Processing Materials

- Work copies of applicant-submitted information
- Deficiency letter
- Deficiency response
- Correct & complete determination
- Any correspondence with the applicant after application receipt and prior to sending the Draft PD

Processing Materials

Water Resources Division – Kalispell Regional Office
655 Timberwolf Pkwy, Ste. 4
Kalispell, MT 59901-1215
(406) 752-2288
DNRCKalispellWater@mt.gov

1/5/2026

RJM Properties LLC
1191 Majestic View Lane
Kalispell, MT, 59901

Subject: Correct and Complete Application for Beneficial Water Use Permit No. 76LJ 30171747

Dear Applicant,

The Department of Natural Resources and Conservation (Department) has determined that your application is correct and complete pursuant to ARM 36.12.1601. Please remember that correct and complete **does not mean that your application will be granted**. The purpose of this letter is to indicate that the Department has enough information to analyze your water right application.
The Department will issue a Draft Preliminary Determination document and Technical Analyses within 120 days of the date of this letter per §85-2-307(2)(b), MCA.

Following issuance of the Draft Preliminary Determination, you (Applicant) will have 15 business days to request an extension of time to submit additional information, if desired pursuant to §85-2-307(3)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to grant your application or grant your application in modified form, the Department will prepare a notice of opportunity to provide public comment, per §85-2-307(4)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to deny your application, the Department will adopt the Draft Preliminary Determination as the final determination per §85-2-307(3)(d)(ii), MCA.

If you have any questions or concerns about the application process, please contact me.
Best,

Abigail Williams
Water Resource Specialist
Kalispell Regional Water Resources Office

CC via email: Mikel Siemens, Core Water Consulting

Core Water Consulting

December 5, 2025

Abigail Williams, Water Resource Specialist
Montana Dept of Natural Resources and Conservation
655 Timberwolf Pkwy, Ste 4
Kalispell, MT 59901

RE: GW Permit Application 76LJ 30171747
RJM Properties LLC, 1191 Majestic View Ln.
in Section 17, Township 27 North, Range 20 West, Flathead County, Montana

Dear Ms. Williams:

A deficiency letter was received from DNRC regarding the application for beneficial water use permit (76LJ 30171747) on October 21, 2025. Responses are provided below for clarification.

For ease of reference comments have been summarized in italics, followed by the response.

1. Form 600 – Question 20 and Supplemental Report Pg 2
Q20: Describe the proposed location of the point(s) diversion to the nearest ¼ ¼ ¼ Section. Label each POD with the POD ID number used on the project map (question 17).

Response: The POD is in the NW1/4, SW1/4, NE1/4 of Section 17, T27N, R20W. The location information on page 2 of the supplemental was incorrect. The POD is located on Lot 2 of the subdivision. The correct POD is identified on Figure 1 Vicinity Map (attached). Thank you for noticing the discrepancy.

2. Variances were not requested at the time the Application was submitted. Please provide forms 633, 653, and 600-ATA for DNRC review.

Response: Form 633 was emailed to Travis Wilson following application submittal on September 8, 2025. Variances were previously approved for the pump test and were attached in the supplemental report. The prior application, 76LJ 30164921, timeframe expired but the ATA includes reasons for the variances approval. Form 653 and 600-ATA are enclosed, and an amended Form 633 will be emailed.

3. Form 600 – Question 18 and Supplemental Report
1. The response on the application was requesting 2.24 AF for multiple domestic, 19.48 AF for lawn and garden, with a total requested volume of 21.72 AF. On page one of the supplemental report in the introduction section a volume of 21.63 acre-feet/year (AF/year) was requested.

Response: The volume listed in the introduction to the supplemental report was incorrect. The total volume of 21.72 AF is requested.

2. Flow rate requested at 105 on the application but the supplemental report states multiple GPM rates:

Page 3 – "pumping at a rate of 101 GPM after a 24 hour period"

Page 4 – a GPM of 104.79 was listed

Page 24 – In the printout of Form 633 a flow rate of 101.12 is recorded

Page 25 – The data graphed states an average sustainable flow of 101.15 GPM

Page 30 & 32 – Graphs note calculations done on "average sustainable flow rate" of 101.27 GPM

Response: The flow rate requested is the average sustained flow over the pump test period at 101.15 gpm. There were numerous other similar numbers. Thank you for asking for direct clarification on the final intended application flow rate. The Form 600 Page 4 has been amended to reflect 101.15 gpm, along with the drawdown graph which relied upon the average totalized flow rate over the test period.

As stated, "A peak domestic flow rate of 22.22 gpm for the eight residences. Lawn and garden irrigation is intended overnight, to minimize evaporation during the day. A 7-hour irrigation period demands a flow rate of 82.57 gpm". The homeowners association will monitor the irrigation practices to ensure proper distribution for domestic purposes during the daytime.

The pump test was targeting a diversion rate of 100 gpm and ultimate average rate was 101.15 gpm over the 24-hour period obtained from the totalizer flow records. The information tab on Form 633 has been amended to the average flow rate for the entire test.

The volume being requested is 21.72 AF and the flow rate requested is 101.15 gpm.

4. The Applicant is stated as Rod McFarlane in the Application and supporting document, but Tina McFarlane signed the Application. The evidence provided in Appendix G (Proof of Possessory Interest) for Tina and Rod McFarlane does not meet the requirement for ARM 36.12.1802(2).

Response: Rodney Macfarlane is the member of RJM Properties LLC with Tia Macfarlane as the registered agent. The permit would be issued to RJM Properties LLC, not Rodney Macfarlane specifically, so Tia Macfarlane (as the registered agent) has the power to sign the application on behalf of RJM Properties. The power of attorney document is attached.

Please reach out if you have any further questions or concerns.

Best regards,

Mikel Siemens, P.E.
Environmental Engineer

Attached:
Figure 1. Vicinity Map
Page 4 of Form 600
Drawdown Graph with Average Sustained Flow Rate of 101.15 gpm
ATA Review Document from Old Application (76LJ 30164921)
Secretary of State Website Business Search
RJM Properties LLC Power of Attorney

Enclosed:
Amended Form 633 (correcting Flow Rate 1st tab)
Form 653
Form 600-ATA

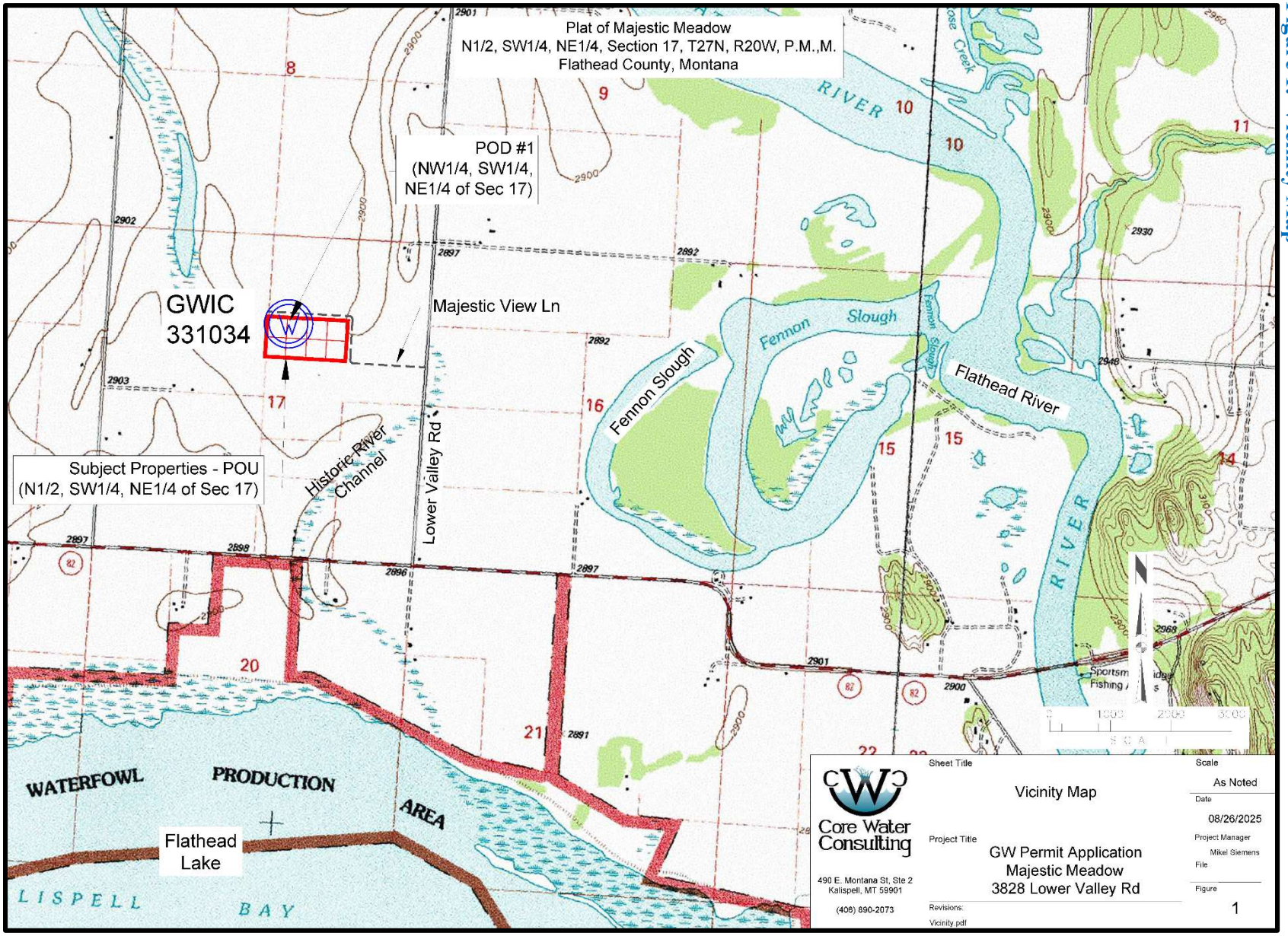


Figure 1. Vicinity Map

Page 4 of Form 600

PURPOSE AND DIVERSION INFORMATION

14. ☐ **Y** ☑ **N** Is the proposed use temporary?

14.a. If yes, when will the appropriation cease? _____

15. Is the proposed source surface water or groundwater? Groundwater

16. What is the source name? GWIC 331034

17. ☑ **S** Attach a map utilizing an aerial photograph or topographic map that shows the following: section corners; township and range; north arrow; scale bar; all proposed points of diversion labeled with a unique Point of Diversion (POD) ID number and, if applicable, GWIC number; all proposed places of use; all proposed conveyance facilities and or routes; all proposed places of storage labeled with a unique Storage ID number; and places of use (POU) for all overlapping water rights. More than one map may be submitted, if necessary to clearly convey all required information.

