

3. CGN MONITOR WELLS and VWPs

3.1. Objectives

Monitor wells, exploration wells, and production wells have been completed throughout the NBP area to allow for measurement of potentiometric head, representative water table conditions and gradient, and sampling of groundwater. Locations are based on consideration of the directions of regional groundwater flow and proposed mining, processing and waste rock facilities.

Single-level VWPs and multi-level VWPs have been installed extensively throughout the NBP area. Locations were selected to collect spatially representative groundwater level data (hydraulic head) and conduct multiple pumping tests to support the Hydrogeology Baseline evaluation. The VWPs have been installed in boreholes using the 'grout-in-place' method (Mikkelsen and Green, 2003) and conforms to State regulations (NDWR, 2012). These references are provided in reference section of the Plan.

3.1.1. Location of wells and VWP and completion details

The locations of the monitoring wells have been chosen to satisfy the following general criteria:

- The monitoring well locations should reflect existing upgradient, downgradient, or cross-gradient conditions based on the conceptual project lay-out and extent, and the understanding of regional groundwater flow.
- Where possible the monitoring wells should be located for use in future hydrologic characterization testing for project water resource production and pit dewatering/pit lake predictions.
- The monitoring well sites should be located, to the extent possible, to ensure long-term monitoring during baseline, construction, operation, and closure.



The locations are shown on Figure 10.

The individual completion details are compiled in the Plan.

Data are collected from water level probes and transducers placed below the water table (monitor well) or grouted in place (VWPs). Data are collected based on a pre-determined schedule and are stored in dataloggers. The data are periodically downloaded for assessment and analysis. Data collection was discussed in the Plan.

3.1.2. Drawdown

Data collection during the pumping drawdown phase was described in the Plan.

3.1.3. Recovery

Data collection during the pumping recovery phase was described in the Plan.

3.2. Water Levels and Pressures

3.2.1. Monitor wells

Data collected from the monitor wells during the drawdown and recovery phases of the WW-21-02 and WW-21-03 programs are presented in Attachment E1. The data for monitor wells NB-WW-03, -04, -05, -06, -07, -08, -9, -10, -11, and -12 have been corrected for barometric pressure changes considering non-vented pressure transducers were deployed and are being used in the analysis of the pump tests. Most of these wells show no impact from the aquifer tests. The two exceptions are: NB-WW-11 which reflects the pumping of a nearby supply well (WW-21-14R) and NB-WW-06. This well is completed in a low permeability stratigraphic unit and showed pumping impacts and slow recovery.

The data from the monitor wells will be further analyzed and included, as needed, in any updated baseline hydrogeological work.

3.2.2. VWPs

Data collected from the VWPs during the drawdown and recovery phases of the WW-21-02 and WW-21-03 programs are presented in Attachment E2.

The pressure (hydraulic head) data recorded by the VWPs associated with the WW-21-02 test (VWP-03, -04, -05, -06, -09, -10, NB-13-226, NB-13-229, NB-13-235, NB-21-523, and NB-21-527) are close to the pumping wells and were monitored to assess connectivity during the depressurization (drawdown) and recovery phases of testing. The pressure data recorded by the VWPs associated with the WW-21-03 test (VWP-07, -08, -10, -06, NB-13-258, NB-21-520, NB-21-521, and NB-21-522) are close to the pumping wells and were monitored to assess connectivity during the depressurization and recovery phase.

There are two considerations in the on-going analysis: 1) These are not *water table* drawdown plots due to the nature and installation of the vibrating wire pressure transducer instruments; and 2) structural geological conditions (e.g., stratigraphic contacts and faults) may be barriers between the pumping wells and some VWPs that hydraulically compartmentalize the bedrock aquifer system. This was a key hydrogeological assessment in the existing baseline analysis.

3.3. Discussion

Both tests show a local response (depressurization) by the aquifers due to pumping. The summarized spatial impacts are noted in Figures E1 and E2 of Attachment E, respectively.



3.3.1. WW-21-02

The provisional observations for WW-21-02:

- The stratigraphic units composing the aquifers below the Sierra Blanca and Yellow Jacket pits were locally impacted as shown in responses of the VWPs. The depressurization responses for the upper most piezometer (or the single piezometer locations) are compiled in Figure E1.
- The presence of faults that act as barriers on the north and east are confirmed by the absence of responses in two key VWPs. On the north side, VWP-21-04 had one impacted transducer which was located on the same side of the fault as the pumping well. The other three transducers (on the other side of the fault) showed no response. On the east side, VWP-21-10 showed no response across one or more major faults. Also, the monitor wells on the east, west, and northwest zones (NB-WW-07, -08, and -09, respectively) showed no measurable responses from testing. These responses are summarized on Figure E1 and provided in the plots of Attachment E1 and E2.
- The local impact in the pit footprint suggests the hydrogeology assumption that the Yellow Jacket pit can be dewatered by groundwater pumping from wells. This supports the 2021 pump test assessment and modeling as reported in the baseline report.
- The recovery of water levels in the pumping well after the pump test are noted on Figure 3. After 35 days of recovery from the pump test (through 1/10/24), the water levels had recovered to approximately 96% of the pre-start levels. The recovery curves were still trending to pre-start levels and will be monitored through 2024. The pressure recoveries in the VWPs are noted in plots of Attachment E2. The monitor well data also are included in Attachment E1.

3.3.2. WW-21-03

The provisional observations for WW-21-03:

- The stratigraphic units composing the aquifers below the Savage Valley, Sierra Blanca, and Jolly Jane pits were variably impacted as shown in the VWPs. The depressurization responses for the upper most piezometer (or the single piezometer locations) are compiled in Figure E2.
- The presence of a fault on the northeast (VWP-21-10) and the low permeability domain to the south (towards NB-WW-06) and southeast (Jolly Jane pit area) are confirmed by the absence of significant responses in the key VWPs and monitor wells. These responses are compiled on Figure E2 and provided in the plots of Attachments E1 and E2.
- The local impact in the pit footprint suggests the hydrogeology assumption that the Savage Valley pit can be dewatered of groundwater pumping from wells. This supports the 2021 pump test assessment and modeling as reported in the baseline report.
- The recovery of water levels after the pump test are noted on Figure 5. After 35 days of recovery after the pump test (through 3/25/24), the water levels had recovered to 59% of the pre-start levels. The recovery curves were still trending to pre-start levels (~2 feet/month) and will be monitored through 2024. The pressure recoveries in the VWPs are noted in plots of Attachment E2. The monitor well data also are included in Attachment E1.

3.3.3. Summary

As noted, the recent data appear to validate the 2021 tests and the hydrogeological analysis as reported in the baseline report. The testing conservatively suggests that the pit dewatering by wells is feasible and that hydraulic compartmentalization of the bedrock groundwater system due stratigraphic contacts and geologic



structural faulting may limit the extent drawdown impacts. The data from the VWPs and monitor wells from both tests will be further analyzed and included, as needed, in any updated baseline hydrogeological work for the NBP.

4. BWSD WELLS AND USGS WELL

4.1. Objectives

The monitoring and inclusion of BWSD and United States Geological Survey (USGS) data in this report is to assess the impacts of the tests in a wider area.

4.1.1. Location of BWSD wells and completion details

Two BWSD wells were monitored during the tests: Beatty Summit Well and Indian Spring Well. The locations of the wells are shown on Figure 1 and in the Plan.

Beatty Summit Well

Beatty Summit well is approximately 36,800 feet (7.0 miles) to the south of WW-21-03. The Beatty Summit Well (log attached in the Plan) has a water level sensor with integrated datalogger memory that was installed in Q2 of 2022. The well was serviced in mid-November 2023 and the water level sensor was removed and was not re-installed. The project has data until mid-November 2023.

Upper Indian Spring Well

The Upper Indian Spring Well is 27,200 feet (5.2 miles) to the south of WW-21-03. The Upper Indian Spring Well (log attached in the Plan) has a water level sensor with integrated datalogger memory that was installed in Q2 of 2022. The water level sensor operated throughout the test.

Both locations have more than ten geologic structural faults¹ between them and pumping from the NBP southern-most testing location at WW-21-03.

4.1.2. Location of USGS ER-OV-05 and completion details

The ER-OV-05 well records and published water level data on the USGS website for the well: <u>https://waterdata.usgs.gov/nwis/inventory/?site_no=370246116461901&agency_cd=USGS</u>

The location of the well is shown on Figure 1.

The log for the ER-OV-05 well is provided in Attachment B3. The well is completed in the "Valley-Fill Deposits" (100VLFL) local aquifer as defined by the USGS. The well is 8,100 feet (1.5 miles) east northeast of WW-21-02 and 10,000 feet (1.9 miles) northeast of WW-21-03.

4.2. Water Levels

Data collected during the drawdown and recovery phases of the program for the Beatty Summit well and Upper Indian Springs well are provided in Figures 11 and 12. The water level data for ER-OV-05 are presented in Figures 13 (2023-2024 focused on the test date ranges) and 14 (1997-2024 for the life of the monitoring program).

4.3. Discussion

Beatty Summit Well

¹ See Table 1 discussion of the relevant geological map and conditions.



- Figure 11 shows the depth to water data for the Beatty Summit well prior to the test demonstrating the fluctuating range due to pump operation: approximately 410 to 430 feet below the ground surface when the pump is off and approximately 475 to 515 below the ground surface with the pump is on.
- The approximate 65-foot drawdown appears constant over the Q2 2022 to Q4 2023 operational range. The water levels and the 65-foot drawdown has an annual cycle with the peak levels in April and the lower levels in September-October.
- The termination of data from the Summit well due to maintenance is offset by the continuous data collection from Upper Indian Springs Well which is closer to the NBP project. Once the Beatty Summit Well data collection is resumed, the results provided to BWSD can be compared to the historic ranges.

Upper Indian Spring Well

- Figure 12 shows the depth to water data for the Upper Indian Spring well prior to the test demonstrating the fluctuating range due to pump operation: approximately 215 to 255 feet below ground surface when the pump is off and approximately 230 to 270 feet below ground surface when the pump is operating.
- The approximate 20 foot operational drawdown appears constant over the Q2 2022 to Q1 2024 period. Based on the observed monitoring period, there seems to be a seasonal cycle with a peak in April and a low point in September.
- Also notable, there appears to be a longer-term rise in the operational drawdown over the monitoring period, possibly due to lower pumping rates or recharge from higher than average 2022-2023 precipitation in the Beatty area.
- The data suggest no impact from the NBP pump testing program. The slight deflections in data in November 2023 during the WW-21-02 test and after the WW-21-03 test are believed to be a change in pumping rates due to BWSD operational demands, not any regional impact.

ER-OV-05

- The ER-OV-05 well (Figure 13) showed no discernable response or change the water level from the WW-21-02 or WW-21-03 pumping test activities.
- There was a slight change in the water level trend (increase) following the Hurricane Hilary event of 19-21 August 2023. The typical yearly cycle for ER-OV-05 shows the water level trend generally increasing in the fourth quarter.
- The long-term data are noted in Figure 14.

5. Springs

5.1. Location Details

The spring locations are noted in Figure 4-1 of the Plan. Spring monitoring was discussed in the Plan.

The geographic and hydrogeological context details for the springs are compiled in Table 1. In all casess the springs occur in separate stratigraphic units and are separated from the project area by multiple geologic faults and other structural features.



5.2. Water Quality and Field Data

The springs were sampled for water quality parameters prior to the tests beginning in September 2023 and four times over the two pump tests. The springs were sampled again after all the testing in mid-March of 2024. The water quality data are compiled into tables by test and are included in Attachments D1 (WW-21-02) and D2 (WW-21-03).

The field data for flow are noted in Table D1. The flow data show the normal range of fluctuation during the monitoring period and are within the range of values for the baseline period of 2013-2023.

5.3. Discussion

No spring flows were observed to be impacted by the test. Field observations and water quality parameters remained constant during the test and were consistent with historical data. A summary of the spring monitoring context is provided here, as well as in referenced Table 1.

SPRING	INTERVENING MONITOR WELL OR VWP	COMMENT
North Mud	NB-WW-08	Intervening monitoring point showed no impact. Also, the spring is considered to be detached from the regional groundwater table (perched).
Mud	NB-WW-08	Intervening monitoring point showed no impact. Also, the spring is considered to be detached from the regional groundwater table (perched).
Springdale	NB-WW-07; VWP-21-10	Intervening monitoring points showed no impact.
Wehrly	NB-WW-12; VWP-21-10	Intervening monitoring points showed no impact.
Brian	NB-WW-05; NB-WW-03	Intervening monitoring points showed no impact.
Burro	NB-WW-05	Intervening monitoring point showed no impact.
North Goss	NB-WW-05	This spring is located on the east side of the Amargosa River drainage.
Indian Spring	NB-WW-05; NB-WW-04; NB- WW-03	Intervening monitoring points showed no impact.

Spring monitoring for field and water quality parameters will continue quarterly through 2024.

6. CONCLUSIONS

6.1. Pump Test Outcomes

6.1.1. WW-21-02

The test results for WW-21-02 confirmed prior, shorter-term testing in 2021 and observed impact across the proposed Sierra Blanca and Yellow Jacket mining areas. The observed distribution of water level and hydraulic head responses validates a dewatering well based strategy to keep the pits dry for safety and operational reasons during the proposed mining. CGN will continue to analyze the results and update the assessment of the baseline hydrogeological conditions and impacts as needed.

6.1.2. WW-21-03

The test results for WW-21-03 confirmed prior, shorter-term testing in 2021 and observed impact across the proposed Sierra Blanca and Savage Valley mining area. The observed distribution of water level and hydraulic head responses validates a dewatering well based strategy to keep the pits dry for safety and operational



reasons during the proposed mining. CGN will continue to analyze the results and update the assessment of the baseline hydrogeological conditions and impacts as needed.

6.1.3. Spring impacts

The spring monitoring data collected prior to the test, during both pumping tests, and after the tests showed no impact to the springs.

6.1.4. Continued observations

The monitor wells and VWPs will remain instrumented and will continue to be monitored as part of the ongoing baseline data collection. The monitor wells also have quarterly water sampling.

The eight springs in this report, including Indian Spring near the BWSD Upper Indian Spring Well, and 30+ other district springs will be monitored quarterly through 2024 and 2025.

6.2. Impacts to BWSD Infrastructure

Monitor wells in the southern part of the NBP mine plan footprint (NB-WW-05, NB-WW-04, and NB-WW-03) that are between the pumping wells and the BWSD wells showed no measurable water level responses from either testing activity. Based on this, the drawdown and overall groundwater impact from the WW-21-02 and WW-21-03 pumping tests did not extend to the southern NBP project boundary.

The southern most monitor well (NB-WW-04) is approximately 15,000 and 24,000 feet from Upper Indian Well and Beatty Summit Well, respectively. The distances are shown on Figure 1 and in the Plan. As noted previously, there are more than ten faults between the tests and the BWSD wells that likely compartmentalize the impacts to near the two test wells.

Monitoring at the Upper Indian Spring Well did not show any response to NBP pumping. The local water level changes in November and in late February appear related to the pumping rate at the Upper Indian Spring Well.

The measuring probe in the Beatty Summit well was removed when the pump was removed and serviced in November. It has not yet been replaced and a new installation is under review.

CGN will work with BWSD to continue monitoring the Beatty Summit Well and Upper Indian Springs Well through 2025.



TABLE 1. SPRING CONTEXT DATA

SPRING	Pumping well	Horizontal distance between well and spring	Vertical distance between well and spring	Geological controls at the spring location	Aquifer conditions and type between pumping well and spring location (source USGS Fridrich et al., 2003; SIM Map 2957.)
North Mud	WW-21-02	10,500 feet (2.0 miles)	118 feet (spring is HIGHER)	Tertiary: Rainbow Mtn Rhyolite	Tertiary geological units. More than six mapped USGS faults
Spring	WW-21-03	9,800 feet (1.9 miles)	56 feet (spring is HIGHER)	Tuffs (Trt)	Tertiary geological units. More than seven mapped USGS faults
	WW-21-02	22,500 feet (4.3 miles)	92 feet (spring is HIGHER)	Young alluvial deposits (Qa)	Tertiary geological units. More than ten mapped USGS faults
Mud Spring	WW-21-03	20,700 feet (3.9 miles)	30 feet (spring is HIGHER)	Tertiary volcanics nearby: Trt; Trl; Tdt	Tertiary geological units. More than ten mapped USGS faults
Brian	WW-21-02	21,500 feet (4.1 miles)	-59 feet (spring is LOWER)	Young alluvial deposits (Qa) Tertiary volcanics nearby: Tyx.	Tertiary, Paleozoic geological units. More than ten mapped USGS faults
Spring	WW-21-03	18,100 feet (3.4 miles)	-78 feet (spring is LOWER)	Paleozoics nearby: Cc; Cz.	Tertiary, Paleozoic geological units. More than eight mapped USGS faults
Springdale	WW-21-02	12,200 feet (2.3 miles)	-302 feet (spring is LOWER)	Young alluvial deposits (Qa)	Tertiary geological units. At least three mapped USGS faults. Additional CGN-mapped faults are known.
Spring	WW-21-03	11,800 feet (2.2 miles)	-364 feet (spring is LOWER)	Tertiary volcanics (Tba) and gravels (Tgs) nearby	Tertiary geological units. At least three mapped USGS faults. Additional CGN-mapped faults are known.
Wehrly	WW-21-02	23,400 feet (4.4 miles)	-476 feet (spring is LOWER)	Colluvium (Qtc);	Tertiary, Paleozoic geological units. More than ten mapped USGS faults
Spring	WW-21-03	21,200 feet (4.0 miles)	-538 feet (spring is LOWER)	Tertiary volcanics nearby: Tyx.	Tertiary, Paleozoic geological units. More than ten mapped USGS faults
Indian	WW-21-02	31,400 feet (5.9 miles)	-59 feet (spring is LOWER)	Tortiony thuglita layor (Trl)	Tertiary, Paleozoic geological units. More than ten mapped USGS faults
Spring	WW-21-03	27,600 feet (5.2 miles)	-78 feet (spring is LOWER)	Tertiary rhyolite lavas (Trl)	Tertiary, Paleozoic geological units. More than ten mapped USGS faults



SPRING	Pumping well	Horizontal distance between well and spring	Vertical distance between well and spring	Geological controls at the spring location	Aquifer conditions and type between pumping well and spring location (source USGS Fridrich et al., 2003; SIM Map 2957.)			
	WW-21-02	21,500 feet	-492 feet (spring		Tertiary, Paleozoic geological units.			
Burro		(4.1 miles)	is LOWER)	Tertiary Landslide breccias (Tyx)	More than ten mapped USGS faults			
Spring	WW-21-03	18,100 feet	-554 feet (spring		Tertiary, Paleozoic geological units.			
		(3.4 miles)	is LOWER)		More than ten mapped USGS faults			
	WW-21-02	29,200 feet	-318 feet (spring		Tertiary, Paleozoic geological units.			
North Goss		(5.5 miles)	is LOWER)	Young alluvial deposits (Qa).	More than ten mapped USGS faults			
Spring	WW-21-03	27,200 feet	-380 feet (spring	Tertiary volcanics nearby: Tmc	Tertiary, Paleozoic geological units.			
		(5.2 miles)	is LOWER)		More than ten mapped USGS faults			

Figure 1: Project Layout (from Plan)

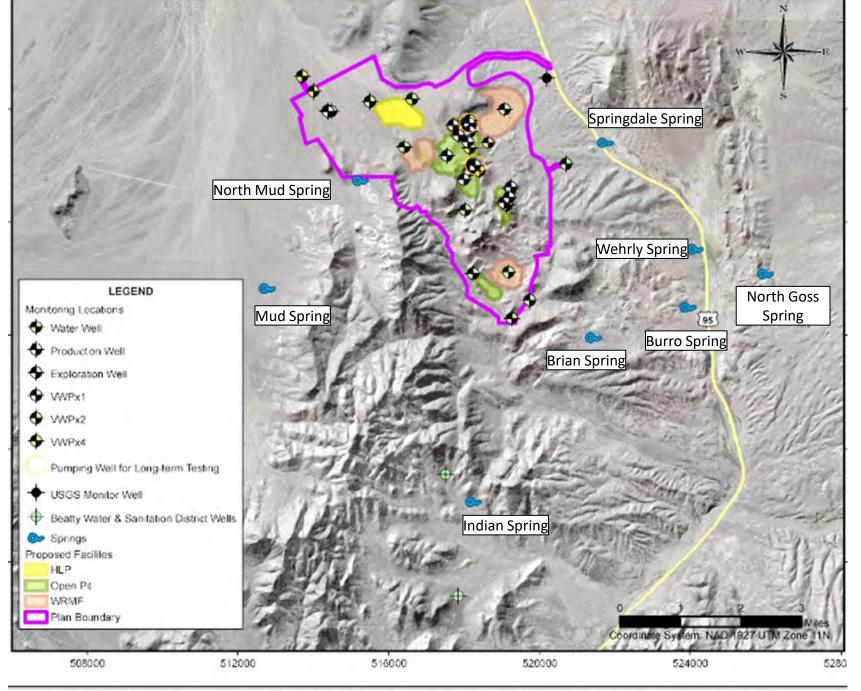


Figure 2-2. Proposed project facilities and monitoring locations for pumping tests.

Figure 2: WW-21-02 Details







TEST #1 (91254T) WW-21-02: DETAILS

- NDWR and BWSD authorization = 75 acre-feet
- Pumping well: WW-21-<u>02</u>
- Test duration: 28-days: 11/8/23 to 12/6/23
- Pumping rate: ~190 gpm over duration of test.
- Supervision: 24/7 coverage at pump and generator. No lost time due to equipment issues.
- Supervision: daylight monitoring measurements and inspections.
- No interruptions to test. Generator cross-over was very quick.
- No safety incidents or environmental releases.
- Weather during test: total precipitation = 0.42"; Temperature = 49F (ave); 58F (ave high)
- Total Pumped water (step and constant rate testing): 7,708,931 gallons/ 23.66 acre-feet
- Unused water: 51.34 acre-feet

Well WW-21	-02			Pe	ermit Number:	NEV2023123						P	ermit Number:	TNEV2023123	
Volume Pumped Tracking				total volu	olume pumped = 55,943 ge		gallons					total volu	ume pumped =	7,652,988	gallons
			total v	olume pumpe	d (acre-feet) =	0.172	acre-feet				total v	olume pumpe	d (acre-feet) =	23.486	acre-feet
					nping period =	0.23	-						nping period =		-
											avei		ume pumped =		gallons per day
													ume pumped =		acre-feet per da
Identifier	Start Date and Time	Start Volume Pumped (gallons)	End Date and Time	End Volume Pumped (gallons)	Daily Volume Pumped (gallons)	Daily Volume Pumped (acre-feet)	Daily Average Pumping Rate (gpm)	Identifier	Start Date and Time	Start Volume Pumped (gallons)	End Date and Time	End Volume Pumped (gallons)	Daily Volume Pumped (gallons)	Daily Volume Pumped (acre-feet)	Daily Average Pumping Rate (gpm)
	11/03/2023 15:15	0	11/03/2023 16:45	16646	16,646	0.051	185	Constant Rate		55943	11/09/2023 00:20	213918	157,975	0.485	197
Pre-test 2	11/07/2023 12:00	16646	11/07/2023 16:00	55943	39,297	0.121	164	Constant Rate		213918	11/10/2023 00:00		275,619	0.846	194
Pre-test TOTAL			0.23		55,943	0.172		Constant Rate		489537	11/11/2023 00:00	764779	275,242	0.845	191
								Constant Rate			11/12/2023 00:00	1037652	272,873	0.837	189
	2.11/11/2	1 02 0	mning	_				Constant Rate			11/13/2023 00:00	1310474	272,822	0.837	189
_ rigure	3: WW-2	1-02 Pu	mping	_				Constant Rate			11/14/2023 00:00	1585036	274,562	0.843	191
								Constant Rate			11/15/2023 00:00	1858519	273,483	0.839	190
								Constant Rate			11/16/2023 00:00	2132144	273,625	0.840	190
								Constant Rate			11/17/2023 00:00	2403015	270,871	0.831	188
								Constant Rate			11/18/2023 00:00	2676392	273,377	0.839	190
								Constant Rate			11/19/2023 00:00	2952823	276,431	0.848	192
								Constant Rate			11/20/2023 00:00	3227923	275,100	0.844	191
								Constant Rate			11/21/2023 00:00	3502416	274,493	0.842	191
								Constant Rate			11/22/2023 00:00	3775483	273,067	0.838	190
								Constant Rate			11/23/2023 00:00	4047435	271,952	0.835	189
								Constant Rate			11/24/2023 00:00	4318325	270,890	0.831	188
								Constant Rate			11/25/2023 00:00	4588911	270,586	0.830	188
								Constant Rate			11/26/2023 00:00	4859187	270,276	0.829	188
								Constant Rate	11/26/2023	4859187	11/27/2023 00:00	5129590	270,403	0.830	188
								Constant Rate	11/27/2023	5129590	11/28/2023 00:00	5399349	269,759	0.828	187
								Constant Rate	11/28/2023	5399349	11/29/2023 00:00	5671644	272,295	0.836	189
								Constant Rate	11/29/2023	5671644	11/30/2023 00:00	5945323	273,679	0.840	190
								Constant Rate		5945323	12/01/2023 00:00	6213601	268,278	0.823	186
								Constant Rate		6213601	12/02/2023 00:00	6491642	278,041	0.853	193
								Constant Rate		6491642		6764486	272,844	0.837	189
								Constant Rate			12/04/2023 00:00		276,415	0.848	192
								Constant Rate			12/05/2023 00:00	7308953	268,052	0.823	186
												7582931			180
								Constant Rate			12/06/2023 00:00		273,978	0.841	
								Constant Rate		/582931	12/06/2023 11:00	7708931	126,000	0.387	191
								Constant Rate TOTAL			28.0		7,652,988	23.486	189.9

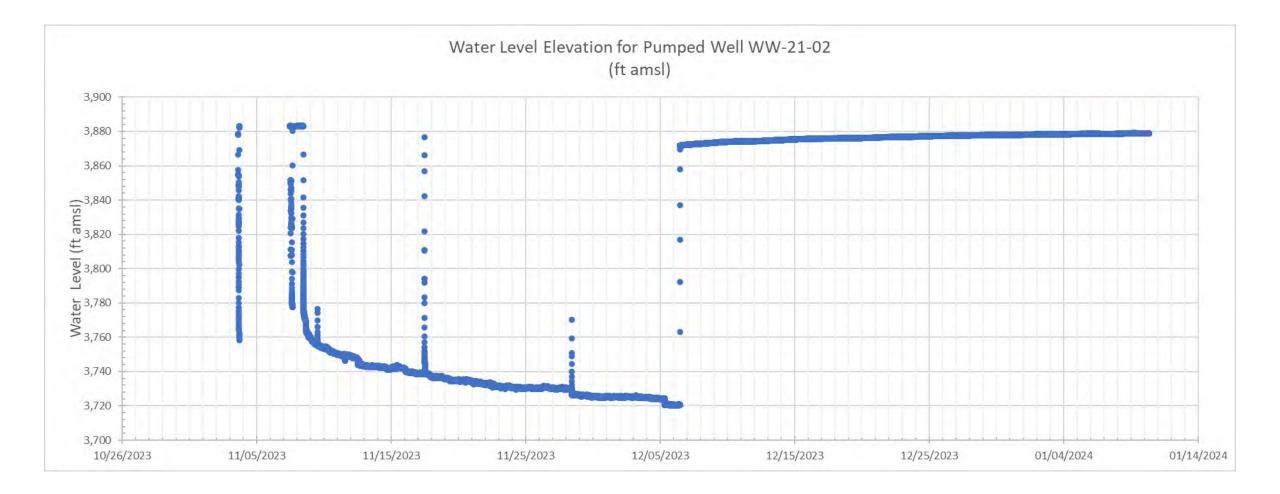


Figure 4: WW-21-02 Flows

Crossing Strozzi Ranch Road



Downgradient of Strozzi Ranch road in dry wash near terminus.





TEST #1 (WW-21-02 - 91254T): SURFACE FLOW

- 23.66 acre-feet pumped.
- Flow path was to the north then east along an existing wash/storm water drainage.
- Daily inspection of the discharge flow path to document downgradient extent and sediment control.
- Surface flow stopped as gradient flattened near the US95 RoW.
- Decreasing flow rates along flow path suggested infiltration. >80% discharge of the water is estimated to have been infiltrated.
- Infiltration to surface alluvium and gravels along flow path becomes recharge to shallow 'basin fill aquifer' of Oasis Valley.
- Hurricane Hilary perspective (8/19/23 to 8/21/23) and early February (2/1/24 - 2/9/24)
 - 3.71" and 3.5" of rain recorded in the Bullfrog Hills uplands.
 - ~1556-acre watershed (including Test #1 flow path) ending near US95 RoW.
 - ~481 & 454 acre-feet of water <u>added</u> to the watershed from these events. The rainfall goes to runoff to Amargosa River valley, evapotranspiration, evaporation, and infiltration.

Figure 6: WW-21-03 Details





TEST #2 (91255T) WW-21-03: DETAILS

- NDWR and BWSD authorization = 75 acre-feet
- Pumping well: WW-21-<u>03</u>
- Test duration: 28-days: 1/23/24 to 2/20/24
- Pumping rate: 248-250 gpm over duration of test
- Supervision: 24/7 coverage at pump and generator
- Supervision: daylight monitoring measurements and inspections.
- No interruptions to test. Generator cross-over was very quick.
- No safety incidents or environmental releases.
- Weather during test: precipitation = 3.75"; Temperature = 43F (ave); 50F (high)
- Pumped water (step and constant rate testing): 10,186,963 gallons/31.26 acre-feet total
- Unused water: 43.74 acre-feet

Figure 7: WW-21-03 Pumping

Well WW-	21-03 Volume P	umped Trackir	ng					Well WW-21	-03 Volume Pumpe	d Tracking					
					Permit Number:	TNFV2023123						Pe	rmit Number:	TNFV2023123	
					lume pumped =		gallons						me pumped =	10,103,39) aallons
				total volume pump		-	6 acre-feet				tota	l volume pumper			6 acre-feet
					mping period =	0.22	-						nping period =	28.0	-
				average daily vol			gallons per day				a	erage daily volu			5 gallons per day
				average daily vol			acre-feet per day					erage daily volu			7 acre-feet per da
							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					, , ,			
Identifier	Start Date and Time	Start Volume Pumped (gallons)	End Date and Time	End Volume Pumped (gallons)	Daily Volume Pumped (gallons)	Daily Volume Pumped (acre-feet)	Daily Average Pumping Rate (gpm)	Identifier	Start Date and Time	Start Volume Pumped (gallons)	End Date and Time	End Volume Pumped (gallons)	Daily Volume Pumped (gallons)	Daily Volume Pumped (acre-feet)	Daily Average Pumping Rate (gpm)
Step Rate	01/22/2024 08:00	0	01/22/2024 14:30	83573	83,573	0.256	139	Constant Rate	01/23/2024 14:00	83573	01/24/2024 00:00	153254	69,681	0.214	116
				STEP TEST TOTAL	83,573	0.256		Constant Rate	01/24/2024 00:00	153254	01/25/2024 00:00	526100	372,846	1.144	259
								Constant Rate	01/25/2024 00:00	526100	01/26/2024 00:00	899694	373,594	1.147	259
								Constant Rate	01/26/2024 00:00	899694	01/27/2024 00:00	1272376	372,682	1.144	259
								Constant Rate	01/27/2024 00:00	1272376	01/28/2024 00:00	1644649	372,273	1.142	259
								Constant Rate	01/28/2024 00:00	1644649	01/29/2024 00:00	2017944	373,295	1.146	259
								Constant Rate	01/29/2024 00:00	2017944	01/30/2024 00:00	2382744	364,800	1.120	253
								Constant Rate	01/30/2024 00:00	2382744	01/31/2024 00:00	2743530	360,786	1.107	251
								Constant Rate	01/31/2024 00:00	2743530	02/01/2024 00:00	3103412	359,882	1.104	250
								Constant Rate	02/01/2024 00:00	3103412	02/02/2024 00:00	3462922	359,510	1.103	250
								Constant Rate	02/02/2024 00:00	3462922	02/03/2024 00:00	3824864	361,942	1.111	251
								Constant Rate	02/03/2024 00:00	3824864	02/04/2024 00:00	4190241	365,377	1.121	254
								Constant Rate	02/04/2024 00:00	4190241	02/05/2024 00:00	4553501	363,260	1.115	252
								Constant Rate	02/05/2024 00:00	4553501	02/06/2024 00:00	4914671	361,170	1.108	251
								Constant Rate	02/06/2024 00:00	4914671	02/07/2024 00:00	5274550	359,879	1.104	250
								Constant Rate	02/07/2024 00:00	5274550	02/08/2024 00:00	5636486	361,936	1.111	251
								Constant Rate	02/08/2024 00:00	5636486	02/09/2024 00:00	5999001	362,515	1.113	252
								Constant Rate	02/09/2024 00:00	5999001	02/10/2024 00:00	6360695	361,694	1.110	251
								Constant Rate	02/10/2024 00:00	6360695	02/11/2024 00:00	6723348	362,653	1.113	252
								Constant Rate	02/11/2024 00:00	6723348	02/12/2024 00:00	7084850	361,502	1.109	251
								Constant Rate	02/12/2024 00:00	7084850	02/13/2024 00:00	7445533	360,683	1.107	250
								Constant Rate	02/13/2024 00:00	7445533	02/14/2024 00:00	7805400	359,867	1.104	250
								Constant Rate	02/14/2024 00:00	7805400	02/15/2024 00:00	8165729	360,329	1.106	250
								Constant Rate	02/15/2024 00:00	8165729	02/16/2024 00:00	8525202	359,473	1.103	250
								Constant Rate	02/16/2024 00:00	8525202	02/17/2024 00:00	8886970	361,768	1.110	251
								Constant Rate	02/17/2024 00:00	8886970	02/18/2024 00:00	9251891	364,921	1.120	253
								Constant Rate	02/18/2024 00:00	9251891	02/19/2024 00:00	9616163	364,272	1.118	253
								Constant Rate	02/19/2024 00:00	9616163	02/20/2024 00:00	9974845	358,682	1.101	249
								Constant Rate	02/20/2024 00:00	9974845	02/20/2024 14:00	10186963	212,118	0.651	253
								2010tant nate				TEST TOTAL	10,103,390	31.01	
												ILJI IUIAL	10,103,390	31.01	

Figure 8: WW-21-03 Water Levels

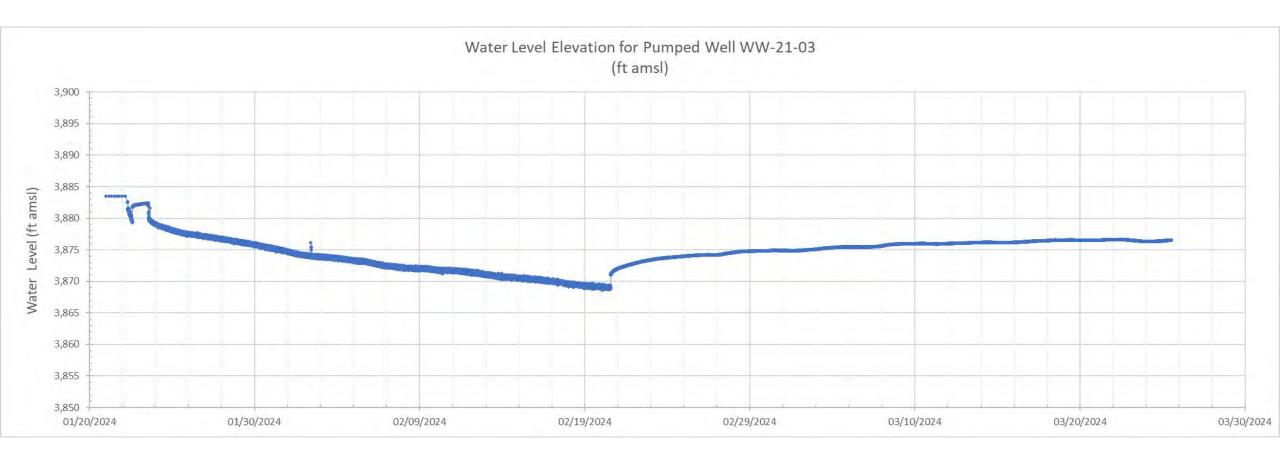


Figure 9: WW-21-03 Flows



Surface flow from test #2 in existing dry wash (looking west)

Surface flow from test #2 combined with stormwater runoff in early February (looking west)





TEST #2 (WW-21-03 - 91255T): SURFACE FLOW

- 31.26 acre-feet pumped.
- Flow path is to the east along an existing wash/storm water drainage.
- Daily inspection of discharge flow path to document downgradient extent and sediment control.
- Extensive flows in drainage from storm water runoff in early February. (see context for Hurricane Hilary)
- Surface flow stopped approximately 7000 feet east-northeast of the well.
- Decreasing flow rates along flow path suggested infiltration. >80% discharge of the water is estimated to have been infiltrated.
- Infiltration to surface alluvium and gravels along flow path becomes recharge to shallow 'basin fill aquifer' of Oasis Valley
- Hurricane Hilary perspective (8/19/23 to 8/21/23) and early February (2/1/24 2/9/24)
 - 3.71" and 3.5" of rain in the Bullfrog Hills uplands.
 - ~1400-acre watershed (including Test #2 flow path) ending near US95 RoW.
 - ~445 & 408 acre-feet of water <u>added</u> to the watershed from these events. The rainfall goes to runoff to Amargosa River valley, evapotranspiration, evaporation, and infiltration.

Figure 10: Project Layout with Monitor Wells and VWPS

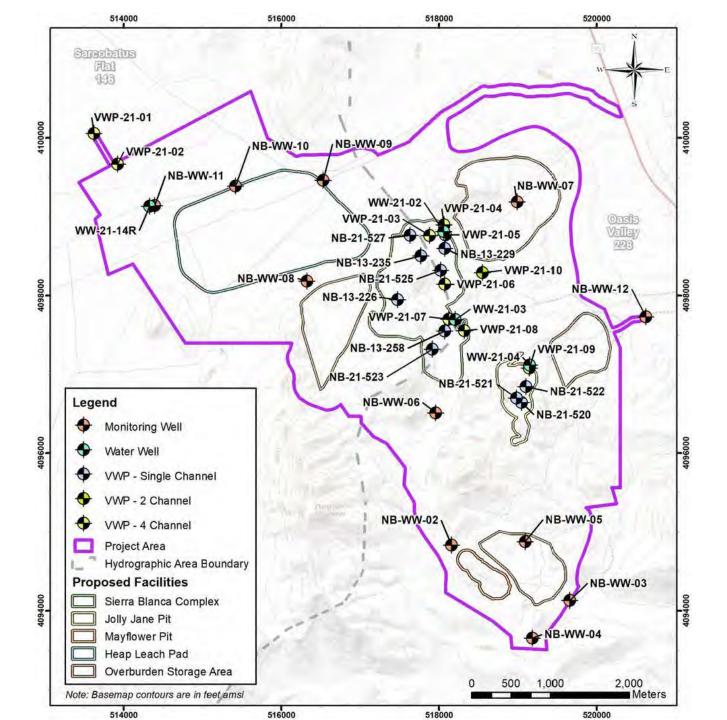


Figure 11: Beatty Summit Well HGL\10_Monitoring\BWSD_Summit/jvd_BWSD_Summit2022_2024.gpj 400 Depth to Water Level (in feet below measuring point) m р 450 Δ m 0 V 500 e 550 10/1/2022 112023 41412023 7142023 10122023 112024 4122024 1112022 A112022 **EXPLANATION** HYDROGRAPH FOR BWSD WW-21-02 pumping period 11/8/2023 to 12/6/2023 Depth to Water Level (pressure transducer) SUMMIT WELL Depth to Water Level (manual measurement) WW-21-03 pumping period 1/23/2024 to 2/20/2024 Prepared by: HGL / LRE Water Notes: 1) well pumping 44 gpm on 22-Sep-2022 at 11:50 hours Project: North Bullfrog 2) pumping water level below transducer setting (498 ft) during summer and fall seasons Location: Nye County, Nevada 3) measuring point top of PVC access tube approximately 1 foot above concrete pad DRAFT 4) pressure transducer removed 11/16/2023 for pump replacement Corvus Gold Nevada Inc.

Figure 12: Upper Indian Spring Well

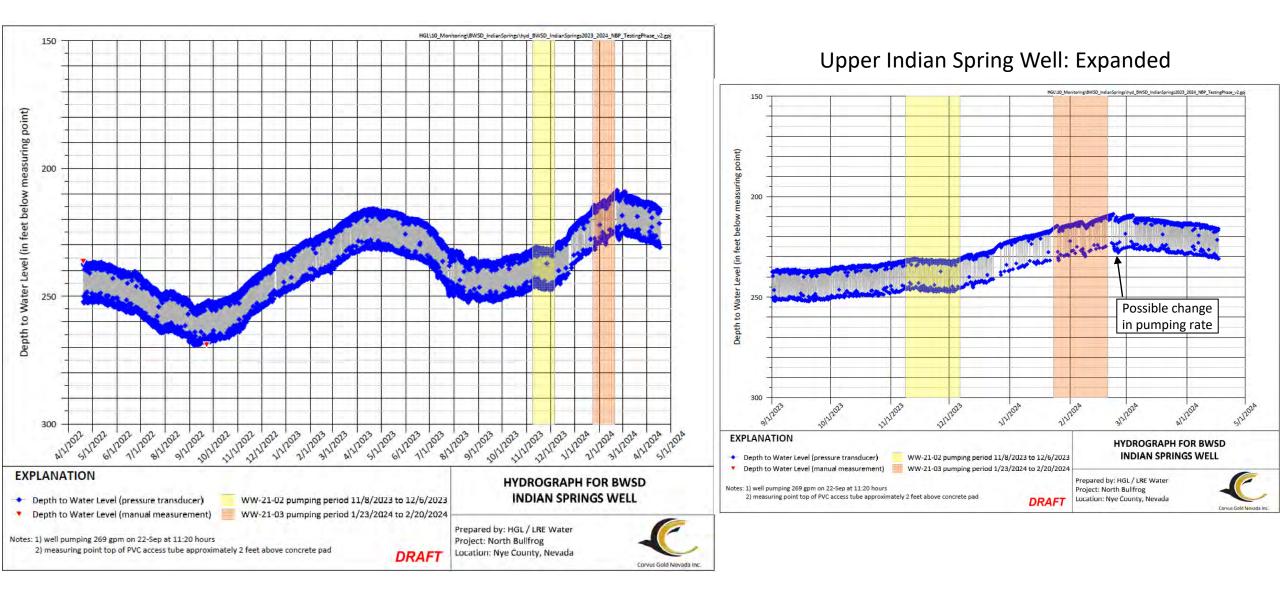


Figure 13: ER-OV-05 2023-2024

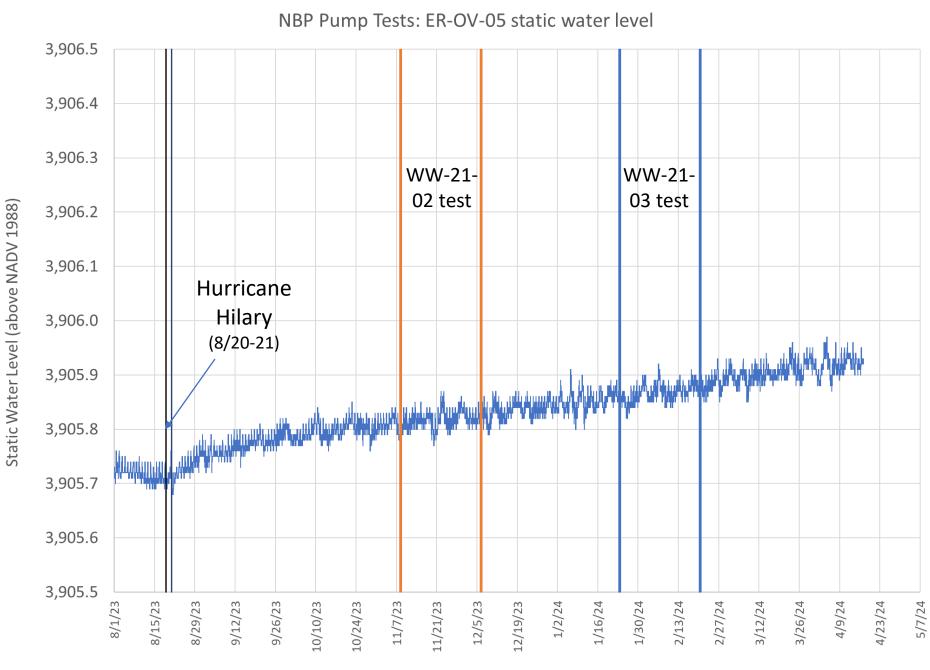
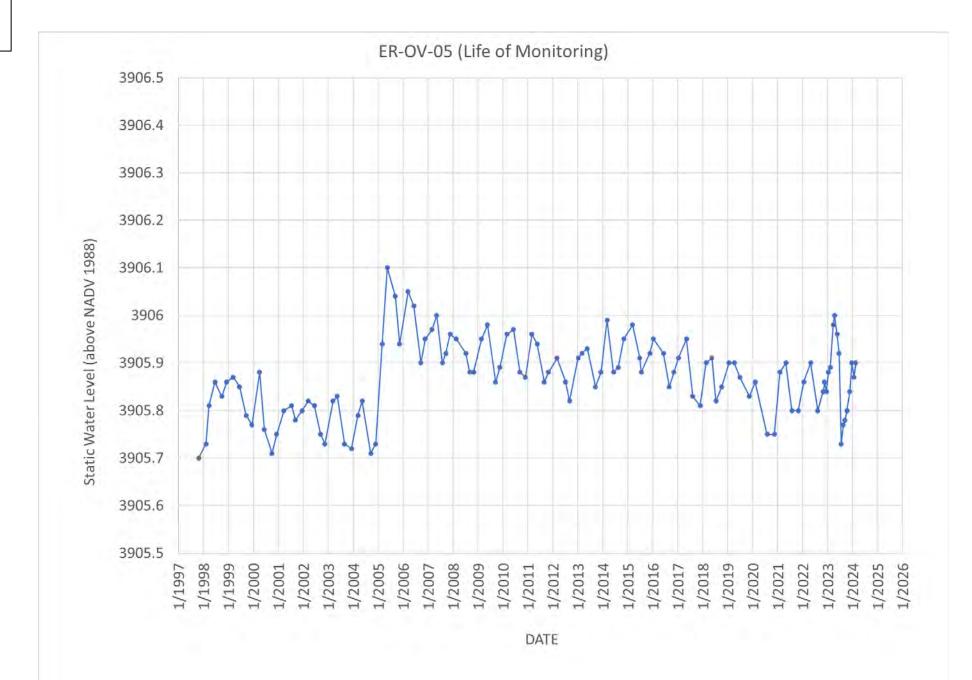


Figure 14: ER-OV-05 Life of Monitoring Program





ATTACHMENT A

Monitoring Plan submitted to NDWR



TECHNICAL MEMORANDUM

То:	Michael Young
Company:	Corvus Gold Nevada, Inc.
Project:	North Bullfrog
From:	Daniel Weber and Brent Johnson
Date:	September 2023
Subject:	Monitoring Plan for Pumping Tests

1 Introduction

Corvus Gold Nevada, Inc. (Corvus) is planning the North Bullfrog Project (NBP or the Project), a proposed, open-pit gold mine operation in southwestern Nevada. Corvus conducted a hydrogeologic field program in 2021, supervised in part by Hydrogeologica, Inc. (HGL). The field program was designed to provide site-specific hydrogeologic characterization information in support of feasibility-level planning for the Project, including water supply, pit dewatering, pit slope design and closure studies. Hydrogeological characterization also includes baseline data collection to support the life-cycle planning of the mine, from development through post-closure. Results of hydrogeologic characterization studies will be evaluated as part of the permitting process, including Nevada Division of Environmental Protection (NDEP) guidelines and the National Environmental Policy Act (NEPA) process to identify potential impacts of the Project and to mitigate or prevent impacts through further planning and engineering.

To further support hydrogeologic characterization studies, HGL proposes to conduct 28-day pumping tests to assess hydrogeologic conditions between the area of planned mining operations and surrounding NBP region. This document provides the Monitoring Plan for the testing operations and includes: background information on the Project, a statement for purpose and need for the pumping tests, descriptions and basis for monitoring locations, methods for data collection and synthesis, field data quality control, field parameter collection, sample collection, and data management and validation. The Monitoring Plan is designed to assure impacts to adjacent water users are identified and mitigated and provide consistent sample collection resulting in data that meets or exceeds quality control protocols for baseline hydrogeologic characterization.

2 Project Background

The NBP, as defined by the mine Plan of Operations or Plan Boundary is located in the northern extension of the Bullfrog Hills in the Basin and Range province of southwestern Nevada (Figure 2-1). The Bullfrog Hills are a low mountain range located between the Amargosa Basin to the south, the Sarcobatus Flats Basin to the north, the Grapevine and Funeral mountains to the west, and the Oasis Valley to the east. Local topographic relief is less than 1,000 feet. Beatty is the closest town to the NBP and is located on Highway 95 approximately 9 miles to the south. The Death Valley National Park boundary is located approximately 3 miles to the southwest. The Nevada National Security Site (Nevada Test Site) is approximately 19 miles to the east.

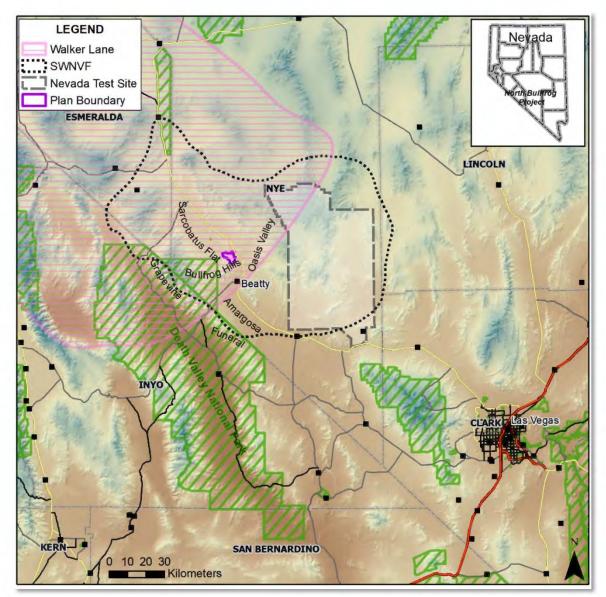


Figure 2-1. NBP site location.

The NBP gold deposits contain mineralization at or near the surface that is suitable for open pit mining methods (Wilson et al., 2020). Mining will be conducted using drill and blast techniques. Waste rock management facilities (WRMF) would be located near each producing open-pit excavation (YellowJacket, Sierra Blanca, and Savage Valley - combined, identified as the Sierra Blanca Complex), Jolly Jane, and Mayflower. Mill mineralization type ore would be hauled to a mill stockpile while run-of-mine (ROM) mineralization type ore would be hauled and placed directly on the heap leach pad (HLP). Mill tails would be hauled and placed directly on the heap leach pad (HLP). Mill tails would be hauled and placed directly on the heap leach pad then mixed into the ROM ore by dozing. Process facilities would be located in the northwest corner of the NBP at the edge of Sarcobatus Flat, a large sedimentary basin with predominantly flat terrain. Process facilities would consist of the mill, heap leach pad, access roads, ponds, adsorption, desorption and recovery (ADR) plant, mobile equipment yard, offices and warehouse. **Figure 2-2** presents the general site layout, including Plan of Operations (Plan) boundary, pits, waste dumps, mill site, ponds, heap leach pad (Corvus 2020a) and the proposed monitoring locations for the pumping tests.

The majority of the mining production will be conducted above the water table. At YellowJacket, mining below approximately 3,940 feet (ft) above mean sea level (amsl) (1,200 meters (m) amsl) is expected to advance below the natural water table, therefore requiring dewatering of the pit-area, fractured rock groundwater system during mining. At closure, a lake is expected to form in the YellowJacket Pit, and areas of the greater Sierra Blanca Complex (Sierra Blanca and Savage Valley) may contribute runoff water to the YellowJacket pit lake and/or develop into the larger pit lake. Based on current hydrogeological evaluation, the open pit at Jolly Jane may also advance below the natural water table of the aquifer, resulting in a pit lake during the post-closure period. Mining at Mayflower will be above the water table; therefore, a pit lake is not expected to form in that pit location.

Dewatering of proposed open-pit areas will provide stable and dry conditions for mining, but as a consequence, the lowering of the local water table may affect downgradient surface water and groundwater resources. Predicting potential impacts will include some inherent uncertainty because the hydrogeology of the volcanic units surrounding the proposed mine facilities is complex due to the structural and stratigraphic heterogeneity of the units. Corvus plans to conduct 28-day pumping tests in the vicinity of the Sierra Blanca pit to provide dewatering system/ well design data for the proposed mine operation.

To date, short-term airlift tests conducted in the Project exploration boreholes (Corvus, 2020b) indicate that some boreholes were completely dry while others yielded as much as 100 gallons per minute (gpm). During recent 2021 field hydrogeologic characterization studies, pumping tests confirmed the wide-range of groundwater yield for Project area; low-yield wells and large amounts of water level drawdown (low permeability) to high-yield wells and small amounts of drawdown (high permeability). Specific capacity¹ values ranged from approximately 0.7 to 40 gpm/ft for the wells tested for periods ranging from 5 to 7 days.

¹ a unit of measurement of well yield per unit depth of drawdown after a specific time duration of pumping

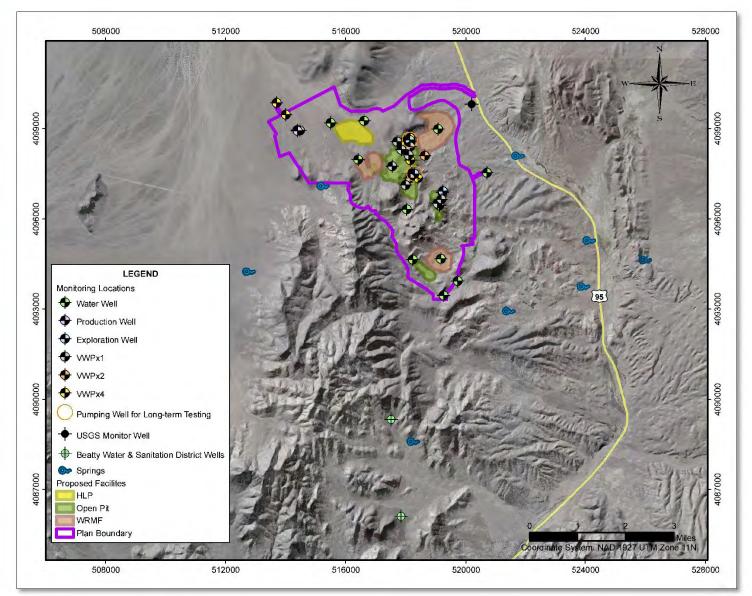


Figure 2-1. Proposed project facilities and monitoring locations for pumping tests.

3 Pumping Test Approach

3.1. Purpose and Need Statement

The purpose and need for 28-day pumping tests are to:

- further inform conceptual site-specific, local-scale interpretations made during shorter duration pumping tests conducted earlier in 2021 for the purpose of developing a dewatering system/ well design for mine operations;
- evaluate responses at more distant monitoring locations to validate the regional-scale, conceptual site model of water resources;
- aid in calibrating a mathematical groundwater flow model for projecting the potential impacts of the proposed mining operation.

Pumping tests conducted over long periods of time provide estimates of aquifer parameters averaged over large-scale aquifer volumes. In conducting 28-day pumping tests for mining hydrogeology purposes, key goals are to identify aquifer heterogeneities and boundaries, often times controlled by fractured rock aquifer properties, which ultimately control the effects of declining water levels. Predicting, monitoring, and mitigating potential impacts are important for informing neighboring surface water and groundwater resource users, as well as for protecting dependent natural ecosystems.

3.2. Definitions

A pumping test is a type of an aquifer test that is a field experiment whereby a well is pumped at a controlled rate and water-level response (drawdown) is measured at the pumped well and if available, one or more surrounding observation wells. The response data, during pumping (drawdown phase) and after pumping (recovery phase) are used to characterize the hydraulic mechanics of the aquifer, evaluate well performance, and identify potential subsurface hydraulic boundaries and structural compartmentalization affecting the movement of groundwater. Constant-rate tests maintain pumping at the control well at a constant rate. This is the most commonly used pumping test method for obtaining estimates of aquifer properties (HydroSOLVE, 2012).

Ultimately, the goal of a pumping test is to estimate hydraulic properties of an aquifer system (Kruseman and de Ridder, 1994). These properties include: transmissivity, hydraulic conductivity (horizontal and vertical) and storativity (storage coefficient). In layered systems, results of pumping tests often provide hydraulic properties of aquitards (vertical hydraulic conductivity and specific storage). Aquitards are hydrostratigraphic units that either confine or semi-confine the hydraulic head in an aquifer. Pumping tests can also aid in characterizing groundwater recharge and no-flow boundaries that may limit the lateral extent of aquifers, as well as identify the behaviour of groundwater flow regimes such as infinite active radial flow, dual porosity flow, and linear and bilinear flow.

3.3. Elements

Proper planning for field data collection and the analytical aspects of a pumping test includes; identifying monitoring locations and methods, acquiring and preparing field equipment, developing methods for measurement of water levels and control of pumping rates, developing data collection schedules (including pre-test and recovery periods) for water levels, identifying other pumping in the area of testing that may influence groundwater levels, monitoring of climate and atmospheric conditions, routing and infiltration of pumped water (discharge) down topographic gradient from the pumping well, defining duration of testing, and practicing safe operating procedures for personnel and environmental protection. Some of these critical elements are expanded on as follows:

- **Define monitoring locations.** Depending on site conditions and accessibility, the monitoring locations may include wells critical for defining hydraulic parameters, as well as any nearby pumping wells that may be operating during the phases of the pumping test. Additionally, if the pumped aquifer includes surface/groundwater interaction, any nearby surface water sources such as streams, springs, and seeps should be part of the monitoring plan.
- Determine the routing and control of discharged water. During the pumping test, it is imperative to minimize turbidity or erosion leading to turbidity or down-gradient flooding. Accordingly, if it is anticipated that discharged water will create flooding, erosion and/or turbidity, water will be managed in such a manner to minimize such problems. To minimize the potential for discharged pumped water to recharge pumped aquifer, spreading of the discharge water on the ground sufficiently far from the pumping test site so that infiltration will not affect the test results may be required. Ultimately, the discharge water must be handled according to all applicable laws and regulations.
- Establish pre-test conditions at monitoring locations. Prior to initiation of the pumping test, pre-test conditions will be established for a period generally equal to the planned duration of the pumping phase of the test, to the extent practicable.
- **Define the data collection schedule.** A data collection schedule should be established at each of the monitoring locations. The schedule will include requirements for the pumping test including pre-test, drawdown, and recovery phases.
- Health, Safety, and Environment. The field activities associated with specific-capacity testing will be performed in accordance with a site-specific health and safety plan (HASP), a copy of which will be present on-site during such activities for field personnel. Each shift, a Job Safety Analysis (JSA) will also be performed to ensure that field personnel aware of the hazards associated with the work, and that responsibilities are defined and acknowledged. As part planning, determine if permitting is required for testing, for example with respect to water rights and temporary discharge, and if required, follow the necessary permit requirements.

4 Monitoring Locations

4.1. Surface Water

The NBP area straddles the divide between the Oasis Valley (Basin 228) and Sarcobatus Flat (Basin 146) hydrographic basins. The basins are referred to as Hydrographic Areas (HAs) designated by the Nevada

Division of Water Resources (NDWR). **Figure 4-1** shows the North Bullfrog Project Boundary with respect to the Sarcobatus Flat Basin and Oasis Valley Basin, and shows the locations of current surface water monitoring stations monitored in the area of NBP by Corvus.

Flowing surface water in the project area is limited to periodic major rainfall events and the Amargosa River channel in Oasis Valley, which borders the NBP along the eastern edge of the NBP Property. Therefore, surface water sampling has focused on springs distributed around the project, and along Oasis Valley (Figure 4-1).

The selection of the surface water quality sampling locations by Corvus has been based on the following general criteria:

- The locations should surround the NBP Project Boundary to the extent possible given the available spring locations, physical access, and consent of land owners.
- The surface sampling sites should be representative of the range of conditions of the existing springs, which vary from features with consistent outflow to static seeps and shallow pools.
- Watersheds that could reasonably be affected by future mining operations should be included in the baseline monitoring.
- The sites should be located, to the extent possible, to ensure monitoring during baseline, construction, operation, and closure.

Springs in the areas surrounding the North Bullfrog Project area have been monitored by Corvus since 2012. As of 2021, spring locations monitored given the criteria described above are provided in **Table 4-1**. Photographs and descriptions of the spring sample sites are provided in Montgomery & Associates (2021), Spring and Seep Survey, and included in **Appendix A**.

Spring Identifier	Latitude	Longitude	Elevation (m amsl)	Flow Rate (gpm)	Date Measured	2021 Spring and Seep Location Identifier
Brian	36.9841	-116.75911	1,208.9	0.8	05/22/2021	13**, 25
Burro	36.99137	-116.73094	1,116.9	N/A	05/23/2021	42, 59**
Lower Indian	36.94504	-116.79498	1236.7	N/A	05/21/2021	11**, 44
Mud	36.99603	-116.85628	1292.7	0.4	05/25/2021	23, 28**
North Goss	36.99932	-116.70773	1170.6	4.5 / 68.8	05/23/2021	9**, 29, 52**
North Mud	37.02161	-116.82844	1,305.8	0.9	05/25/2021	22**, 37, 38
Springdale	37.03062	-116.75553	1,171.4	N/A	05/22/2021	16**, 40, 83**
Wehrly	37.00515	-116.72866	1,122.6	2.4	05/22/2021	18**, 41, 60

Table 4-1. North Bullfrog Project Spring Monitoring Locations*

* Montgomery & Associates (2021)

** location identifier for field water quality parameters measured and samples obtained for laboratory analysis NDEP Profile I parameters

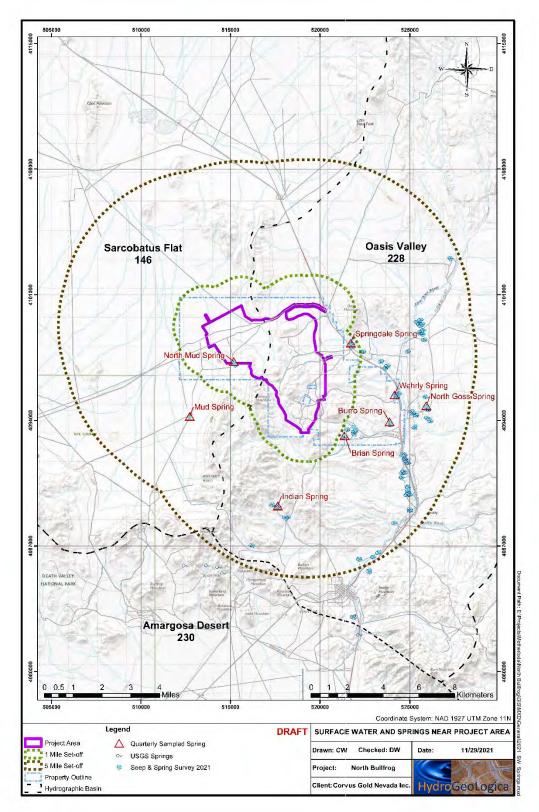


Figure 4-1. Surface water conditions and spring monitoring locations.

4.2. Groundwater

Wells serving as monitor wells, exploration wells, and production wells have been completed throughout NBP area to allow for measurement of potentiometric head, representative water table conditions and gradient, and sampling of groundwater. Locations are based on consideration of the directions of regional groundwater flow and proposed mining, processing and waste rock facilities.

The locations of the monitoring wells have been chosen to satisfy the following general criteria:

- The monitoring well locations should reflect existing upgradient, downgradient, or cross-gradient conditions based on the conceptual project lay-out and extent, and the understanding of regional ground water flow.
- Where possible the monitoring wells should be located for use in future hydrologic characterization testing for project water resource production and pit dewatering/pit lake predictions.
- The monitoring well sites should be located, to the extent possible, to ensure monitoring during baseline, construction, operation, and closure.

It is likely that groundwater primarily flows in structurally bounded, discrete fracture zones and stratigraphic units of the volcanic rock complex in the NBP resource areas. Vibrating wire piezometers (VWPs) are a cost-effective method for collecting hydraulic pressure head information from discrete hydrogeologic intervals in a groundwater flow system. These instruments can be installed during the mine exploration program in boreholes at depths that target the discrete intervals. Using a datalogger or vibrating-wire field reader connected to the wire leads of piezometers, the pressure data provides potentiometric surface and hydraulic gradients of the monitored intervals due to natural, baseline conditions and pumping or airlifting in nearby boreholes.

Single-level VWPs and multi-level VWPs have been installed extensively throughout the NBP area. Locations were selected to collect spatially-representative groundwater level data and conduct multiple pumping tests to support the Hydrogeology Baseline evaluation. The VWPs have been installed in boreholes using the 'grout-in-place' method (Mikkelsen and Green, 2003) and conforms to State regulations (NDWR, 2012).

The locations for groundwater monitoring within and outside of the NBP plan boundary scheduled for monitoring during the 28-day tests, as well as the two wells identified as pumping wells for 28-day testing, exploration wells WW-21-02 and WW-21-03, are shown on **Figure 2-2.** Well locations and general details for wells within the NBP plan boundary are provided in **Table 4-2**. Wells outside the plan boundary proposed for monitoring are listed in **Table 4-3**. VWP locations and completion information is provided in **Table 4-4**. Completion details and diagrams for the wells and VWPs are presented in **Appendix B**.

Well Identifier	Site Type	Prospect	NAD27 Easting UTM (m)	NAD27 Northing UTM (m)	Land Surface Elevation (ft amsl)	Total Depth (ft)	Measurement Date	Depth to Water (ft bls)	Comments
NB-WW-02	MW	Mf	518240.02	4094636.31	4447.93	304.80	29-Apr-2014	560.15	CGNI 2014
NB-WW-03	MW	Mf	519741.41	4093938.13	4178.59	310.90	29-Mar-2021	392.89	M&A Q1
NB-WW-04	MW	Mf	519265.54	4093455.90	4236.53	182.88	28-Mar-2021	300.56	M&A Q1
NB-WW-05	MW	Mf	519173.89	4094679.51	4169.19	182.88	28-Mar-2021	283.25	M&A Q1
NB-WW-06	MW	SB	518039.88	4096313.94	4338.61	182.88	28-Mar-2021	452.01	M&A Q1
NB-WW-07	MW	SB	519071.00	4098989.27	4054.46	73.15	28-Mar-2021	148.98	M&A Q1
NB-WW-08	MW	SB	516406.51	4097983.81	4261.07	135.64	28-Mar-2021	285.17	M&A Q1
NB-WW-09	MW	S	516611.90	4099265.29	4161.73	91.44	28-Mar-2021	222.13	M&A Q1
NB-WW-10	MW	S	515499.28	4099192.58	4125.06	79.24	28-Mar-2021	192.47	M&A Q1
NB-WW-11	MW	S	514471.62	4098944.84	4113.13	73.15	11-Jun-2021	165.78	PPT WL
NB-WW-12	MW	SB	520707.57	4097530.50	3952.84	54.86	28-Mar-2021	85.77	M&A Q1
NB-WW-14	MW	S	514389.93	4098947.11	4112.45	152.40	11-Jun-2021	163.45	PPT WL
WW-21-02	EXW	YJ	518140.70	4098615.56	4158.92	480.00	21-May-2021	275.85	PPT WL
WW-21-03	EXW	SV	518287.72	4097497.35	4222.33	520.00	31-May-2021	338.90	PPT WL
WW-21-04	EXW	11	519231.17	4096920.47	4159.14	380.00	20-Oct-2021	275.85	PPT WL
WW-21-14R	PW	S	514407.03	4098933.36	4112.96	770.00	11-Jun-2021	166.40	PPT WL

[Notes: MW, monitor well; EXW, exploration well; PW, production well; Mf, Mayflower; SB, Sierra Blanca; S, Sarcobatus; YJ, Yellow Jacket; SV, Savage Valley; JJ, Jolly Jane; m, meters; ft amsl, feet above mean sea level; ft bls, feet below land surface; CGNI 2014, Corvus Gold Nevada Inc. monitoring database; M&A Q1, Montgomery & Associates quarterly measurements database; PPT WL, pre-pumping test water level. Table summarizes information from 2021 Corvus survey database. Horizontal coordinate information is referenced to the North American Datum of 1927 (NAD 27)]

Table 4-3.	Off-Property W	ell Locations
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NDWR Well Identifier	Alternate Well Identifier	Site Type	Latitude	Longitude	Land Surface Elevation (ft amsl)	Total Depth (ft)	Hydraulic Head Measurement Date	Hydraulic Head Depth (ft bls)	Comments
69873	370246116461901 ER-OV-05	MW	37.04605	-116.7728	3935	200	02-Aug-1997	35.50	NDWR; Jackson et al., 2021
115834	BWSD Upper Indian	PW	36.95148	-116.8043	4178.59	1205	25-Apr-2012	146	NDWR
31029	BWSD Summit	PW	36.92412	-116.7997	4236.53	700	15-Jan-1989	130	NDWR

[Notes: MW, monitor well; PW, production well; ft amsl, feet above mean sea level. Table summarizes information from NDWR databases http://images.water.nv.gov/images/well_logs/115000/115834.pdf; http://images.water.nv.gov/images/well_logs/31000/31029.pdf; http://images.water.nv.gov/images/well_logs/69000/69873.pdf

Identifier	Site Type	Prospect	NAD27 Easting UTM (m)	NAD27 Northing UTM (m)	Land Surface Elevation (ft amsl)	Azimuth	Dip	Total Depth of VWP Borehole (ft bls)
VWP-21-01	VWPx4	Sarcobatus	513702.03	4099859.83	4083.08	360	-90	825
VWP-21-02	VWPx4	Sarcobatus	514001.13	4099469.30	4093.57	360	-90	825
VWP-21-03	VWPx4	Sierra Blanca	517962.24	4098563.52	4185.72	360	-90	820
VWP-21-04	VWPx4	Sierra Blanca	518145.19	4098701.83	4176.53	360	-90	820
VWP-21-05	VWPx4	Yellow Jacket	518163.04	4098571.89	4169.36	360	-90	1060
VWP-21-06	VWPx4	Sierra Blanca	518154.91	4097949.17	4246.87	360	-90	820
VWP-21-07	VWPx4	Savage Valley	518203.12	4097502.75	4266.88	360	-90	820
VWP-21-08	VWPx4	Savage Valley	518401.02	4097356.35	4191.89	360	-90	820
VWP-21-09	VWPx4	Jolly Jane	519227.98	4096880.53	4164.43	360	-90	760
VWP-21-10	VWPx2	Yellow Jacket	518630	4098096	4155	360	-90	580
NB-13-226	VWPx1	Sierra Blanca	517552.86	4097751.58	4311.18	360	-90	600
NB-13-229	VWPx1	Yellow Jacket	518153.48	4098399.01	4213.01	360	-90	750
NB-13-235	VWPx1	Sierra Blanca	517850.33	4098306.49	4321.67	360	-90	600
NB-13-258	VWPx1	Sierra Blanca	518152.71	4097351.35	4307.32	360	-90	700
NB-21-520	VWPx1	Jolly Jane	519128.04	4096446.51	1296.99	126	-60	502
NB-21-521	VWPx1	Jolly Jane	519063.62	4096502.97	1291.00	270	-60	528
NB-21-522	VWPx1	Jolly Jane	519185.77	4096649.33	1279.61	117	-70	443
NB-21-523	VWPx1	Savage Valley	517994.81	4097123.82	1312.89	266	-70	656
NB-21-525	VWPx1	Sierra Blanca	518102.44	4098124.21	1302.34	83	-70	853
NB-21-527	VWPx1	Sierra Blanca	517714.24	4098566.50	1305.48	280	-70	590

[Notes: VWP, vibrating wire piezometer; VWPx4, four piezometers installed in fully-grouted borehole; VWPx2, two piezometers installed in fully grouted borehole; VWPx1, one piezometer installed in fully-grouted borehole; m, meters; ft amsl, feet above mean sea level; ft bls, feet below land surface. Table summarizes information from 2021 Corvus survey database. Coordinates for VWP-10 are based on field GPS coordinates. Horizontal coordinate information is referenced to the North American Datum of 1927 (NAD 27)]

5 Test Design

Two, 28-day sequential pumping tests are planned: a 28-day test at well WW-21-03, followed by a 28-day test at well WW-21-03 (Figure 2-2; Section 6). Equipment to be provided by pumping test contractor, includes:

- Submersible test pump, shroud, pump column pipe, discharge line, etc.;
- Electrical generator, fuel, and variable frequency drive for pump motor operation;
- Two (2) 1-inch inside diameter access pipes;
- Discharge assembly as represented in the schematic diagram shown on Figure 5-1;
- Temporary lighting for the well site ("light tower");
- Electrical power source, personnel, computers, and other equipment;

The test pump intake is specified to be set at a maximum depth of 500 feet below land surface (bls) and capable of producing 600 gpm from a pumping water level of 440 feet bls. The pumping system will be capable of maintaining the required flow rate with a minimum system pressure of 20 pounds per square inch (psi). Pump column pipe diameter will be selected to minimize head loss. The test pump, including all access pipes, must be capable of operating inside the diameter of production casing. The test pump specifications for the proposed test pump, including performance curve at multiple motor speeds and projected total dynamic head, will be finalized during the final planning stage and work order of the test.

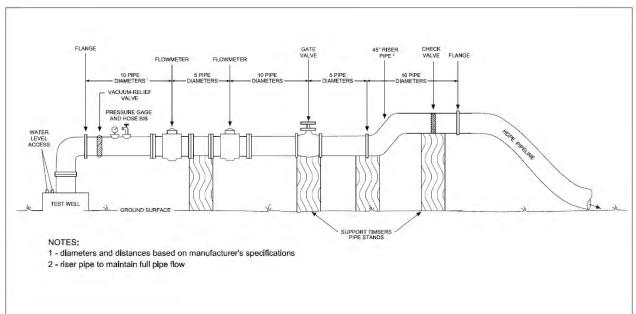


Figure 5-1. Schematic diagram of discharge manifold at pumping well.

The access pipes will extend from land surface to the top of the pump bowls for water level sounder and pressure transducer monitoring. The access pipe will have smooth beveled openings (tops), be perforated in the lower 20 feet with a minimum of ten equally spaced ¹/₄-inch diameter holes per foot and be capped on the bottom. The access pipe(s) must permit the free and unobstructed passage of electrical water level electric sounder and In-Situ LevelTROLL pressure transducer from the wellhead to the bottom of the access pipes such that accurate measurements can be obtained.

Discharge will be directed downgradient from pumping wells as shown on **Figure 5-2**. Straw waddles, straw bales, splash pads, etc., will be used to direct discharge and maximize surface infiltration so as to minimize disturbance and erosion of discharge areas. Approximately 300 feet of discharge pipeline is required for the pumping test at well WW-21-03; approximately 1,100 feet is required for the pumping test at well WW-21-03; approximately 1,100 feet is required for the pumping test at well WW-21-03 along with a temporary discharge tank to maintain a constant hydraulic head at the pumping well. The discharge line shall be properly vented so as to vent volumes of air during filling or startup, and allow air back into the pipeline during emptying.



Figure 5-2. Discharge layouts for well WW-21-02 and WW-21-03 pumping tests.

6 Schedule, Measurements, and Documentation

Project personnel will begin monitoring for the 28-day tests within one month following the completion of necessary State permitting. At wells sites and VWPs, monitoring will be conducted using a combination of continuous data-logging pressure transducers and periodic manual measurements. At spring locations, monitoring will be conducted using a staff gauge, flow measurements (stop watch and calibrated volume method), and water quality sampling.

Continuous loggers (pressure transducers) either are installed or will be installed at locations where more frequent water level data are desired for monitoring the water level effects of testing operations and where access constraints preclude obtaining periodic manual measurements. At observation wells and VWPs, the pressure transducers will record water levels at least every 4 hours to provide a continuous log of water levels throughout the period of monitoring. At the pumping wells, measurements will occur more frequently. Barometric pressure changes will be analyzed using either the NBP meteorological station database or an installed barometric pressure/logger at the location of a pumping well (e.g., In Situ BaroTROLL); processing the changes may be required to correct transducer data for barometric pressure fluctuations. Manual measurements of water levels will be conducted at wells using an electronic water level indicator (sounder) to set level references for the continuous monitoring a 30-day test at well WW-21-03, followed by a 30-day at well WW-21-02. Example field forms for recording and documenting measurements are provided in **Appendix C**.

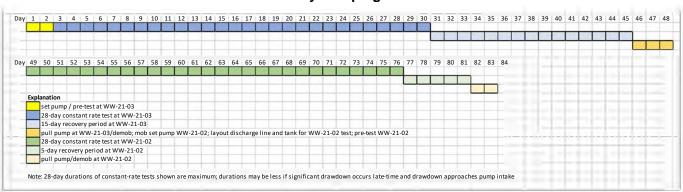


Table 6-1. 28-day Pumping Test Schedule

6.1. Pumping Well

<u>Water Level</u> - Rapid, high-frequency readings are needed early in the test at the pumping well in order to observe early-time effects of pumping in the aquifer, wellbore storage, and well construction. Using a pressure transducer and integrated datalogger (e.g., In Situ LevelTROLL), water level measurements will

be collected using a step linear log type interval for user-defined "steps" within a schedule. Example steps for drawdown and recovery phase of testing are as follows using LevelTROLL:

Pumping Well Measurements of Water Level					
Elapsed Time (minutes)	Measurement Interval				
0 to 5	5 seconds				
5 to 10	20 seconds				
10 to 100	1 minute				
100 to 1000	5 minutes				
1000 to 5000	10 minutes				
5000 to end of test	20 minutes				

For manual water level readings using an electrical water level sounder, measurements will be collected every 5 to 10 minutes during the first hour of pumping and every 1 to 2 hours during the test while personnel are on-site at the well, to the extent practicable. Manual water level measurements will follow the established schedule as closely as possible. If the designated time for a drawdown reading is missed, a reading should be obtained as soon as possible while noting the actual time the reading was obtained.

Flow Rate The flow meter readings will be recorded at a minimum every 5 minutes during the first hour of the test, as well as during any change in pumping due to instability from constant-rate pumping. When discharge becomes stable, the frequency of recording pumping rate will be no less than 60 minutes between recording. As water levels decline, the discharge rate may decrease, thus requiring adjustment. Whenever adjusting the flow rate, record water levels in the pumped well before and after each adjustment. Flow meter readings will be recorded on field forms including both instantaneous (gpm) and totalizer (gallons) measurements.

Water Quality Routine measurement of discharge water for field parameters will be obtained and recorded daily on field forms. A water quality meter should be used capable of reliably measuring pH, specific conductance, temperature, and turbidity (e.g., MyronL Ultrameter or equivalent). Two samples of discharge water will be obtained for water quality parameters for laboratory analysis of the dissolved fraction of the Nevada Department of Environmental Protection (NDEP) Profile I parameters: one sample after 10 days of pumping, and one sample at the end of the pumping period.

6.2. Observation Wells and VWPs

Water Level - During testing at wells WW-21-02 and WW-21-03, VWPs in the Sierra Blanca Complex (proposed open-pits Yellow Jacket, Savage, and Sierra Blanca) will be monitored at higher frequency, on the order of 1-hour readings or more to define early-time drawdown groundwater flow conditions **(Table 4-4)**. After early time, approximately 2 days of drawdown, data collection will be programmed for

measurements at 4-hour frequency, similar to the other more distant VWP and WW locations. Manual measurements water level measurements at WW wells will occur at a frequency of every 1 to 2 days.

At the offsite BWSD wells Indian Springs and Summit, pressure transducers (e.g., In Situ LevelTROLL) have been installed and will be programmed for water level data collection at a frequency of 4 hours. We understand that the USGS has installed a transducer and datalogger at ER-OV-05. The USGS will be given at least two weeks' notice of the test startup.

6.3. Springs

Monitoring Frequency and Measurements Monitoring of spring locations conducted by M&A, 2021 (Appendix A) will serve as baseline conditions prior to conducting testing at wells WW-21-02 and WW-21-03 (Table 4-1; Figure 4-1). During testing, selected springs monitoring will occur at a frequency of four times during the testing period to assess site conditions, and where possible record flow rate, field parameters, and level. The frequency will be: one monitoring round at the start of the test, followed by monitoring weekly during pumping, and a final round one week after the pumping period. Two samples of spring discharge will be obtained for water quality parameters for laboratory analysis: one sample at the start of pumping, and one sample in the week after the pumping period.

Monitoring of spring locations conducted by M&A (2021) have included flow measurements at identified monitoring locations using a five-gallon bucket and stopwatch and calculating average flow over several measurements. At some locations with low flow rates, a 500-mL sample bottle has been used instead of a five-gallon bucket for flow rate measurements. At these locations, field parameters and surface water samples have also been collected for laboratory analysis of the dissolved fraction of the NDEP Profile I parameters. Sample bottles are prepared by the analytical laboratory and packaged with the necessary quantity and variety of preservative required for each analytical method. Filled sample bottles shall be labeled with information including date, time of sample collection, sample location, sampling personnel, and project name. Bottles are to be placed in an ice-filled cooler and later transported to the analytical laboratory by field personnel. Appropriate duplicate samples are also collected. Laboratory Chain-of-Custody procedures are followed and both electronic data and paper records were transmitted by the Laboratory with the analytical results. Samples are analyzed at an NDEP-certified testing laboratory.

Water Level Where seeps have been pooled by a landowner, such as Springdale, a staff gauge has been installed to monitor level as a surrogate to hydraulic head of the local conditions. During Q3 and Q4 2021, weekly to biweekly measurements have been logged by Corvus and M&A personnel.



7 Field Quality Control Requirements

Entering records on field forms and in field notebooks should always have the day, month, year and time of measurement, based on a 24-hour clock in hours and minutes (i.e., dd.mmm.yyyy hh.mm). Site conditions should be described including general weather description and atmospheric temperature. Other documentation may include field sketch and identifying photographs of water discharge, outside influences detected during the test, and any modifications to the Plan.

Before the constant-rate test, watches and other time-measurement devices (i.e., dataloggers) should be synchronized so that the time of each reading, electronic and manual, can be referenced to the exact minute and hour that pumping started. It is imperative that time device agreement and measuring device accuracy be maintained throughout the testing period (pre-test baseline, drawdown, and recovery). A routine comparison and synchronization should be conducted of all clocks based on smart phones time signal, in vehicles, wrist watches, and data recorders for agreement and note any discrepancies in field notes identifying the devices and where they were used. For water levels, compare manual measurements to datalogger measurements within wells to confirm accuracy of measuring devices as much as possible.