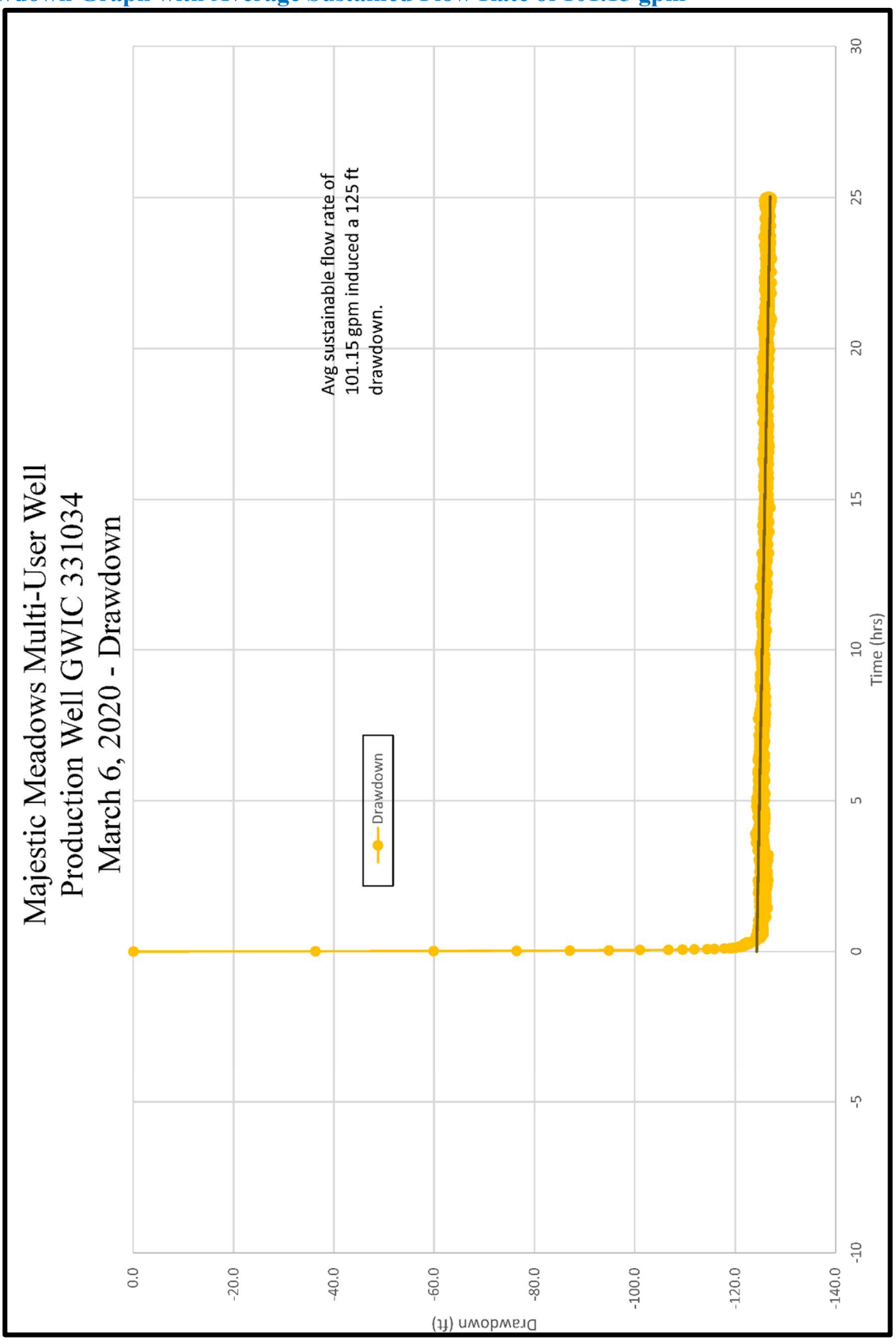
18. Fill out the table below. Means of diversion for surface water includes headgate, pump, dam, and others. Means of diversion for groundwater includes well, developed spring, pit pond, and others.

Purpose	**Means of Diversion**	**Acres Irrigated** (if appl.)	**Period of Diversion** *(Month/Day - Month/Day)*	**Period of Use** *(Month/Day - Month/Day)*	**Flow Rate** ☑ *GPM* ☐ *CFS*	**Volume** *(Acre-Feet)*
Domestic	Well		01/01-12/31	01/01-12/31	22.00 (day)	2.24
Lawn & Garden	Well	10	04/15-10/15	04/15-10/15	82.57 (night)	19.48
				Total Flow Rate and Volume Required	101.15	21.72

19. ☑ **Y** ☐ **N** Does the proposed use include on or more of the following purposes: domestic, multiple domestic, stock, or irrigation? If yes, fill out the following table, where applicable.

Purpose	**Requested Information**	**Response**
Domestic or multiple domestic	Number of dwellings	8
Stock	Number of animal units	
Irrigation	Method of irrigation type (sprinkler or flood) and subtype (if flood: level border, graded border, furrow, contour ditch, or other; if sprinkler: center pivot, wheel line, or other)	Lawn and garden irrigation (sprinkler)
Irrigation (flood only)	Design slope	

Drawdown Graph with Average Sustained Flow Rate of 101.15 gpm



ATA Review Document from Old Application (76LJ 30164921)

ARM 36.12.121 - Aquifer Testing Addendum (ATA) - Review

Department of Natural Resources and Conservation (DNRC)
Water Sciences Bureau (WSB)

Applicant	RJM Real Estate		
Pre-Application/Application No.	76LJ 30164921	**Date Sent to RO**	12/10/2024
Regional Office (RO)	Kalispell	**WSB Staff Name**	Kim Bolhuis, Groundwater Hydrologist

This checklist identifies any deficiencies that would require a variance pertinent to Administrative Rules of Montana (ARM) 36.12.121. **Table 1** lists deficiencies that would require a variance, the recommended action and the rationale describing why the variance request could be considered appropriate. If the requirements of ARM 36.12.121 are satisfied for each item, the box will be checked next to that item indicating such.

Table 1: Deficiencies identified, recommended action and rationale from WSB.

☐ **No Deficiencies Identified**

Test Duration	Variance (ARM) (R=Requested; A=Additional)	Recommend Granting Variance Request	Rationale:
24-hr	3(a) ☐ R ☒ A	☒ Yes ☐ No	Rate departed from the average by more than +/- 5% during the test. The anomalies were short and did not endure for significant amounts of time during the test. The change in pumping rates will not affect analysis or modeling efforts by WSB.
24-hr	2(b) ☐ R ☒ A	☐ Yes ☒ No	The average pumping rate was not maintained at or above 105 gpm, which is the requested rate. The average pumping rate through the duration of the test was 101.5 gpm. The 24-hr aquifer test clearly demonstrates that well/pump/aquifer cannot sustain pumping at 105 gpm. This departure from ARM 36.12.121 would affect modeling efforts since the requested flow rate and therefore volume cannot be achieved. A flow rate of 101 gpm would be recommended as that has been proven sufficient by the aquifer test data.
24-hr	3(f) ☐ R ☒ A	☒ Yes ☐ No	An observation well was used to monitor this 24-hr test that was completed in the same aquifer as the production well and was close enough 330 ft away) to potentially record an aquifer response to pumping. However, the observation well did not show a significant response to pumping, in addition to being pumped during the 24-hr test on the production well. The data is not usable for modeling of aquifer properties. However, the production well data is sufficient for modeling aquifer transmissivity, and a textbook value or value from a nearby test will be used for storativity.
24-hr	3(g) ☐ R ☒ A	☒ Yes ☐ No	Background levels were not recorded for a total of 48 hours prior to the aquifer test. They were recorded for approximately 19

			hours prior to the test. The 19 hours of background monitoring showed no significant trend (slope was $6x10^{-5}$ ft/ft). The background monitoring indicates that the water table trend is insignificant and will not affect modeling or analysis efforts.
Choose an item.	Choose an item. ☐ R ☐ A	☐ Yes ☐ No	

36.12.121(2): Minimum information that must be submitted with applications, check if provided:

☒ **(a)** Map with labeled location of production and observation wells; and

☒ **(b)** ☐ **NA** Well logs of the production and observation wells; and

☒ **(c)** ☐ **NA** Form No. 633, in electronic format, with *all* information and data provided.

36.12.121 (3): Minimum testing procedures are as follows, check if met:

☐ **(a)** ☐ **NA** Pumping must be maintained throughout the duration of the test. The rate may not depart from the average pumping rate by more than +/- 5%.

☐ **(b)** ☐ **NA** The average pumping rate must be equal to or greater than the proposed flow rate if the application is for one well or if the total proposed rate for multiple wells can be obtained from a single well.

☐ **(c)** ☒ **NA** The proposed pumping rate may be demonstrated by testing multiple wells as long as (e) is met by one well and the remaining flow rate is demonstrated by eight-hour drawdown and yield tests on additional production wells under (e)(ii) and e(iii).

☒ **(d)** ☐ **NA** Pumping rate must be measured with a reliable measuring device and recorded with clock time according to the schedule on Form No. 633.

☒ **(e)** ☐ **NA** Minimum duration of pumping during an aquifer test must be 24 hours for a proposed pumping rate and volume equal to or less than 150 GPM or 50 AF, or 72 hours for a proposed pumping rate and volume greater than 150 GPM or 50 AF.

☐ **(e)(i)** ☒ **NA** At a minimum an eight-hour drawdown and yield test is required on all new production wells.

☐ **(e)(ii)** ☒ **NA** In addition to (e), if more than one new production well is proposed, at a minimum an eight-hour drawdown and yield test is required on all subsequent new production wells.

☐ **(e)(iii)** ☒ **NA** The testing procedures for a minimum eight-hour drawdown and yield test performed on any production well must follow (a), (d), and (h).

☐ **(f)** ☐ **NA** One or more observation wells must be completed in the same source aquifer as the proposed production well and close enough to the production well so that drawdown is measurable and far enough that well hydraulics do not affect the observation well.

☐ **(g)** ☐ **NA** Background groundwater levels in the production well and observation well(s) must be monitored at frequent intervals for at least two days prior to beginning the aquifer test according to the Form No. 633.

☒ **(h)** ☐ **NA** Groundwater levels in the production and/or observation well(s) must be reported with 0.01-foot precision according to the schedule specified on Form No. 633.

Secretary of State Website Business Search

STATE OF MONTANA
SECRETARY OF STATE
2025 ANNUAL REPORT

STATE OF MONTANA
-FILED-
SECRETARY OF STATE
File Number: 16371952
Date Filed: 1/3/2025 6:10:28 AM

Business Type	
Business Type	Domestic Limited Liability Company
Business Sub-Type	Limited Liability Company
Business Name	
Annual Report Year	2025
Name of Business Entity	RJM Properties LLC
Montana File Number	C1296743
Country of Organization	United States
State of Organization	Montana
Business Purpose	Building apartments
Business Mailing Address of Principal Office	
Address	1191 MAJESTIC VIEW LANE KALISPELL, MT 59901
Business Physical Address of Principal Office	
Address	1191 MAJESTIC VIEW LANE KALISPELL, MT 59901
The registered agent on record is:	
Registered Agent	Tia Macfarlane Non-Commercial Registered Agent Agent Number RA1296804 Email Address tia.macfarlane13@gmail.com Website Physical Address 1191 MAJESTIC VIEW LN KALISPELL, MT 59901-1814 Mailing Address 1191 MAJESTIC VIEW LN KALISPELL, MT 59901-1814
LLC Management	
LLC Managed By	Members

Members

Name Of Individual Or Business Entity	Business Mailing Address	Email Address	Active Registered Entity
Rodney Macfarlane	1191 MAJESTIC VIEW LANE KALISPELL, MT 59901	tia.macfarlane13@gmail.com	

Declarations

☒ I confirm I have reviewed the information set forth in this Annual Report and that all information is correct and factual.

☒ I have been authorized by the business entity to file this document online.

☒ I, HEREBY SWEAR AND/OR AFFIRM, under penalty of law, including criminal prosecution, that the facts contained in this document are true. I certify that I am signing this document as the person(s) whose signature is required, or as an agent of the person(s) whose signature is required, who has authorized me to place his/her signature on this document.