Field plots should be prepared of data routinely to evaluate trends and assess anomalies by:

- Tabulate and graph the elapsed time, discharge rate, and pumped well drawdown as early as possible in the test, usually after the first hours of testing. Prepare log-log, semi-log, and composite plots during the test.
- Compare this processed data to basic type curves to detect deviations that may be due to discharge variations or other changes in field conditions that may need to be addressed (e.g., infiltration of discharge recharging the aquifer and affecting drawdown patterns, etc.).
- Keep diagnostic plots current throughout the test in order to support decisions about test progress and determining anomalies such as equipment malfunctions or unacceptable flow rate variations. Analysis of the plots may suggest timing for when data collection is sufficient or more data are needed to substantiate conclusions about the groundwater flow system.

8 General Documentation and Validation

The Project Manager or Field Team Leader shall oversee and ensure that field documentation is collected in accordance with the Monitoring Plan and any site-specific or project specific planning documents.

The field personnel will be responsible for the understanding and implementation of the Monitoring Plan during all field activities, as well as, obtaining the appropriate field logbooks, field forms and records necessary to complete the field activities. Field personnel shall ensure all field activities are documented and archived digitally completely at the end of each field day. Field personnel are responsible for tracking the location of all field documentation, including field logbooks. Field personnel are responsible for assuring that the original documentation (or copies of the field log book), are copied, filed, and archived periodically during the testing program and verified at the end of the field project.

9 References

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Appendix A

2021 Spring and Seep Survey



October 12, 2021

Baseline Spring and Seep Survey

Prepared for: Corvus Gold Nevada Inc. North Bullfrog Project, Nye County, Nevada

Prepared by: Montgomery & Associates 1550 E. Prince Road, Tucson, Arizona



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Appendices

Appendix A. Location Descriptions, Photos, and Measurements Appendix B. Water Quality Analytical Report



ABBREVIATIONS AND UNITS

AOIArea of Impact
BLMU.S. Bureau of Land Management
DODissolved Oxygen (DO) measurement in milligrams per liter (mg/L)
ECElectrical conductivity of solution in microSiemens per centimeter (µS/cm)
ElevationElevation of location above mean sea level, in meters (m asl)
FlowFlow rate measurement at discharge location in gallons per minute (GPM)
N/ANot Available
NDEPNevada Department of Environmental Protection
NDWRNevada Department of Water Resources
NTUTurbidity measurement in Nephelometric Turbidity Units (NTU)
pHnegative logarithm of hydrogen ion activity in solution
TDSTotal Dissolved Solids measurement in milligrams per liter (mg/L)
TempTemperature in degree Celsius (°C)
USGSU.S. Geological Survey
UTMUniversal Transverse Mercator coordinate system; North American Datum 1983
(NAD83), in meters (m)



1 INTRODUCTION

Montgomery & Associates (M&A) was retained by HydroGeoLogica, Inc. (HGL) to conduct a baseline Spring and Seep Survey in the vicinity of the North Bullfrog Project (NBP) near Beatty, Nevada, northwestern Nye County.

The seeps and springs included were selected based on proximity of planned NBP facilities to the Amargosa River, Death Valley National Park, and domestic and public water supply sources in Oasis Valley Hydrographic Area (HA) (Basin 228) and Sarcobatus Flat Basins HA (Basin 146) of Nevada. The Oasis Valley Basin is in Death Valley Hydrographic Region 14 and Sarcobatus Flat Basin is in Central Hydrographic Region 10 as defined by the in the State of Nevada Division of Water Resources (NDWR). The Project Boundary straddles the divide between the Oasis Valley HA and Sarcobatus Flat HA.

Identification of seeps and springs was accomplished and targeted for field verification based on previous surface water sampling efforts and locations shown on USGS topographic maps. Additional springs were identified during discussions with local stakeholders. Other springs and seeps were identified during field transects along with analysis of high-resolution satellite imagery (e.g., Google Earth).

A regional location map showing the NBP property area and locations identified by the Spring and Seep Survey is shown on Figure 1. Where possible, the identified springs have been visited and cataloged by M&A. In several cases, no active spring was found at the locations provided in public databases, or M&A was refused access by the landowner. Field-verified location information is given for each spring, where possible, in the attached location descriptions (Appendix A).



2 BACKGROUND

The NBP is entirely controlled by Corvus Gold Nevada Inc. (CGNI), a wholly owned subsidiary of Corvus Gold Inc. ("Corvus"), through federal mining claims (Public Lands) and historic patented mining claims (Private Lands). The NBP patented and unpatented mining claims cover approximately 72 square kilometers (Wilson and others, 2020). The NBP was a historic mining center and the surface area of the NBP contains many abandoned workings, audits, and dispersed surface disturbances from exploration activities. Current land use is limited to livestock grazing and recreational use.

From Wilson and others (2020): *NBP is in Western Nevada's high desert which receives about 15- centimeters ("cm") of precipitation per year, mostly as modest snowfall in the winter and thunderstorms in the summer. The average daily temperature varies from a low of* $5^{\circ}C$ ($40.8^{\circ}F$) *in January to a high of* $27^{\circ}C$ ($80.8^{\circ}F$) *in July, peak temperatures can reach* $43^{\circ}C$ ($110^{\circ}F$). Due to the mild climate at NBP, the operating season is year*round, though occasional thunderstorms may prohibit operations for short periods due to safety concerns regarding lightning strikes. The hills at NBP are covered with sparse low brush including creosote, four-wing saltbush, rabbit brush and ephedra. The Project is in the Basin and Range province. Topographic relief is several hundred feet. Topography varies from low hills and desert plains to locally very steep, rocky and rugged hills. The elevation of the Project ranges from* 1,100 *m* (3,600 feet) to 1,500 *m* (4,800 feet). Most of *the Project is characterized by low hills separated by modest width valleys.*

The low hills and valleys of the NBP expose a mixed terrain of clastic and limestone Paleozoic rocks overlain by a tertiary volcanic sequence dominated by interbedded ash flows and air-fall tuffs. These sequences are heavily faulted, creating local barriers to groundwater flow and pathways for mineralization. Alteration of the volcanic units has produced swelling clays, which have been mined in addition to precious metal resources.



3 METHODS & RESULTS

Preliminary baseline surface water quality monitoring efforts were conducted from 2012 through 2015 and are a subset of the locations sampled in this study. The surface water sampling event presented here allows comparison to that dataset and establishes baseline water quality at additional sites to support environmental permitting and ongoing monitoring around the planned NBP Area of Impact (AOI).

Identification of seeps and springs was completed by CGNI and HGL prior to the field sampling event. Sample locations were targeted for field verification based on previous surface water sampling efforts and locations shown on USGS topographic map, as well as through discussion with local stakeholders. After location selection was complete, landowners were contacted by representatives of CGNI to arrange site access. Springs and seeps identified as part of this effort are shown on Figure 1 and listed in Table 1. Table 1 includes names of mapped springs, UTM site coordinates, landowners, and site access status.

Site coordinates reported in Table 1 (UTM) were derived from either National Hydrography Dataset (NHD) data or were provided by CGNI. Sampled sites were checked with a handheld GPS unit at the sample location; verified sample coordinates for each location are presented in Appendix A in latitude/longitude (WGS84).

Water quality parameters were measured at each sample site using a Horiba U-52 Ultrameter. Measured field parameters include temperature, pH, EC, turbidity, DO, and TDS. Flow measurements were performed at sample sites where possible, using a five-gallon bucket and stopwatch and calculating average flow over several measurements. At some locations with low flow rates, a 500-mL sample bottle was used instead of a five-gallon bucket for flow rate measurements. Where a single mapped location had multiple sources of flow, the flow rates were measured separately at each source (e.g., Location 15, Appendix A).

Surface water samples were collected for laboratory analysis of the dissolved fraction of the NDEP Profile I parameters. Sample bottles were prepared by the analytical laboratory and packaged with the necessary quantity and variety of preservative required for each analytical method. Filled sample bottles were labeled with information including date, time of sample collection, sample location, sampling personnel, and project name. Bottles were placed in an ice-filled cooler and later transported to the analytical laboratory by M&A personnel. Appropriate duplicate samples were also collected. Laboratory Chain-of-Custody procedures were followed and both electronic data and paper records were transmitted by the Laboratory with the analytical results. Samples were analyzed at an NDEP-certified testing laboratory. Results of these analytical tests are presented in Appendix B.

Appendix A includes detailed sample location descriptions and site data. For each location entry shown in Appendix A, sections include: 1) general information providing information on land



ownership, naming convention, georeference data including location coordinates and elevation, general hydrographic and hydrologic information, spring classification details, and description of existing infrastructure, if present; 2) hydrological observations providing a summary of flow characteristics, or presence of water, and available field water quality parameters, when possible; and 3) representative photographs showing characteristics such as the location geomorphology, vegetation, hydrology.



4 STUDY LIMITATIONS

Several private landowners approached by CGNI refused access to proposed sample sites, and two sites located within the boundaries of Death Valley National Park required permit access to sample which was not obtained. Heavy surface disturbance (both anthropogenic and wildlife disturbances) made undisturbed field parameter measurement and sampling difficult in some sample locations. Flow measurements also depended upon surface expression of the spring; bucket and stopwatch measurements are impossible where insufficient surface gradient exists to channelize flow. In some locations spring development included fragile or degraded infrastructure that could have been damaged by flow measurement or sampling.



5 SUPPLEMENTARY DATA

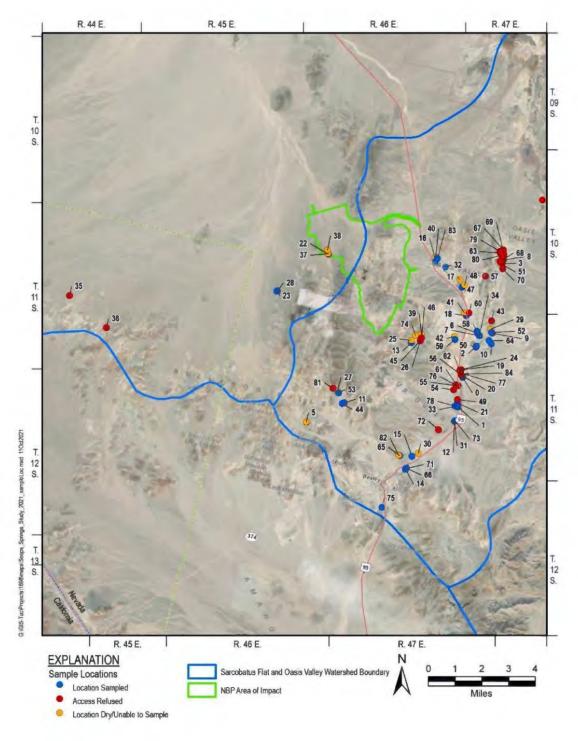


Figure 1. Location Map – Spring and Seep Survey



Table 1. North Bullfrog Project Seep and Spring Matrix

mple	Name	Basin	Easting	AD27 (m) Northing	Elevation (m)	Comments
0	1	Oasis Valley	524902.88		1096.24	
1		Oasis Valley	525025.75		1074.04	Sampled as Location 21
2		Oasis Valley Oasis Valley	525305.31 525736.42		1117.90 1171.71	No access granted
-		Oasis Valley	527268.45		1213.45	No access granted
5		Sarcobatus Flat			1284.16	DRY
6		Oasis Valley	525196.14		1120.95	Heavily manipulated, unable to sample
7	Goss Springs	Oasis Valley	525368.43			Dry
8		Oasis Valley	525750.91		1172.94	No access granted
9		Oasis Valley	526075.15			
10		Oasis Valley Oasis Valley	526159.58 518223.42		1236.74	
12		Oasis Valley	525000.63			DRY
13		Oasis Valley	521387.77		1208.99	
14	Revert Springs	Oasis Valley	522737.41		1033.96	-
15	Beatty Springs	Oasis Valley	522937.68	the second in case in the local loca		
16		Oasis Valley	521751.35		1171.44	
17	-	Oasis Valley	523418.09		1141.70	Influenced by Location 32
18	Hot Springs	Oasis Valley Oasis Valley	524297.12 524713.65		1122.68 1094.16	No access granted
-	Hot Springs	Oasis Valley	524790.87			No access granted
21	Ute Springs	Oasis Valley	524939.07		1075.95	no access granied
22		Sarcobatus Flat			1305.80	
23	Mud Springs	Sarcobatus Flat	512757.04	4094461.28	1293.22	Unable to differentiate from Location 28
24	Bailey Hot Spring	Oasis Valley	524640.86		1091.57	No access granted
25	Brian Spring	Oasis Valley	521361.86		1215.07	DRY
26 27	Crystal Spring Indian Spring	Oasis Valley Oasis Valley	521910.85 517644.93		1189.50 1281.33	No access granted DRY
28	Mud Spring	Sarcobatus Flat			1292.74	
29	North Goss Spring	Oasis Valley	525913.84		1170.39	DRY
35	inclut obee opting	Oasis Valley	523283.68		1025.02	Unable to differentiate from Location 30
31		Oasis Valley		4089193.58		DRY
32	1	Oasis Valley	522420.21		1159.08	
33	1	Oasis Valley	524906.17	4090088.73	1072.95	Sampled as Location 21
34	Goss Springs	Oasis Valley	525327.02		1121.20	Sample taken, but unable to verify source of irrigation pipe
20		Sarcobatus Flat	500478.67 503103.27	4091467.51 4090076.31	1487.33 1630.77	Permit Required Permit Required
37		Sarcobatus Flat Sarcobatus Flat	515256.23		1303.31	Unable to differentiate from Location 22
38	North Mud Spring	Sarcobatus Flat		4097481.65		DRY
39	Seep Spring	Oasis Valley		4093834.72	1180.66	DRY
40	Springdale Spring	Oasis Valley		4098506.71		DRY
41	Wehrly Spring	Oasis Valley		4095622.75		DRY
42	Burro Spring	Oasis Valley		4094116.75		DRY
42		Oasis Valley	525861.22			No access granted
44	Lower Indian Springs	Oasis Valley		4088751.29		
45 46	Crystal Springs	Oasis Valley		4093414.32 4093594.22	1188.75 1187.13	No access granted
47		Oasis Valley Oasis Valley		4093094.22	1134.07	No access granted
48	-	Oasis Valley	523785.34			Influenced by Location 32
45	Burrell Hot Spring	Oasis Valley		4090486.73		No access granted
50		Oasis Valley	525290.29		1115.47	
\$1		Oasis Valley	525587.41		1169.86	No access granted
52	-	Oasis Valley		4094835.08		
53	Middle Indian Spring	Oasis Valley		4089311.44		Broken pipe on surface, unable to verify source up-canyon
34 82		Oasis Valley		4091003.15		No access granted
F.S.		Oasis Valley Oasis Valley	524749.83	4091291.58 4091942.28		No access granted No access granted
-		Oasis Valley		4091942.28		No access granted
58		Oasis Valley		4094713.35		
59		Oasis Valley		4093951.06		
60		Oasis Valley	524419.60	4095677.06	1122.30	Actual spring on Nature Conservancy, not sampled
61		Oasis Valley		4091333.81		No access granted
62		Oasis Valley		4092050.46		No access granted
C3	-	Oasis Valley		4099574.71	1171.85	No access granted
64 65		Oasis Valley		4094320.49	1162.29 1025.64	
66	Revert Springs	Oasis Valley Oasis Valley		4086467.95 4085831.46		
67	never opings	Oasis Valley		4085831.40		No access granted
10E		Oasis Valley		4099163.77	1170.48	No access granted
6		Oasis Valley	525712.61	the second se	1174.88	No access granted
1		Oasis Valley	525827.02			No access granted
71	Revert Springs	Oasis Valley		4085785.74		
22	2 1 m m m m	Oasis Valley	524169.57	4088478.17	1058.59	No access granted
73	1	Oasis Valley	525024 24	4089216.77	1061.16	1
74	100000000000000000000000000000000000000	Oasis Valley		4093680.62	1197.93	DRY
75		Oasis Valley	521846.33		988.29	
		Oasis Valley	524602.88	4091300.85	1093.63	No access granted
11		Oasis Valley	524716.78	4092077.25	1094.18	No access granted
78		Oasis Valley		4090078.12	1073.65	Sampled as Location 21
13		Oasis Valley		4099673.90		No access granted
D2	Linear Indian Park	Oasis Valley		4099481.81		No access granted
81 82	Upper Indian Spring	Oasis Valley		4089505.75 4086466.56		Municipal locked sistem DRY
02		Oasis Valley Oasis Valley		4086466.56		
83						



Location Sampled Access Refused Location Dry/Unable to Sample

Page 7



6 REFERENCES

Wilson, S.E., Young, M.R, House, A.R, Delong, R., and D. Malhotra, 2020. Technical Report and Preliminary Economic Assessment for Gravity Milling and Heap Leach Processing at the North Bullfrog Project, Bullfrog Mining District, Nye County, Nevada, November 20, 2020, NI 43-101 report for Corvus Gold Inc.



Location Descriptions, Photos, and Measurements



Location 11 is a BLM land location upgradient to the north of Location 44 with a fenced-in area and collection pipe with valved discharge. No measurement of flow was obtained due to leaking valve with minimal discharge and concern of valve failure. Water has collected below the collection box in a low-lying area with heavy vegetation, but all water is retained within the fenced in area.





North View of Location 11

Sample Location 11

Location 11: BLM							
Sol			Soils Sand and Gravels with swelling value		valv	charge Location Buried corroded ed, one inch diameter Carlon pipe in	
Dexter Race & Louis Wersan Montgomery & Associates			Usage Discharge area is fenced in with no visible usage or direct access		inlet <u>Flov</u> to lir	covered collection box; unable to verify inlet location below land surface <u>Flow</u> No flow measurement possible due to limited elevation difference and dispersed flow	
<u>Latitude</u> 36.94504	Longitude -116.79498	(<u>evation</u> <u>m asl)</u> 236.74	Emergence Environment Subaerial in excavated gravel channel <u>Orifice Geomorphology</u> Cont spring, developed	act	<u>Field Parameters</u> Temp: 17.3°C pH: 7.71 EC: 311 μS/cm NTU: 5.6 DO: 3.30 mg/L TDS: 202 mg/L	



Location 13 is a BLM land location with a buried one-inch diameter Carlon pipe discharge within a fenced area and no visible usage. There are concrete structures to the west within the fenced area (possible vaults), but we were unable to verify location of the buried pipe inlet.





West View of Location 13

Sample Location 13

Location 13: BLM						
			ohic Unit Overburden Id and Gravels with swelling	Discharge Location Buried one inch diameter Carlon pipe with no visible inlet Flow 0.8 GPM		
Montgomery & A	ssociates		enced location with all vegetation ble to wildlife			
Latitude 36.9841	Longitude -116.75911	Elevation (m asl) 1208.99	Emergence Environment Subaerial in excavated gravel channel	Field Parameters Temp: 21.0°C pH: 7.97		
			Orifice Geomorphology Cont spring, developed	act EC: 355 µS/cm NTU: 1.0 DO: 9.24 mg/L TDS: 231 mg/L		



Location 16 is a residential location likely influenced by several springs that have been excavated into a large, heavily vegetated retention pond. There are several outbuildings within the fenced location with limited wildlife accessibility. Vegetation limits accessibility for sampling without disturbing the shallow organic material. No flow is available due to outlet seeps to the southeast.



North View of Location 16

Sample Location 16

Location 16: John Lawrence Moog Trustee						
Soils Soils Silt a Dexter Race & Louis Wersan Usage Fer			and sand area area area area area area area are		narge Location Excavated low-lying adjacent to hillslope	
Montgomery & As	ssociates		visible direct usage. Overflow continues N/A down gradient to pastureland			
Latitude	Longitude	Elevation (m asl)	Emergence Environment Subaerial in excavated pond	• 8	Field Parameters Temp: 19.9°C	
37.03062	-116.75553	1171.44	Orifice Geomorphology Conta spring, undeveloped	act	pH: 8.30 EC: 644 µS/cm NTU: 243 DO: 4.1 mg/L TDS: 412 mg/L	



Location 18 is a residential location with a buried one-inch diameter Carlon pipe that appears to run into concrete vault to the west of the discharge location. The resident has an electric pump from the vault to holding tanks that gravity feed to the home. All livestock and wildlife are fenced outside away from the vault location, but the residence is up gradient.



North View of Location 18

Sample Location 18

Location 18: Wehrly Property						
Soils Silt Dexter Race & Louis Wersan Usage All			livestock are fenced away ault, but residence is t	Discharge Location Excavated low- lying area adjacent to hillslope Flow 2.4 GPM		
Latitude 37.00515	Longitude -116.72866	Elevation (m asl) 1122.68	Emergence Environment Subaerial with concrete vault storage Orifice Geomorphology Cont spring, developed	Field Parameters Temp: 19.3°C pH: 7.97 act EC: 1020 μS/cm NTU: 1.2 DO: 6.62 mg/L TDS: 652 mg/L		



Location 22 has a one-inch diameter Carlon pipe discharging from an adjacent northwest facing hillslope. The area is heavily utilized by burros with significant vegetation down gradient. A second location is marked down gradient, but there is no clear discharge area. Vegetation spreads out down gradient indicating possible increased flow but cannot be separated from Location 22.



North View of Location 22

Sample Location 22

Location 22: BLM						
Dexter Race Soils		Soils Silt	Silt and sand		Discharge Location Excavated low- lying area of hillslope Flow 0.9 GPM	
Latitude 37.02161	Longitude -116.82844	Elevation (m asl) 1305.80	Emergence Environment Subaerial with excavation and underground pipe to SE <u>Orifice Geomorphology</u> Con spring, developed		<u>Field Parameters</u> Temp: 17.9°C pH: 8.63 EC: 356 µS/cm NTU: 0 DO: 5.48 mg/L TDS: 238 mg/L	



Location 28 discharges on northwest facing hillslope with heavy burro usage and minor vegetation down gradient. A public two-track crosses the discharge area approximately 100 feet down gradient. The location does not appear to be excavated and piped like Location 22 but could not be verified without excavation while onsite.



North View of Location 28

Sample Location 28

Location 28: BLM (Mud Springs)						
Site Visit Date: Dexter Race Montgomery & A		Soils Silt a	avy burro usage spreading	<u>Discharge Location</u> Low-lying area of hillslope Flow 0.4 GPM		
Latitude 36.99603	Longitude -116.85628	Elevation (m asl) 1292.74	Emergence Environment Subaerial on hillslope Orifice Geomorphology Cont spring, undeveloped	Field Parameters Temp: 18.0°C act pH: 8.25 EC: 415 μS/cm NTU: 8.3 DO: 6.13 mg/L TDS: 269 mg/L		



Location 44 is fenced in with no visible wildlife usage. There is no clear surface expression of the discharge within the fence line, but there is a cattle trough down gradient with 1 ¹/₄ -inch buried galvanized pipe discharging to the trough. We were unable to verify the buried line upgradient and the flow could be influenced by locations piped from the northwest canyon. The flow is larger than expected for a small fenced-in footprint.



North View of Location 44

Sample Location 44

To a hearth

Location 44: BLM (Lower Indian Springs)					
Soils Silt a		enced in area with buried		Discharge Location Low-lying area of hillslope Flow N/A	
Latitude 36.94434	Longitude -116.79668	Elevation (m asl) 1170.29	Emergence Environment Subaerial on small hillslope Orifice Geomorphology Conta spring, developed	act	Field Parameters Temp: 19.2°C pH: 7.68 EC: 314 μS/cm NTU: 0.2 DO: 6.00 mg/L TDS: 204 mg/L



Location 59 is fenced in with no visible wildlife usage. There are two channels that are heavily vegetated and have been excavated within approximately the last 10 years. There is minimal elevation change and all water remains within the channel (there is no flow available). The coordinates for Location 42 are within the fence but there is no visible surface expression.



North View of Location 59



Sample Location 59

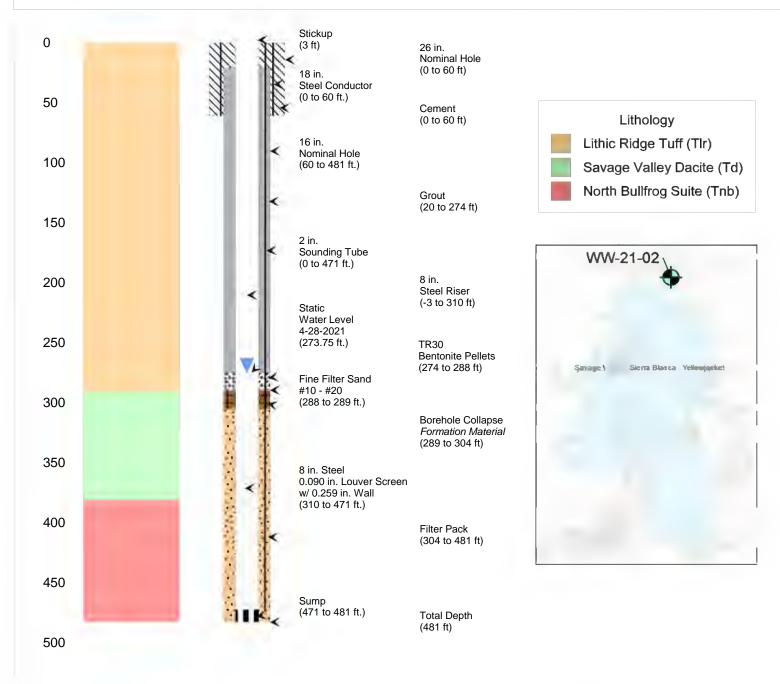
Location 59: BLM						
Dexter Race Soils Sar			bedrock ad and swelling clays enced in area with no visible age		Discharge Location hillslope Flow N/A	
Latitude 36.99137	Longitude -116.73094	Elevation (m asl) 1116.92	Emergence Environment Subaerial on very small hillslop Orifice Geomorphology Cont spring, developed	oe act	Field Parameters Temp: 15.4°C pH: 7.89 EC: 1110 μS/cm NTU: 4.1 DO: 11.21 mg/L TDS: 713 mg/L	

Appendix B

Borehole Logs and Construction Details for Wells and VWPs

Borehole Log & Well Construction (As-Built)





550

Location: North Sierra Blanca Northing (NAD27): 4098615.56 Easting (NAD27): 518140.70 Ground Surface Elevation (ft amsl): 4158.92 Drilling and Installation Date From: 4/18/2021 To: 4/28/2021 Driller: Boart Longyear Drilling Method: Dual Tube Flooded Reverse Circulation Note: all depths are in feet below ground surface



Borehole Log Well Construction (As-Built)

Stickup

Cement (0 to 60 ft)

8 in. Steel Riser

Grout

Static Water Level

4-28-2021 (337.5 ft)

Fine Filter Sand

#10 - #20 (363.5 to 365.5 ft)

8 in. Steel

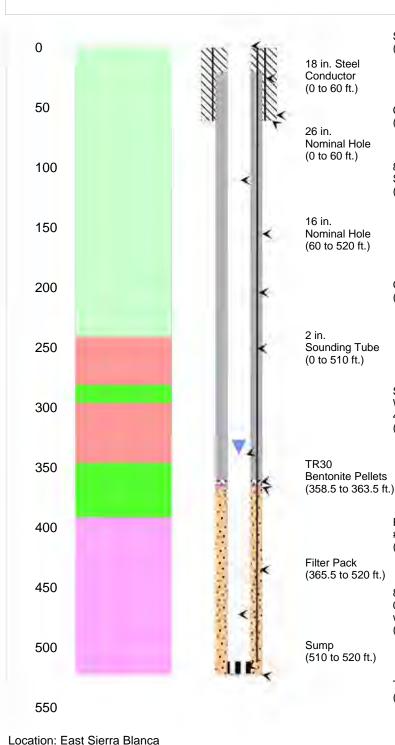
Total Depth (520 ft)

w/ 0.259 in. Wall (370 to 510 ft)

(20 to 363.5 ft)

(-2 to 370 ft)

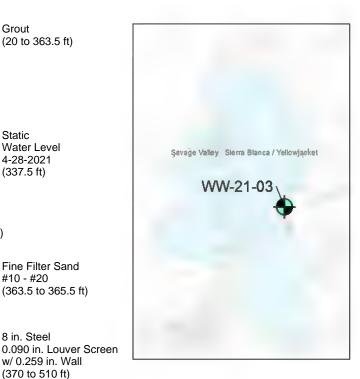
(2 ft)



Project: North Bullfrog Client: Corvus Gold, Inc. ID: WW-21-03



* lower mixed clastic member



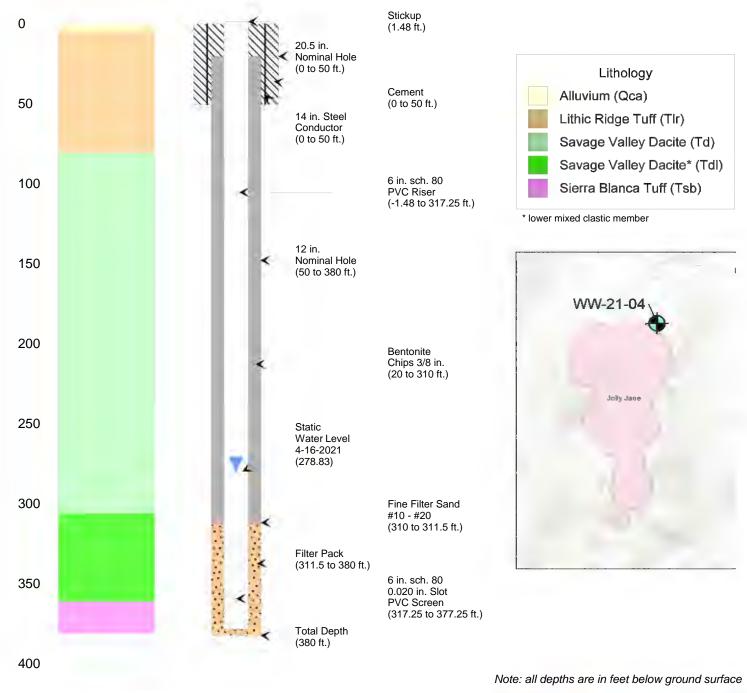
Note: all depths are in feet below ground surface



Northing (NAD27): 4097497.35 Easting (NAD27): 518287.72 Ground Surface Elevation (ft. amsl): 4222.33 Drilling and Installation Date From: 4/8/2021 To: 4/16/2021 Driller: Boart Longyear Drilling Method: Dual Tube Flooded Reverse Circulation

Borehole Log Well Construction (As-Built)

Project: North Bullfrog Client: Corvus Gold, Inc. ID: WW-21-04

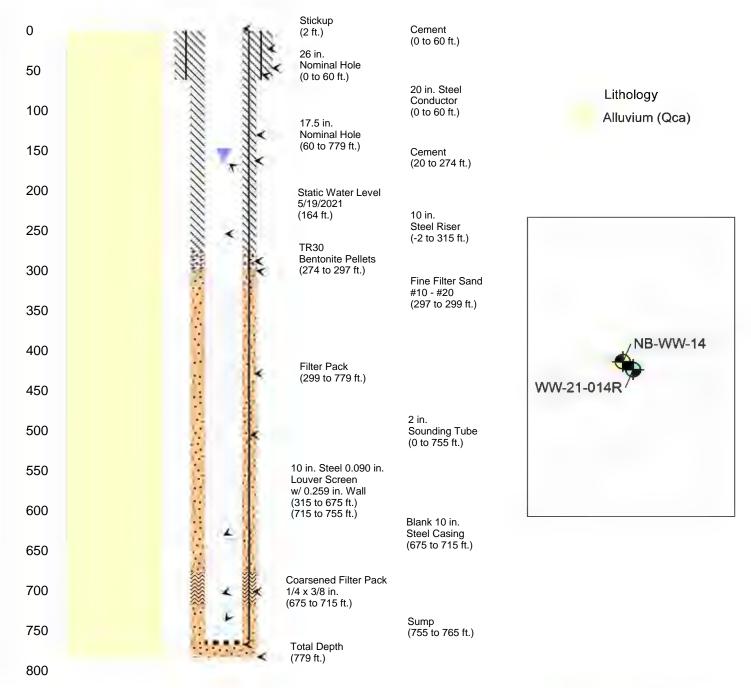


Location: North Jolly Jane Northing (NAD27): 4096920.47 Easting (NAD27): 519231.17 Ground Surface Elevation (ft. amsl): 4159.14 **Drilling and Installation Dates** From: 3/29/2021 To: 4/5/2021 Driller: Boart Longyear Drilling Method: Dual Tube Flooded Reverse Circulation



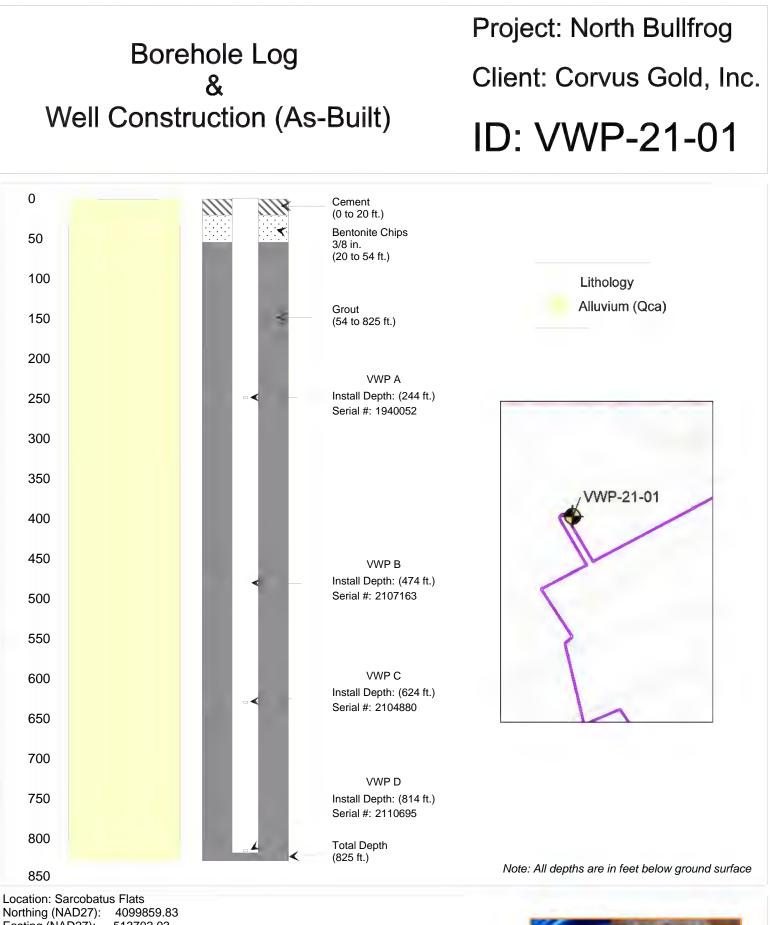
Borehole Log & Well Construction (As-Built)

Project: North Bullfrog Client: Corvus Gold, Inc. ID: WW-21-14R



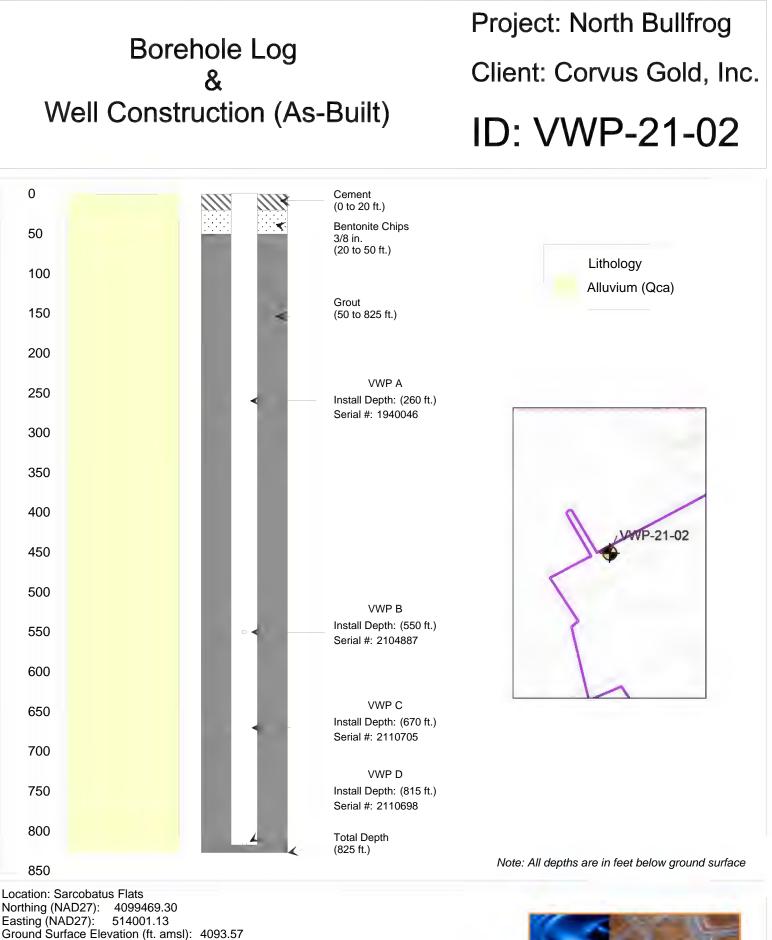
Location: Sarcobatus Flats Northing (NAD27): 4098933.36 Easting (NAD27): 514407.03 Ground Surface Elevation (ft. amsl): 4112.96 Drilling and Installation Date From: 5/9/2021 To: 5/19/2021 Driller: Boart Longyear Drilling Method: Dual Tube Flooded Reverse Circulation Note: All depths are in feet below ground surface





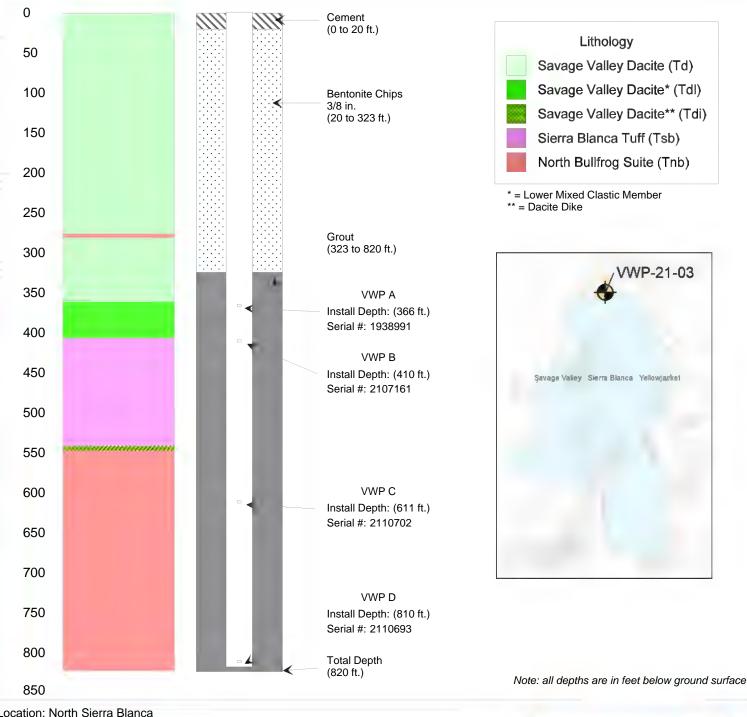
Northing (NAD27): 4099859.83 Easting (NAD27): 513702.03 Ground Surface Elevation (ft amsl): 4083.08 Drilling and Installation Date From: 4/25/2021 To: 4/28/2021 Driller: Boart Longyear Drilling Method: Reverse Circulation

HydroGeoLogica



Drilling and Installation Date From: 4/29/2021 To: 4/30/2021 Driller: Boart Longyear Drilling Method: Reverse Circulation HydroGeoLogica

Borehole Log & Well Construction (As-Built)



Location: North Sierra Blanca Northing (NAD27): 4098563.52 Easting (NAD27): 517962.24 Ground Surface Elevation (ft. amsl): 4185.72 Drilling and Installation Date From: 4/12/2021 To: 4/24/2021 Driller: Boart Longyear Drilling Method: Reverse Circulation

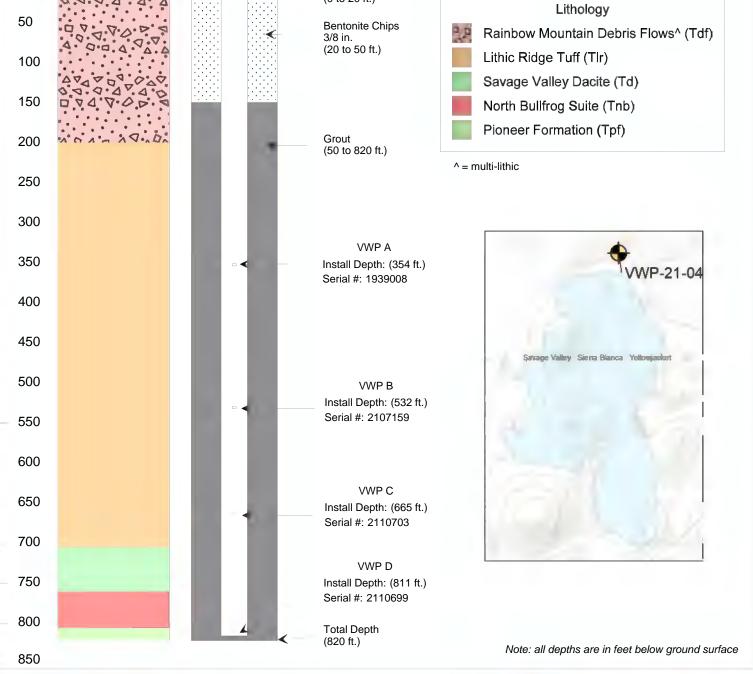
Hydro GeoLogica

Project: North Bullfrog

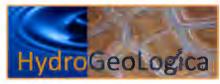
Client: Corvus Gold, Inc.