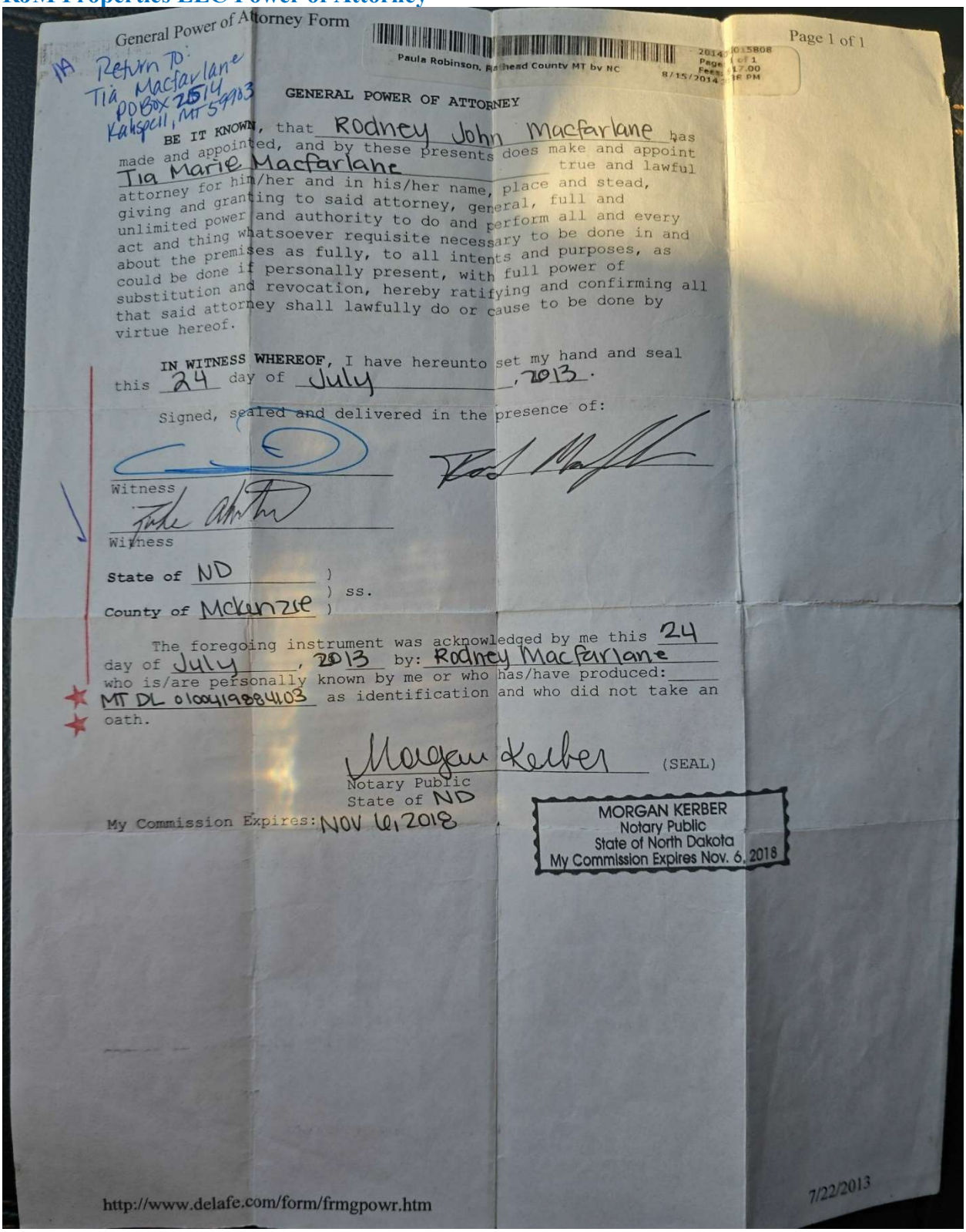
Page 1 of 2

Page 1 of 2

Signature		
Self	*Macfarlane*	*01/03/2025*
Signer's Capacity	Sign Here	Date
Position	Manager/Member	
Daytime Contact		
Phone Number	(406) 261-6652	
Email	jdobginger@gmail.com	

Page 2 of 2

RJM Properties LLC Power of Attorney



General Power of Attorney Form

Page 1 of 1

Paula Robinson, Rockhead County MT by NC
2014 015808
Page 1 of 1
Fees 17.00
8/15/2014 1E PM

Return To:
Tia Macfarlane
PO Box 25514
Kalispell, MT 59903

GENERAL POWER OF ATTORNEY

BE IT KNOWN, that Rodney John Macfarlane has made and appointed, and by these presents does make and appoint Tia Marie Macfarlane true and lawful attorney for him/her and in his/her name, place and stead, giving and granting to said attorney, general, full and unlimited power and authority to do and perform all and every act and thing whatsoever requisite necessary to be done in and about the premises as fully, to all intents and purposes, as could be done if personally present, with full power of substitution and revocation, hereby ratifying and confirming all that said attorney shall lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 24 day of July, 2013.

Signed, sealed and delivered in the presence of:

Witness

Witness

State of ND)
) ss.
County of Mckenzie)

The foregoing instrument was acknowledged by me this 24 day of July, 2013 by: Rodney Macfarlane who is/are personally known by me or who has/have produced: MT DL 01004198841103 as identification and who did not take an oath.

Morgan Kerber (SEAL)
Notary Public
State of ND

My Commission Expires: NOV 6, 2018

MORGAN KERBER
Notary Public
State of North Dakota
My Commission Expires Nov. 6, 2018

http://www.delafe.com/form/frmgpowr.htm

7/22/2013

VARIANCE REQUEST

ARM 36.12.123

Form No. 653 *(Revised 08/2025)*

For Department Use Only

Application # _____ Basin _____

Received Date _____

Received By _____

INSTRUCTIONS

Use this form to request a variance from the requirements of ARM 36.12.121 or 36.12.1702, as provided for in ARM 36.12.123.

Submit this completed form to the appropriate regional office by the deadline established during the preapplication meeting or, if a preapplication meeting is not held, include this request with your filed application or as part of a deficiency response.

Applicant Name RJM Properties LLC, c/o Rod Macfarlane

Mailing Address 1191 Majestic View Lane

City Kalispell State MT Zip 59901

Home Phone 406-261-6652 Other Phone _____

Email: rod_macfarlane@yahoo.com

Representative Name (if other than Applicant) Mikel Siemens, PE; Core Water Consulting Inc.

☒ Representative is Consultant ☐ Representative is Attorney ☐ Representative is Other (describe) _____

Mailing Address 490 E Montana Street, Suite 2

City Kalispell State MT Zip 59901

Home Phone 406-890-2073 Other Phone _____

Email: mikel@corewaterconsulting.com

Identify from which section(s) of ARM 36.12.121 or 36.12.1702 you are requesting a variance. Refer to the rule for a full list of requirements in these sections.

☒ ARM 36.12.121 Aquifer Testing Requirements

- ☐ (2)(a) map with labeled location of production and observation wells
- ☐ (2)(b) well logs of the production and observation wells
- ☐ (2)(c) Form No. 633, in electronic format, with all information and data provided
- ☒ (3)(a) pumping rate may not depart from the average pumping rate by more than +/- 5%
- ☒ (3)(b) average pumping rate equal to or greater than the proposed flow rate if the application is for one well or if the total proposed rate for multiple wells can be obtained from a single well
- ☐ (3)(c) proposed pumping rate may be demonstrated by testing multiple wells as long as (e) is met by one well and the remaining flow rate is demonstrated by eight-hour drawdown and yield tests on additional production wells under (e)(i)(i)
- ☐ (3)(d) pumping rate must be measured with a reliable measuring device and recorded with clock time according to the schedule on Form No. 633
- ☐ (3)(e) minimum duration of pumping during an aquifer test must be 24 hours for a proposed pumping rate and volume equal to or less than 150 GPM or 50 AF, or 72 hours for a proposed pumping rate and volume greater than 150 GPM or 50 AF
- ☐ (3)(e)(i) at a minimum an eight-hour drawdown and yield test is required on all new production wells
- ☐ (3)(e)(ii) In addition to (e), if more than one new production well is proposed, at a minimum an eight-hour drawdown and yield test is required on all subsequent new production wells
- ☐ (3)(e)(iii) the testing procedures for a minimum eight-hour drawdown and yield test performed on any production well must follow (a), (d), and (h)
- ☒ (3)(f) one or more observation wells must be completed in the same source aquifer as the proposed production well and close enough to the production well so that drawdown is measurable and far enough that well hydraulics do not affect the observation well
- ☒ (3)(g) background groundwater levels in the production well and observation well(s) must be monitored at frequent intervals for at least two days prior to beginning the aquifer test according to the Form No. 633
- ☐ (3)(h) groundwater levels in the production and/or observation well(s) must be reported with 0.01-foot precision according to the schedule specified on Form No. 633

For each variance requested explain why the requirement was not met and why testing data are still usable and reliable. If applicable, specify alternative testing methodology or aquifer test data, to support your request. Add attachments if needed.

Based upon the ATA review document for the last application (76LJ 30164921), the variances listed here should be granted as they were before. The reasoning given by WSB is as follows. 3(a): The rate departed from the average by more than +/-5% during the test. The anomalies were short and did not endure for significant amounts of time during the test. The change in pumping rates will not affect analysis or modeling efforts by WSB. 3(b): The average pumping rate was not maintained at or above 105 gpm, which was the requested rate. The average pumping rate through the duration of the test was 101.5 gpm. The 24hr aquifer test clearly demonstrates that well/pump/aquifer cannot sustain pumping at 105 gpm. The requested flow rate is now requested at 101 gpm, which should allow this variance. 3(f): An observation well was used to monitor this 24hr test that was completed in the same aquifer as the production well and was close enough to 330-ft away to potentially record an aquifer response to pumping. However, the observation well did not show a significant response to pumping, in addition to being pumped during the 24hr test on the production well. The data is not usable for modeling of aquifer properties. However, the production well data is sufficient for modeling aquifer transmissivity, and a textbook value or value from a nearby test will be used for storativity. 3(g): Background levels were not recorded for a total of 48 hours prior to the aquifer test. They were recorded for approximately 19 hours prior to the test. The 19 hours of background monitoring showed no significant trend, which indicates that the water table trend is insignificant and will not be utilized.

☐ ARM 36.12.1702 Physical Surface Water Availability
- ☐ (1)(b) at a minimum, three measurements that reflect high, moderate, and low flows during the period of diversion
- ☐ (4) once monthly measurements at department-approved intervals during the proposed period of diversion

Explain the specific variance you are requesting and the reason for requesting it. Also identify your proposed alternative measurement methodology, if applicable. Attach additional sheets if necessary.

Form No. 600/606-ATA *(02/2025)* **Applicant Name** RJM Properties LLC

APPLICATION FOR BENEFICIAL WATER USE PERMIT OR APPLICATION TO CHANGE A WATER RIGHT

AQUIFER TESTING ADDENDUM

ARM 36.12.121

Complete this addendum if the source of water for a Beneficial Water Use Permit or Water Right Change application is groundwater. Do not use this form if the source is a developed spring. Check the box denoting the information is attached or data was collected following minimum testing procedures. On a separate document, address the required information. Attachments must be labeled as shown in the sections below (i.e., ATA.3.a).

Section 1. Attachments must make specific reference to the section item shown.

VARIANCE INFORMATION:

ATA.1.a ☐ The Applicant submitted a variance request per ARM 36.12.123 for a variance from the requirements of ARM 36.12.121 and has provided a copy of the written request.

Section 2. Attachments must make specific reference to the section item shown.

MINIMUM INFORMATION THAT MUST BE SUBMITTED WITH APPLICATIONS:

ATA.2.a ☐ Provide a map with labeled location of production and observation wells.

ATA.2.b ☐ Provide well logs of production and observation wells.

ATA.2.c ☐ Provide Form No. 633, in electronic format, with all information and data provided.

ATA.2.d ☐ Provide a description of testing methods and quality of the aquifer test and data.

Section 3. Attachments must make specific reference to the section item shown.

MINIMUM TESTING PROCEDURES:

For any of the following, if the answer is “NO” or “NA”, provide information explaining why on a separate attachment.