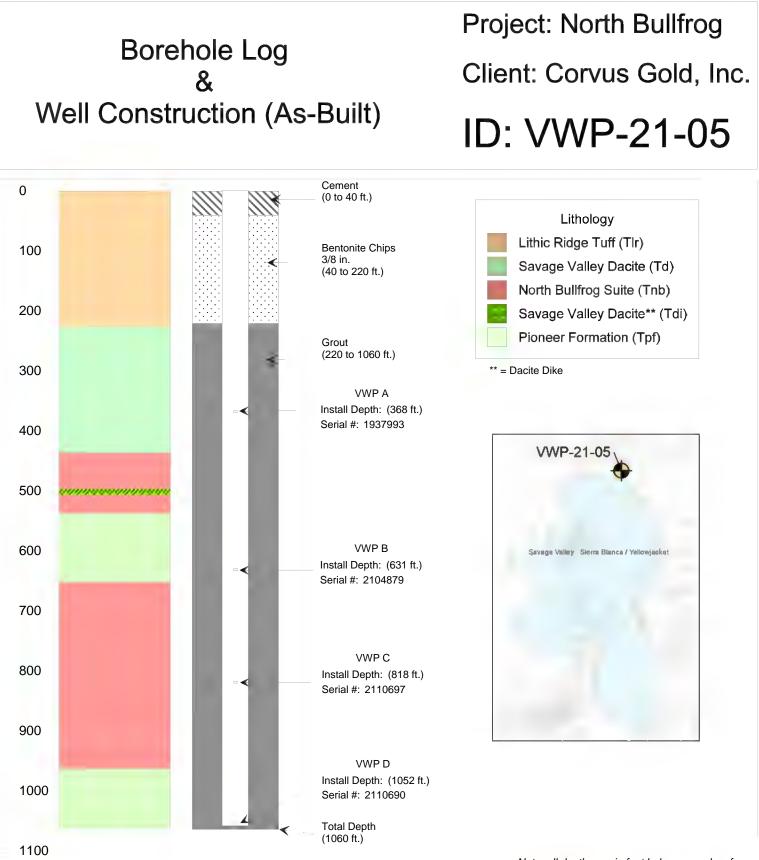
ID: VWP-21-03

Project: North Bullfrog **Borehole Log** Client: Corvus Gold, Inc. Well Construction (As-Built) ID: VWP-21-04 0 Cement (11)(0 to 20 ft.) Lithology 50 **Bentonite Chips** 20 Rainbow Mountain Debris Flows[^] (Tdf) < 3/8 in. (20 to 50 ft.) Lithic Ridge Tuff (Tlr) 100 Savage Valley Dacite (Td)



Location: North Sierra Blanca Northing (NAD27): 4098701.83 Easting (NAD27): 518145.19 Ground Surface Elevation (ft. amsl): 4176.53 Drilling and Installation Date From: 4/10/2021 To: 4/11/2021 Driller: Boart Longyear Drilling Method: Reverse Circulation

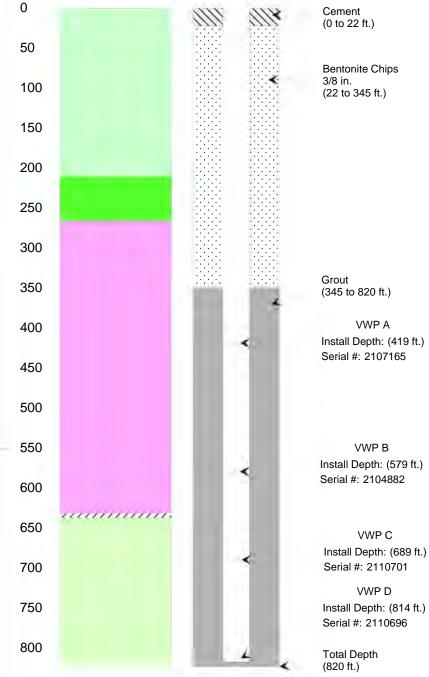




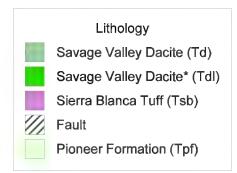
Location: North Sierra Blanca Northing (NAD27): 4098571.89 Easting (NAD27): 518163.04 Ground Surface Elevation (ft. amsl): 4169.36 Drilling and Installation Date From: 4/4/2021 To: 4/9/2021 Driller: Boart Longyear Drilling Method: Reverse Circulation Note: all depths are in feet below ground surface



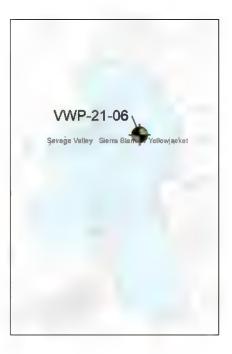
Borehole Log & Well Construction (As-Built)



Project: North Bullfrog Client: Corvus Gold, Inc. ID: VWP-21-06



* = Lower Mixed Clastic Member

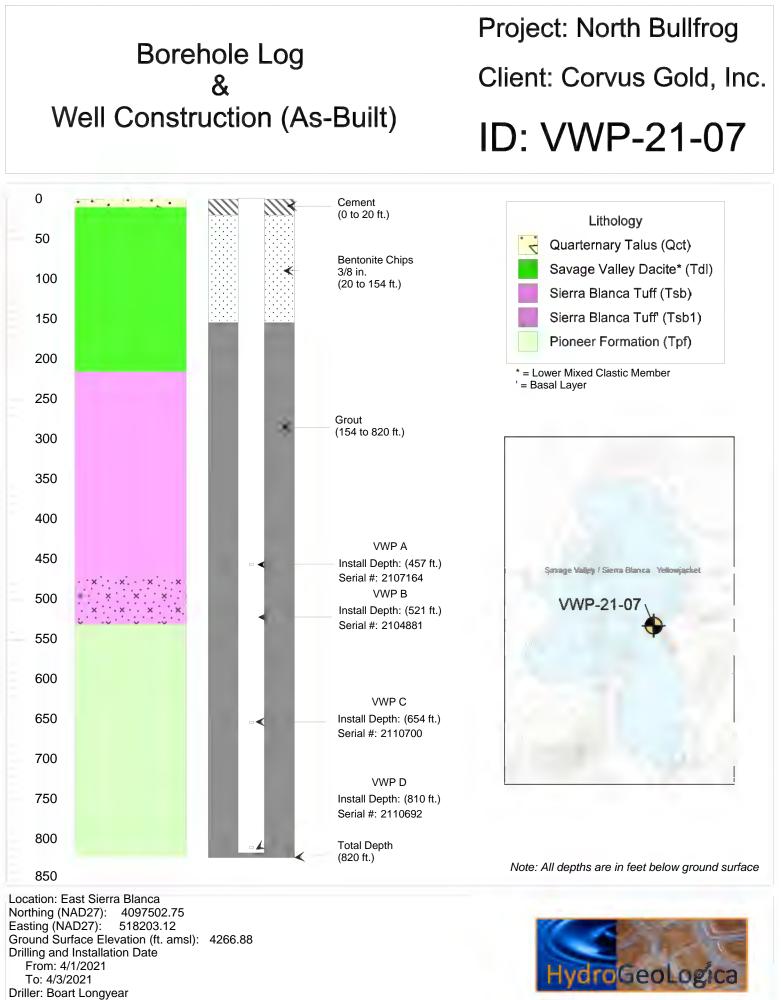


Note: all depths are in feet below ground surface

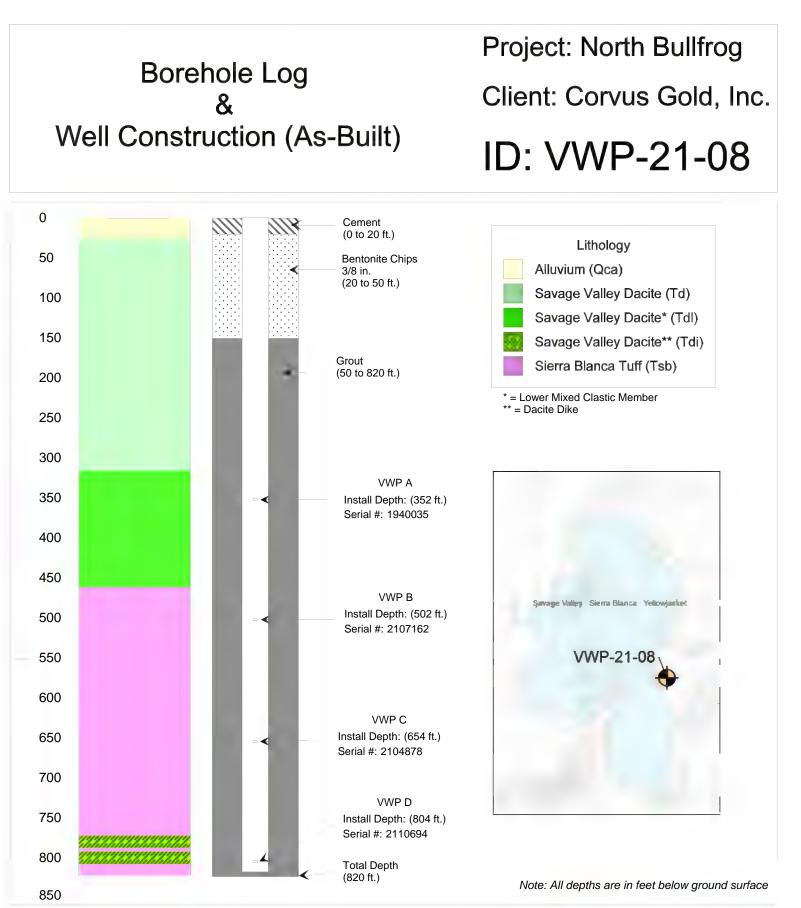


850

Location: Sierra Blanca Northing (NAD27): 4097949.17 Easting (NAD27): 518154.91 Ground Surface Elevation (ft. amsl): 4246.87 Drilling and Installation Date From: 3/21/2021 To: 3/31/2021 Driller: Boart Longyear Drilling Method: Reverse Circulation



Drilling Method: Reverse Circulation

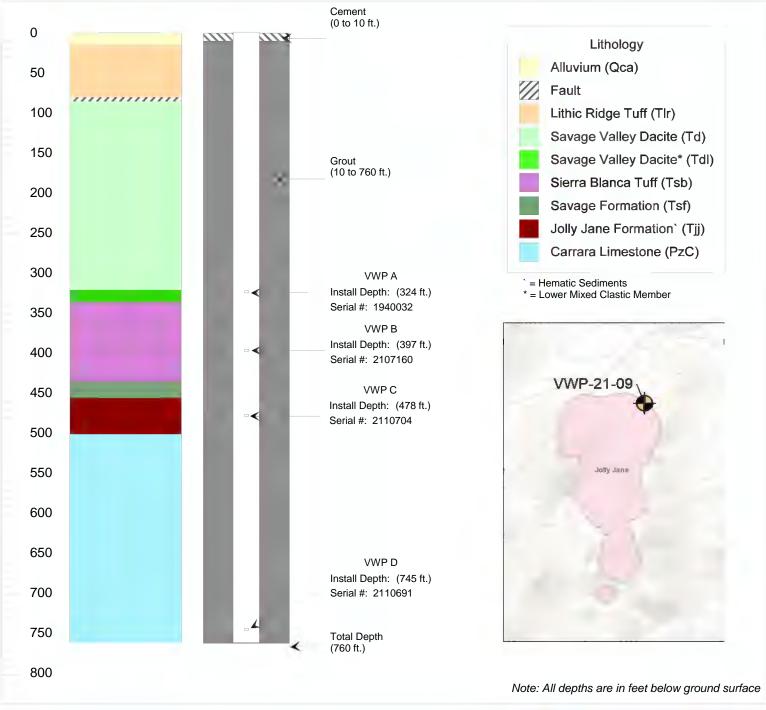


Location: East Sierra Blanca Northing (NAD27): 4097356.35 Easting (NAD27): 518401.02 Ground Surface Elevation (ft. amsl): 4191.89 Drilling and Installation Date From: 3/17/2021 To: 3/21/2021 Driller: Boart Longyear Drilling Method: Reverse Circulation



Borehole Log & Well Construction (As-Built)

Project: North Bullfrog Client: Corvus Gold, Inc. ID: VWP-21-09



Location: North Jolly Jane Northing (NAD27): 4096880.53 Easting (NAD27): 519227.98 Ground Surface Elevation (ft. amsl): 1269.33 Drilling and Installation Date From: 3/13/2021 To: 3/16/2021 Driller: Boart Longyear Drilling Method: Reverse Circulation

Hydro GeoLogica

North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

Page | 44

8 APPENDIX B – NBP MONITORING WELL COMPLETION INFORMATION FOR WATER

QUALITY SAMPLING (NB-WW-02, -03, -04, -05, -06, -07, -08.-09, -10, -11 AND -12)

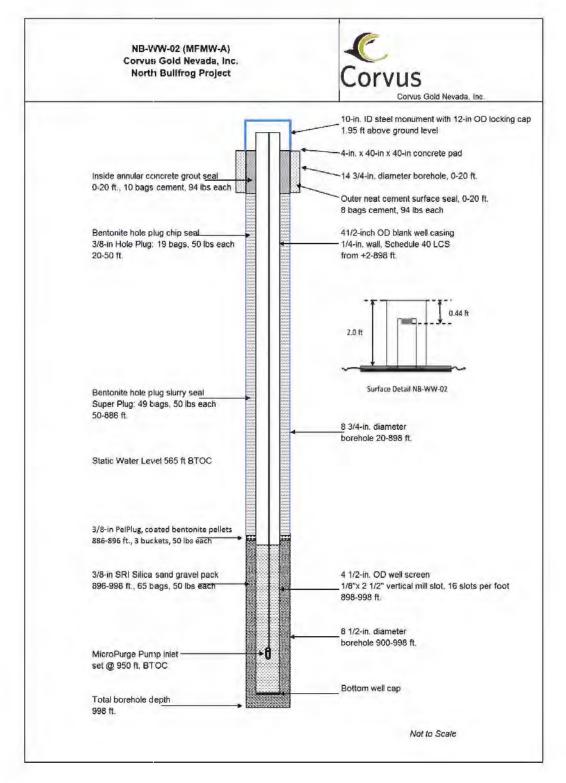


Figure 8-1 Completion Diagram for NB-WW-02



North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

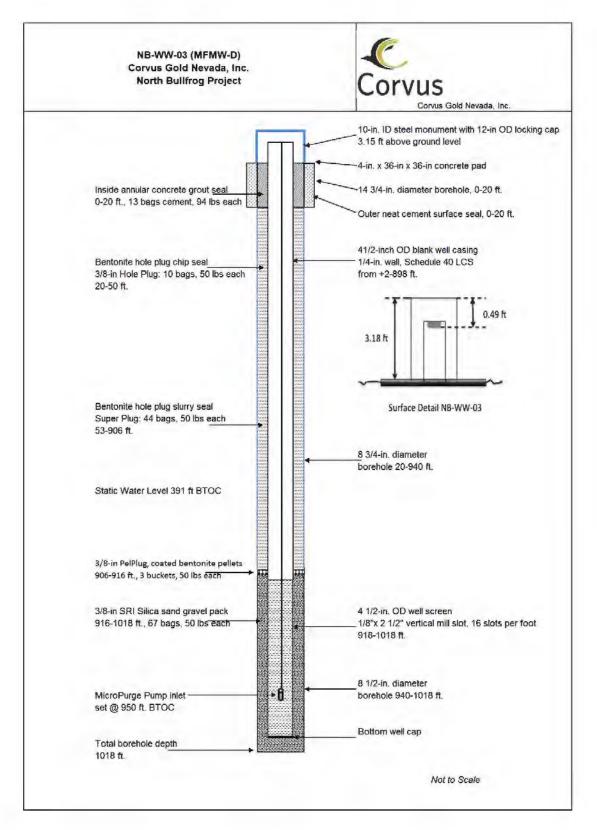


Figure 8-2 Completion Diagram for NB-WW-03



North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

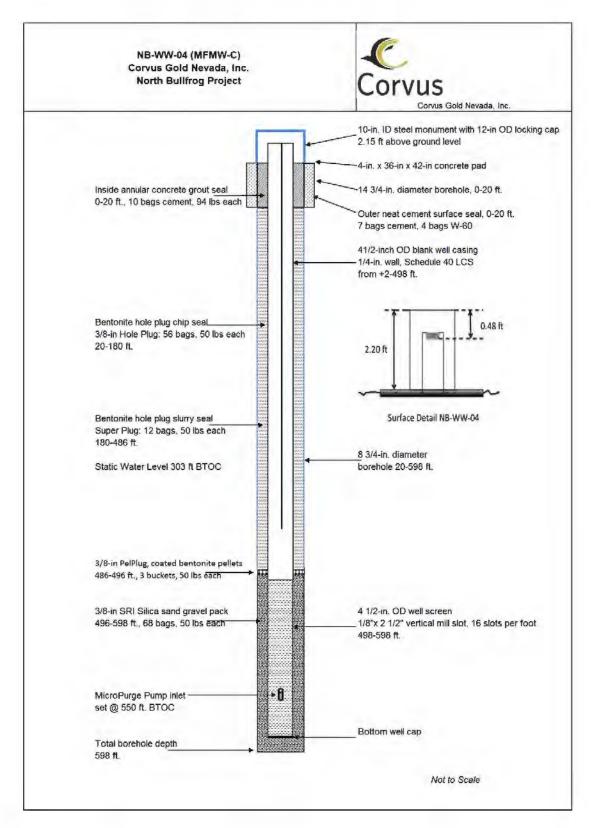


Figure 8-3 Completion Diagram for NB-WW-04



North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

Page |47

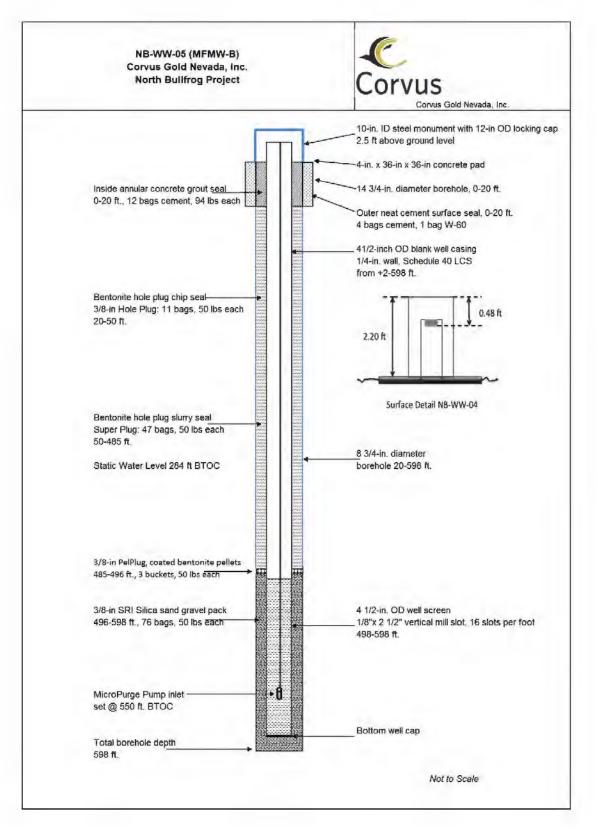


Figure 8-4 Completion Diagram for NB-WW-05



North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

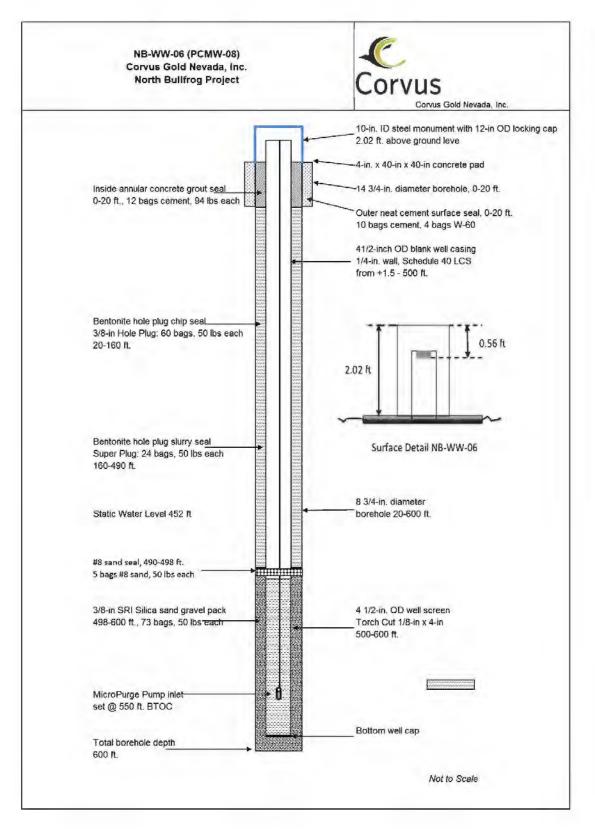
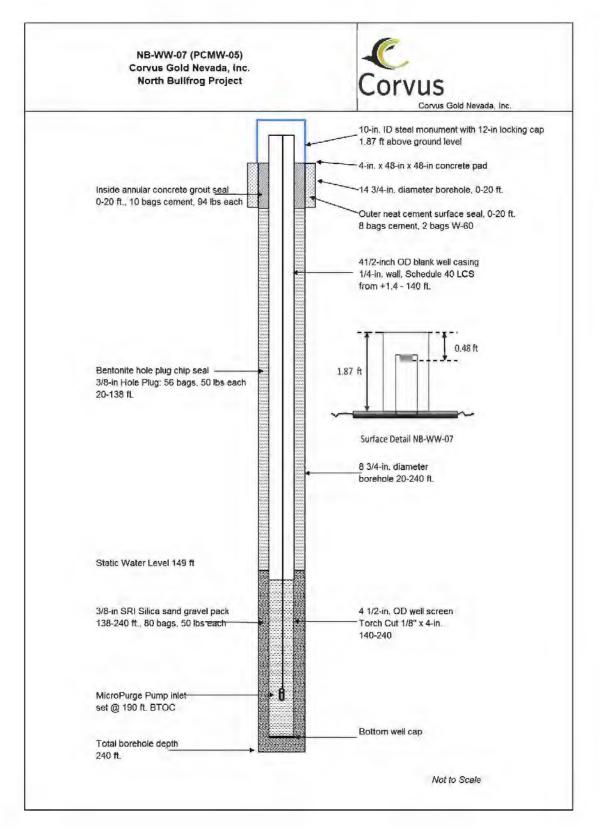


Figure 8-5 Completion Diagram for NB-WW-06



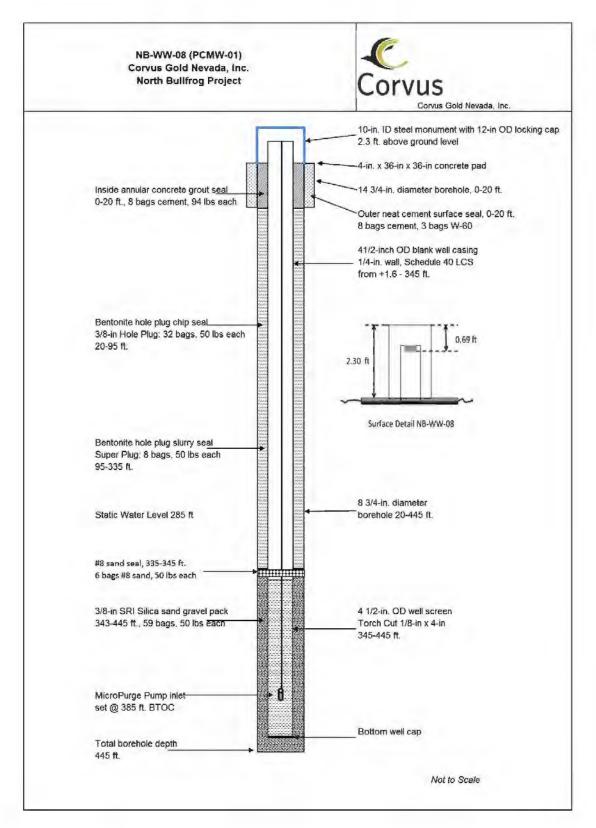
North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

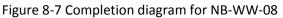






North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan







North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

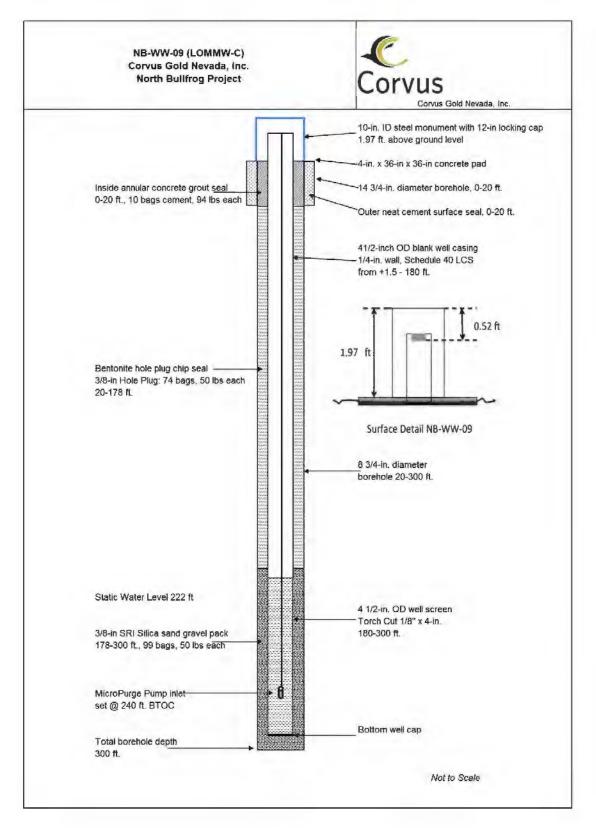


Figure 8-8 Completion Diagram for NB-WW-09



North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

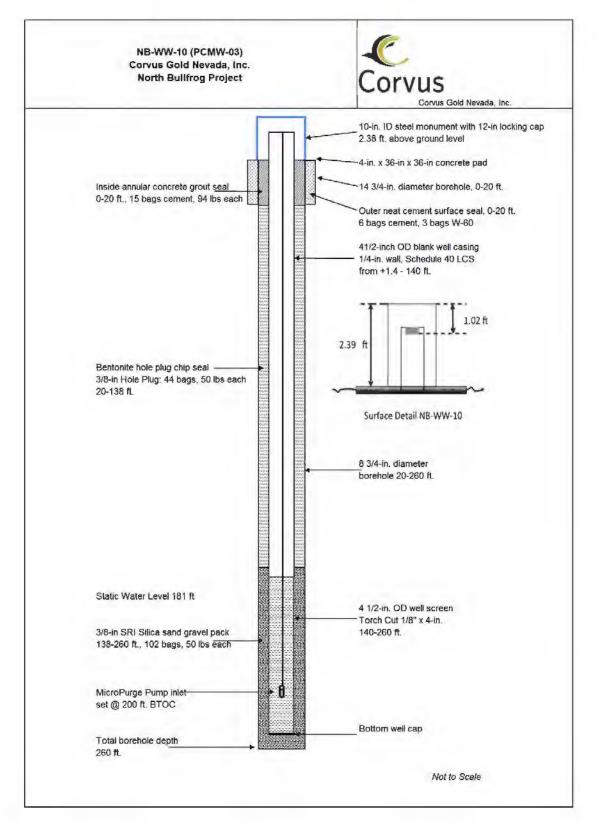


Figure 8-9 Completion Diagram for NB-WW-10



North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

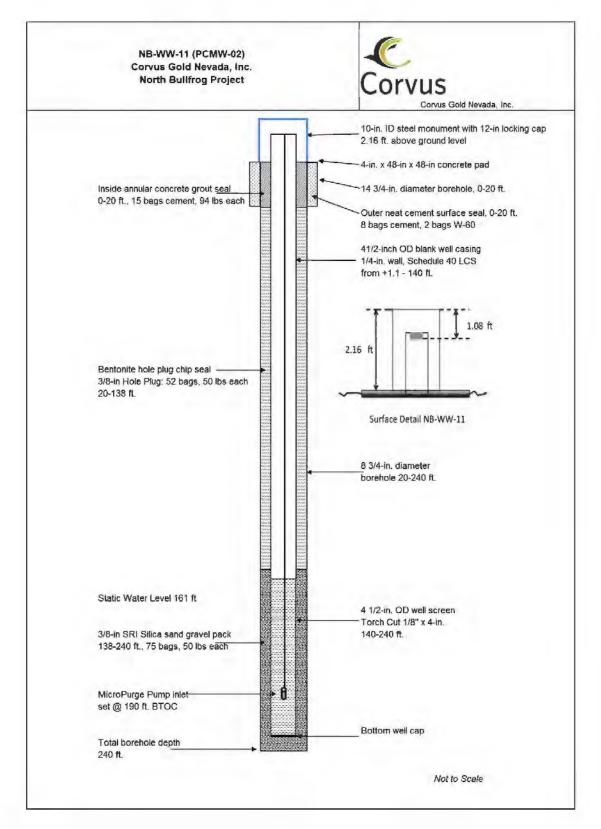


Figure 8-10 Completion Diagram for NB-WW-11



North Bullfrog Project – Baseline Surface and Ground Water Quality Sampling Plan

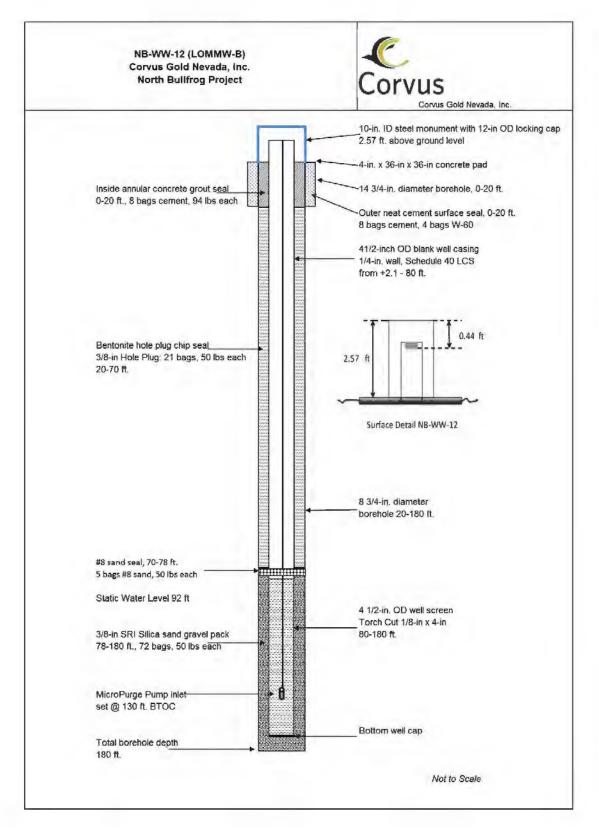


Figure 8-11 Completion Diagram for NB-WW-12

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3.		TYPE OF WOR			4.		PROPOSED USE 5. TYPE WELL
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6.		LITHOL	OGIC LC)G			8. WELL CONSTRUCTION
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Date	completed	1-15				. <u>, 1989</u> .	10. DRJLLER'S CERTIFICATION This well was drilled under my supervision and the report is true to the
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							Nevada contractor's driller's number issued by the Division of Water Resources
			LER TES	•			Nevada driller's license number issued by the Division of Water Resources, the on-site driller. 1559
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<u>G.P.</u>	M]	Draw down	1		nour	

(Res 11-85)

STATE OF NEVADA DIVISION OF WATER RESOURCES WELL DRILLER'S REPORT



PRINT OR TYPE ONLY DO NOT WRITE ON BACK Please complete this form It its entirety in accordance with NRS 534.170 and NAC 534.340

1. OWNER Beatty Water & Sanita MAILING ADDRESS P.O. Box 99,		89003	}	(## y5 = # #############################	ADDRESS	AT WELL LO	CATION 3	NOTICE OF I 7 Miles NW o		66659
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SE14, SE14, Sec. 24, TIOS, R47E

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Desiree Brantley

To: Cc: Subject: Reiner, Steven Jeff Sanders RE: Township and range errors found in well driller's reports

Yep, will do!

From: Reiner, Steven [mailto:srreiner@usgs.gov]
Sent: Monday, November 14, 2016 1:44 PM
To: Desiree Brantley
Cc: Jeff Sanders; Steven Reiner
Subject: Township and range errors found in well driller's reports

HI Desiree,

When looking over some well files, I noted errors in the legal description in the well driller's reports of three wells installed by USGS in 1997.

I have attached the well driller's report for the three wells with legal description errors. At the top of each of these well driller's reports I have written the correct legal description.

Is it possible for you to change the legal descriptions of these wells so that future users of the NDWR well database can find them?

Thanks,

Steve

--

P.S. GO BAND!!!

Steve Reiner United States Geological Survey 160 North Stephanie Street Henderson, NV 89074 (702)564-4608

Appendix C

Example Field Forms

Measuring Point description. Sounder: Flow_Meter: Transducer (serial no., gage factor)

Date Page Page Project Observer

Tir	ne	Flow Rate										De	pth to Wa	ter						
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 Page _____of_____

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 Project No. _____

 Observer ______

MONITORING DATA SHEET

IDENTIFIER_				 	Diagram:
Site Location Type: Measuring Point_					
weasuring Point_				 	
which is		above/below land sur	face (Source:)	
Measuring Point E	levation	amsl	(Source:)	
Total Well Depth_		Depth to	Pump Intake	 	
Perforated Interva	I	Packer [Depth	 	
Initial Water Level	/ Data / Time			 	

Date/Time	Remarks (Weather, Temperature, Sounder ID, etc.)

Page _____of_____ Date_____

MONITORING FIELD DATA SHEET

IDENTIFIER_____

Project No._____

Observer _____

Date/Time	Remarks (Weather, Temperature, Sounder ID, etc.)

Pageof
Date
Project No
Observer

FIELD NOTES

FIELD ACTIVITY_

Date/Time

REMARKS



ATTACHMENT B

NDWR WELL LOGS: B1: WW-21-02 B2: WW-21-03 B3: ER-OV-05 SE14, SE14, Sec. 24, TIOS, R47E

WHITE-DIVISION OF WATER RESO CANARY-CLIENT'S COPY PINK-WELL DRILLER'S COPY PRINT OR TYPE ONLY		ISION (OF WAT	NEVADA TER RESO TR'S REP	Log No. 69813				
DO NOT WRITE ON BACK		Ple			orm in its entirety in 4.170 and NAC 534.340				
I. OWNER U.S. C	2. N.	Sur.	xx-1		ADDRESS AT WELL LOCATION $ER - CV - RS$				
Carson City N 2. LOCATION SIU 4 N	U 5	3.0	От	10	N/S R	17 0	Nye		County
PERMIT NO.			Parcel No.			n/1	Subdivision Name		
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] Other			Municipal/	Industrial 🖸	Irrigation Monitor	Stock Ai		
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STATE OF NEVADA DIVISION OF WATER RESOURCES WELL DRILLER'S REPORT

C	FFICE USE ONLY
Log No.	121.975
Permit No.	130100
Basin No.	

PRINT OR TYPE IN BLACK INK ONLY DO NOT WRITE ON BACK

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

NOTICE OF INTENT NO. S2021-136 WELL NAME (If applicable) : WW-21-03

	vus Gold Inc 8 S. Ridgelir hlands Ranc	e Blvd, S			5 SA	NW of Beatty,	VELL LOCATION Corv	us Gold N. Bullfi	og Projec
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PERMIT/WAIVER NO.	W-2140 Water Resources		Current Parce		Longitude	-116.79643W	UTM N 409	7696 🛛 NAD	0 83/WGS 8
3. WORKED PER			4.	1	PROP	OSED USE	5.	WELL TYP	'E
New Well Deepen: Orig W	L#		Dom Dom	nestic		Irrigation	Monitor A	uger CRotary	X RVC
Replacement: Original well log #				ng / Dewa		Com / Ind	Stock Ai	r 🛛 Mud	Son
Recondition: Original well log #	English and the	and a star	X Test			Mun / QM		ther	
	HOLOGIC LO					NSTRUCTION			•
Material	Lost Circ.	Water	From	То	Depth Drille	ed: 520	Feet De	pth Cased: 52	0 Fee
Encountered	Circ.	Strata		0.10				,	
savage valley dacite		-	0	240			From	<u>To</u>	
rhyolite flow			240	280		26	Inches 0	Feet 60	
dacitic tuff			280	295		16	Inches 60	Feet 52	
rhyolite flow	<u></u>	1	295	345			Inches	Feet	Fee
dacitic tuff		1.1	345	390			CASING SCHEDUL	1	1
alternating quartz and welded	uff	89 - 9 - 1	390		Size O.D.	Weight/Ft.	Wall Thickness	From	То
and sierra blanca tuff		1	1.11	520	(Inches)	(Pounds)	(Inches)	(Feet)	(Feet
	and the second				18	70.59	.375	0	60
		ente est	the state		8.625	22.36	.25	+1.5	520
in i	n an San ar	and the se	aller and	and second	2.375	3.65	.154	+1.5	510
A A Subar		1.00					ANNULAR MATERIALS		
in in	and weather &	123			Sanitary Se				
					Neat Ceme	ent		Pumped 🖾	Poured
1.1		1000			Cement Gr			Pumped	Poured
	1.42.17	1			Concrete G	Grout		Pumped	Poured
en jar an jar al lar		1	the server		Bentonite C	Chips	to	Pumped	Poured
attern Entre					Gravel Pac	k [> 0.2 in.] 362	to 520	🛛 Pumped	Poured
allies Lind sussis		2 2 2 2 2 3	й цё Е		Sand Pack	[< 0.2 in.] 359	to 362	🛛 Pumped 🛛	Poured
STA STA					🖾 Other, expl	ain: 357	to 359 tonite pellets	Pumped	Poured
DCNR/DWR/SNBC			102				PERFORATIONS:		
RECEIVED			1.00		Type of per	foration: Lou	lvers		
MAY 0 5 2021					Size of per	foration: 0.0			
WIAI 0 0 2021		1.1			From			510	Fee
					From		Feet To		Fee
					Erom				
Date started:	7-Apr		, 20	21					
	7-Apr	28-	. 20	21	From		Feet To		Fee
7. WATER QL					10.		DRILLER'S CERTIFICA	ΓΙΟΝ	
	336	Feet bel	ow land su	urface			y supervision. This report is t		
Artesian Flow: N/A	G.P.M.		I/A	P.S.I.	knowledge.				
Water Temperature: 68	° Fahren	18 C 19 C			Name -	Boart Longyea	Contractor		
Water Quality:	Go	ou			Address	2455 \$ 2600 \	, West Valley City, UT,	9/110	
8. WE	LL TEST DAT	Δ			- Address	2455 5 5000 4	Contractor	04115	
Test Method: Dailer	Pump	x Air Li	ft		Phone	775-748-1960			
G.P.M.	Draw Down		Recorded	Time	and the second	ntractor's license r	umber		
	Feet Below Static)	(Hours))	as issued b	by the State Contra	ctor's Board:	0021976	
air lift 49.6	23.1	Sec. Marca an	5	land and state			umber as issued by the	1	
40.0					Nevada Div	vision of Water Rea	sources (on-site driller):	2233	
					Signadi	1	1. 10	•	
					Signed:	A CAR	inn		
					-	By dril	er performing actual drilling on site or o	contractor	
					Date:	By drill	er performing actual drilling on site or o 4/20/2021	contractor	
(Rev. 04-16)		USE	ADDITIO	NAL SHE	Date:		in the second		f pg.
		USE	ADDITIO		ETS IF NECES	SARY	4/20/2021		f pg.
		USE	ADDITIO		ETS IF NECES	SARY	4/20/2021		f pg.
		USE	ADDITIO		ETS IF NECES	SARY	in the second		f pg.

FORM 4013

STATE OF NEVADA DIVISION OF WATER RESOURCES WELL DRILLER'S REPORT

OFFICE USE ONLY Log No. Permit No. Basin No.

PRINT OR TYPE IN BLACK INK ONLY
DO NOT WRITE ON BACK

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

NOTICE OF INTENT NO. S2021-137 WELL NAME (If applicable): WW-21-02

L DE ILO Ingrands Stander, CO 20129 Solidiver Andre: County: Proposition: 2 DES LOCATION: SE IV. W. 28 Sec. U. VG 4: 64 Linkines: 37.33515 N. UTME County:: No. MAD 27 PERMITWANEEN.NO. W2338 Carrent Precision: Carrent Precision: County:: No. No. 27 Bedre View III Desert: Of Wills Onnestic Con. Ind Marce III: No. Marce IIII: No. Marce III: No. Marce IIII: No. Marce IIII: No. Marce IIII: No. Marce IIIIII: No. Marce IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	1. OWNER/CLIENT NAME Corvus Gold Inc. MAILING ADDRESS 9088 S. Ridgeline Blvd						DETAILED ADDRESS AT WELL LOCATION Corvus Gold North Bullfrog Project, 11 Miles NW of Beatty, NV					
2. PLENCATION Set 0.0 MQ. 4.6. E Londors	Ste 103			, CO 80	129	Subdivision N	lame:		Co	ounty:	Nye	
PERMIT/MAVER NO. W-2138	2. PLS LOCATION SE 1/4 NW					Latitude	37.03615 N	UTM E			0 27	
New Will Despension (Despension) Wills Despension Monder Monder Numerical Model Numerical Numer	PERMIT/WAIVER NO. V	/-2138 Resources		Surrent Parce	No.	Longitude	-116.79590 W	UTM N				
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□ Represente: Original well og # □ Mining / Devater □ Con / Ind □ Stock □ Ar ■ Mud □ Sock 3 □ LTHOLOGIC LOG □ mining / Devater □ Mining / Dev	New Well Deepen: Orig WL#			Dom	estic		Irrigation	Monitor	Auger	C Rotary	RVC	
Image: Construction: Original well big # Image: Construction Image: Construction Image: Construction Other 3 LITHO.0GL LOG Material Loss Peer Construction Depth Dailed: 485 Feer Depth Dailed: 485 Feer Depth Dailed: 485 Feer HOLE DIAMETER (RIT SIZE) Brown, Black, White rock and clay 0 105 245 225 16 where 60 Feet 485 Feet					ng / Dewa			discourse in the second s				
S. LITHOLOGIC LOG Part L CONSTRUCTION Material Clost Strata From To Depth Dated: 485 Feet Depth Dated: 485 Feet Singer Jock and some gray clay 105 2245 325 333 Inches 0 Feet				-		Constant and a second sec				in a second		
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Image: starter for the completed Image: starter for the	Grey and black rock			445	485	(Inches)	(Pounds)	(Inch	es)	(Feet)	(Feet)	
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Type of perforation: Louvers JUN 2 4 2021	DCNR/DWR/SNBO							PERFORAT	IONS:			
JUN 2 4 2021						Type of pe	rforation: Lou	ivers				
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By driller performing actual drilling on site or contractor Date: 4/29/2021			-			Signed	1	let	C-	-		
						orginoo.	By drill	er performing actual drillin	g on site or contracto	×		
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	Rev. 04-16)		LISE				SSARY	-112		00 0	fna	

(Rev. 04-16)



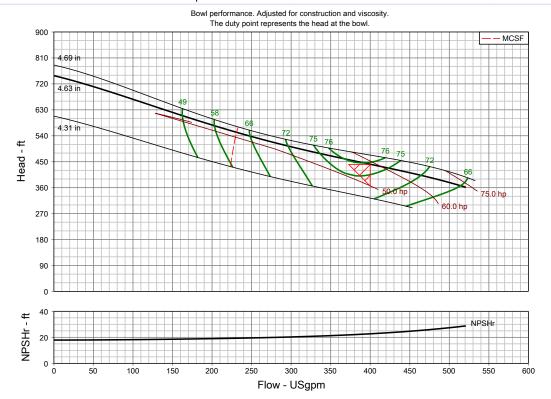
ATTACHMENT C

PUMP SPECIFICATIONS



Pump Performance Datasheet American-Marsh Pumps Quotation System 23.2.0

Item number Service Quantity Quote number	: 001 : : 1 : 1451351	Stages Based on curve number Basic model number	: 6WC : 11 : 6WC : - : 20 Sep 2023 5:49 PM
Operating Conditions		Liquid	
Flow, rated Differential head / pressure, rated (reques Differential head / pressure, rated (actual) Suction pressure, rated / max NPSH available, rated Site Supply Frequency Performance	: 448.9 ft : 0.00 / 0.00 psi.g : Ample : 60 Hz	Liquid type Additional liquid description Solids diameter, max Solids concentration, by volume Temperature, max Fluid density, rated / max Viscosity, rated	: Water : : 0.00 in : 0.00 % : 68.00 deg F : 1.000 / 1.000 SG : 1.00 cP
Speed criteria	: Synchronous	Vapor pressure, rated	: 0.34 psi.a
Speed, rated	: 3500 rpm	Material	
Impeller diameter, rated	: 4.63 in	Material selected	: Cast iron - Standard
Impeller diameter, maximum	: 4.69 in	Pressure Data	
Impeller diameter, minimum	: 4.31 in	Maximum working pressure	: See the Additional Data page
Efficiency (bowl / pump)	: 75.85 / - %	Maximum allowable working pressu	Ire : See the Additional Data page
PEI (CL)	:-	Maximum allowable suction pressu	re : N/A
NPSH required / margin required	: 22.72 / 0.50 ft	Hydrostatic test pressure	: See the Additional Data page
Ns (total flow) / Nss (imp. eye flow)	: 4,033 / 6,701 US Units	Driver & Power Data (@Max dens	sity)
MCSF	: 231.0 USgpm	Driver sizing specification	: Maximum power
Head, maximum, rated diameter	: 748.6 ft	Margin over specification	: 0.00 %
Head rise to shutoff (bowl / pump)	: 69.69 / - %	Service factor	: 1.00
Flow, best eff. point (bowl / pump)	: 379.5 / - USgpm	Power, hydraulic	: 44.55 hp
Flow ratio, rated / BEP (bowl / pump)	: 105.40 / - %	Power (bowl / pump)	: 58.73 / - hp
Diameter ratio (rated / max)	: 98.66 %	Power, maximum, rated diameter	: 73.08 hp
Head ratio (rated dia / max dia)	: 93.29 %	Minimum recommended motor ratir	ng : 75.00 hp / 55.93 kW
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00		
Selection status	: Acceptable		





ATTACHMENT D

WATER QUALITY RESULTS:

D1: WW-21-02

WW-21-02

Description	Reference Value	WW-21-02	WW-21-02	WW-21-02
Description	(mg\L)	Week 1	Week 4	End of Test
Name of NV Certified Lab		WETLAB	WETLAB	WETLAB
Lab Reference #		23110305-001	23120006-001	23120186-001
Sample Date		11/9/2023	11/29/2023	12/6/2023
Lab Test Date		11/15/2023	12/7/2023	12/11/2023
Sampled By		JE	JE	JE
Alkalinity, Bicarbonate (as		220	210	220
Alkalinity, Total (as CaCO₃)		220	210	220
Aluminum	0.2	<0.050	<0.050	<0.050
Antimony	0.006	<0.0025	<0.0025	<0.0025
Arsenic	0.01	0.015	0.013	0.013
Barium	2	<0.020	<0.020	<0.020
Beryllium	0.004	<0.0010	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010	<0.0010
Calcium		82	84	81
Chloride	400	35	37	35
Chromium	0.1	<0.0050	<0.0050	<0.0050
Copper	1	<0.040	<0.040	<0.040
Fluoride	4	<1.0	<1.0	0.63
Iron	0.6	<0.10	<0.10	<0.10
Lead	0.015	<0.0025	<0.0025	<0.0025
Magnesium	150	15	15	14
Manganese	0.1	0.21	0.20	0.19
Mercury	0.002	<0.00045	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.030	<0.030
Nitrate + Nitrite, Total (as N)	10	<0.10	<0.10	<0.10
Nitrogen, Total (as N)	10	<0.50	<0.50	<0.50
pH (standard units)	6.5 - 8.5	7.78	7.66	7.76
Potassium		5.9	6	5.7
Selenium	0.05	<0.0050	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050	<0.0050
Sodium		76	71	71
Sulfate	500	170	170	170
Thallium	0.002	<0.0010	<0.0010	<0.0010
Total Dissolved Solids	1000	520	500	540
Uranium, Total	0.03	0.0069	0.0067	0.0064
WAD Cyanide	0.2	<0.010	<0.010	<0.010
Zinc	5	<0.020	<0.020	<0.020



ATTACHMENT D

WATER QUALITY RESULTS:

D2: WW-21-03

WW-21-03

	Reference	WW-21-03	WW-21-03
Description	Value	Week 1	Week 4
	(mg\L)	VVEEK I	VVEEK 4
Name of NV Certified Lab		WETLAB	WETLAB
Lab Reference #		24010564-001	24020574-001
Sample Date		1/24/2024	2/20/2024
Lab Test Date		1/29/2024	2/27/2024
Sampled By		JE	DR
Alkalinity, Bicarbonate (as		160	170
Alkalinity, Total (as CaCO ₃)		160	170
Aluminum	0.2	<0.050	<0.050
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	<0.0050	0.017
Barium	2	<0.020	<0.020
Beryllium	0.004	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010
Calcium		87	92
Chloride	400	30	29
Chromium	0.1	<0.0050	<0.0050
Copper	1	<0.040	<0.040
Fluoride	4	<1.0	<1.0
Iron	0.6	<0.10	<0.10
Lead	0.015	<0.0025	<0.0025
Magnesium	150	15	16
Manganese	0.1	0.042	<0.010
Mercury	0.002	0.00047	<0.00045
Nickel	0.1	<0.030	<0.030
Nitrate + Nitrite, Total (as N)	10	<0.10	<0.10
Nitrogen, Total (as N)	10	<0.50	<0.50
pH (standard units)	6.5 - 8.5	7.51	8.02
Potassium		4.2	4.1
Selenium	0.05	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050
Sodium		50	52
Sulfate	500	210	200
Thallium	0.002	<0.0010	<0.0010
Total Dissolved Solids	1000	510	520
Uranium, Total	0.03	0.0084	0.0084
WAD Cyanide	0.2	<0.010	<0.010
Zinc	5	<0.020	<0.020



ATTACHMENT D

WATER QUALITY RESULTS: D3: SPRINGS

North Mud Spring

	Reference		
Description		North Mud	North Mud
Description	Value	Week 1	Week 4
	(mg\L)		
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		24010562-001	24020442-001
Sample Date		1/23/2024	2/14/2024
Lab Test Date		1/29/2024	2/29/2024
Sampled By		JE	JE
Alkalinity, Bicarbonate		120	160
Alkalinity, Total (as		120	160
Aluminum	0.2	0.14	<0.05
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.011	0.010
Barium	2	<0.020	<0.02
Beryllium	0.004	<0.0010	<0.001
Cadmium	0.005	<0.0010	<0.001
Calcium		11	26
Chloride	400	28.9	59
Chromium	0.1	<0.0050	<0.005
Copper	1	<0.040	<0.04
Fluoride	4	0.55	<1
Iron	0.6	0.16	<0.1
Lead	0.015	<0.0025	<0.0025
Magnesium	150	1.84	3.9
Manganese	0.1	0.014	<0.01
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	< 0.03
Nitrate + Nitrite, Total	10	2.9	6.9
Nitrogen, Total (as N)	10	3.2	7.6
pH (standard units)	6.5 - 8.5	7.98	7.87
Potassium		1.8	1.9
Selenium	0.05	<0.0050	<0.005
Silver	0.1	<0.00500	<0.005
Sodium		76	110
Sulfate	500	29	58
Thallium	0.002	<0.0010	<0.001
Total Dissolved Solids	1000	270	400
Uranium, Total	0.03	0.006	0.016
WAD Cyanide	0.2	<0.010	< 0.01
Zinc	5	<0.020	< 0.02

Mud Spring

Description	Reference Value	Mud Spring Week 1	Mud Spring Week 4
	(mg\L)		
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		24010562-002	24020442-002
Sample Date		1/23/2024	2/14/2024
Lab Test Date		1/29/2024	2/29/2024
Sampled By		JE	JE
Alkalinity,		120	150
Alkalinity, Total (as		120	150
Aluminum	0.2	0.062	<0.05
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.007	0.008
Barium	2	<0.020	<0.02
Beryllium	0.004	<0.0010	< 0.001
Cadmium	0.005	<0.0010	< 0.001
Calcium		13	18
Chloride	400	35.2	42
Chromium	0.1	<0.0050	<0.005
Copper	1	<0.040	< 0.04
Fluoride	4	0.43	0.36
Iron	0.6	<0.10	<0.1
Lead	0.015	<0.0025	<0.0025
Magnesium	150	2.34	3.5
Manganese	0.1	< 0.010	< 0.01
Mercury	0.002	0.0006	<0.00045
Nickel	0.1	<0.030	< 0.03
Nitrate + Nitrite, Total	10	3.2	4.7
Nitrogen, Total (as N)	10	3.6	5
pH (standard units)	6.5 - 8.5	7.77	8.04
Potassium		4.7	4.6
Selenium	0.05	<0.0050	< 0.005
Silver	0.1	< 0.00500	< 0.005
Sodium		77	99
Sulfate	500	33	40
Thallium	0.002	< 0.0010	< 0.001
Total Dissolved Solids	1000	300	350
Uranium, Total	0.03	< 0.0050	0.0079
WAD Cyanide	0.2	<0.010	< 0.01
Zinc	5	< 0.020	<0.02

Springdale Spring

Π			
	Reference		
Description	Value	Springdale Spring	Springdale Spring
	(mg\L)	Week 1	Week 4
	(8 (=)		
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		24010562-006	24020442-003
Sample Date		1/23/2024	2/14/2024
Lab Test Date		1/29/2024	2/29/2024
Sampled By		JE	JE
Alkalinity,		250	220
Alkalinity, Total (as		250	220
Aluminum	0.2	<0.050	<0.05
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.048	0.030
Barium	2	<0.020	<0.02
Beryllium	0.004	<0.0010	<0.001
Cadmium	0.005	<0.0010	<0.001
Calcium		35	31
Chloride	400	74.8	51
Chromium	0.1	<0.0050	<0.005
Copper	1	<0.040	<0.04
Fluoride	4	2.3	1.8
Iron	0.6	<0.10	0.28
Lead	0.015	<0.0025	<0.0025
Magnesium	150	6.73	5.8
Manganese	0.1	<0.010	<0.01
Mercury	0.002	0.00095	<0.00045
Nickel	0.1	<0.030	<0.03
Nitrate + Nitrite,	10	0.58	0.83
Nitrogen, Total (as N)	10	2.5	1.9
pH (standard units)	6.5 - 8.5	7.63	7.89
Potassium		18	11
Selenium	0.05	<0.0050	<0.005
Silver	0.1	<0.00500	<0.005
Sodium		150	130
Sulfate	500	120	87
Thallium	0.002	<0.0010	< 0.001
Total Dissolved Solids	1000	610	500
Uranium, Total	0.03	0.008	0.0073
WAD Cyanide	0.2	<0.010	<0.01
Zinc	5	<0.020	<0.02

Wehrly Spring

	Referenc		
	e Value	Wehrly Spring	Wehrly Spring
Description		Week 1	Week 4
	(mg\L)		
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		24010562-008	24020442-004
Sample Date		1/23/2024	2/14/2024
Lab Test Date		1/29/2024	2/29/2024
Sampled By		JE	JE
Alkalinity, Bicarbonate		300	310
Alkalinity, Total (as		300	310
Aluminum	0.2	<0.050	<0.05
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.024	0.025
Barium	2	0.026	0.029
Beryllium	0.004	<0.0010	< 0.001
Cadmium	0.005	<0.0010	< 0.001
Calcium		40	44
Chloride	400	81.8	88
Chromium	0.1	<0.0050	<0.005
Copper	1	<0.040	<0.04
Fluoride	4	3.4	3.1
Iron	0.6	<0.10	<0.1
Lead	0.015	<0.0025	<0.0025
Magnesium	150	7.44	8.2
Manganese	0.1	<0.010	<0.01
Mercury	0.002	0.0008	<0.00045
Nickel	0.1	<0.030	<0.03
Nitrate + Nitrite, Total	10	1	1.1
Nitrogen, Total (as N)	10	1.1	1.2
pH (standard units)	6.5 - 8.5	7.86	7.93
Potassium		11.0	11.0
Selenium	0.05	<0.0050	<0.005
Silver	0.1	<0.00500	<0.005
Sodium		220	240
Sulfate	500	190	200
Thallium	0.002	<0.0010	<0.001
Total Dissolved Solids	1000	770	740
Uranium, Total	0.03	0.0059	0.0064
WAD Cyanide	0.2	<0.010	<0.01
Zinc	5	<0.020	<0.02

North Goss Spring

	_		
	Referenc	North Goss	North Goss
Description	e Value		
	(mg\L)	Spring Week 1	Spring Week 4
Name of NV Certified Lab		WETLAB	WETLAB
Lab Reference #		24010562-005	24020442-005
Sample Date		1/23/2024	2/14/2024
Lab Test Date		1/29/2024	2/29/2024
Sampled By		JE	JE
Alkalinity, Bicarbonate		150	160
Alkalinity, Total (as		150	160
Aluminum	0.2	<0.050	<0.05
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.0073	0.0082
Barium	2	<0.020	<0.02
Beryllium	0.004	<0.0010	<0.001
Cadmium	0.005	<0.0010	<0.001
Calcium		17	18
Chloride	400	45.7	45
Chromium	0.1	<0.0050	<0.005
Copper	1	<0.040	<0.04
Fluoride	4	2.9	2.5
Iron	0.6	<0.10	<0.1
Lead	0.015	<0.0025	<0.0025
Magnesium	150	1.24	1.3
Manganese	0.1	<0.010	<0.01
Mercury	0.002	0.00054	<0.00045
Nickel	0.1	<0.030	<0.03
Nitrate + Nitrite, Total (as	10	0.51	0.58
Nitrogen, Total (as N)	10	0.52	0.59
pH (standard units)	6.5 - 8.5	8.06	8.14
Potassium		4.8	5.2
Selenium	0.05	<0.0050	<0.005
Silver	0.1	<0.00500	<0.005
Sodium		110	120
Sulfate	500	82	79
Thallium	0.002	<0.0010	<0.001
Total Dissolved Solids	1000	380	410
Uranium, Total	0.03	0.0092	0.0093
WAD Cyanide	0.2	<0.010	< 0.01
Zinc	5	<0.020	<0.02

Burro Spring

	Referenc	Burro Spring	Burro Spring
Description	e Value		
	(mg\L)	Week 1	Week 4
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		24010562-003	24020442-006
Sample Date		1/23/2024	2/14/2024
Lab Test Date		1/29/2024	2/29/2024
Sampled By		JE	JE
Alkalinity, Bicarbonate		480	530
Alkalinity, Total (as		540	530
Aluminum	0.2	0.071	<0.05
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.037	0.036
Barium	2	0.021	0.022
Beryllium	0.004	<0.0010	<0.001
Cadmium	0.005	<0.0010	< 0.001
Calcium		25	33
Chloride	400	143	140
Chromium	0.1	<0.0050	<0.005
Copper	1	<0.040	<0.04
Fluoride	4	6.2	4
Iron	0.6	<0.10	<0.1
Lead	0.015	<0.0025	<0.0025
Magnesium	150	15.8	17
Manganese	0.1	0.01	<0.01
Mercury	0.002	0.00048	<0.00045
Nickel	0.1	<0.030	<0.03
Nitrate + Nitrite, Total	10	<0.10	<0.1
Nitrogen, Total (as N)	10	2.2	0.65
pH (standard units)	6.5 - 8.5	8.65	8.25
Potassium		21.0	17.0
Selenium	0.05	<0.0050	<0.005
Silver	0.1	<0.00500	<0.005
Sodium		530	500
Sulfate	500	470	410
Thallium	0.002	<0.0010	<0.001
Total Dissolved Solids	1000	1400	1400
Uranium, Total	0.03	0.018	0.016
WAD Cyanide	0.2	<0.010	<0.01
Zinc	5	<0.020	<0.02

Brian Spring

Π	2.6		
	Reference		
Description	Value	Brian Spring	Brian Spring
	(mg\L)		
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		24010562-004	24020442-007
Sample Date		1/23/2024	2/14/2024
Lab Test Date		1/29/2024	2/29/2024
Sampled By		JE	JE
Alkalinity, Bicarbonate		130	140
Alkalinity, Total (as		130	140
Aluminum	0.2	<0.050	<0.05
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.018	0.018
Barium	2	<0.020	<0.02
Beryllium	0.004	<0.0010	< 0.001
Cadmium	0.005	<0.0010	<0.001
Calcium		25	28
Chloride	400	21.1	25
Chromium	0.1	<0.0050	<0.005
Copper	1	<0.040	<0.04
Fluoride	4	0.72	0.67
Iron	0.6	<0.10	<0.1
Lead	0.015	<0.0025	<0.0025
Magnesium	150	3.87	4.2
Manganese	0.1	<0.010	<0.01
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.03
Nitrate + Nitrite, Total	10	3.1	3.8
Nitrogen, Total (as N)	10	3.2	4.1
pH (standard units)	6.5 - 8.5	7.71	7.91
Potassium		3.7	4.1
Selenium	0.05	<0.0050	<0.005
Silver	0.1	<0.00500	<0.005
Sodium		53	63
Sulfate	500	23	31
Thallium	0.002	<0.0010	<0.001
Total Dissolved Solids	1000	250	290
Uranium, Total	0.03	<0.0050	0.006
WAD Cyanide	0.2	<0.010	<0.01
Zinc	5	<0.020	<0.02

Lower Indian Spring

0	-		
	Referenc	Lower Indian	Lower Indian
Description	e Value		
	(mg\L)	Spring Week 1	Spring Week 4
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		24010562-007	24020442-008
Sample Date		1/23/2024	2/14/2024
Lab Test Date		1/29/2024	2/29/2024
Sampled By		JE	ĴE
Alkalinity,		110	120
Alkalinity, Total (as		110	120
Aluminum	0.2	<0.050	<0.05
Antimony	0.006	< 0.0025	< 0.0025
Arsenic	0.01	0.007	0.0051
Barium	2	<0.020	<0.02
Beryllium	0.004	< 0.0010	< 0.001
Cadmium	0.005	< 0.0010	< 0.001
Calcium		6.6	7.3
Chloride	400	15.3	15
Chromium	0.1	<0.0050	<0.005
Copper	1	<0.040	<0.04
Fluoride	4	0.44	0.36
Iron	0.6	<0.10	<0.1
Lead	0.015	<0.0025	<0.0025
Magnesium	150	0.699	0.73
Manganese	0.1	<0.010	<0.01
Mercury	0.002	0.00046	<0.00045
Nickel	0.1	<0.030	<0.03
Nitrate + Nitrite, Total	10	2.2	2.5
Nitrogen, Total (as N)	10	2.2	2.5
pH (standard units)	6.5 - 8.5	7.64	7.95
Potassium		1.4	1.5
Selenium	0.05	<0.0050	<0.005
Silver	0.1	<0.00500	<0.005
Sodium		63	69
Sulfate	500	19	19
Thallium	0.002	<0.0010	<0.001
Total Dissolved Solids	1000	210	210
Uranium, Total	0.03	<0.0050	<0.005
WAD Cyanide	0.2	<0.010	<0.01
Zinc	5	<0.020	<0.02

North Mud Spring

	Reference		
Description		North Mud	North Mud
Description	Value	Week 1	Week 4
	(mg\L)		
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		23110382-007	23120005-001
Sample Date		11/14/2023	11/29/2023
Lab Test Date		11/20/2023	12/7/2023
Sampled By		JE	JE
Alkalinity, Bicarbonate		120	130
Alkalinity, Total (as		120	130
Aluminum	0.2	<0.050	0.13
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.009	0.011
Barium	2	<0.020	<0.020
Beryllium	0.004	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010
Calcium		8	13
Chloride	400	28	30.6
Chromium	0.1	<0.0050	<0.0050
Copper	1	<0.040	<0.040
Fluoride	4	0.5	0.62
Iron	0.6	<0.10	0.19
Lead	0.015	<0.0025	<0.0025
Magnesium	150	1.6	1.9
Manganese	0.1	<0.010	<0.010
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.030
Nitrate + Nitrite, Total	10	3.5	2.9
Nitrogen, Total (as N)	10	3.6	3.5
pH (standard units)	6.5 - 8.5	7.84	7.93
Potassium		1.1	1.9
Selenium	0.05	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050
Sodium		70	79
Sulfate	500	28	30
Thallium	0.002	<0.0010	<0.0010
Total Dissolved Solids	1000	220	280
Uranium, Total	0.03	0.0052	0.0053
WAD Cyanide	0.2	<0.010	<0.010
Zinc	5	<0.020	<0.020

Mud Spring

Description	Reference Value (mg\L)	Mud Spring Week 1	Mud Spring Week 4
Name of NV Certified Lab		WETLAB	WETLAB
Lab Reference #		23110382-006	23120005-002
Sample Date		11/14/2023	11/29/2023
Lab Test Date		11/20/2023	12/7/2023
Sampled By		JE	JE
Alkalinity, Bicarbonate (as		120	120
CaCO ₃)			
Alkalinity, Total (as CaCO ₃)		120	120
Aluminum	0.2	<0.050	<0.050
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.007	0.006
Barium	2	<0.020	<0.020
Beryllium	0.004	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010
Calcium		13	11
Chloride	400	35	35.5
Chromium	0.1	<0.0050	<0.0050
Copper	1	<0.040	<0.040
Fluoride	4	0.41	0.47
Iron	0.6	<0.10	<0.10
Lead	0.015	<0.0025	<0.0025
Magnesium	150	2.3	2.2
Manganese	0.1	<0.010	<0.010
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.030
ivitrate + ivitrite, rotar (as	10	3.3	3.5
Nitrogen, Total (as N)	10	3.5	3.6
pH (standard units)	6.5 - 8.5	7.62	7.81
Potassium		4.7	4.8
Selenium	0.05	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050
Sodium		82	77
Sulfate	500	33	33
Thallium	0.002	<0.0010	<0.0010
Total Dissolved Solids	1000	280	280
Uranium, Total	0.03	<0.0050	<0.0050
WAD Cyanide	0.2	<0.010	<0.010
Zinc	5	<0.020	<0.020

Springdale Spring

	Reference		
		Springdale Spring	Springdale Spring
Description	Value	Week 1	Week 4
	(mg\L)	WEEKI	WCCK 4
		WETLAB	WETLAB
Lab Reference #		23110382-001	23120005-006
Sample Date		11/10/2023	11/29/2023
Lab Test Date		11/20/2023	12/7/2023
Sampled By		JE	JE
Aikannity, Aikathnty,*rJcai (as		210	210
		210	210
Aluminum	0.2	<0.050	<0.050
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.024	0.030
Barium	2	<0.020	<0.020
Beryllium	0.004	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010
Calcium		28	28
Chloride	400	45	50.3
Chromium	0.1	<0.0050	<0.0050
Copper	1	<0.040	<0.040
Fluoride	4	2	2
Iron	0.6	<0.10	<0.10
Lead	0.015	<0.0025	<0.0025
Magnesium	150	5	5.3
Manganese	0.1	<0.010	<0.010
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.030
	10	0.97	0.75
Nitrogen, Total (as N)	10	1.2	1
pH (standard units)	6.5 - 8.5	7.64	7.79
Potassium		9.6	11
Selenium	0.05	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050
Sodium		110	120
Sulfate	500	68	75
Thallium	0.002	<0.0010	<0.0010
Total Dissolved Solids	1000	460	460
Uranium, Total	0.03	0.0089	0.0071
WAD Cyanide	0.2	<0.010	<0.010
Zinc	5	<0.020	<0.020

Wehrly Spring

I	Referenc		
Description	e Value	Wehrly Spring	Wehrly Spring
Description	(mg\L)	Week 1	Week 4
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		23110382-002	23120005-007
Sample Date		11/14/2023	11/29/2023
Lab Test Date		11/20/2023	12/7/2023
Sampled By		JE	JE
Alkalinity, Bicarbonate		300	300
Alkalinity, Total (as		300	300
Aluminum	0.2	<0.050	<0.050
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.022	0.025
Barium	2	0.023	0.025
Beryllium	0.004	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010
Calcium		43	42
Chloride	400	87	89.2
Chromium	0.1	<0.0050	<0.0050
Copper	1	<0.040	<0.040
Fluoride	4	3.5	3.6
Iron	0.6	<0.10	<0.10
Lead	0.015	<0.0025	<0.0025
Magnesium	150	7.5	7.8
Manganese	0.1	<0.010	<0.010
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.030
Nitrate + Nitrite, Total	10	1.4	1.1
Nitrogen, Total (as N)	10	1.4	1.1
pH (standard units)	6.5 - 8.5	7.76	7.85
Potassium		13.0	15.0
Selenium	0.05	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050
Sodium		220	230
Sulfate	500	210	340
Thallium	0.002	<0.0010	<0.0010
Total Dissolved Solids	1000	770	770
Uranium, Total	0.03	0.006	0.0055
WAD Cyanide	0.2	<0.010	<0.010
Zinc	5	<0.020	<0.020

North Goss Spring

1	_		
	Referenc	North Goss	North Goss
Description	e Value	Spring Week 1	Spring Week 4
	(mg\L)		
Name of NV Certified Lab		WETLAB	WETLAB
Lab Reference #		23110382-005	23120005-005
Sample Date		11/14/2023	11/29/2023
Lab Test Date		11/20/2023	12/7/2023
Sampled By		JE	JE
Alkalinity, Bicarbonate		150	150
Alkalinity, Total (as		150	150
Aluminum	0.2	<0.050	<0.050
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.0069	0.0071
Barium	2	<0.020	<0.020
Beryllium	0.004	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010
Calcium		19	18
Chloride	400	45	46.7
Chromium	0.1	<0.0050	<0.0050
Copper	1	<0.040	<0.040
Fluoride	4	2.8	2.9
Iron	0.6	<0.10	<0.10
Lead	0.015	<0.0025	<0.0025
Magnesium	150	1.3	1.3
Manganese	0.1	<0.010	<0.010
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.030
Nitrate + Nitrite, Total (as	10	0.57	0.49
Nitrogen, Total (as N)	10	0.57	<0.50
pH (standard units)	6.5 - 8.5	7.86	8.04
Potassium		5.9	6.1
Selenium	0.05	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050
Sodium		120	120
Sulfate	500	81	83
Thallium	0.002	<0.0010	<0.0010
Total Dissolved Solids	1000	340	390
Uranium, Total	0.03	0.0097	0.0085
WAD Cyanide	0.2	<0.010	<0.010
Zinc	5	<0.020	<0.020

Burro Spring

	Referenc		
Description	e Value	Burro Spring	Burro Spring
Description	(mg\L)	Week 1	Week 4
Name of NV Certified	(1118 (L)	WETLAB	WETLAB
Lab Reference #		23110382-004	23120005-003
Sample Date Lab Test Date		11/10/2023	11/29/2023
		11/20/2023	12/7/2023
Sampled By		JE	JE
ผาหลักท์กญ่) เอเลเ (as		450	380
$c_{1}c_{2}$		450	380
Aluminum	0.2	<0.050	<0.050
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.016	0.019
Barium	2	0.026	0.024
Beryllium	0.004	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010
Calcium		55	51
Chloride	400	76	58.3
Chromium	0.1	<0.0050	<0.0050
Copper	1	<0.040	<0.040
Fluoride	4	5.8	3.9
Iron	0.6	<0.10	<0.10
Lead	0.015	<0.0025	<0.0025
Magnesium	150	21	12
Manganese	0.1	0.037	<0.010
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.030
ivitrate + ivitrite, rotar	10	<0.10	<0.10
Nitrogen, Total (as N)	10	0.54	0.84
pH (standard units)	6.5 - 8.5	7.75	7.98
Potassium		15.0	9.0
Selenium	0.05	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050
Sodium		290	210
Sulfate	500	210	180
Thallium	0.002	<0.0010	<0.0010
Total Dissolved Solids	1000	820	750
Uranium, Total	0.03	0.0074	0.0069
WAD Cyanide	0.2	< 0.010	< 0.010
Zinc	5	<0.010	<0.010
	5	NU.UZU	NU.UZU

Brian Spring

	Reference		
Description	Value	Brian Spring	Brian Spring
	(mg\L)		
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		23110382-003	23120005-004
Sample Date		11/10/2023	11/29/2023
Lab Test Date		11/20/2023	12/7/2023
Sampled By		JE	JE
Alkalinity, Bicarbonate		130	130
Alkalinity, Total (as		130	130
Aluminum	0.2	<0.050	<0.050
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.017	0.018
Barium	2	<0.020	<0.020
Beryllium	0.004	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010
Calcium		24	24
Chloride	400	20	21.1
Chromium	0.1	<0.0050	<0.0050
Copper	1	<0.040	<0.040
Fluoride	4	0.73	0.77
Iron	0.6	<0.10	<0.10
Lead	0.015	<0.0025	<0.0025
Magnesium	150	3.5	3.7
Manganese	0.1	<0.010	<0.010
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.030
Nitrate + Nitrite, Total	10	3.4	3.2
Nitrogen, Total (as N)	10	3.5	3.3
pH (standard units)	6.5 - 8.5	7.68	7.74
Potassium		4.0	4.3
Selenium	0.05	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050
Sodium		52	52
Sulfate	500	22	23
Thallium	0.002	<0.0010	<0.0010
Total Dissolved Solids	1000	250	230
Uranium, Total	0.03	<0.0050	<0.0050
WAD Cyanide	0.2	<0.010	<0.010
Zinc	5	<0.020	<0.020

Lower Indian Spring

0	-		
	Referenc	Lower Indian	Lower Indian
Description	e Value		
	(mg\L)	Spring Week 1	Spring Week 4
Name of NV Certified		WETLAB	WETLAB
Lab Reference #		23110382-008	23120005-008
Sample Date		11/10/2023	11/29/2023
Lab Test Date		11/20/2023	12/7/2023
Sampled By		JE	JE
Alkalinity,		110	110
Alkalinity, Total (as		110	110
Aluminum	0.2	<0.050	<0.050
Antimony	0.006	<0.0025	<0.0025
Arsenic	0.01	0.0054	0.0058
Barium	2	<0.020	<0.020
Beryllium	0.004	<0.0010	< 0.0010
Cadmium	0.005	<0.0010	<0.0010
Calcium		6.3	6.7
Chloride	400	15	15.4
Chromium	0.1	<0.0050	<0.0050
Copper	1	<0.040	<0.040
Fluoride	4	0.41	0.46
Iron	0.6	<0.10	<0.10
Lead	0.015	<0.0025	<0.0025
Magnesium	150	0.72	0.73
Manganese	0.1	<0.010	<0.010
Mercury	0.002	<0.00045	<0.00045
Nickel	0.1	<0.030	<0.030
Nitrate + Nitrite, Total	10	2.2	2.2
Nitrogen, Total (as N)	10	2.2	2.2
pH (standard units)	6.5 - 8.5	7.51	7.6
Potassium		1.2	1.7
Selenium	0.05	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050
Sodium		62	63
Sulfate	500	19	20
Thallium	0.002	<0.0010	<0.0010
Total Dissolved Solids	1000	210	210
Uranium, Total	0.03	<0.0050	<0.0050
WAD Cyanide	0.2	<0.010	<0.010
Zinc	5	<0.020	

TABLE D1: Compiled Spring Flow Data

1050 000 21 02				
SPRING	9/21/2023	11/10/23 to	Week of	Week of
SERING	9/21/2023	11/14/2023	11/14/23	11/29/2023
North Mud	0.26	2	2	1.5
Mud	0.5	1.5	1.5	3
Springdale (staff gage) ¹	NMF	NMF (1.10)	NMF (1.10)	NMF (1.10)
Wehrly	4	1	1.5	1.5
Brian	1	2	2	2
Burro	NMF	NMF	NMF	NMF
North Goss	60	75	75	72
Indian Spring	2	3	3	4

Test WW-21-02

Test WW-21-03

	Week of	Week of	Week of	Week of
SPRING	1/23/24	1/30/24	2/14/24	3/11/24 ²
North Mud	1	1	1	1.1
Mud	1.5	1.5	2.5	5.9
Springdale (staff gage)	NMF	NMF (1.10)	NMF (1.10)	30
Wehrly	1	1	2	0.6
Brian	2	1.5	1	1.4
Burro	NMF	NMF	NMF	0.3
North Goss	75	70	80	70.1
Indian Spring	2.5	3	3	3.1
NMF = No Measureable Flow	: due to a heavily	/ impacted spring	area or conditio	ns that are
poorly conducive to measurr	nent.			
1 = Springdale (staff gage) is	located in the ma	ain spring dischar	ge pool and meas	sures the pool
elevation. Changes in the ele	evation are reflect	tive of increasing	or decreasing sp	ring flow. Flow
measurement were difficult	in the 2023 and e	arly 2024 configu	ration. Starting	in March 2024,
the stable outflow channel c	ross-section was	idenitfied and qu	arterly measurm	ent will continue
through 2024-2025.				

2 = Starting in Q1 of 2024 new third party is sampling the springs. The flow measurment strategies were reviewed to collect data at the previously challenging locations.



ATTACHMENT E

FIGURES

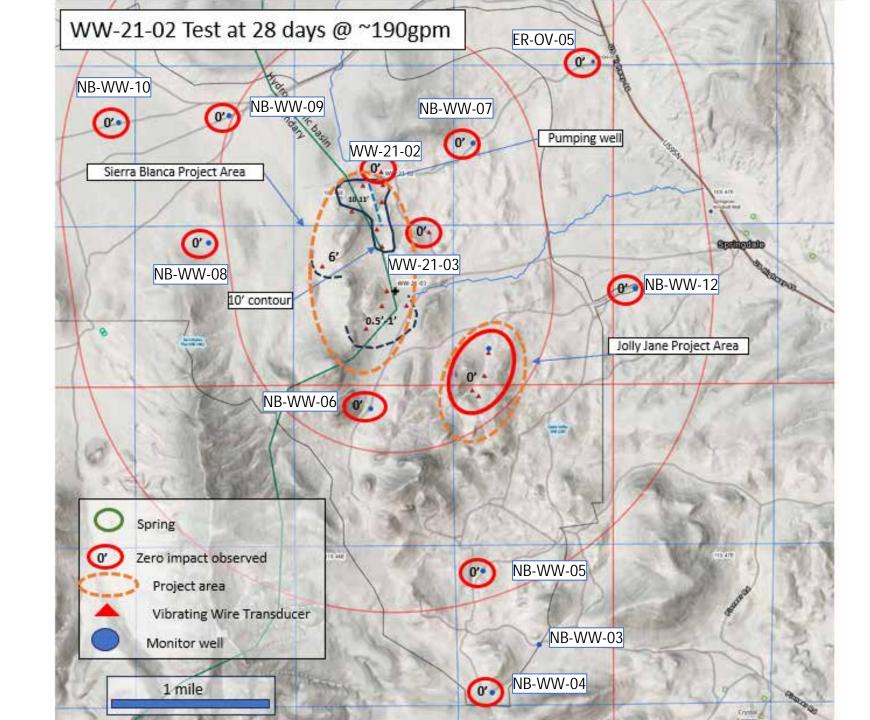


FIGURE E1

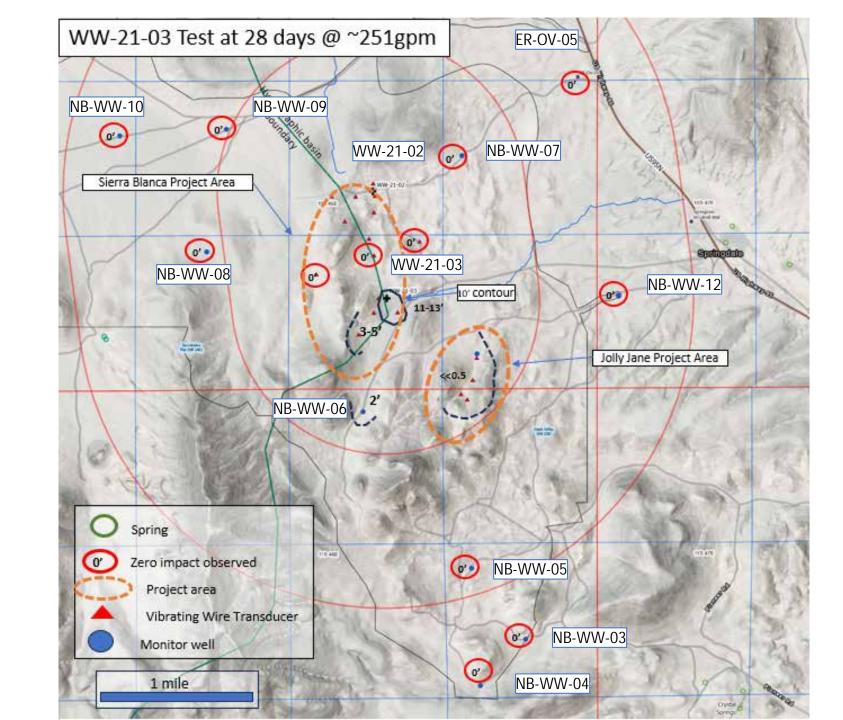
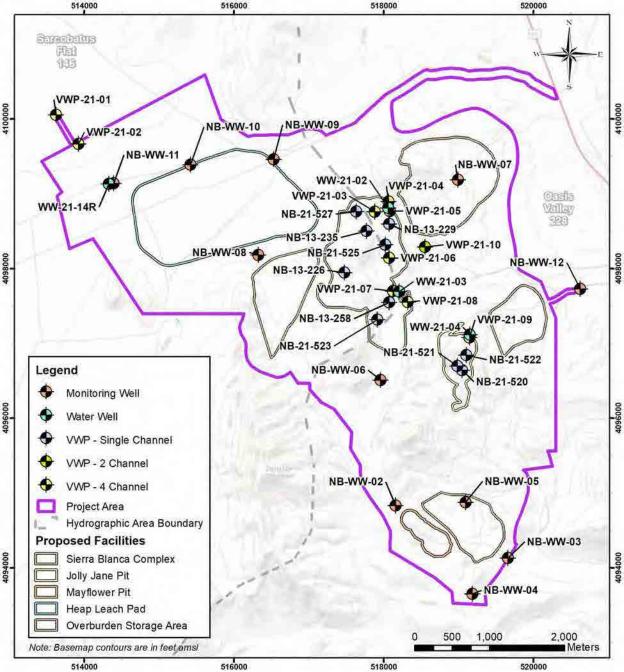