ATA.3.a YES☑ NO☐ NA☐ Pumping was maintained throughout the duration of the test and the rate did not depart from the average pumping rate by more than 5%.

ATA.3.b YES☑ NO☐ NA☐ The average pumping rate is equal to or greater than the proposed flow rate if the application is for one well or if the total proposed rate for multiple wells can be obtained from a single well.

ATA.3.c YES☐ NO☐ NA☑ The proposed pumping rate was demonstrated by testing multiple wells, and 3.e was met by one well and the remaining flow rate demonstrated by eight-hour drawdown and yield tests on additional production wells under 3.e.ii and 3.e.iii.

ATA.3.d YES☑ NO☐ NA☐ The pumping rate was measured with a reliable measuring device and recorded with clock time according to the schedule on Form No. 633.

ATA.3.e YES☑ NO☐ NA☐ The duration of pumping during an aquifer test was at least 24 hours for a proposed pumping rate and volume equal to or less than 150 gpm or 50 acre-feet, or at least 72 hours for a proposed pumping rate and volume greater than 150 gpm or 50 acre-feet.

i. If a variance from 3.e was granted, at a minimum, eight-hour drawdown and yield tests were completed on all new production wells.

ii. In addition to 3.e, if more than one new production well is proposed, at a minimum, eight-hour drawdown and yield tests were completed on all subsequent new production wells.

iii. The testing procedures for a minimum eight-hour drawdown and yield test performed on any production well followed 3.a, 3.d, and 3.h.

ATA.3.f YES☐ NO☑ NA☐ One or more observation wells were completed in the same source aquifer as the proposed production well and close enough to the production well so that drawdown is measurable and far enough away so that well hydraulics do not affect the observation well.

ATA.3.g YES☐ NO☑ NA☐ Background groundwater levels in the production well and observation well(s) were monitored at frequent intervals for at least two days prior to beginning the aquifer test according to Form No. 633.

ATA.3.h YES☑ NO☐ NA☐ Water levels in the production well and observation well(s) were reported with 0.01-foot precision according to the schedule specified on Form No. 633 (8-hour drawdown and yield test only need to provide water levels for drawdown; no background and recovery data are necessary).

Water Resources Division – Kalispell Regional Office
655 Timberwolf Pkwy, Ste. 4
Kalispell, MT 59901-1215
(406) 752-2288
DNRCKalispellWater@mt.gov

October 20, 2025

RJM Properties LLC
1191 Majestic View Lane
Kalispell, MT, 59901

Subject: Deficiency letter for Beneficial Water Use Permit No. 76LJ 30171747.

Dear Applicant,

The Department of Natural Resources and Conservation (DNRC or Department) has begun reviewing your application. This letter is to notify you of the deficiencies in your application as required in ARM 36.12.1501(1) and §85-2-302(5)(b), MCA. An Applicant is required to submit substantial and credible information addressing the rules and statutes that are relative to your application. You must provide the information specified below for your application to be considered correct and complete. "Correct and complete" means all of the information provided is substantial and credible and provides all of the information as required by applicable rules and statutes. The application as submitted contains deficiencies in the following section(s):

POINT(S) OF DIVERSION- ARM 36.12.110

Form 600 - Question 20 and Supplemental Report Pg 2
Q20: *Describe the proposed location of the point(s) diversion to the nearest ¼ ¼ ¼ Section. Label each POD with the POD ID number used on the project map (question 17)*

On the application it is stated the POD is in the NW ¼ SW ¼ NE ¼. On page 2 of supporting documents, it is stated POD#1 is located at NE ¼ SW ¼ NE ¼.
Please confirm where the POD is located.

PHYSICAL GROUNDWATER AVAILABILITY- ARM 36.12.1703

Variances were not requested at the time the Application was submitted. Please provide forms 633, 653 and 600-ATA for DNRC review.

BENEFICIAL USE- ARM 36.12.1801

Form 600 – Question 18 and Supplemental Report
Q18: *Fill out the table below. Means of diversion for surface water included headgate, pump, dam, and others. Means of diversion for groundwater includes well, developed spring, pit pond, and others.*

1. The response on the application was requesting 2.24 AF for multiple domestic. 19.48 AF for lawn and garden with a total volume requested of 21.72 AF.
   On page one of the supplemental report in the introduction section a volume of 21.63 acre-feet/year (AF/year) was requested.

2. Flow rate requested at 105 on the application but the supplemental report states multiple GPM rates:
   Page 3 - "pumping at a rate of 101 GPM after 24 hour period"
   Page 4 - a GPM of 104.79 was listed
   Page 24 – In the printout of Form 633 a flow rate of 101.12 GPM is recorded
   Page 25 – The data graphed states an average sustainable flow of 101.15 GPM
   Pages 30 & 32 – Graphs note calculations done on "average sustainable flow rate" of 101.27 GPM

Please confirm what volume is being requested.
Please confirm the flow rate and ensure the well is able to produce the requested flow rate.

AFFIDAVIT AND CERTIFICATION

The Applicant is stated as Rod McFarlane in the Application and supporting document, but Tina McFarlane signed the Application.

The evidence provided in Appendix G (Proof of Possessory Interest) for Tina and Rod McFarlane does not meet the requirement for ARM 36.12.1802(2).

As stated above, the information submitted to address the rules and statutes listed in this deficiency letter must be substantial credible information to be acceptable at the correct and complete determination. §§85-2-102 (9) and (26), MCA.

Please submit the information specified above to the Kalispell Regional Office by February 17, 2026. This is the only deficiency letter that will be sent. An application not corrected or completed within 120 days from the date of this letter is terminated per ARM 36.12.1501(2) and §85-2-302(6)(a), MCA.

Please let me know if you have any questions.

Sincerely,

Abigail Williams
Water Resource Specialist
406-752-2735
Abigail.Williams@MT.gov

cc: Mikel Siemens
490 E Montana Street, Suite 2
Kalispell, MT, 59901

IMPORTANT NOTICE: This will be the final opportunity for you to provide the required information to the Department. If all of the requested information in this letter is not postmarked or submitted within 120 days of this letter, the application will be terminated within 30 days and the application fee will not be refunded.

Variance Information

- Variance Request Form
- WSB Variance Sheet
- Approval or Denial of Variance Request

Variance Information

Water Resources Division

Kalispell Regional Office

655 Timberwolf Pkwy Ste 4
Kalispell MT 59901-1215
phone: 406-752-2288

December 30, 2025

Core Water Consulting
mikel@corewaterconsulting.com

RE: Granted Variance for Application No. 76LJ 30171747 - RJM Properties LLC

Dear Ms. Siemens,

The Applicant (through its consultant) requested a variance from the aquifer testing requirements for the subject-line permit application.

Variances from the following rules are needed for the aquifer test conducted on the well.

- ARM 36.12.121(3)(a) involves pumping rate departures from the average flow rate during the test
- ARM 36.12.121(3)(f) involves certain requirements for observation wells
- ARM 36.12.121(3)(g) involves certain requirement for background water level observations

The Department grants variances of aquifer testing from the ARM noted directly above.

In addition, a variance from ARM 36.12.121(3)(b) was requested but it was also noted that a variance was no longer needed. The department concurs that a variance is not needed for 36.12.121(3)(b) for this application.

Sincerely,

Jim Ferch
Kalispell Water Resources Regional Manager
jferch@mt.gov
406-752-2706

ARM 36.12.121 - Aquifer Testing Addendum (ATA) - Review

Department of Natural Resources and Conservation (DNRC)
Water Sciences Bureau (WSB)

Applicant	RJM Properties LLC		
Pre-Application/Application No.	76LJ 30171747	**Date Sent to RO**	12/18/2025
Regional Office (RO)	Kalispell	**WSB Staff Name**	Kim Bolhuis, Groundwater Hydrologist

This checklist identifies any deficiencies that would require a variance pertinent to Administrative Rules of Montana (ARM) 36.12.121. **Table 1** lists deficiencies that would require a variance, the recommended action and the rationale describing why the variance request could be considered appropriate. If the requirements of ARM 36.12.121 are satisfied for each item, the box will be checked next to that item indicating such.

Table 1: Deficiencies identified, recommended action and rationale from WSB**.**

☐ **No Deficiencies Identified**

Test Duration	Variance (ARM) (R=Requested; A=Additional)	Recommend Granting Variance Request	Rationale:
24-hr	3(a) ☒ R ☐ A	☒ Yes ☐ No	Rate departed from the average by more than +/- 5% during the test. The anomalies were short and did not endure for significant amounts of time during the test. The change in pumping rates will not affect analysis or modeling efforts by WSB.
24-hr	3(f) ☒ R ☐ A	☒ Yes ☐ No	An observation well was used to monitor this 24-hr test that was completed in the same aquifer as the production well and was close enough 330 ft away) to potentially record an aquifer response to pumping. However, the observation well did not show a significant response to pumping, in addition to being pumped during the 24-hr test on the production well. The data is not usable for modeling of aquifer properties. However, the production well data is sufficient for modeling aquifer transmissivity, and a textbook value or value from a nearby test will be used for storativity.
24-hr	3(g) ☒ R ☐ A	☒ Yes ☐ No	Background levels were not recorded for a total of 48 hours prior to the aquifer test. They were recorded for approximately 19 hours prior to the test. The 19 hours of background monitoring showed no significant trend (slope was $6x10^{-5}$ ft/ft). The background monitoring indicates that the water table trend is insignificant and will not affect modeling or analysis efforts.
Choose an item.	Choose an item. ☐ R ☐ A	☐ Yes ☐ No	

36.12.121(2): Minimum information that must be submitted with applications, check if provided:

☒ **(a)** Map with labeled location of production and observation wells; and

☒ **(b)** ☐ **NA** Well logs of the production and observation wells; and

☒ **(c)** ☐ **NA** Form No. 633, in electronic format, with *all* information and data provided.

36.12.121 (3): Minimum testing procedures are as follows, check if met:

☐ **(a)** ☐ **NA** Pumping must be maintained throughout the duration of the test. The rate may not depart from the average pumping rate by more than +/- 5%.

☐ **(b)** ☐ **NA** The average pumping rate must be equal to or greater than the proposed flow rate if the application is for one well or if the total proposed rate for multiple wells can be obtained from a single well.

☐ **(c)** ☒ **NA** The proposed pumping rate may be demonstrated by testing multiple wells as long as (e) is met by one well and the remaining flow rate is demonstrated by eight-hour drawdown and yield tests on additional production wells under (e)(ii) and e(iii).

☒ **(d)** ☐ **NA** Pumping rate must be measured with a reliable measuring device and recorded with clock time according to the schedule on Form No. 633.

☒ **(e)** ☐ **NA** Minimum duration of pumping during an aquifer test must be 24 hours for a proposed pumping rate and volume equal to or less than 150 GPM or 50 AF, or 72 hours for a proposed pumping rate and volume greater than 150 GPM or 50 AF.

☐ **(e)(i)** ☒ **NA** At a minimum an eight-hour drawdown and yield test is required on all new production wells.

☐ **(e)(ii)** ☒ **NA** In addition to (e), if more than one new production well is proposed, at a minimum an eight-hour drawdown and yield test is required on all subsequent new production wells.

☐ **(e)(iii)** ☒ **NA** The testing procedures for a minimum eight-hour drawdown and yield test performed on any production well must follow (a), (d), and (h).

☐ **(f)** ☐ **NA** One or more observation wells must be completed in the same source aquifer as the proposed production well and close enough to the production well so that drawdown is measurable and far enough that well hydraulics do not affect the observation well.

☐ **(g)** ☐ **NA** Background groundwater levels in the production well and observation well(s) must be monitored at frequent intervals for at least two days prior to beginning the aquifer test according to the Form No. 633.

☒ **(h)** ☐ **NA** Groundwater levels in the production and/or observation well(s) must be reported with 0.01-foot precision according to the schedule specified on Form No. 633.

VARIANCE REQUEST

ARM 36.12.123

Form No. 653 *(Revised 08/2025)*

For Department Use Only

Application # _____ Basin _____

Received Date _____

Received By _____

INSTRUCTIONS

Use this form to request a variance from the requirements of ARM 36.12.121 or 36.12.1702, as provided for in ARM 36.12.123.

Submit this completed form to the appropriate regional office by the deadline established during the preapplication meeting or, if a preapplication meeting is not held, include this request with your filed application or as part of a deficiency response.

Applicant Name RJM Properties LLC, c/o Rod Macfarlane

Mailing Address 1191 Majestic View Lane

City Kalispell State MT Zip 59901

Home Phone 406-261-6652 Other Phone _____

Email: rod_macfarlane@yahoo.com

Representative Name (if other than Applicant) Mikel Siemens, PE; Core Water Consulting Inc.

☒ Representative is Consultant ☐ Representative is Attorney ☐ Representative is Other (describe) _____

Mailing Address 490 E Montana Street, Suite 2

City Kalispell State MT Zip 59901

Home Phone 406-890-2073 Other Phone _____

Email: mikel@corewaterconsulting.com

Identify from which section(s) of ARM 36.12.121 or 36.12.1702 you are requesting a variance. Refer to the rule for a full list of requirements in these sections.

☒ ARM 36.12.121 Aquifer Testing Requirements

- ☐ (2)(a) map with labeled location of production and observation wells
- ☐ (2)(b) well logs of the production and observation wells
- ☐ (2)(c) Form No. 633, in electronic format, with all information and data provided
- ☒ (3)(a) pumping rate may not depart from the average pumping rate by more than +/- 5%
- ☒ (3)(b) average pumping rate equal to or greater than the proposed flow rate if the application is for one well or if the total proposed rate for multiple wells can be obtained from a single well
- ☐ (3)(c) proposed pumping rate may be demonstrated by testing multiple wells as long as (e) is met by one well and the remaining flow rate is demonstrated by eight-hour drawdown and yield tests on additional production wells under (e)(i)(i)
- ☐ (3)(d) pumping rate must be measured with a reliable measuring device and recorded with clock time according to the schedule on Form No. 633
- ☐ (3)(e) minimum duration of pumping during an aquifer test must be 24 hours for a proposed pumping rate and volume equal to or less than 150 GPM or 50 AF, or 72 hours for a proposed pumping rate and volume greater than 150 GPM or 50 AF
- ☐ (3)(e)(i) at a minimum an eight-hour drawdown and yield test is required on all new production wells
- ☐ (3)(e)(ii) In addition to (e), if more than one new production well is proposed, at a minimum an eight-hour drawdown and yield test is required on all subsequent new production wells
- ☐ (3)(e)(iii) the testing procedures for a minimum eight-hour drawdown and yield test performed on any production well must follow (a), (d), and (h)
- ☒ (3)(f) one or more observation wells must be completed in the same source aquifer as the proposed production well and close enough to the production well so that drawdown is measurable and far enough that well hydraulics do not affect the observation well
- ☒ (3)(g) background groundwater levels in the production well and observation well(s) must be monitored at frequent intervals for at least two days prior to beginning the aquifer test according to the Form No. 633
- ☐ (3)(h) groundwater levels in the production and/or observation well(s) must be reported with 0.01-foot precision according to the schedule specified on Form No. 633

For each variance requested explain why the requirement was not met and why testing data are still usable and reliable. If applicable, specify alternative testing methodology or aquifer test data, to support your request. Add attachments if needed.

Based upon the ATA review document for the last application (76LJ 30164921), the variances listed here should be granted as they were before. The reasoning given by WSB is as follows. 3(a): The rate departed from the average by more than +/-5% during the test. The anomalies were short and did not endure for significant amounts of time during the test. The change in pumping rates will not affect analysis or modeling efforts by WSB. 3(b): The average pumping rate was not maintained at or above 105 gpm, which was the requested rate. The average pumping rate through the duration of the test was 101.5 gpm. The 24hr aquifer test clearly demonstrates that well/pump/aquifer cannot sustain pumping at 105 gpm. The requested flow rate is now requested at 101 gpm, which should allow this variance. 3(f): An observation well was used to monitor this 24hr test that was completed in the same aquifer as the production well and was close enough to 330-ft away to potentially record an aquifer response to pumping. However, the observation well did not show a significant response to pumping, in addition to being pumped during the 24hr test on the production well. The data is not usable for modeling of aquifer properties. However, the production well data is sufficient for modeling aquifer transmissivity, and a textbook value or value from a nearby test will be used for storativity. 3(g): Background levels were not recorded for a total of 48 hours prior to the aquifer test. They were recorded for approximately 19 hours prior to the test. The 19 hours of background monitoring showed no significant trend, which indicates that the water table trend is insignificant and will not be utilized.

☐ ARM 36.12.1702 Physical Surface Water Availability
- ☐ (1)(b) at a minimum, three measurements that reflect high, moderate, and low flows during the period of diversion
- ☐ (4) once monthly measurements at department-approved intervals during the proposed period of diversion

Explain the specific variance you are requesting and the reason for requesting it. Also identify your proposed alternative measurement methodology, if applicable. Attach additional sheets if necessary.

Application Materials

- Work Copy
- Application
- Any information submitted with Application including maps

Application Materials

APPLICATION FOR BENEFICIAL WATER USE PERMIT

§ 85-2-302, MCA

Form No. 600 *(02/2025)*

For Department Use Only

RECEIVED
DNRC Water Resources

SEP 08 2025

Kalispell Unit

Application # 30171747 Basin 76LJ
Priority Date 9/8/25 Time 15:11 AM/PM
Rec'd By LP
Fee Rec'd $ 2500.00 Check # 1422
Deposit Receipt # KLW2604244
Payor Inline Company LLC
Refund $ _____ Date _____

FILING FEE

$2900/$1600 – Inside a Basin Closure Area, Controlled Groundwater Area or Compact Closure; without/with filing fee reduction.

$2500/$1200 – Outside a Basin Closure Area; Controlled Groundwater Area or Compact Closure; without/with filing fee reduction.

INFORMATION

An application will be eligible for a filing fee reduction and expedited timelines if the applicant completes a preapplication meeting with the Department (ARM 36.12.1302(1)), which includes submitting any follow-up information identified by the Department (ARM 36.12.1302(3)(c)) and receiving either Department-completed technical analyses or Department review of applicant-submitted technical analyses (ARM 36.12.1302(4) and (5)). An application for the proposed project also must be submitted within 180 days of delivery of Department technical analyses or scientific credibility review and no element on the submitted application can be changed from the completed preapplication meeting form (ARM 36.12.1302(6)). **If application is eligible for a filing fee reduction, $500 paid for Form 600P-B will be credited toward filing fees shown above.**

Applicant Information: ***Add more as necessary.***

Applicant Name RJM Properties LLC c/o Rod Macfarlane
Mailing Address 1191 Majestic View Lane City Kalispell State MT Zip 59901
Phone Numbers: Home _____ Work _____ Cell _____
Email Address rod_macfarlane@yahoo.com

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Contact/Representative Information: ***Add more as necessary.***

Contact/Representative is: ☐ Applicant ☑ Consultant ☐ Attorney ☐ Other
Contact/Representative Name Mikel Siemens, PE; Core Water Consulting
Mailing Address 490 E Montana Street, Suite 2 City Kalispell State MT Zip 59901
Phone Numbers: Home _____ Work 406-890-2073 Cell 406-261-0216
Email Address mikel@corewaterconsulting.com

NOTE: *If a contact person is identified as an attorney, all communication will be sent only to the attorney unless the attorney provides written instruction to the contrary (ARM 36.12.122(2)). If a contact person is identified as a consultant, employee, or lessee, the individual filing the water right form or objection form will receive all correspondences, and a copy may be sent to the contact person (ARM 36.12.122(3)).*

Answer every question and applicable follow-up questions. Use the checkboxes to denote yes ("Y"), no ("N"), or not applicable ("NA"). Questions that require items to be submitted to the Department have a submitted ("S") checkbox, which is marked when the required item is attached to the Application. Label all submitted items with the question number for which they were submitted. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, specify "see attachment" on this form, and label the attachment with the question number. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Responses in the form of a table may be entered into the table provided on this form or in an attachment. If an attachment is used, the table must have the exact headings found on this form, and "see attachment" must be entered as a response to the relevant question. Clearly label all units in tables and narrative responses.

PREAPPLICATION AND TECHNICAL ANALYSES INFORMATION

1. ☑ **Y** ☐ **N** Do you elect for Department technical analyses to be used for criteria assessment?

2. ☐ **Y** ☑ **N** Did you have a preapplication meeting AND complete a Permit Preapplication Meeting Form Part A and Part B (Form 600P-A and 600P-B)?

IF QUESTION 2 IS NO, answer 2.a and 2.b:

2.a. ☑ **S** Submit the Technical Analyses Addendum (Form 600-TAA).

2.b. ☐ **S** ☑ **NA** Submit the technical analyses, if you elected in question 1 for Applicant technical analyses to be used for criteria assessment. Select "NA" if you elected for Departmental technical analyses.

IF QUESTION 2 IS YES, answer 2.c, 2.d, and 2.e:

2.c. ☐ **Y** ☑ **N** Has any element of the project described in this application changed from the mandatory elements of the project described in the completed form 600P? **If yes:**

2.c.i. Please explain.

A pre-application meeting was held, however, the final application (Form 600) was not submitted by the DNRC deadline. The applicant chose to not have another pre-application meeting and to submit the application for an expedited timeline. DNRC completed the technical analysis which is still valid until January 15, 2026.

2.c.ii. ☐ **S** Submit the Technical Analyses Addendum (Form 600-TAA).

2.d. ☐ **Y** ☑ **N** Are the technical analyses to be used for criteria assessment exactly the same as those completed during the preapplication process? **If no:**

2.d.i. Please explain.

The expire pre-app and the TAA were completed at 101 gpm, which is being increased to 105 gpm, and the volume had less than 1 AF increase. So with these increases, a new DNRC TA may be required.

2.d.ii. ☐ **S** Submit the Technical Analyses Addendum (Form 600-TAA).

2.e. ☑ **Y** ☐ **N** Did you elect in Question 1 for Department technical analyses to be used for criteria assessment? **If no:**

2.e.i. ☐ **S** Submit the technical analyses.

APPLICATION ADDENDA AND REVIEW

3. ☐ **S** ☑ **NA** If your application is for groundwater, not surface water, and one or more of your points of diversion are in a Basin Closure Area, then submit the Basin Closure Area Addendum (Form 600-BCA).

4. ☐ **S** ☑ **NA** If your application is for groundwater and one or more points of diversion are in a Basin Closure Area, then your project must have a Hydrogeologic Report that conforms with MCA 85-2-361 to comply with the requirements of § 85-2-360, MCA. A Hydrogeologic Report Addendum (Form 600-HRA) or Department Technical Analyses may be used to meet these requirements. Please mark the box below that best applies, then select "S" if submitting a Hydrogeologic Report or "NA" if one is not required. This question does not apply to surface water points of diversion in a Basin Closure Area.

- ☐ If you elected to conduct Technical Analyses, you must submit the Hydrogeologic Report Addendum (Form 600-HRA).
- ☐ If you elected for DNRC to conduct Technical Analyses but did not have a preapplication meeting AND complete a Form 600P Permit Preapplication Meeting Form (or changes have occurred since the completed Form 600P), you must submit the Hydrogeologic Report Addendum (Form 600-HRA).
- ☐ If you elected for DNRC to conduct Technical Analyses, had a preapplication meeting, completed a Form 600P, and the Technical Analyses remain unchanged since the preapplication meeting, you do not need to submit Form 600-HRA because the Department's Technical Analyses meet the report requirements of § 85-2-360 and § 85-2-361, MCA.