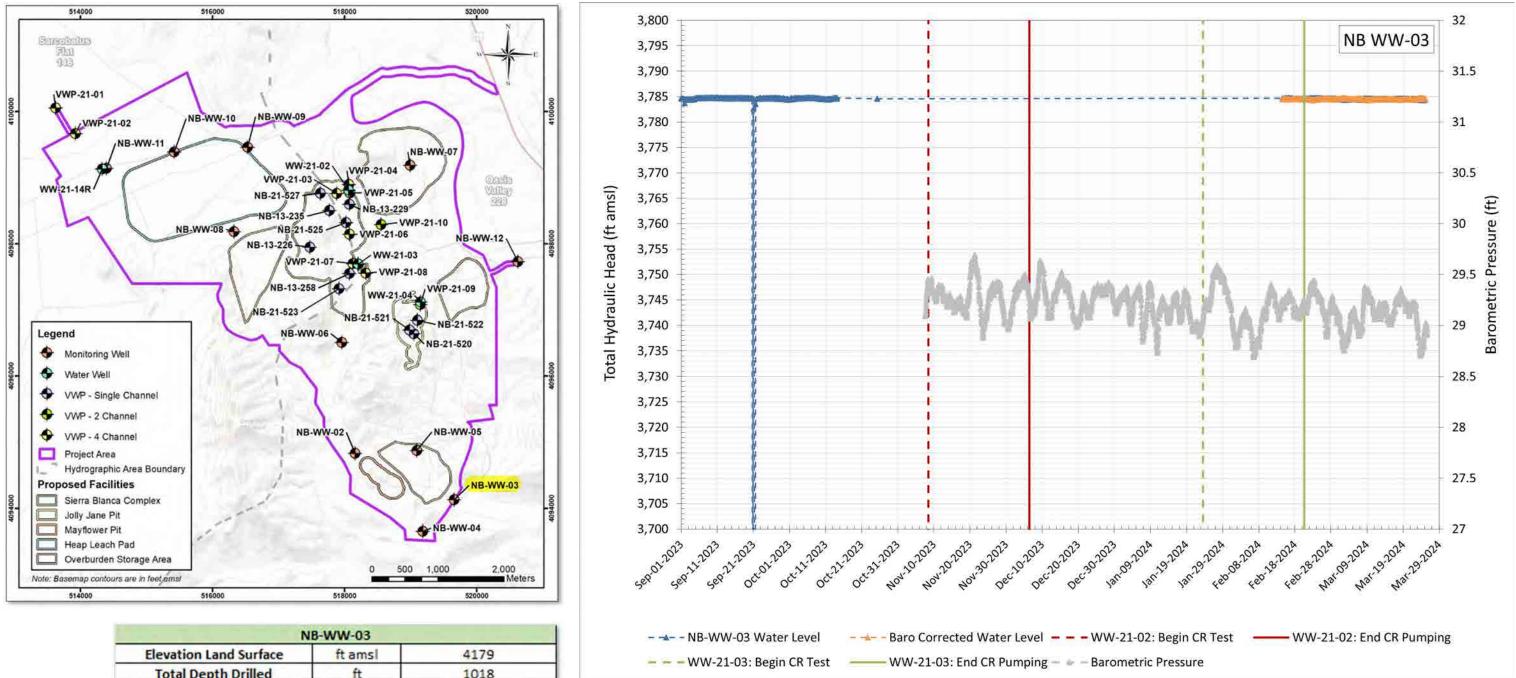
FIGURE E2



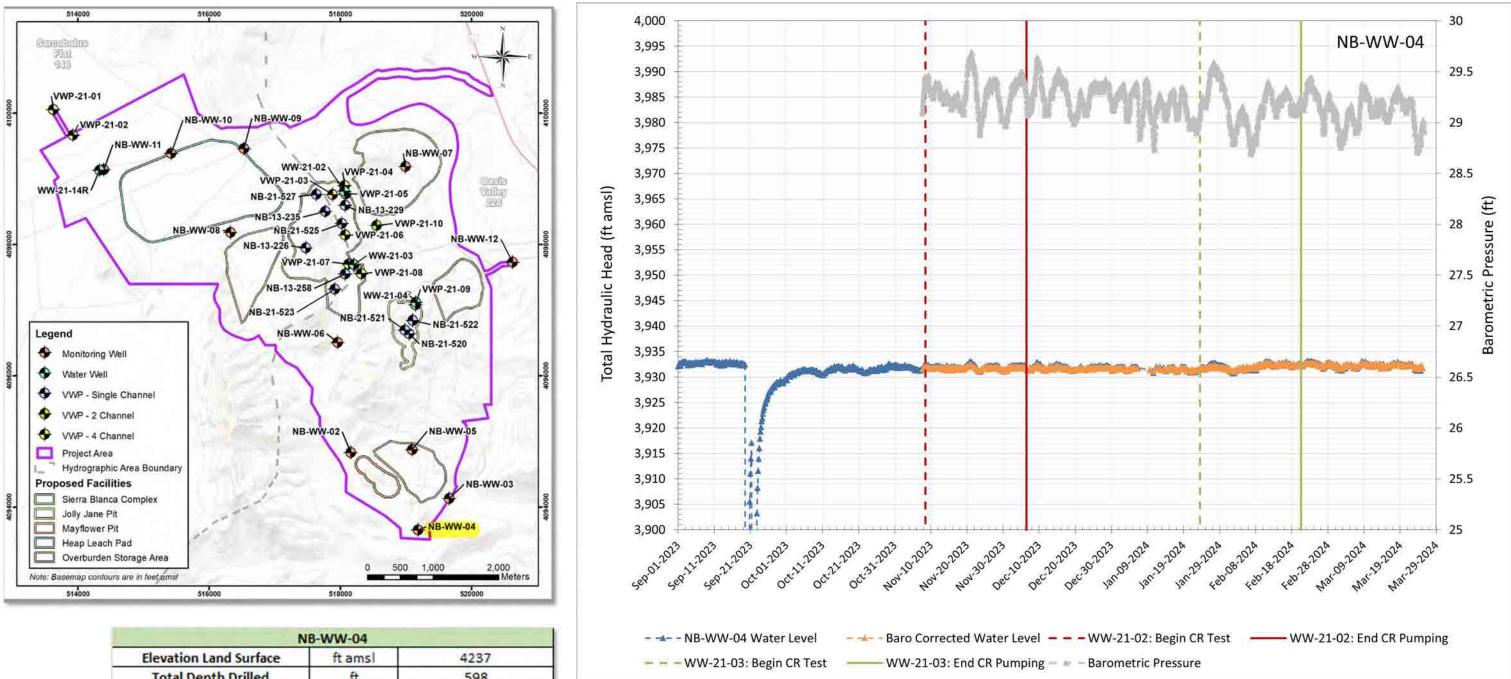
ATTACHMENT E

WATER LEVEL RESULTS: E1: MONITOR WELLS

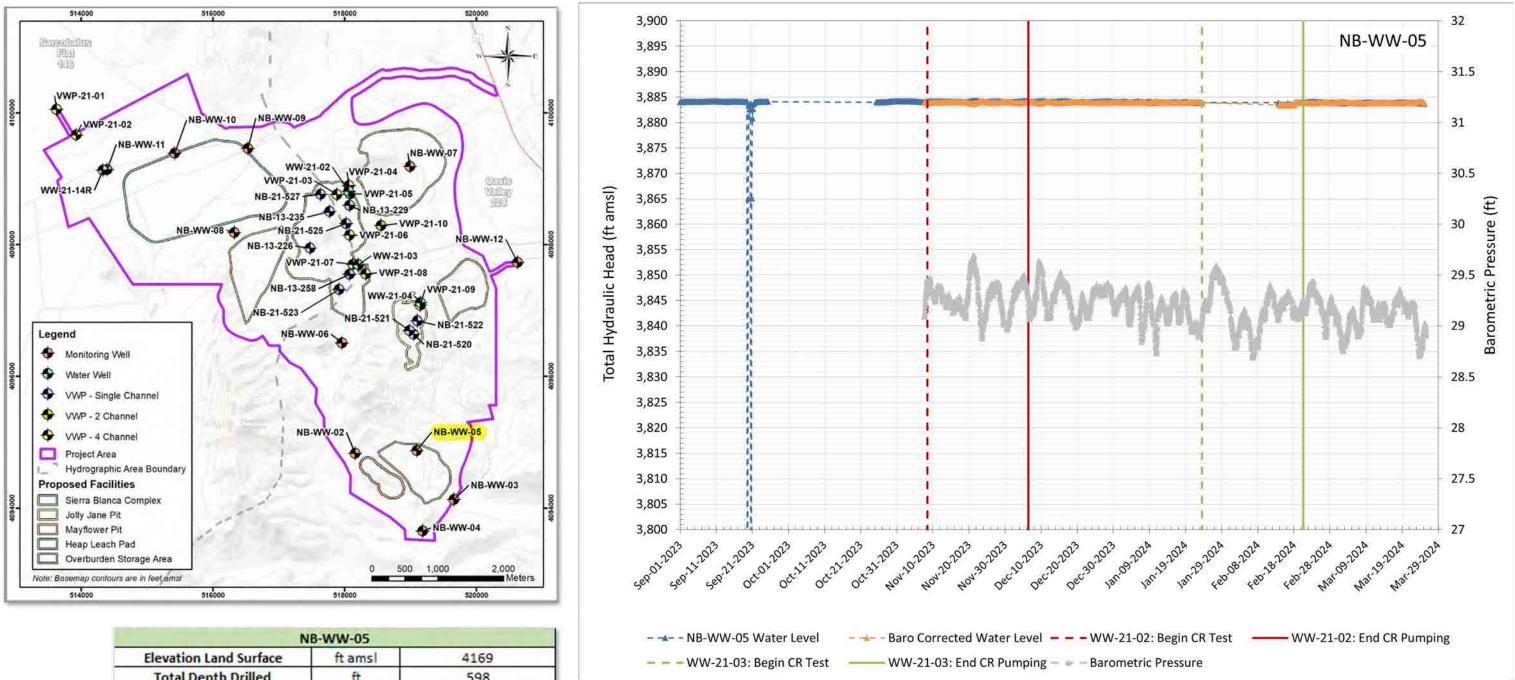




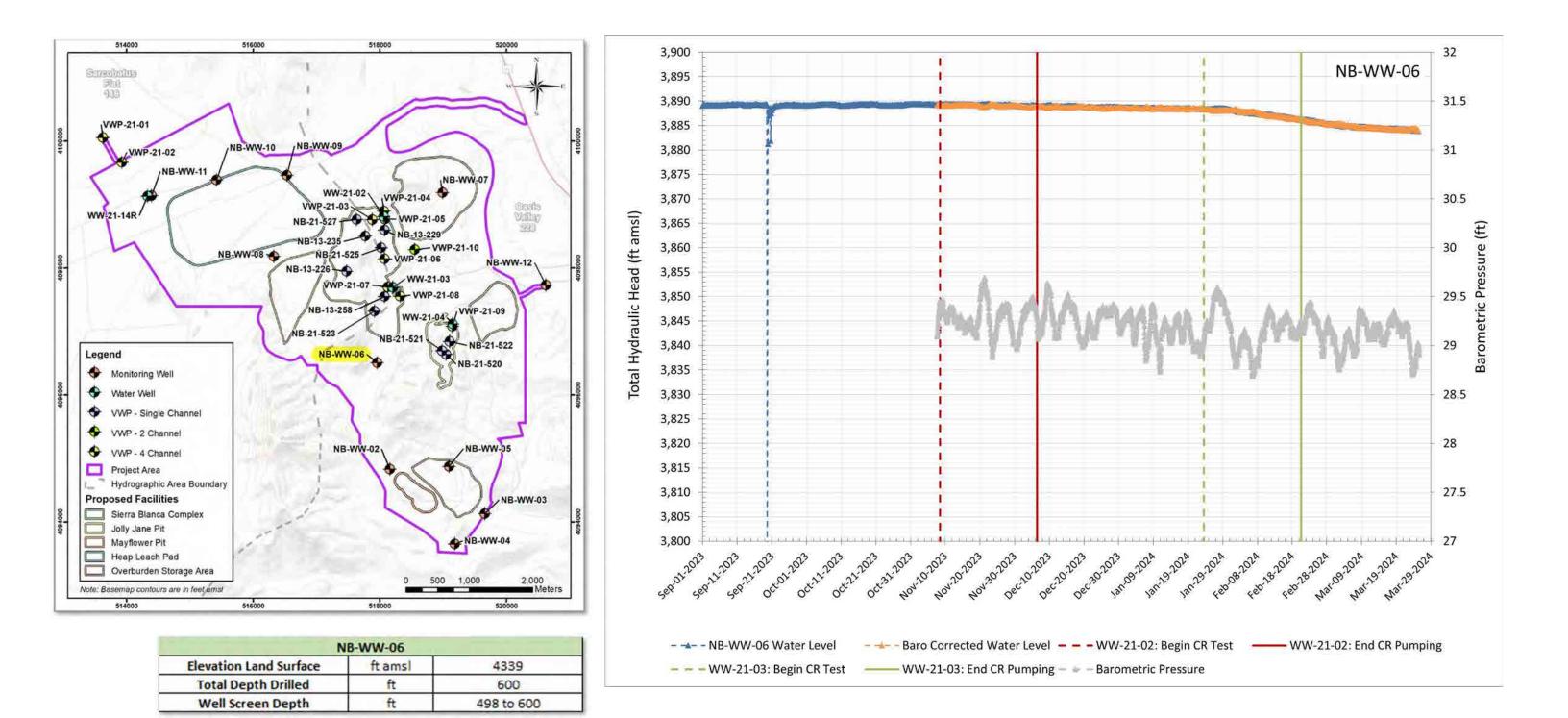
ND-WW-03			
Elevation Land Surface	ft amsl	4179	
Total Depth Drilled	ft	1018	
Well Screen Depth	ft	918 to 1018	

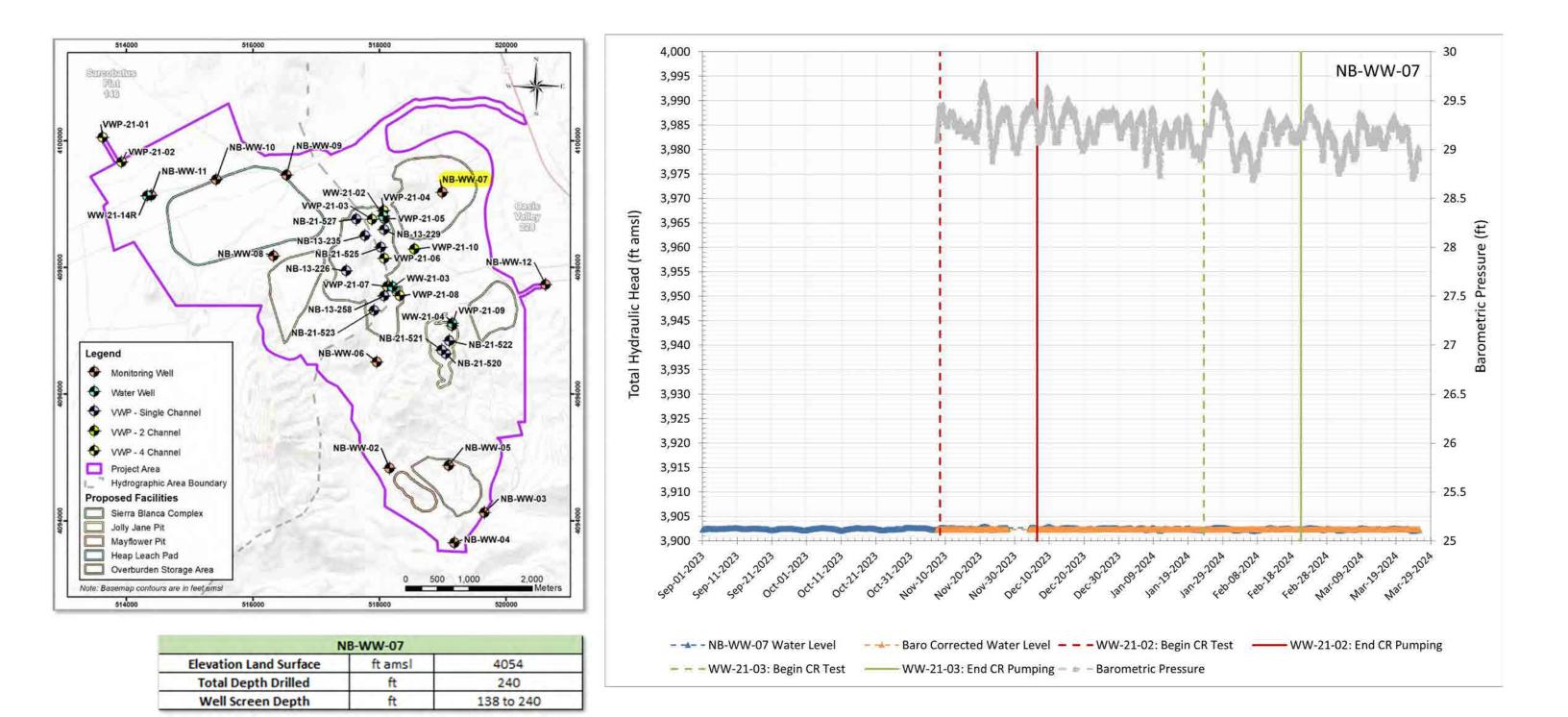


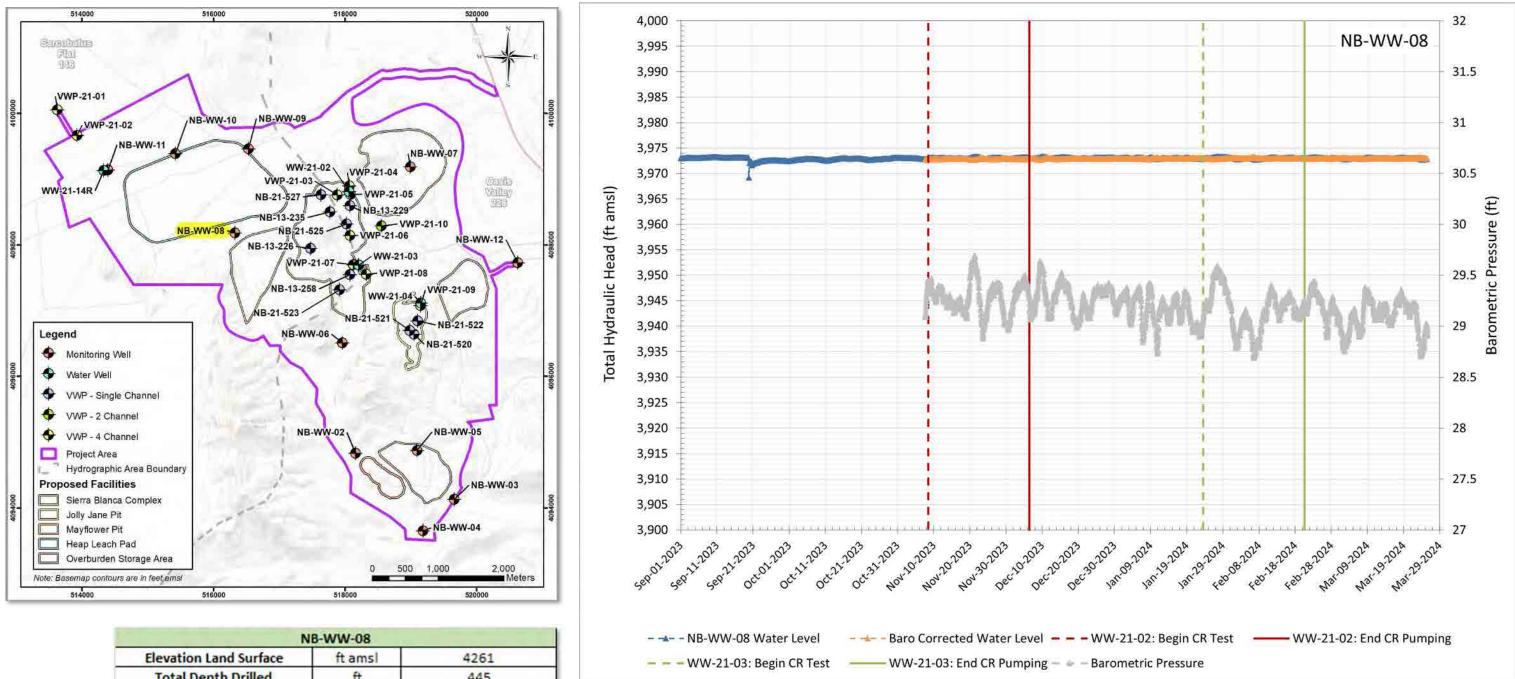
Elevation Land Surface	ft amsl	4237
Total Depth Drilled	ft	598
Well Screen Depth	ft	498 to 598



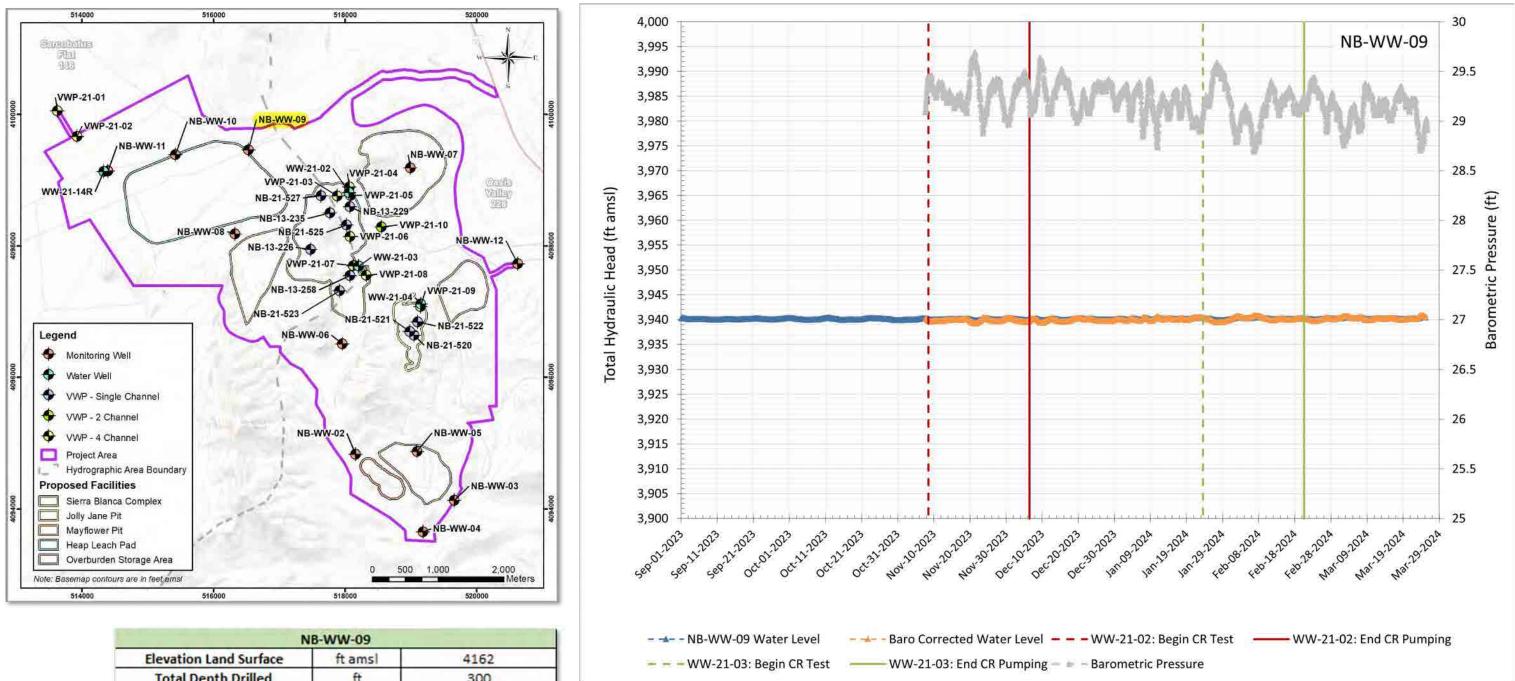
Elevation Land Surface	ft ams	4169
Total Depth Drilled	ft	598
Well Screen Depth	ft	498 to 598



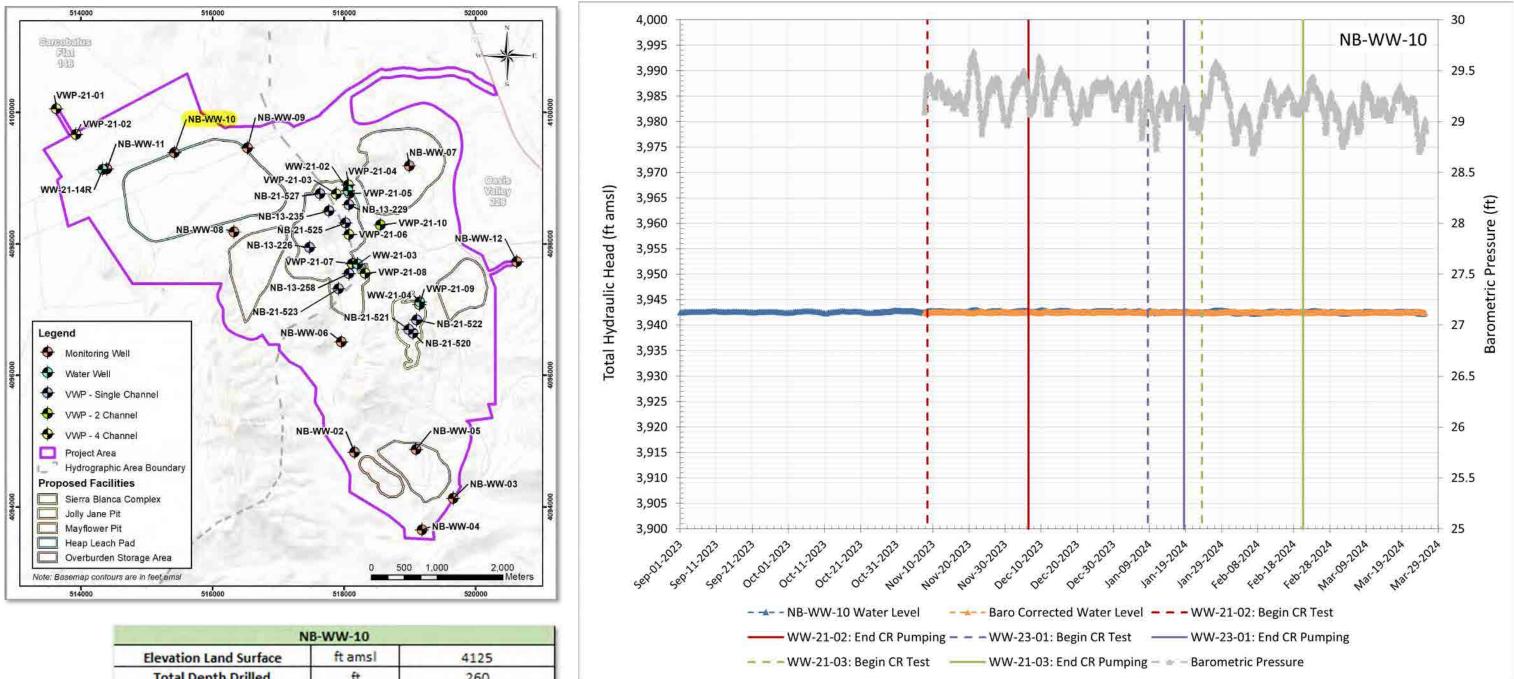




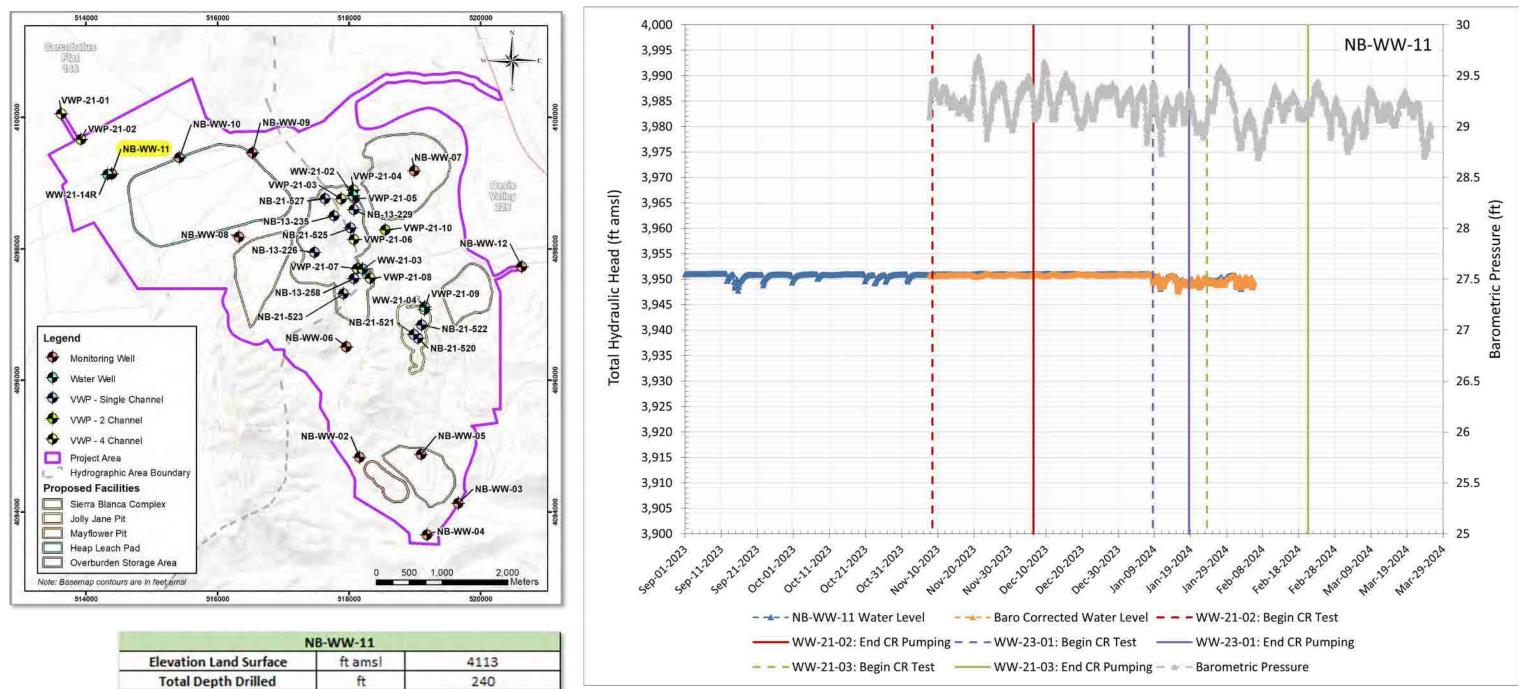
Elevation Land Surface	ft amsl	4261
Total Depth Drilled	ft	445
Well Screen Depth	ft	345 to 45



Elevation Land Surface	ft ams!	4162
Total Depth Drilled	ft	300
Well Screen Depth	ft	180 to 300



Elevation Land Surface	ft ams!	4125
Total Depth Drilled	ft	260
Well Screen Depth	ft	138 to 260

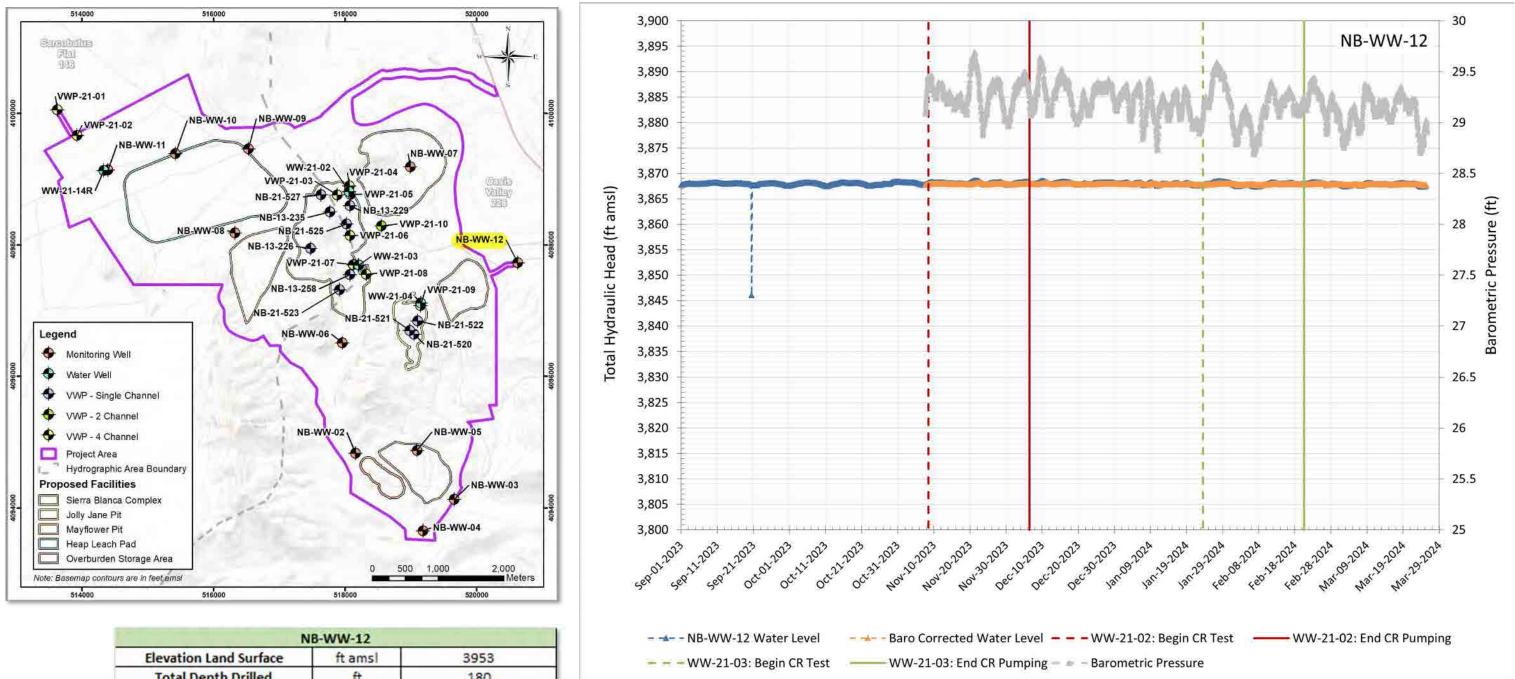


No data collected post 2/5/2024	(Datalogger Error)
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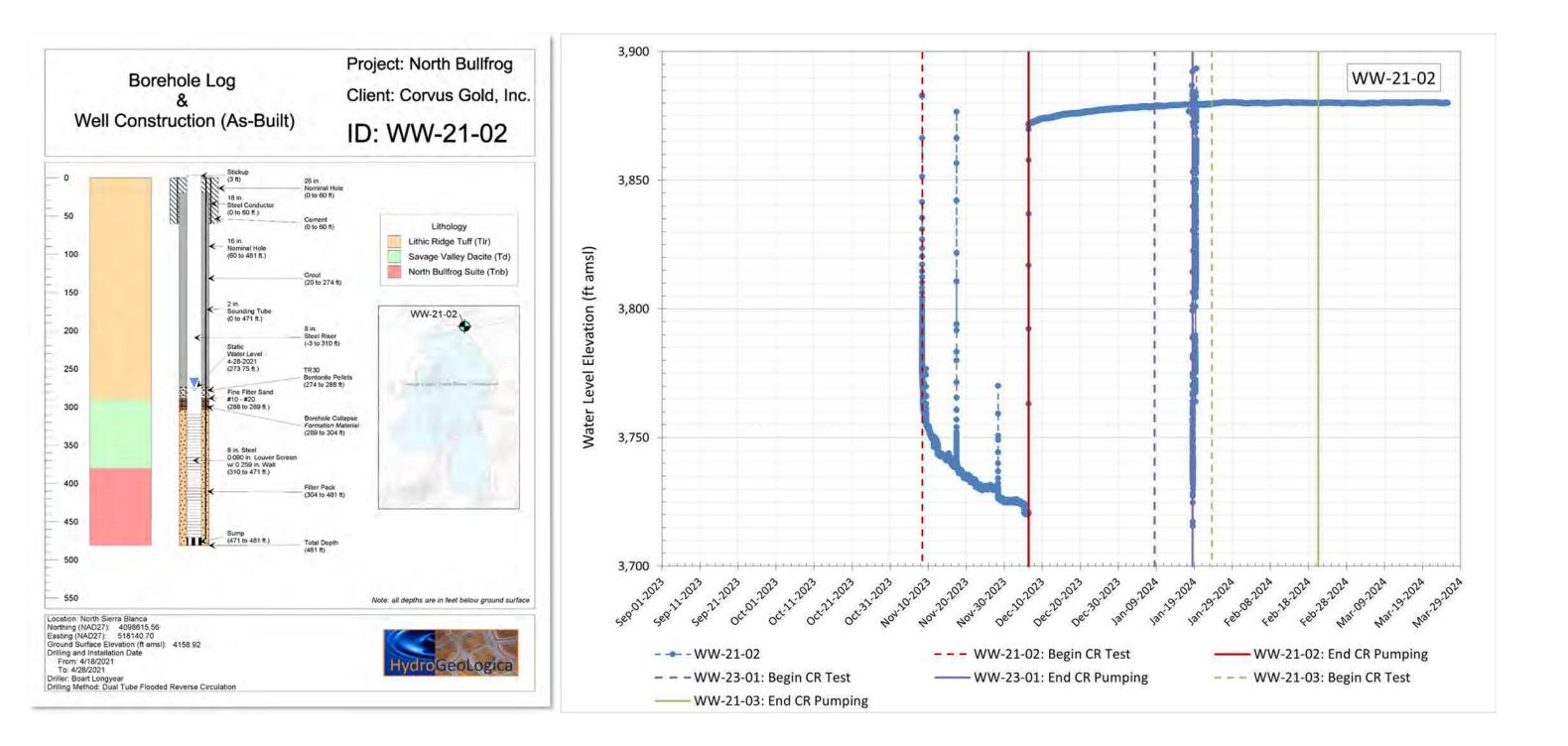
Well Screen Depth