5. ☐ **S** ☑ **NA** If the project is for one or more groundwater points of diversion located in a Controlled Groundwater Area, then submit the Controlled Groundwater Area Addendum (Form 600-CGWA).

6. ☐ **S** ☑ **NA** If the project involves an appropriation that is greater than 5.5 CFS and 4,000 acre-feet, then submit a Criteria Addendum Application for Beneficial Water Use Permit for Appropriations Greater than 5.5 CFS and 4,000 AC-FT (Form 600-B).

7. ☐ **S** ☑ **NA** If the project involves out-of-state water use, then submit the Out-of-State Use Addendum (Form 600/606-OSA).

8. ☐ **S** ☑ **NA** If you require mitigation water to meet the criteria of issuance, then submit a Mitigation Purpose Addendum (Form 600/606-MIT).

9. ☐ **S** ☑ **NA** If the proposed purposes include marketing or selling water, (not marketing for mitigation/ aquifer recharge), then submit the Marketing Purpose Addendum (Form 600/606-WMA).

10. ☐ **S** ☑ **NA** If the project involves one or more places of storage, then submit a Permit Storage Addendum (Form 600-SA). This does not include reservoirs, pits, pit-dams, or ponds with a capacity less than 0.1 AF; water tanks; or cisterns (ARM 36.12.113(6)).

11. ☐ **S** ☑ **NA** If the project is in designated sage grouse habitat, then submit a review letter from the Montana Sage Grouse Habitat Conservation Program.

12. ☐ **S** ☑ **NA** If the project includes a point of diversion and/or place of use on State of Montana Trust Land, submit documentation of consent from the DNRC Trust Lands Management Division.

13. ☐ **S** ☑ **NA** You must provide a written notice of the application to each owner of an appropriation right sharing a point of diversion or means of conveyance (e.g., canal, ditch, flume, pipeline, or constructed waterway) pursuant to §85-2-302(4)(c), MCA. Submit a copy of this notice and the recipient list.

PURPOSE AND DIVERSION INFORMATION

14. ☐ **Y** ☑ **N** Is the proposed use temporary?

14.a. If yes, when will the appropriation cease? _____

15. Is the proposed source surface water or groundwater? Groundwater

16. What is the source name? GWIC 331034

17. ☑ **S** Attach a map utilizing an aerial photograph or topographic map that shows the following: section corners; township and range; north arrow; scale bar; all proposed points of diversion labeled with a unique Point of Diversion (POD) ID number and, if applicable, GWIC number; all proposed places of use; all proposed conveyance facilities and or routes; all proposed places of storage labeled with a unique Storage ID number; and places of use (POU) for all overlapping water rights. More than one map may be submitted, if necessary to clearly convey all required information.

18. Fill out the table below. Means of diversion for surface water includes headgate, pump, dam, and others. Means of diversion for groundwater includes well, developed spring, pit pond, and others.

Purpose	**Means of Diversion**	**Acres Irrigated** (if appl.)	**Period of Diversion** *(Month/Day - Month/Day)*	**Period of Use** *(Month/Day - Month/Day)*	**Flow Rate** ☑ *GPM* ☐ *CFS*	**Volume** *(Acre-Feet)*
Domestic	Well		01/01-12/31	01/01-12/31	22.00	2.24
Lawn & Garden	Well	10	04/15-10/15	04/15-10/15	82.57	19.48
				Total Flow Rate and Volume Required	105	21.72

19. ☑ **Y** ☐ **N** Does the proposed use include on or more of the following purposes: domestic, multiple domestic, stock, or irrigation? If yes, fill out the following table, where applicable.

Purpose	**Requested Information**	**Response**
Domestic or multiple domestic	Number of dwellings	8
Stock	Number of animal units	
Irrigation	Method of irrigation type (sprinkler or flood) and subtype (if flood: level border, graded border, furrow, contour ditch, or other; if sprinkler: center pivot, wheel line, or other)	Lawn and garden irrigation (sprinkler)
Irrigation (flood only)	Design slope	

POINT(S) OF DIVERSION

20. Describe the proposed location of the point(s) diversion to the nearest ¼ ¼ ¼ Section. Label each POD with the POD ID number used for the project map (question 17).

POD #	¼	¼	¼	Sec.	Twp.	Rge.	County	Lot	Block	Tract	Subdivision	Gov. Lot
1	NW	SW	NE	17	27N	20W	Flathead	2			Majestic Meadow	

PLACE OF USE

21. What are the geocodes of the place of use?

07-3835-17-1-04-20-0000	

22. Describe the legal land description for the proposed place of use and, if applying for an irrigation or lawn and garden purpose, list the number of irrigated acres.

Acres	Gov. Lot	Block	¼	¼	¼	Sec.	Twp.	Rge.	County
10			N2	Sw	NE	17	27N	20W	Flathead

SUPPLEMENTAL AND OVERLAPPING WATER RIGHTS

23. ☐ **Y** ☑ **N** Will other water rights supplement or overlap the place of use to contribute to the purpose(s)?

23.a. If yes, summarize how the supplemental and proposed water rights will be operated as a whole to serve the purpose(s).

24. For each supplemental or overlapping water right, please list the water right number, typical period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed to the shared place of use.

Water Right #	Average Period of Diversion	Average Period of Use	Flow Rate	Volume Contributed

25. ☐ **Y** ☑ **N** Will this application supplement contract water from a Federal Project, ditch company, or other source?

25.a. If yes, explain.

ADVERSE EFFECT

26. Explain how you can control your diversion in response to a call being made.

Reduce frequency hertz on VFD Control to limit peak production on the pump.

27. Describe any plans you have for ensuring existing water rights will be satisfied during times of water shortage.

Reduce to domestic use only if needed. See supplemental report for more information.

28. ☐ Y ☑ N Are you aware of any calls that have been made on the source of supply or, if groundwater, on nearby surface water sources?

28.a. If yes, explain.

29. ☐ Y ☑ N Does a water commissioner distribute water or oversee water distribution on your proposed source?

29.a. If yes, list the source(s).

30. ☐ Y ☑ N Do other water rights share any of the proposed points of diversion?

30.a. If yes, describe how the proposed project will not adversely affect these water rights.

31. ☐ Y ☑ N Do other water rights share any conveyance infrastructure associated with the proposed project?

31.a. If yes, describe how the proposed project will not adversely affect these water rights.

ADEQUATE MEANS OF DIVERSION AND OPERATION

32. ☑ **S** Submit a diagram of how you will operate your system from all proposed points of diversion to all proposed places of use.

33. Describe specific information about the capacity of all proposed diversionary structures. This may include, where applicable: pump curves and total dynamic head calculations, headgate design specifications, and dike or dam height and length.

The diversion system includes 3-inch galvanized iron drop pipe length of 200 feet. The well will have a Grundfos SP90S100-9 submersible pump controlled by a variable frequency drive (VFD). The pumphouse will have two Flexcon FT266 pressure tanks which in combination with the VFD will prevent water hammer and short cycling of the pump. The pressure tanks and circuitry will be in the pump control house on Lot 2 near the well. See the supplemental report for additional information.

34. Describe the size, materials, capacity, and configuration of infrastructure to convey water from all proposed points of diversion to all proposed places of use. This may include but is not limited to, pipelines and ditches. Include a description of any losses related to the proposed conveyance. Ditch conveyance losses may be estimated numerous ways, which include a ditch loss rate or Department standard methods.

From the well, a 2-inch PVC pipe will convey water to the pump house with a McCrometer totalizing flow meter. Two Flexcon pressure tanks will be installed to ensure adequate flow and prevent water hammering. From the pumphouse, a 4-inch PVC C900 water mail will convey to the eight lots with separate service connections. Friction analysis is included in the supplemental report.

35. Describe how the proposed diversion and conveyance infrastructure can provide the required flow and volume, for the purposes plus any conveyance losses and storage, throughout the proposed period of diversion.

See supplemental report for additional details.

36. Provide a plan of operations, which includes specific information about how water is delivered within the place of use. This may include, where applicable, the range of flow rates needed for a pivot.

Water will divert year-round for domestic use and from April 15th to October 15th for lawn and garden irrigation. See supplemental report for additional details. Irrigation will occur overnight for a seven-hour period.

37. ☐ **Y** ☑ **N** Does the proposed conveyance require easements?

37.a. If yes, explain.

38. ☑ **Y** ☐ **N** Do you own the land where all proposed points of diversion are located?

38.a. ☐ **S** If no, submit documentation to show you have the right to use all points of diversion located on each property you do not own. This may include, but is not limited to, a well agreement, an easement, or permission of the party that owns the property where the proposed point(s) of diversion are located.

39. ☐ **Y** ☑ **N** Will your system be designed to discharge water from the project?

IF YES,

39.a. Explain the wastewater disposal method.

39.b. ☐ **Y** ☐ **N** ☐ **NA** Have the necessary permits been obtained to comply with §§ 75-5-410 and 85-2-364, MCA?

40. ☑ **Y** ☐ **N** Do you have any plans to measure your diversion and use?

40.a. If yes, describe the plan and the type of measurements you will take.

Pump house will be equipped with totalizing flow meter to measure flow periodically with minimum monthly volume records.

41. ☑ **Y** ☐ **N** Is the means of diversion for any proposed point of diversion a well?

IF YES,

41.a. ☑ **Y** ☐ **N** Have all wells been drilled?

41.b. For all wells that have been drilled, what is the name of the well driller and, if available, what is their license number?
William (Joe) Davis - Davis Brothers Drilling, WWC-651

41.c. ☐ **Y** ☐ **N** For all wells yet to be drilled, will a licensed well driller construct the wells?

41.d. ☑ **S** ☐ **NA** Submit any well logs not yet submitted to the Department.

BENEFICIAL USE

42. ☑ **Y** ☐ **N** Does the Department have a volume, period of diversion, or period of use standard for the purposes for which water is proposed? Department standards can be found in the DNRC Water Calculation Guide, ARM 36.12.112, and ARM 36.12.115.

42.a. ☑ **Y** ☐ **N** If yes, do all proposed beneficial uses fall within Department standards?

42.b. If no Department standard exists, or if any proposed beneficial use falls outside of Department standards, explain how the requested flow rate and volume are reasonable for the purpose.

43. ☑ **Y** ☐ **N** Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?

44. ☐ **Y** ☑ **N** Are you proposing to use surface water for in-house domestic use?

44.a. ☐ **Y** ☐ **N** If yes, does a COSA exist for the proposed place of use?

44.a.i. ☐ **S** ☐ **NA** If yes, please submit the COSA.

44.a.ii. ☐ **Y** ☐ **N** If no, have you researched or consulted with DEQ regarding their requirements?

POSSESSORY INTEREST

45. ☐ **Y** ☑ **N** Do you meet one of the exceptions to possessory interest requirements, pursuant to ARM 36.12.1802? Exceptions include cases where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use.

45.a. If yes, explain.

46. ☑ **Y** ☐ **N** ☐ **NA** Do you own all proposed places of use? Mark "NA" if you meet one of the exceptions to the possessory interest requirement.

IF NO,

46.a. ☐ **S** Explain and submit documentation that shows you either have possessory interest or written permission of the parties with possessory interest of the place of use.

46.b. ☑ **Y** ☐ **N** Would you like the water right to be appurtenant to the land? Please note that if your water right is not appurtenant to land it will not transfer by default with the conveyance of the property, pursuant to § 85-2-403, MCA.

46.b.i. If no, explain.

PROPOSED COMPLETION PERIOD

47. How much time will be needed to complete this project and to submit to the DNRC a Project Completion Notice (Form 617)? 15 years

48. Please describe why this amount of time is needed to complete this project.
A 15-year period will be needed to put all the water to beneficial use. The time requested is to allow the developer to sell the lots and then for the individual lot owners to develop the property residences and put the water to beneficial use.

AFFIDAVIT & CERTIFICATION

Read carefully before you sign and review with legal counsel if you have any questions. All owners (or trustees) must sign the form. ***If the owner is a business or trust, include the title of the representative(s) signing the form (i.e., president, trustee, managing partner, etc.) and provide documentation that establishes the authority of the representative to sign the application.*

I affirm the information provided for this application is to the best of my knowledge true and correct. If a preapplication meeting form was submitted, I am aware that my application for this project will not qualify for a discounted filing fee and expedited timelines if upon submittal of the application to the Department, I changed any element of the proposed application from the preapplication meeting form and follow-up materials (ARM 36.12.1302(6)(a)).

I affirm I have possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use, unless this application meets an exception to the possessory interest requirements in ARM 36.12.1802(1)(b).

I understand that making a false statement under oath or affirmation in this application and official proceedings throughout the examination of my application may subject me to prosecution under § 45-7-202, MCA, a misdemeanor punishable by a jail term not to exceed 6 months or a fine not to exceed $500, or both. I have read this Affidavit and understand the terms and conditions.

I declare under penalty of perjury and under the laws of the state of Montana that the foregoing is true and correct.

Printed Name Tia MacFarlane

Applicant Signature _____ Date: 9-3-25

Printed Name _____

Applicant Signature _____ Date: _____

Printed Name _____

Applicant Signature _____ Date: _____

Core Water Consulting

September 8, 2025

Kalispell Water Resources Regional Office
655 Timberwolf Parkway, Suite 4
Kalispell, MT 59901-1215

RE: Provisional Permit Ground Water for RJM Properties, LLC in Kalispell, MT

Dear Water Right Specialists:

Enclosed are materials for Provisional Permit water right with an expired pre-application submission date. A DNRC Technical Analysis was completed, but an increase in flow rate is requested to 105 gpm instead of 101 gpm, with a minor increase in water volume also.

Enclosed is the Form 600, Form 600 TAA and Supplemental Report to expand upon the permit criteria.

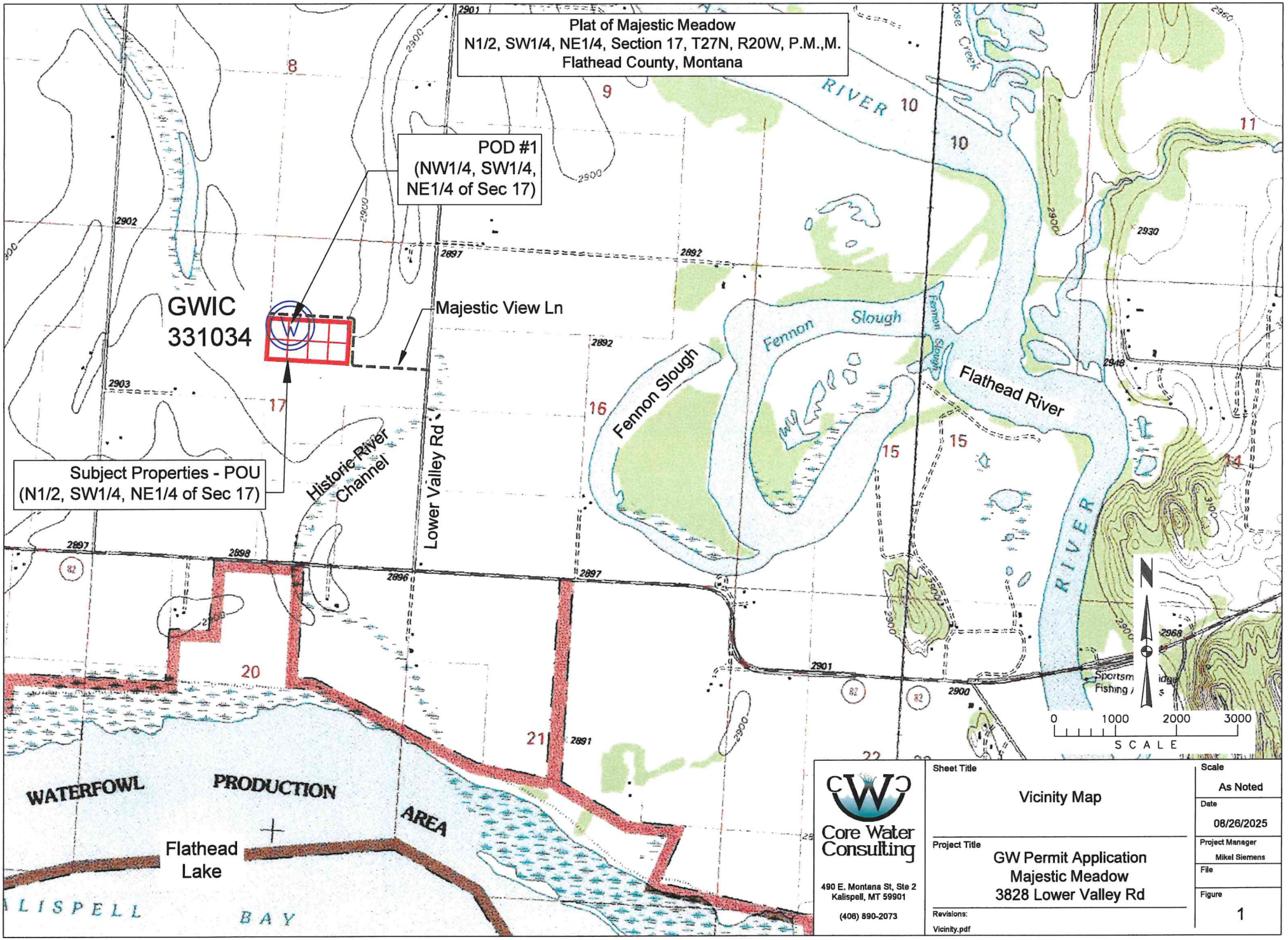
Best regards,

Mikel Siemens, P.E.
Environmental Engineer

Enclosed:

- $2500 Check #1422 from Inline Company, LLC to DNRC
- Figure 1. Vicinity Map
- Figure 2. Means of Diversion
- Figure 3. Pump House
- Figure 4. Well Detail
- Form 600
- Form 600 – TAA

(406) 890-2073 * 490 E. Montana Street, Suite 2, Kalispell, MT 59901 * mikel@corewaterconsulting.com



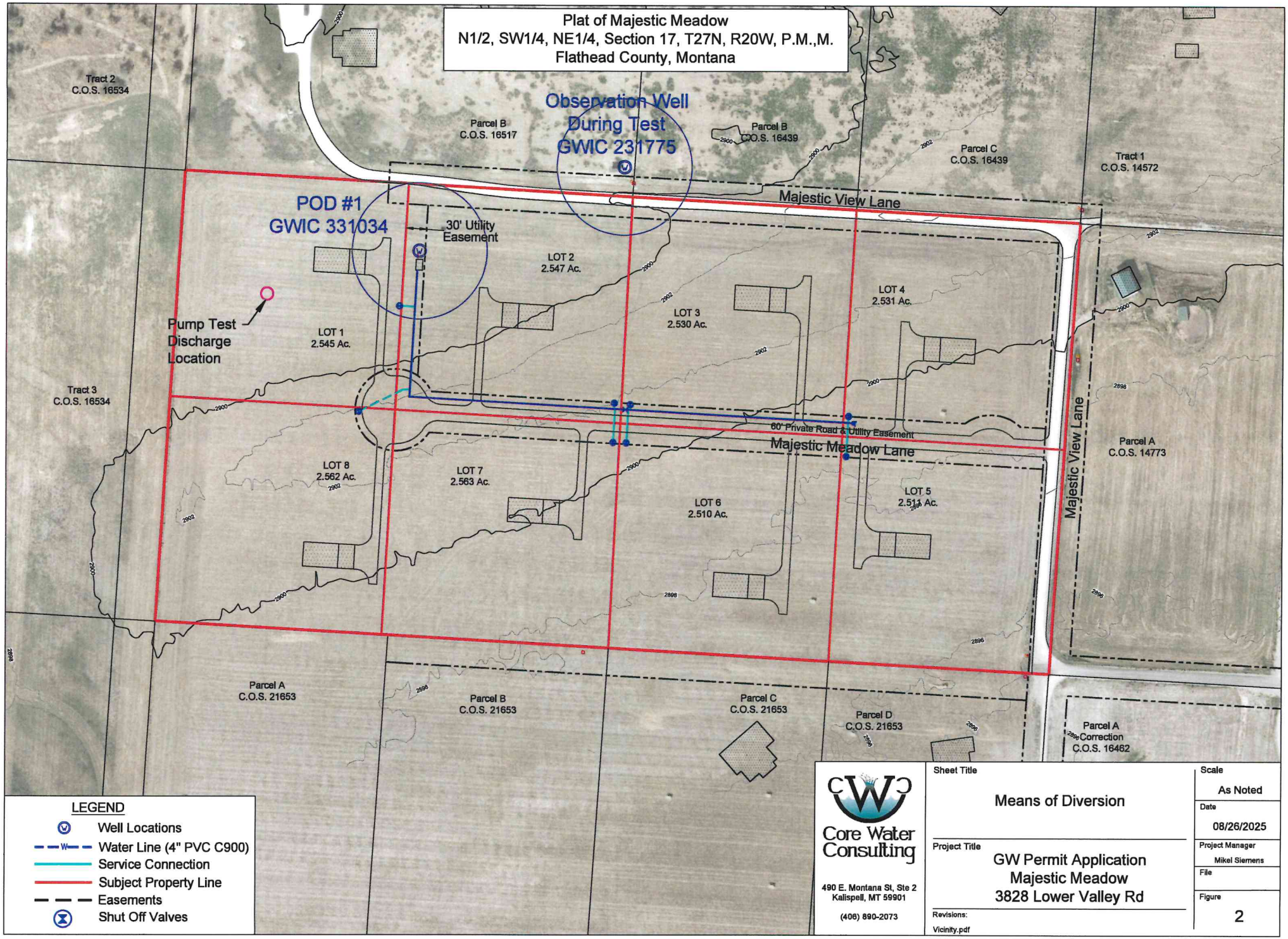
Core Water Consulting
490 E. Montana St, Ste 2
Kalispell, MT 59901
(406) 890-2073