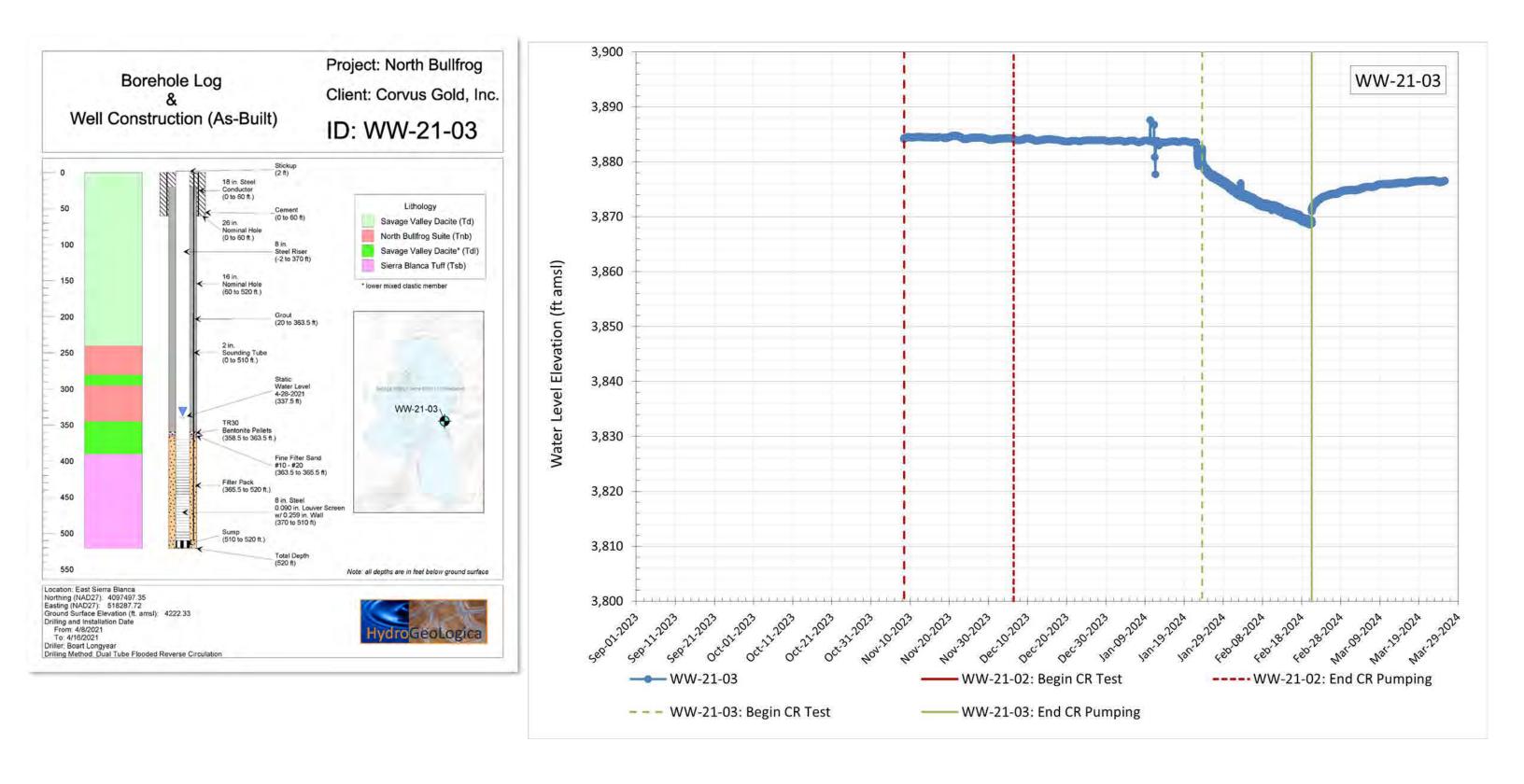
ft

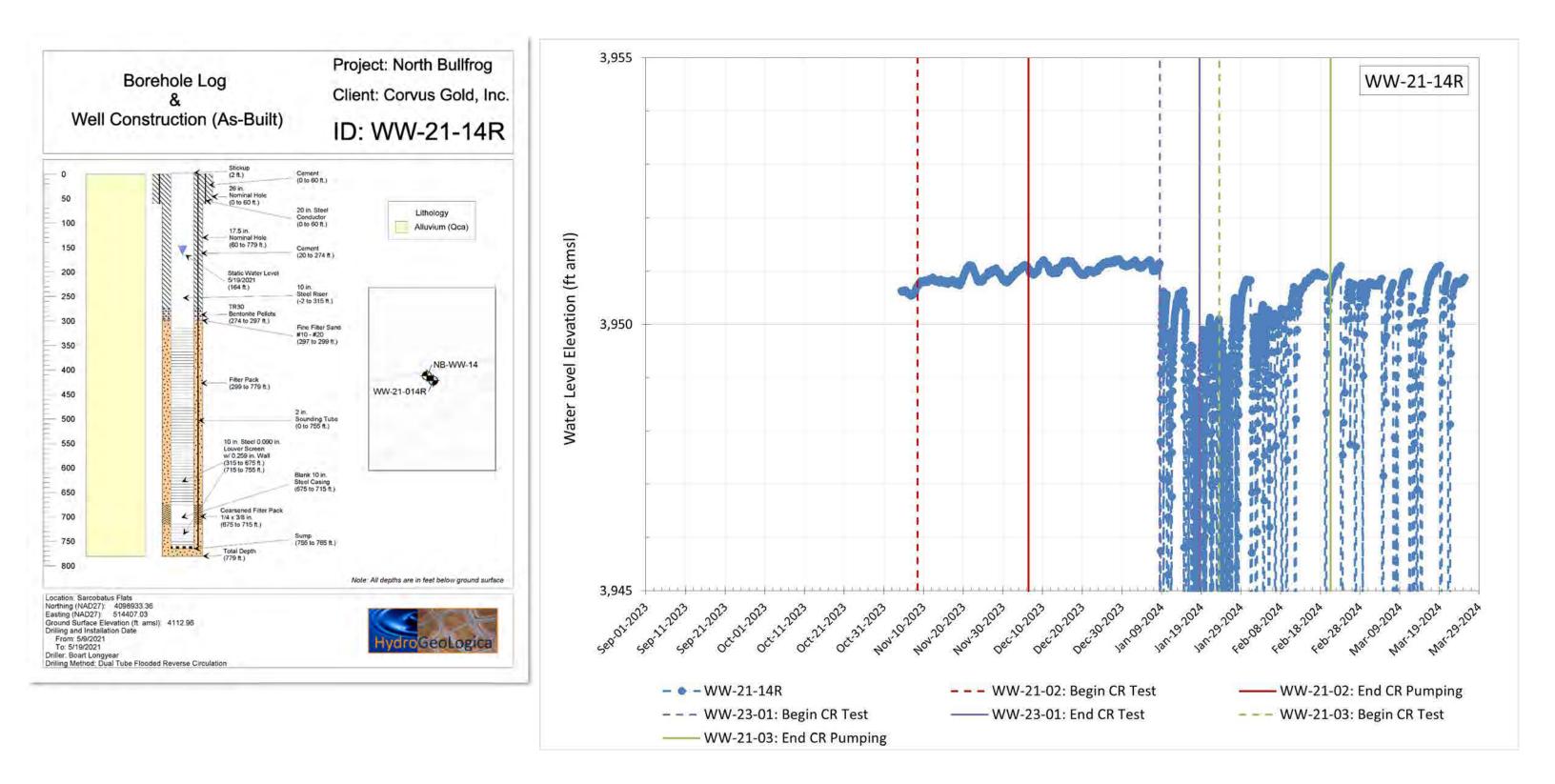
138 to 240

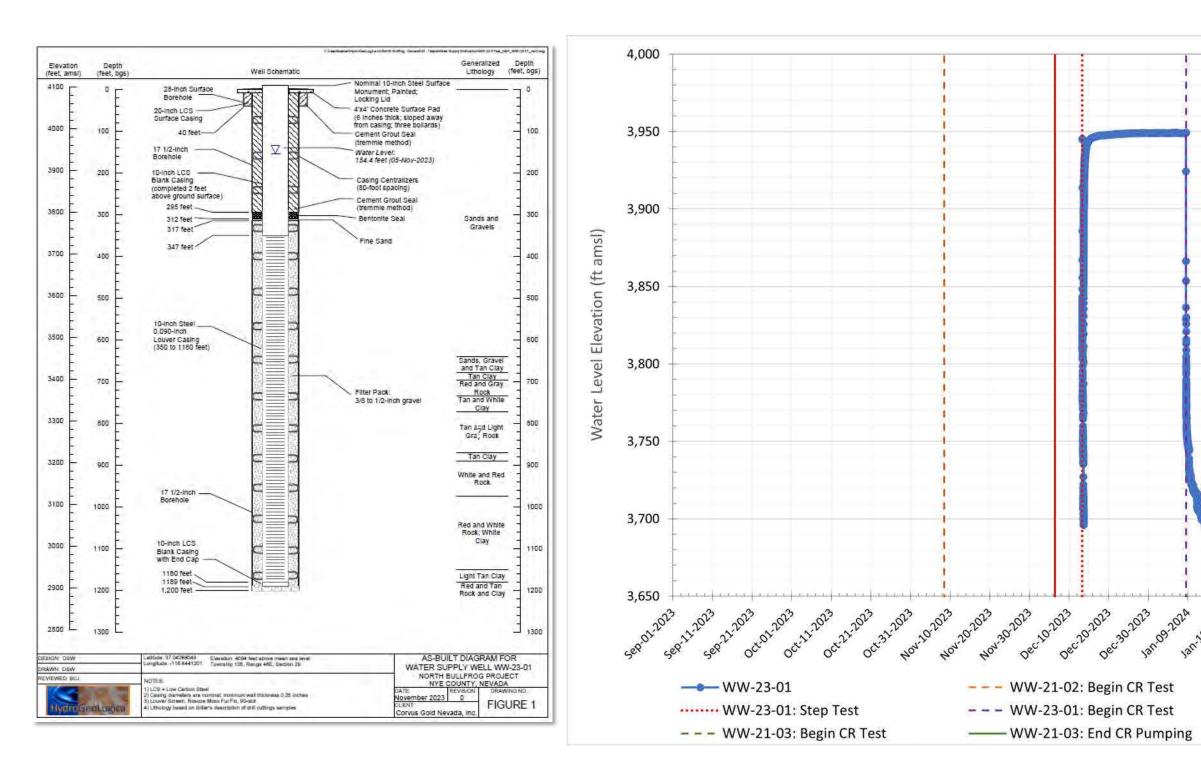


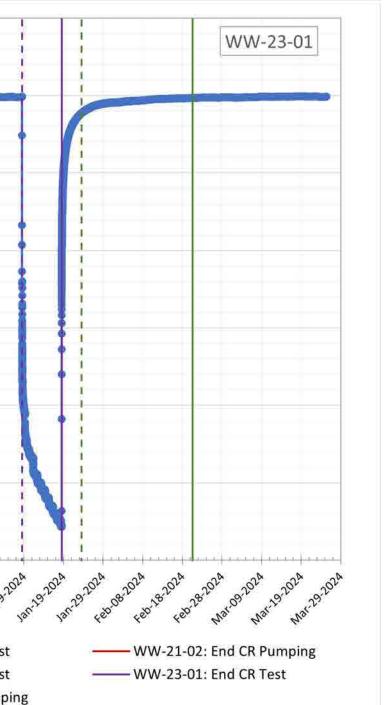
Elevation Land Surface ft ams 3953			
Total Depth Drilled	ft	180	
Well Screen Depth	ft	78 to 180	









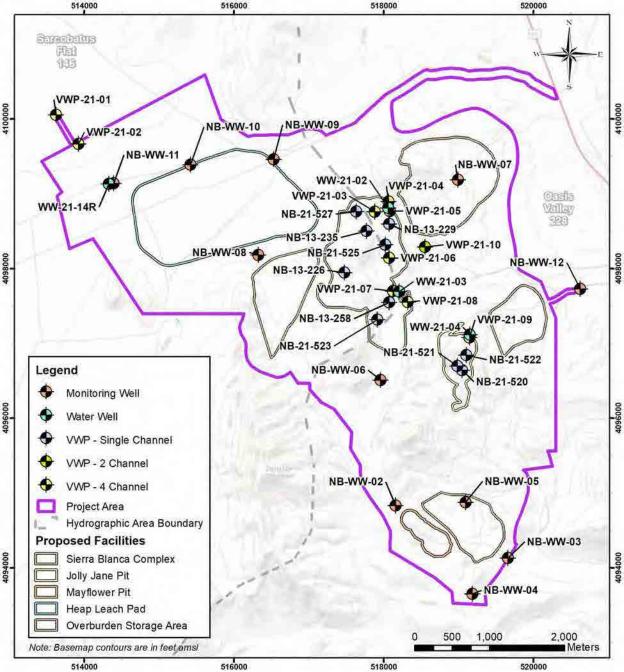


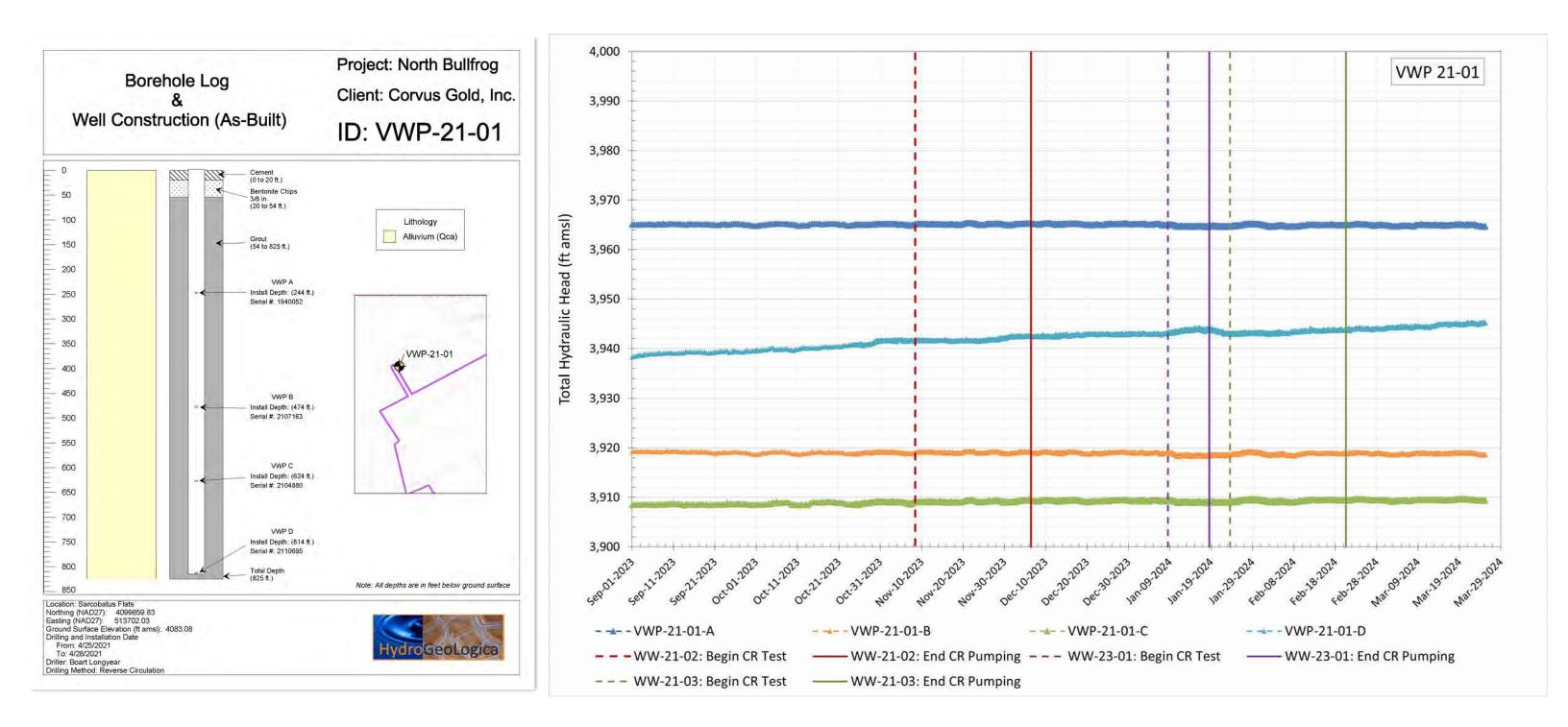


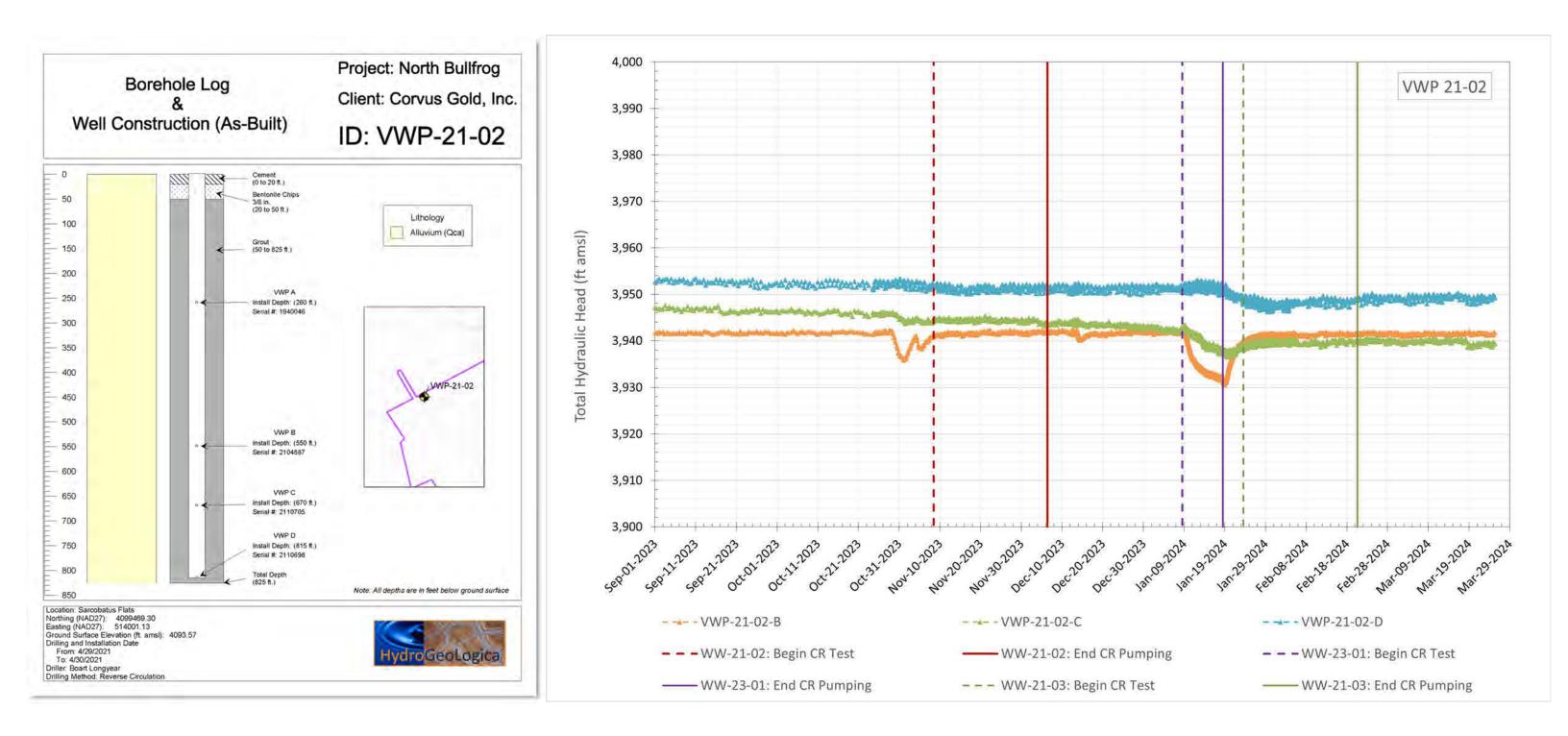
ATTACHMENT E

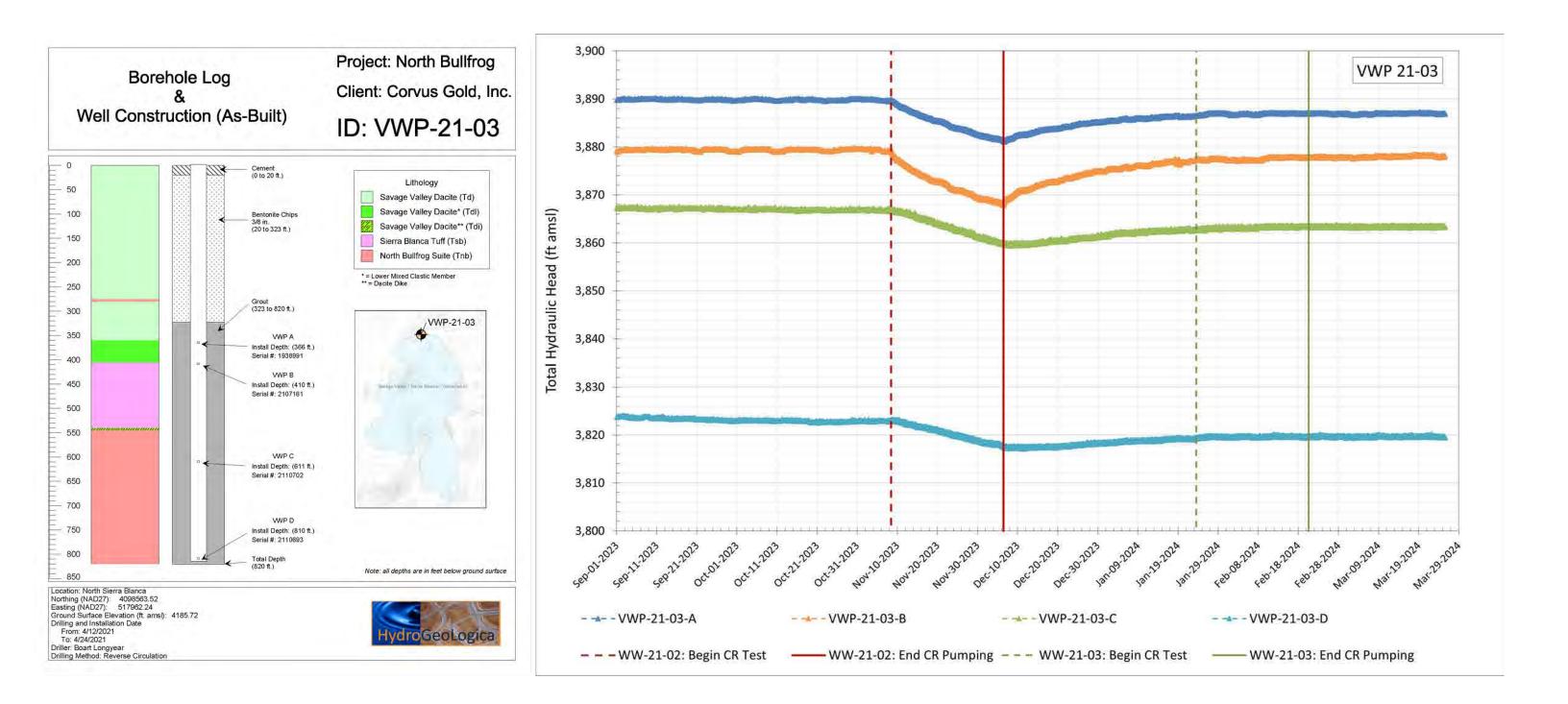
WATER LEVEL RESULTS:

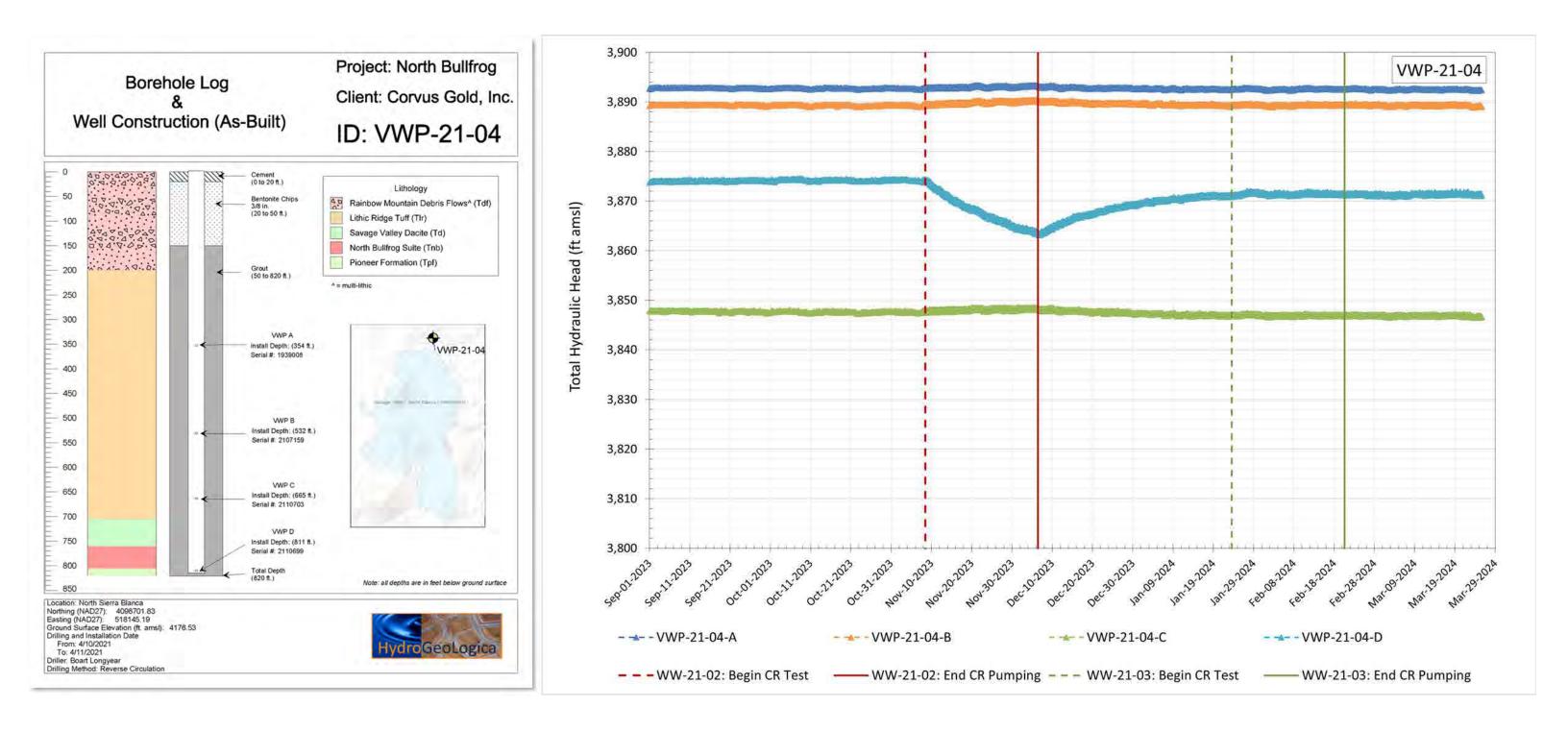
E2: VWPS

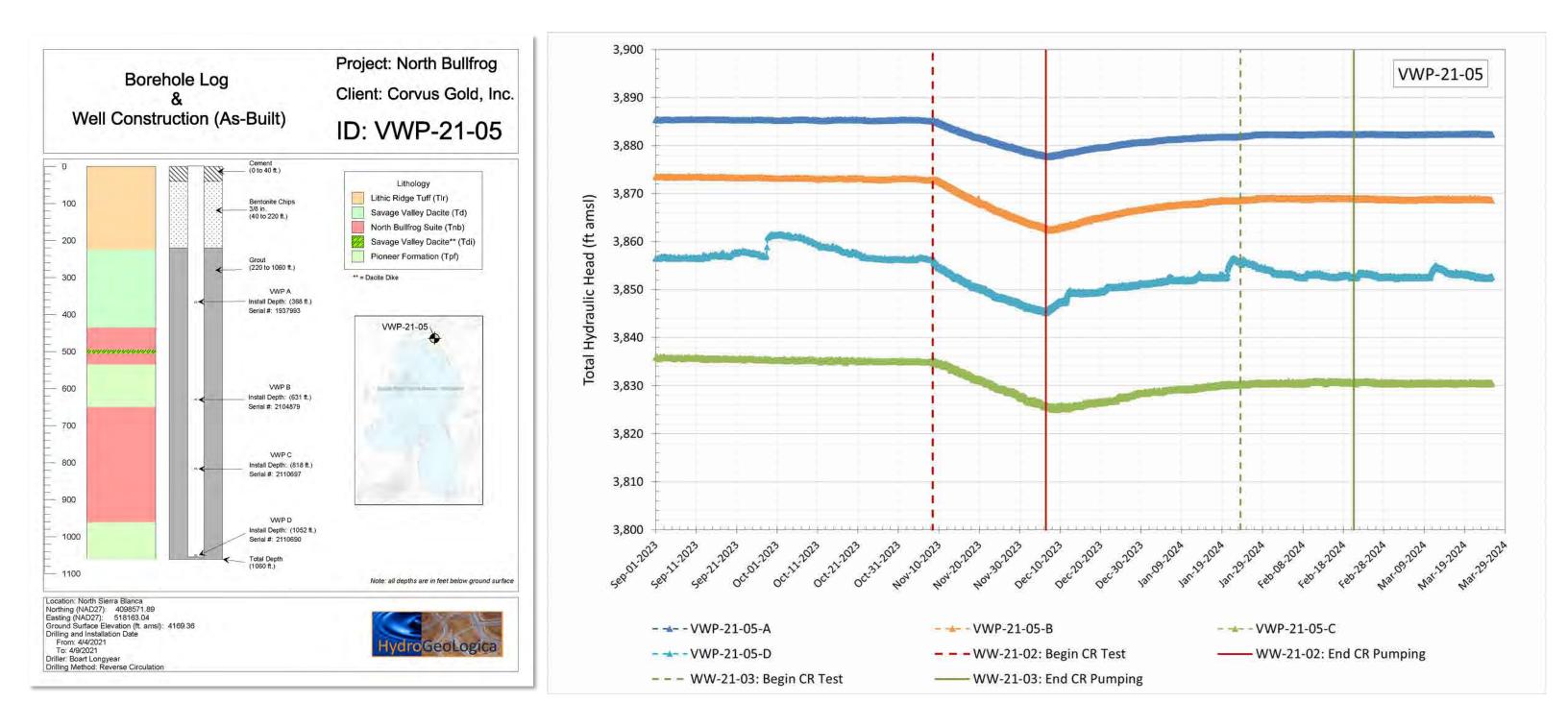


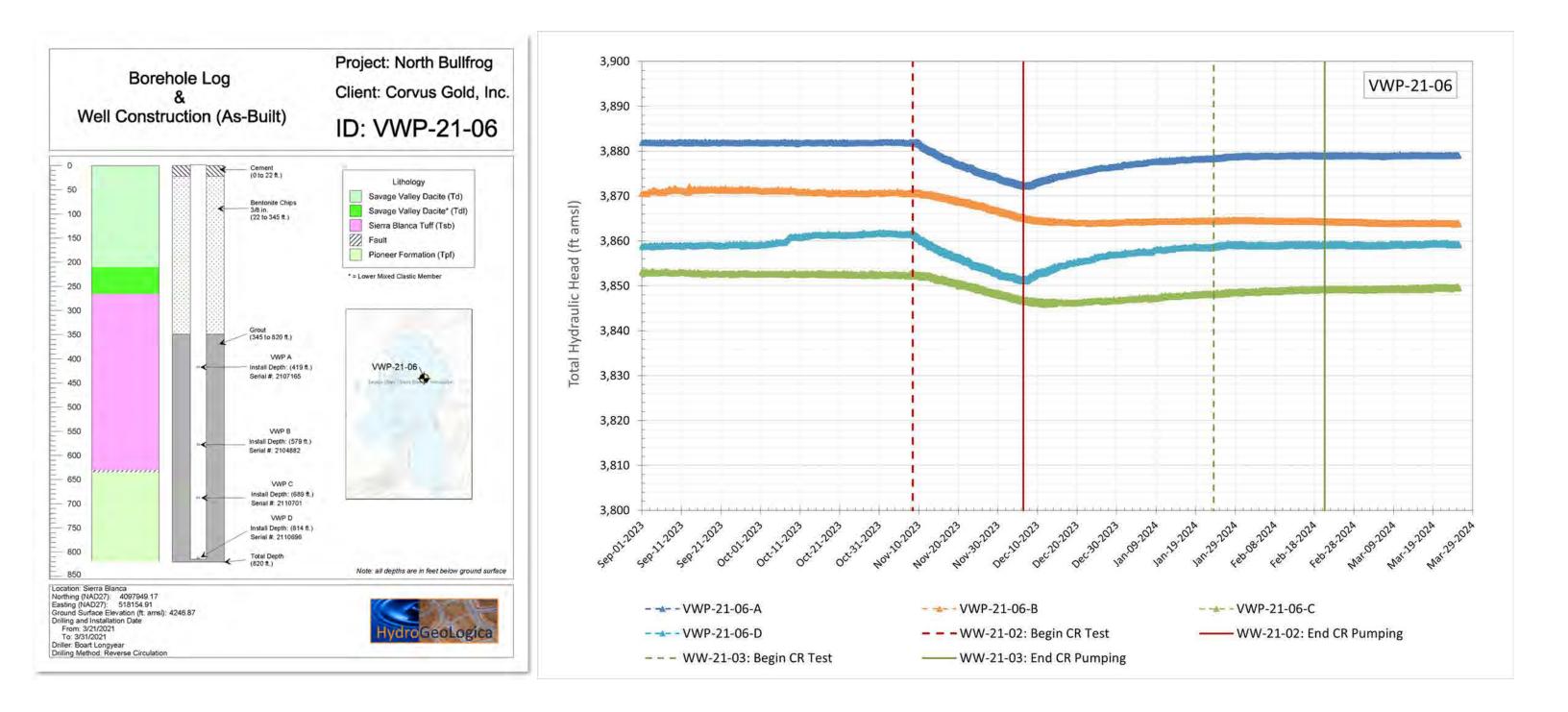


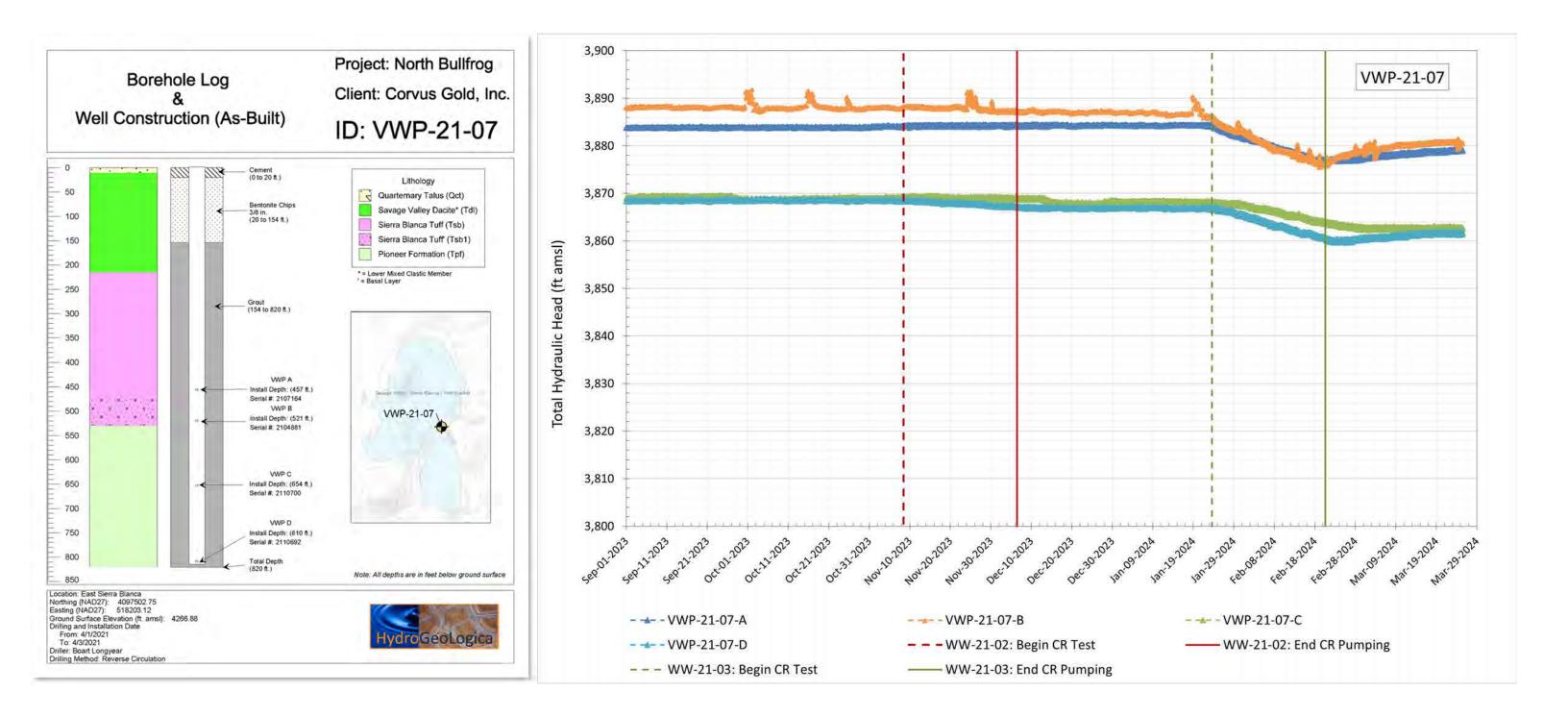


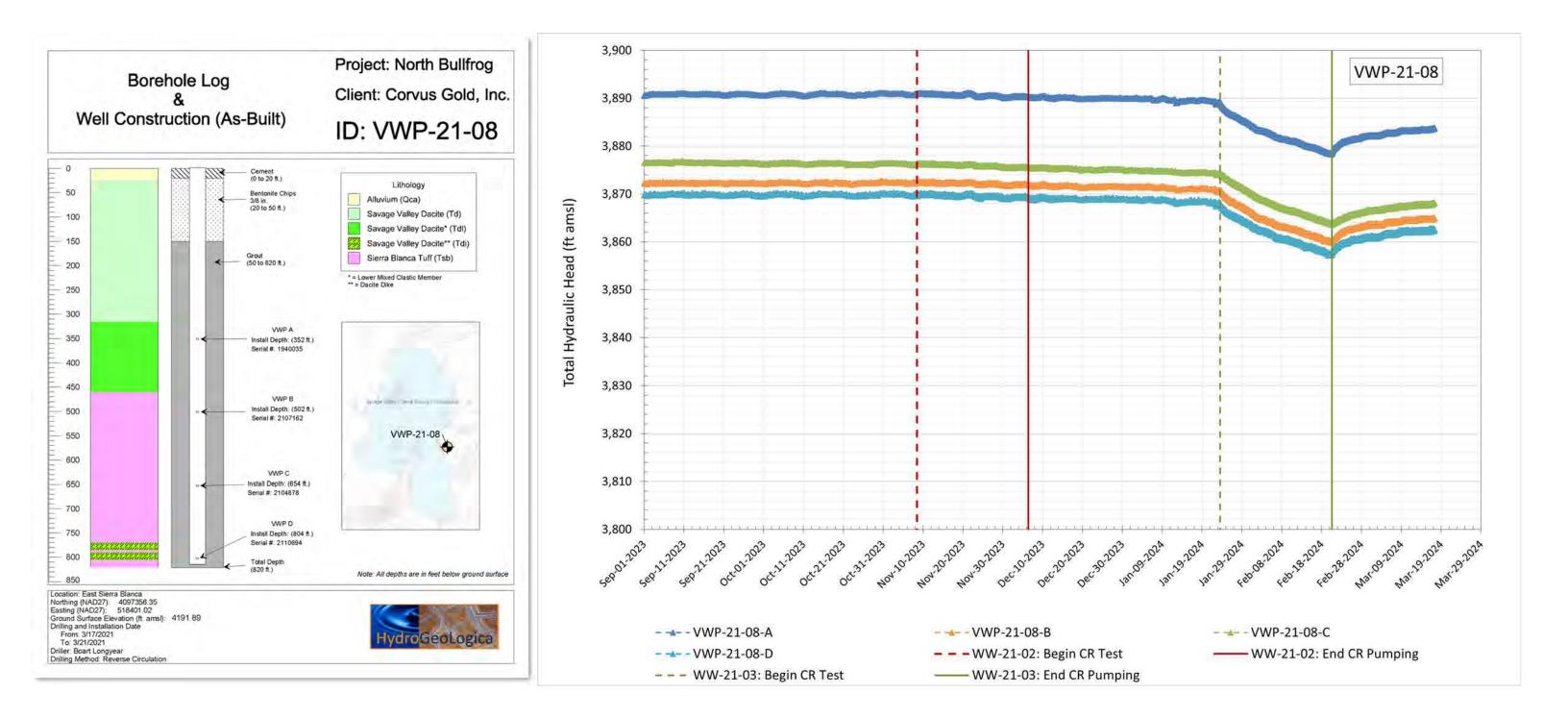


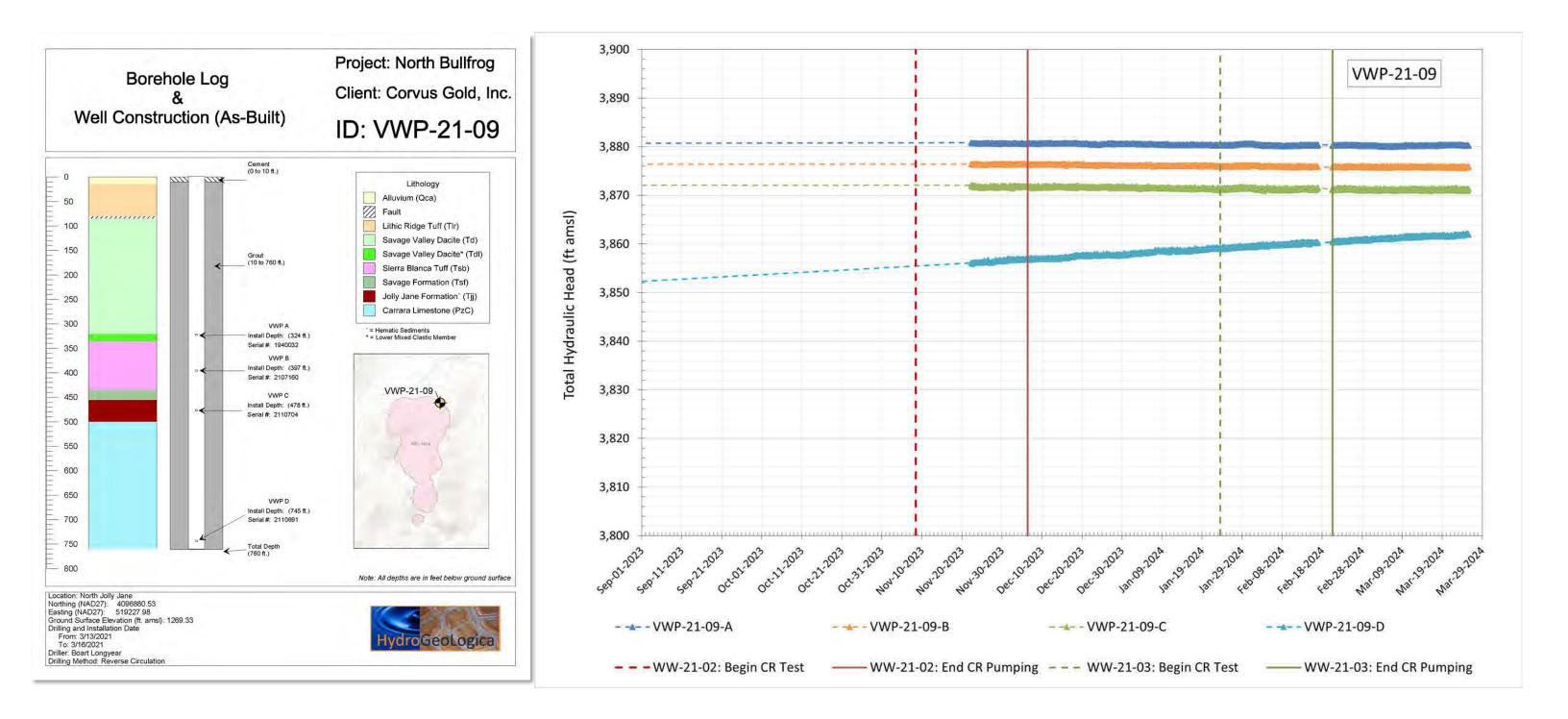


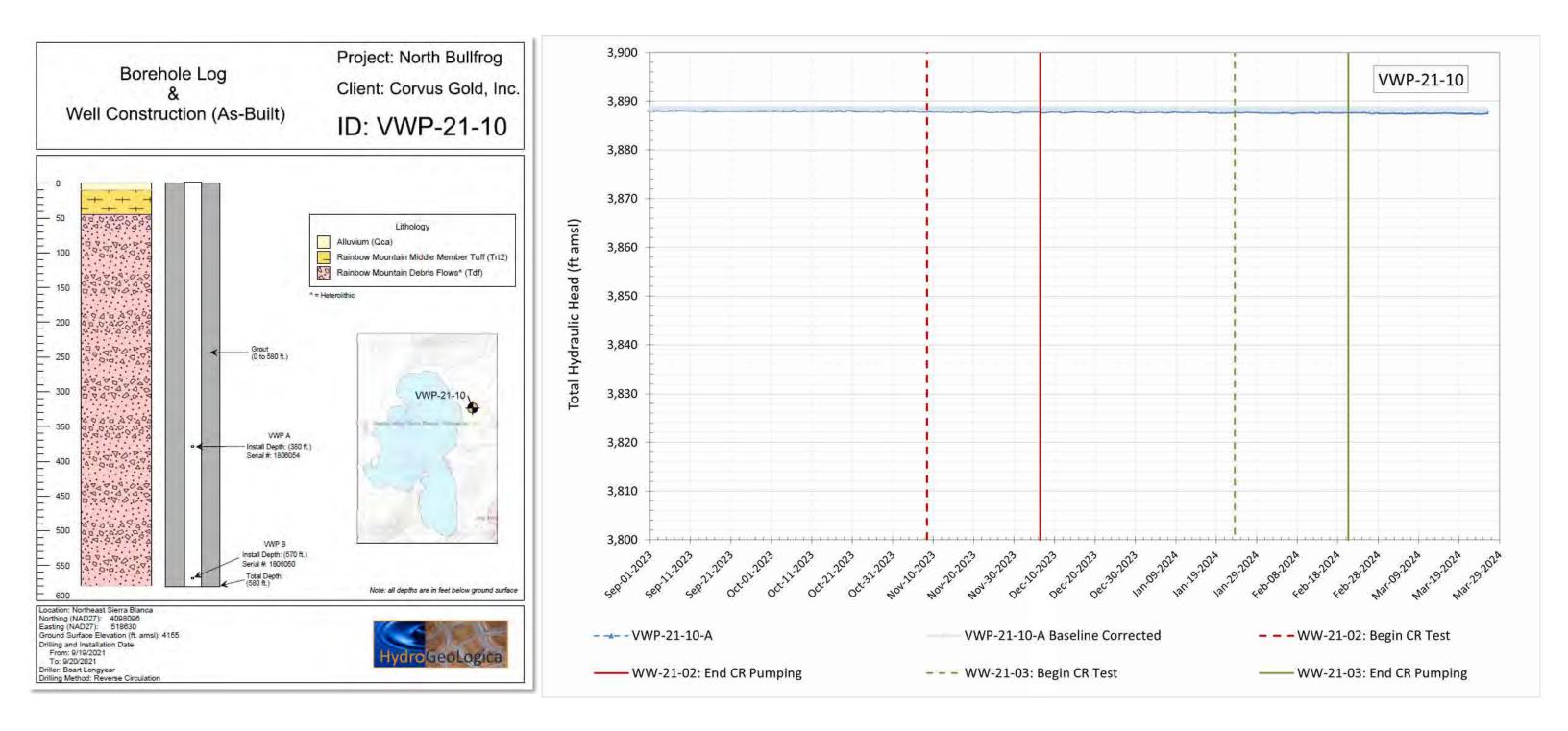


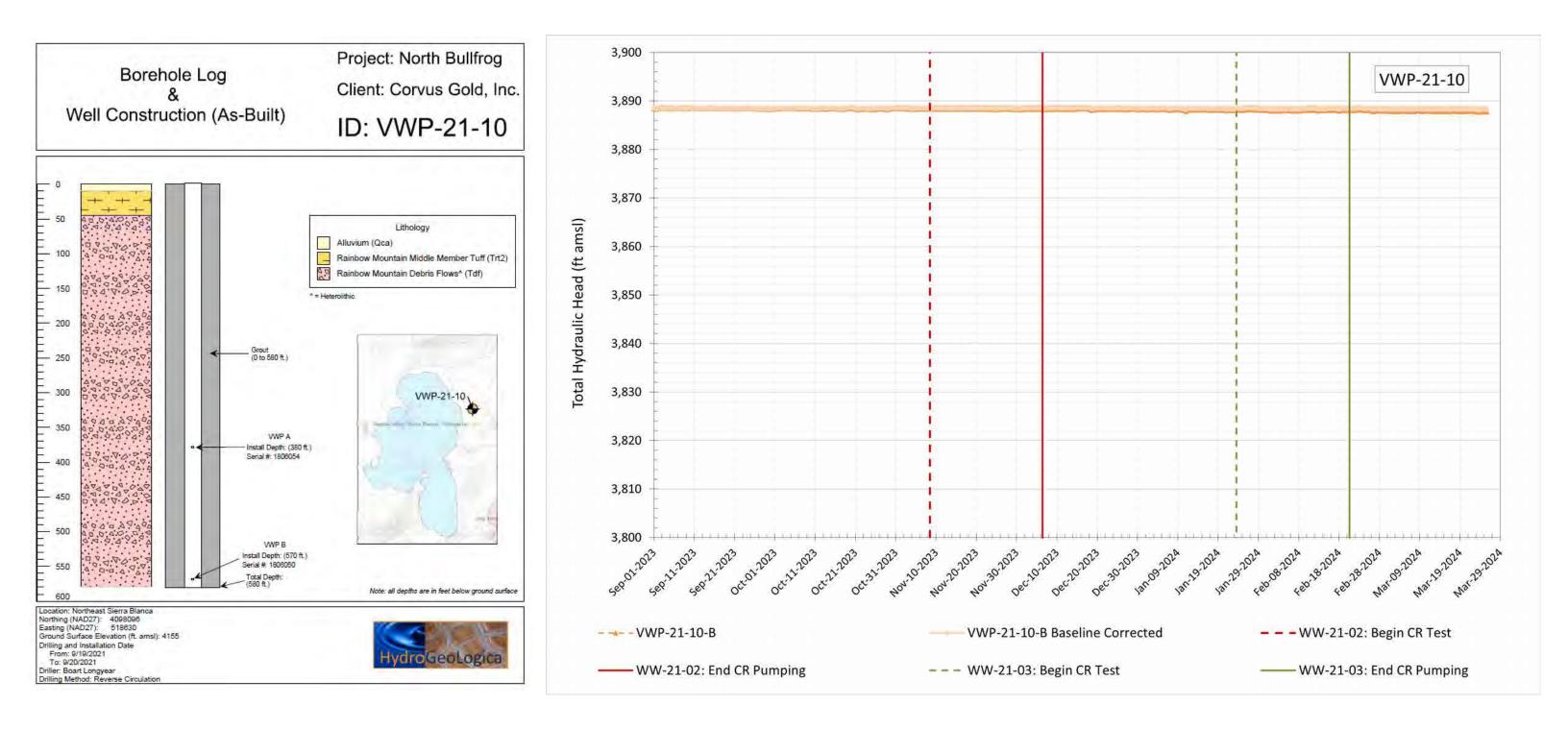


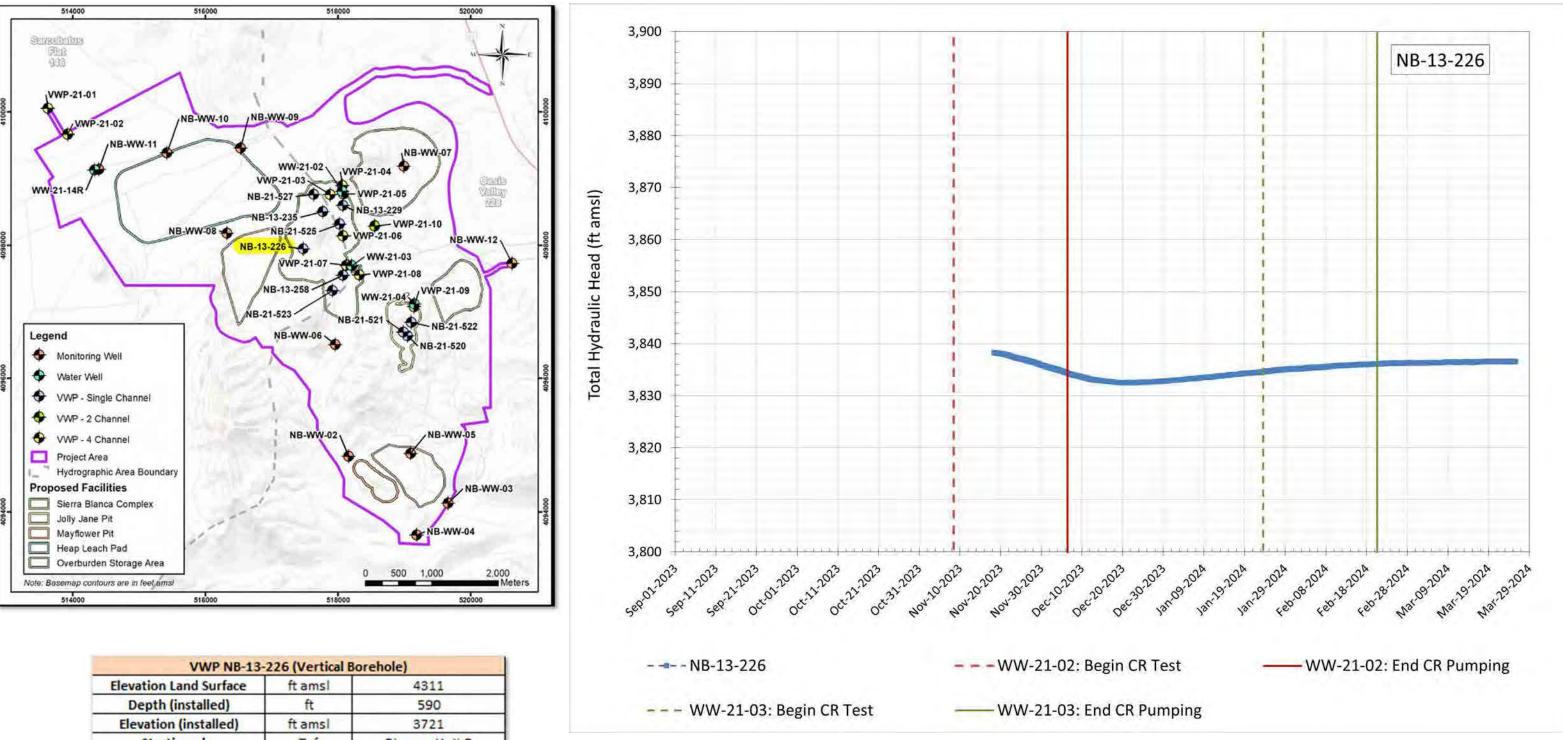




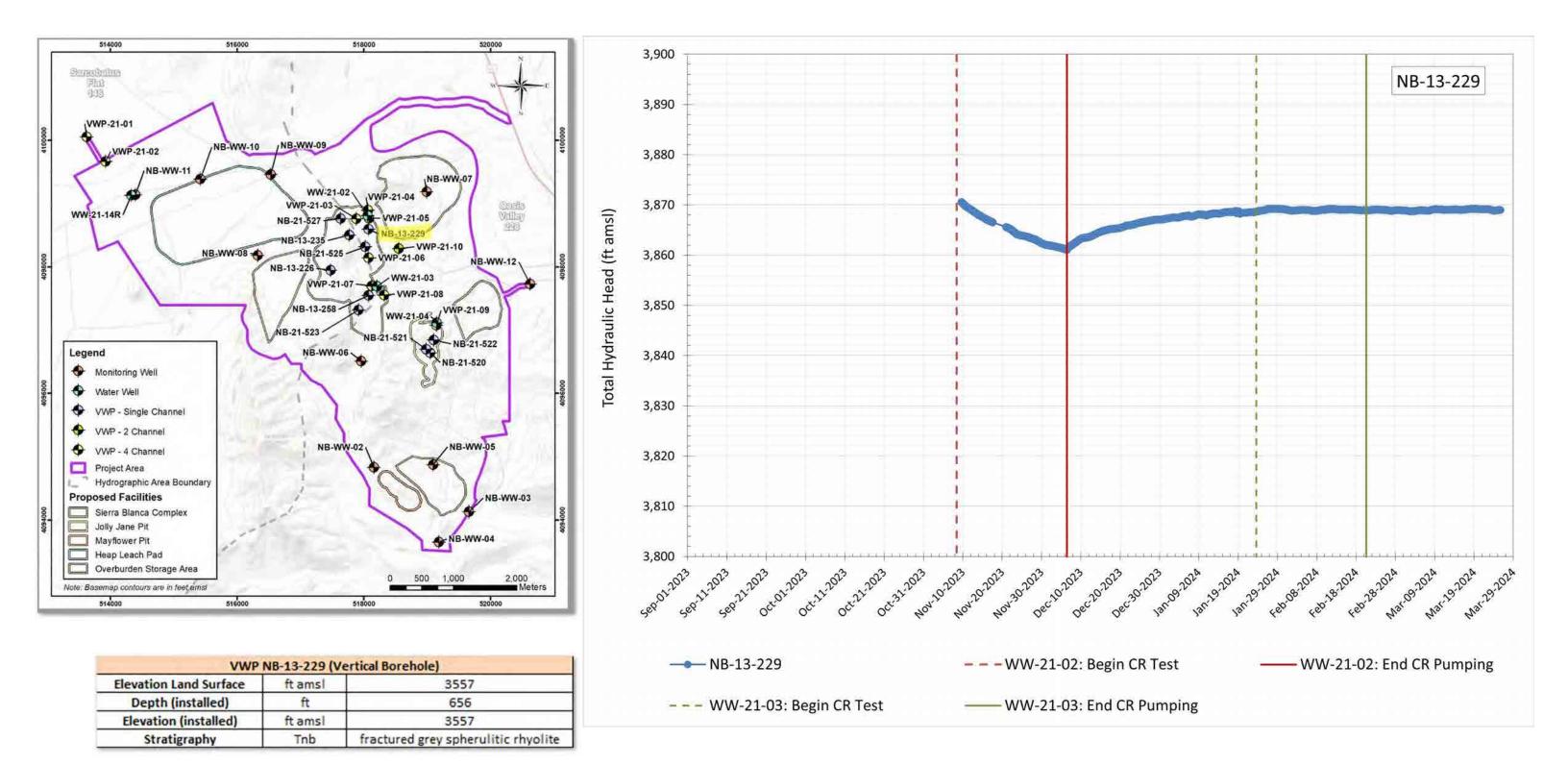


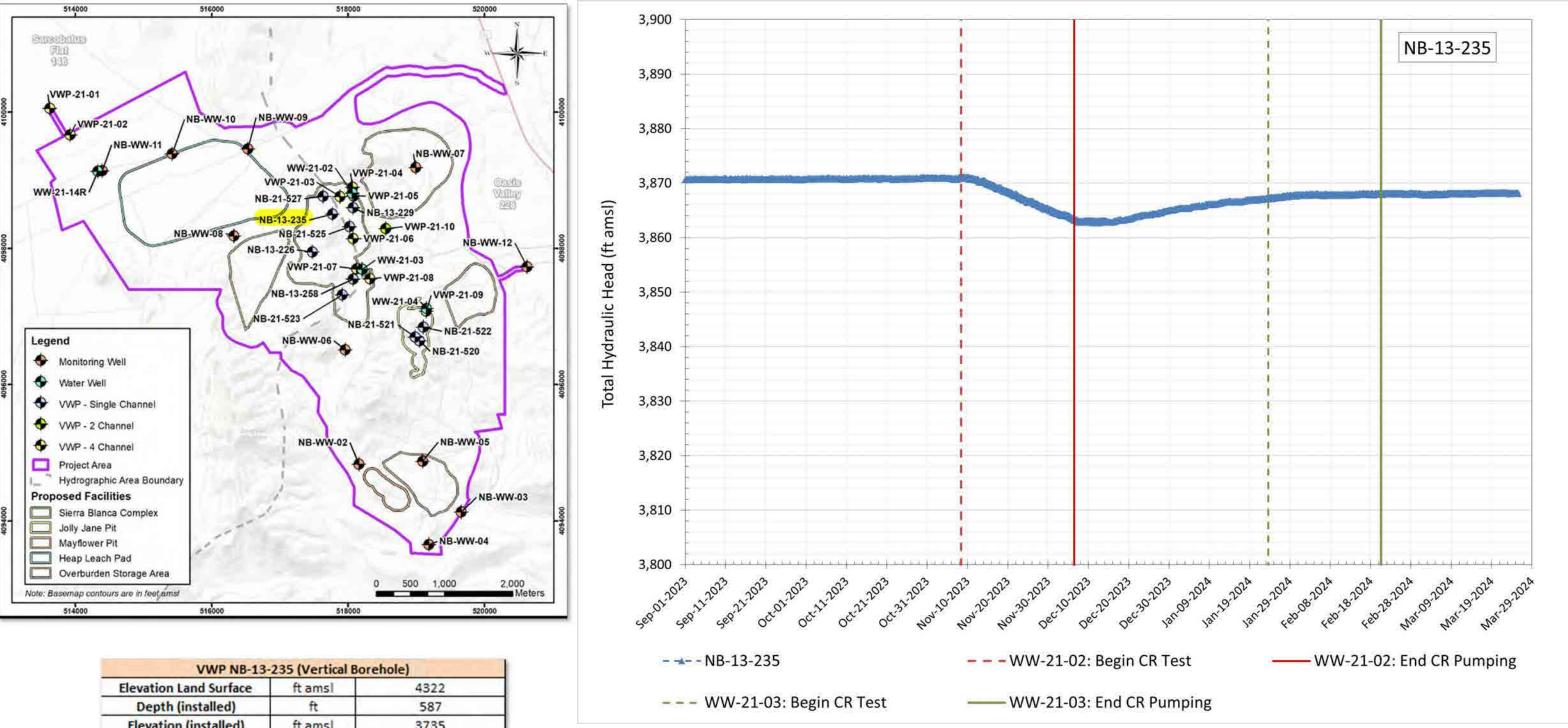




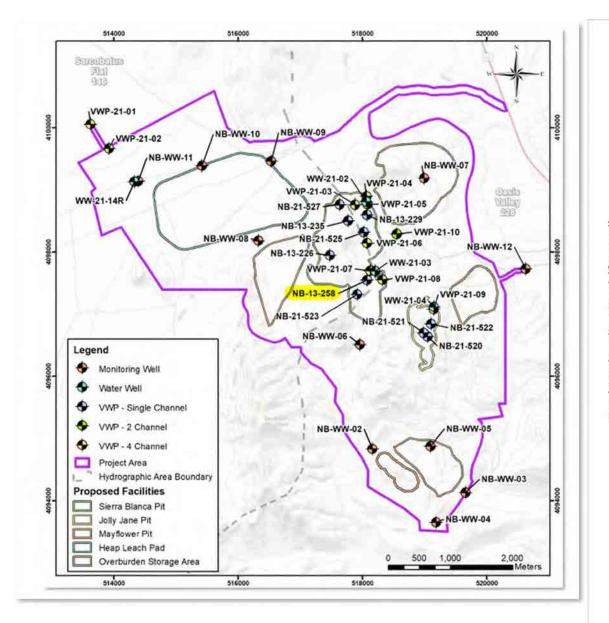


ation Land Surface	it amai	7011
Depth (installed)	ft	590
evation (installed)	ft amsl	3721
Stratigraphy	Tpf	Pioneer Unit B

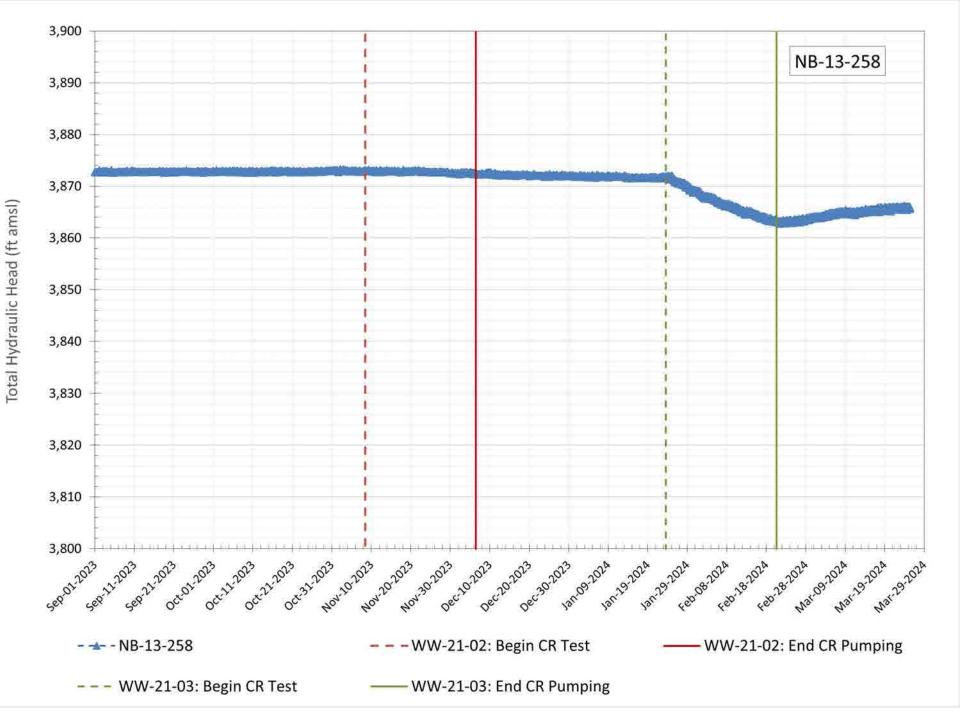


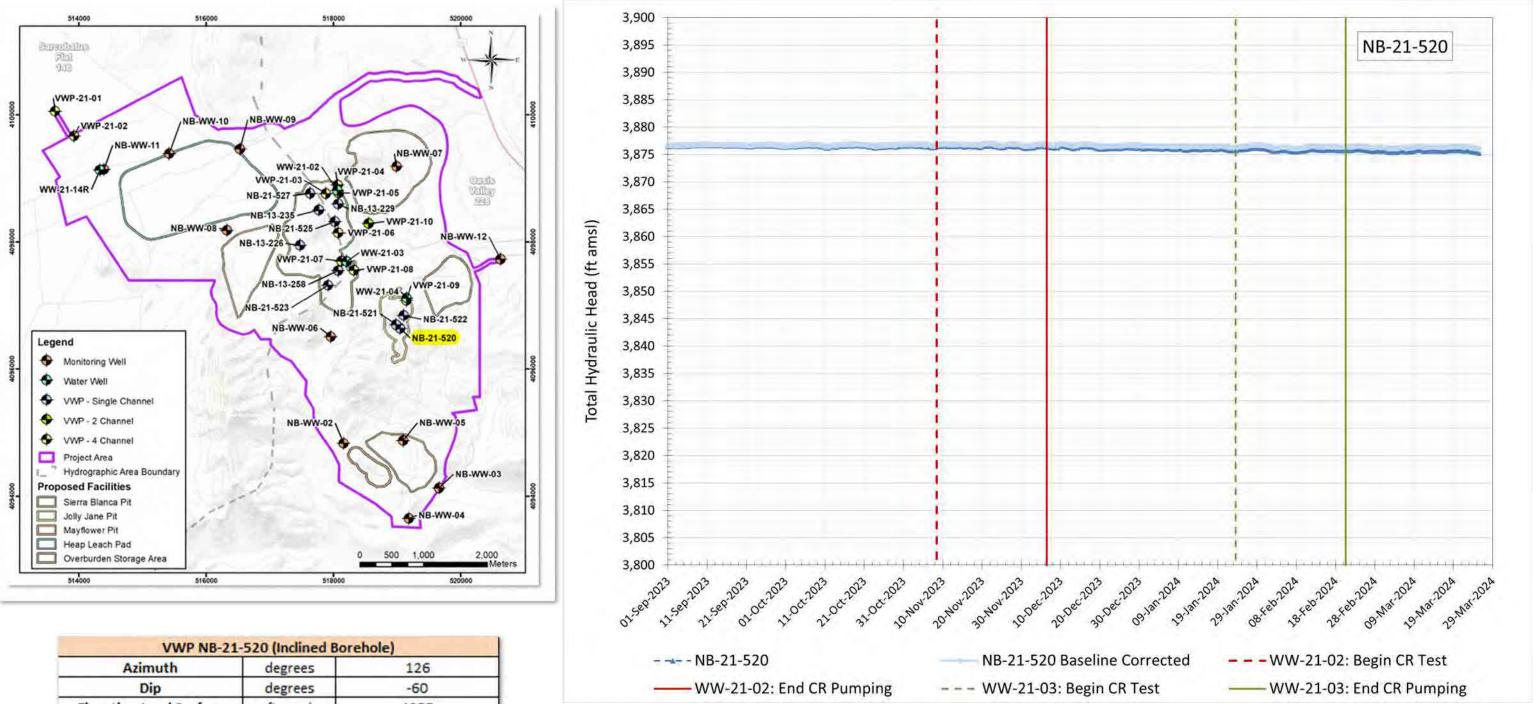


Stratigraphy	Tpf	Pioneer Unit B
Elevation (installed)	ft amsl	3735
Depth (installed)	ft	587
Elevation Land Surface	ft amsi	4322

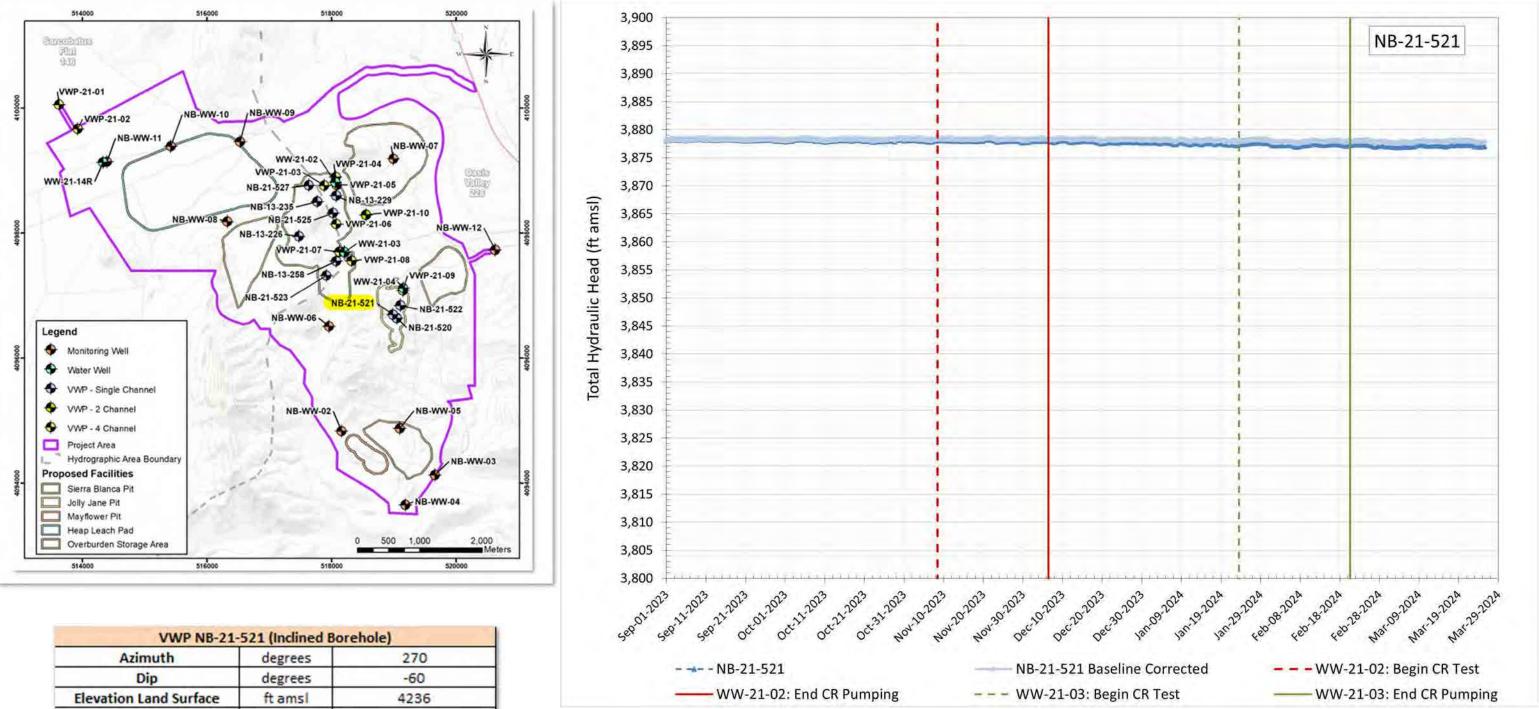


VWP NB-13-	258 (Vertical B	orehole)
Elevation Land Surface	ft amsl	4307
Depth (installed)	ft	688
Elevation (installed)	ft ams	3619
Stratigraphy	Tpf	Pioneer Unit D

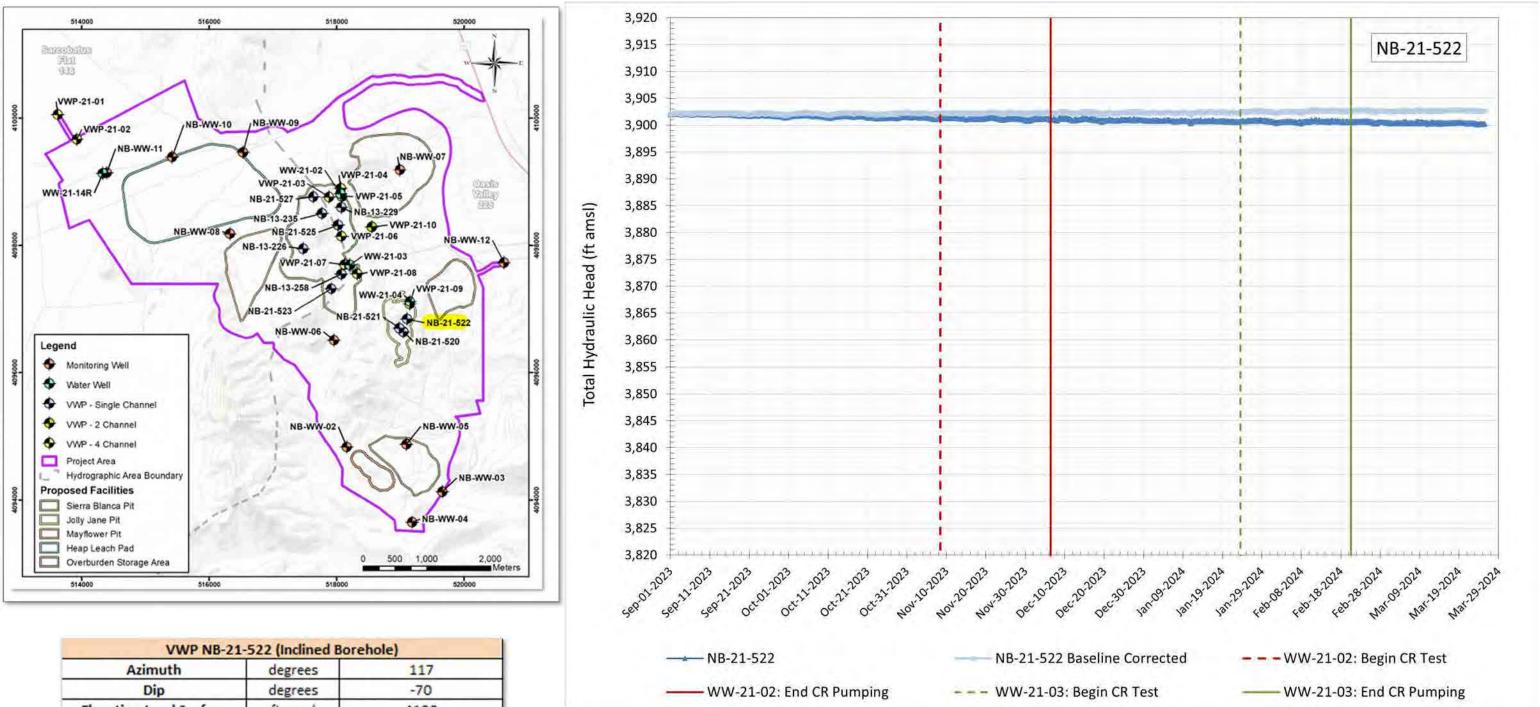




Azimuth	degrees	126
Dip	degrees	-60
Elevation Land Surface	ft amsl	4255
Length (installed)	ft	502
Depth (installed)	ft bls	435
Elevation (installed)	ft ams!	3820
Stratigraphy	PzC	Carrara Limestone

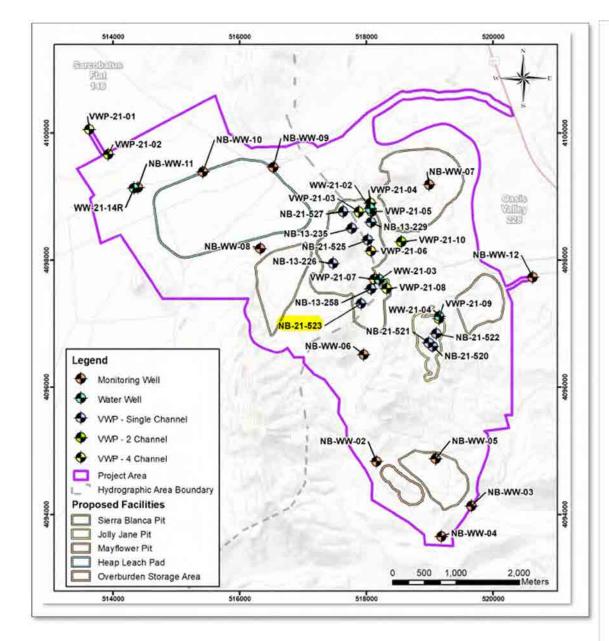


VWP NB-21-	521 (Inclined I	Borehole)
Azimuth	270	
Dip	degrees	-60
Elevation Land Surface	ftamsl	4236
Length (installed)	ft	523
Depth (installed)	ft bls	453
Elevation (installed)	ft amsl	3783
Stratigraphy	PzC	Carrara Limestone

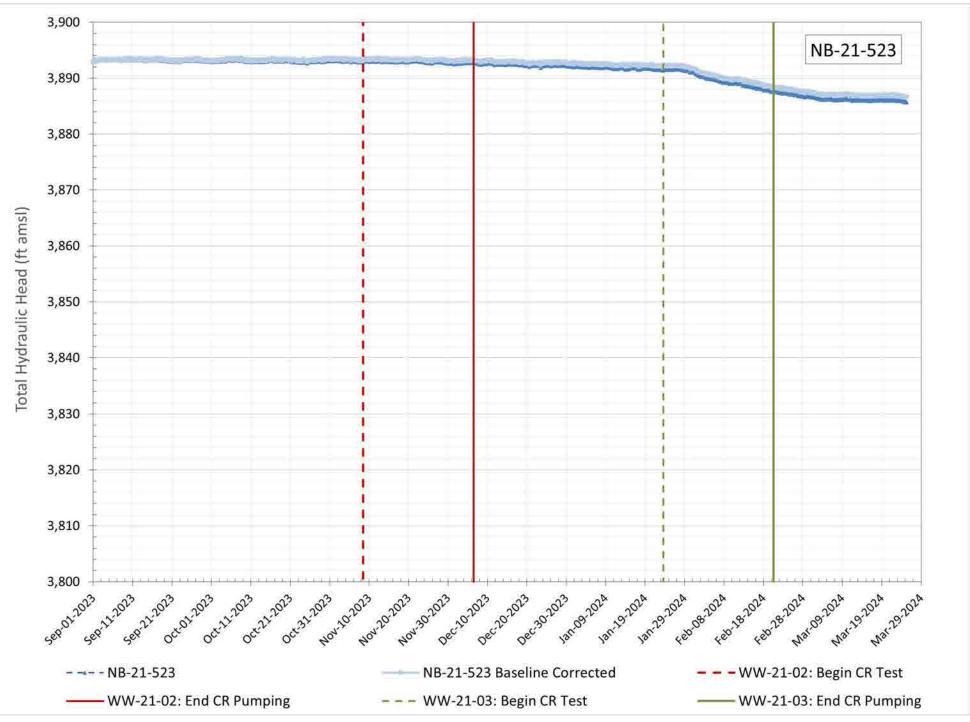


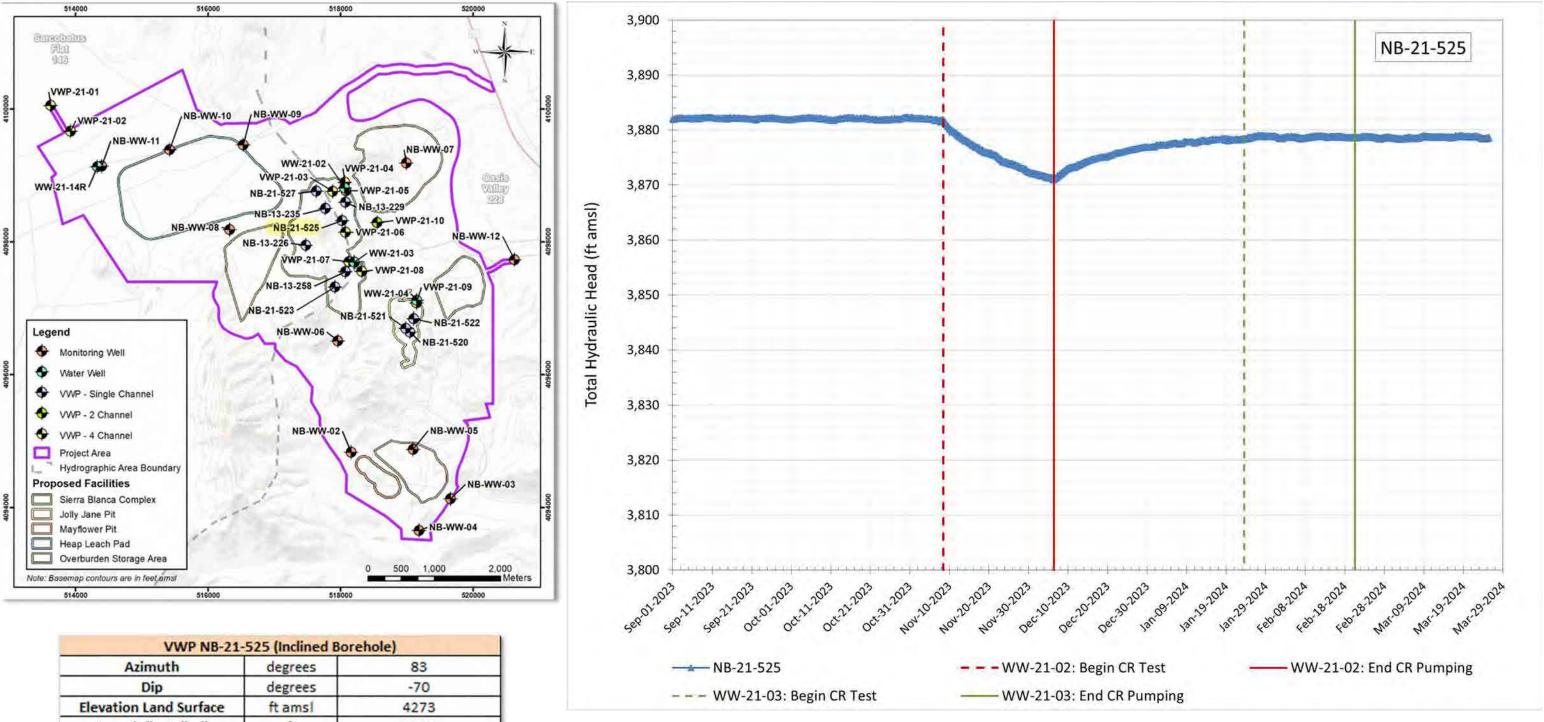
 WW-21-03:	Begin	CR Test

Azimuth	degrees	117
Dip	degrees	-70
Elevation Land Surface	ft amsl	4198
Length (installed)	ft	438
Depth (installed)	ft bls	412
Elevation (installed)	ft ams	3787
Stratigraphy	Td	Savage Valley Dacite

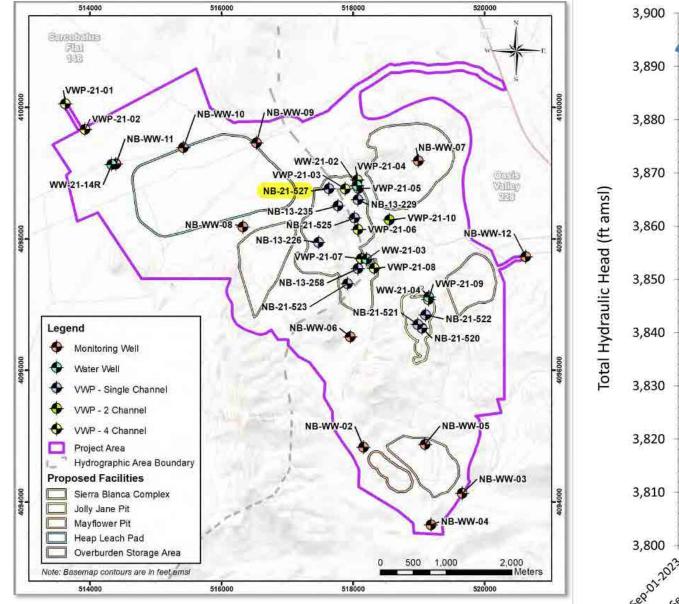


VWP NB-21-	523 (Inclined E	Borehole)
Azimuth	degrees	266
Dip	degrees	-70
Elevation Land Surface	ft amsl	4307
Length (installed)	ft	651
Depth (installed)	ft bls	612
Elevation (installed)	ft ams	3696
Stratigraphy	PzW	Wood Canyon Fm.





VVVP ND-21-	525 (inclined	burenoiej
Azimuth	degrees	83
Dip	degrees	-70
Elevation Land Surface	ft amsl	4273
Length (installed)	ft	844
Depth (installed)	ft bls	793
Elevation (installed)	ft amsl	3480
Stratigraphy	Tnb	North Bullfrog Suite



VWP NB-21-	527 (Inclined Bo	rehole)
Azimuth	degrees	280
Dip	degrees	-70
Elevation Land Surface	ft amsl	4283
Length (installed)	ft	580
Depth (installed)	ft bls	545
Elevation (installed)	ftamsl	3739
Stratigraphy	Tpf	Pioneer Fm