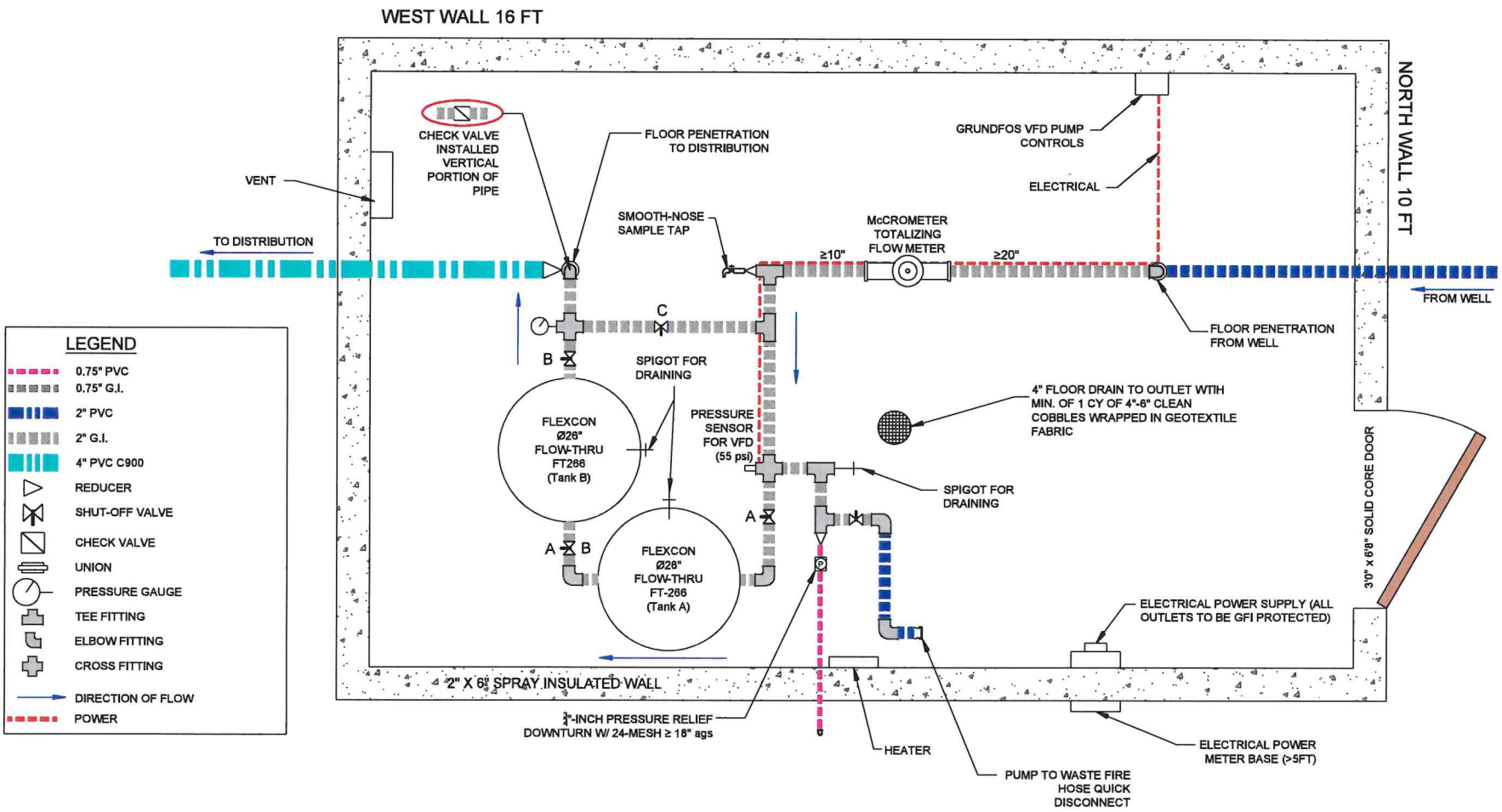
Sheet Title: Vicinity Map

Project Title: GW Permit Application
Majestic Meadow
3828 Lower Valley Rd

Revisions:
Vicinity.pdf

Scale: As Noted
Date: 08/26/2025
Project Manager: Mikel Siemens
File:
Figure: 1


Plat of Majestic Meadow
N1/2, SW1/4, NE1/4, Section 17, T27N, R20W, P.M.,M.
Flathead County, Montana
Observation Well
During Test
GWIC 231775
POD #1
GWIC 331034
30' Utility
Easement
Pump Test
Discharge
Location
Majestic View Lane
60' Private Road & Utility Easement
Majestic Meadow Lane
Majestic View Lane
Tract 2
C.O.S. 16534
Parcel B
C.O.S. 16517
Parcel B
C.O.S. 16439
Parcel C
C.O.S. 16439
Tract 1
C.O.S. 14572
LOT 1
2.545 Ac.
LOT 2
2.547 Ac.
LOT 3
2.530 Ac.
LOT 4
2.531 Ac.
LOT 5
2.513 Ac.
LOT 6
2.510 Ac.
LOT 7
2.563 Ac.
LOT 8
2.562 Ac.
Tract 3
C.O.S. 16534
Parcel A
C.O.S. 14773
Parcel A
C.O.S. 21653
Parcel B
C.O.S. 21653
Parcel C
C.O.S. 21653
Parcel D
C.O.S. 21653
Parcel A
Correction
C.O.S. 16462
LEGEND
Well Locations
Water Line (4" PVC C900)
Service Connection
Subject Property Line
Easements
Shut Off Valves
Core Water Consulting
490 E. Montana St, Ste 2
Kalispell, MT 59901
(406) 890-2073
Sheet Title
Means of Diversion
Project Title
GW Permit Application
Majestic Meadow
3828 Lower Valley Rd
Revisions:
Vicinity.pdf
Scale
As Noted
Date
08/26/2025
Project Manager
Mikel Siemens
File
Figure
2



Note:
During pressure tank maintenance, valves are modified so the system can still operate with one pressure tank online.

- Tank A is offline, then Valves A & A closed and C open
- Tank B is offline, the Valves B & B closed and C open

System should normally operate with valve C closed and water flows pressure tanks.

Pressure tanks will be labeled with maximum DEQ service pressure of 83.3 psi.

Pump to be Grundfos 4" Tri-Seal High-Capacity 10-HP Pump
(Model 90S100-9) 105 GPM @ 297.16 TDH

Core Water Consulting
490 E. Montana St, Ste 2
Kalispell, MT 59901
(406) 890-2073

Sheet Title: Pump House

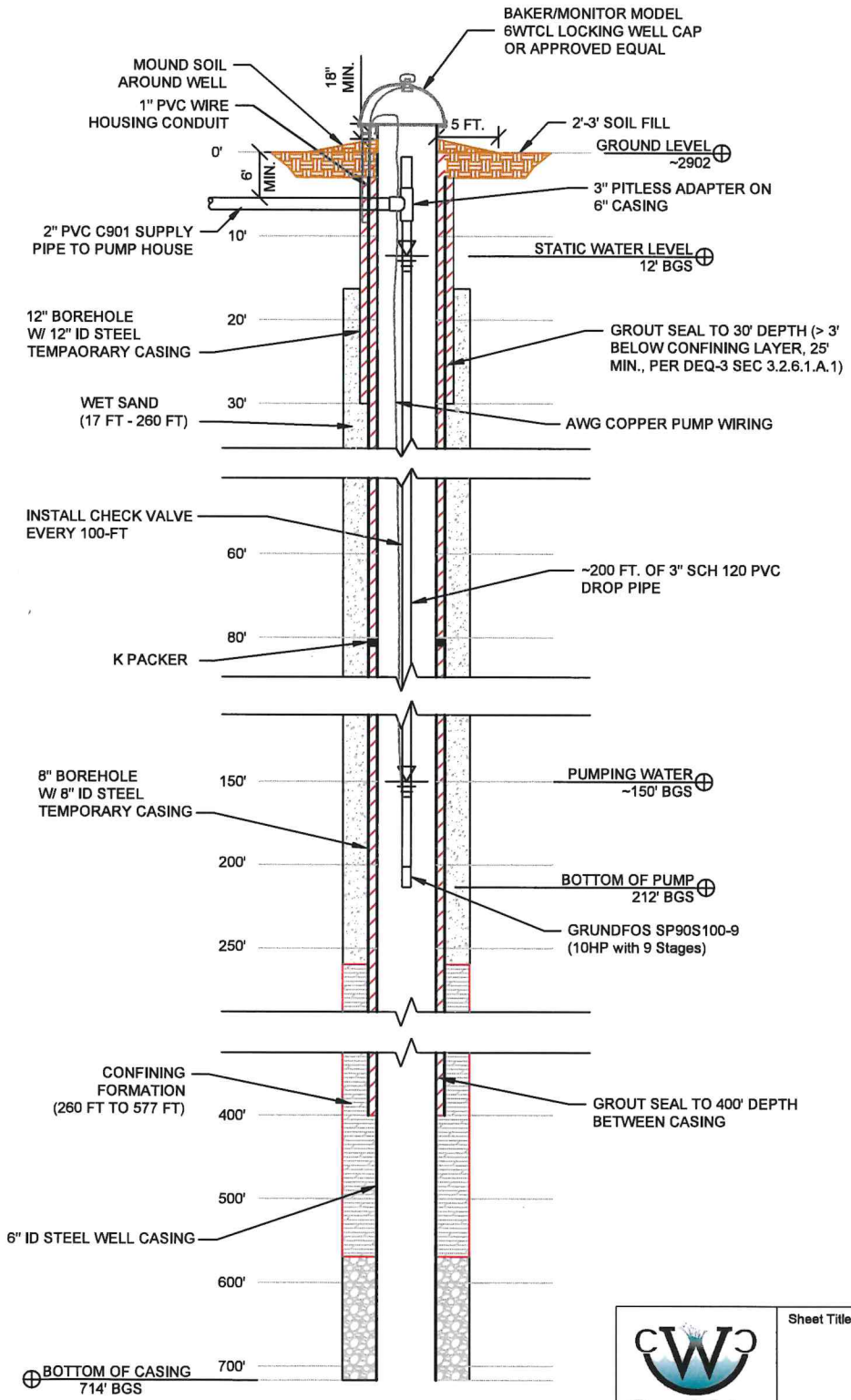
Project Title: GW Permit Application
Majestic Meadow
3828 Lower Valley Rd

Revisions:
PH-Plan.pdf

Scale: Not to Scale
Date: 08/26/2025
Project Manager: Mikel Siemens
File:
Figure: 3

MONTANA
MIKEL ANN SIEMENS
No. 63114 PE
LICENSED PROFESSIONAL ENGINEER

MAJESTIC MEADOW
MULTIUSER WATER
SUPPLY WELL
GWIC 331034



FLOW RATE 105 GPM

Core Water Consulting

490 E. Montana St, Ste 2
Kalispell, MT 59901

(406) 890-2073

Sheet Title	Well Details per Drillers Log
Project Title	GW Permit Application Majestic Meadow 3828 Lower Valley Rd
Revisions:	Vicinity.pdf
Scale	As Noted
Date	08/26/2025
Project Manager	Mikel Siemens
File	
Figure	4

Core Water Consulting

GROUNDWATER APPLICATION FOR BENEFICIAL WATER USE PERMIT SUPPLEMENTAL INFORMATION FOR MAJESTIC MEADOW

IN THE N1/2, SW1/4, NE1/4 OF SECTION 17, T27N, R20W, P.M.,M. FLATHEAD COUNTY, MONTANA

Prepared for:
RJM Properties LLC
Rod Macfarlane, Representative
1191 Majestic View Lane
Kalispell, MT 59901

September 8, 2025

Prepared by:
Core Water Consulting

(406) 890-2073 * 490 E. Montana St, Suite 2, Kalispell, MT 59901 * Mikel@corewaterconsulting.com

Contents

Components in this report are provided to supplement Form 600 for a Groundwater Provisional Permit. Not all sections for the DNRC form require supplemental descriptions.

INTRODUCTION

Majestic Meadow is a subdivision which received approval from Montana Department of Environmental Quality but requires a Provision Permit water right for increased flow rate and volume. The existing multiuser water supply well, POD#1, provides water for the subdivision at 35 gpm with minimal lawn sprinkling. A Provisional Permit for multiple domestic and lawn and garden irrigation water at a flow rate of 105 gpm and volume of 21.63 acre-feet/year (AF/year) is desired so each of the eight lots can irrigate 1.25 acre per parcel.

PHYSICAL CONDITIONS

The Majestic Meadow Subdivision is in the lower Flathead Valley northeast of Somers and northwest of Bigfork, MT. The valley is bounded to the north by the Whitefish Mountains, the West by the Salish mountain range, the south by Flathead Lake, and the East by the Swan Mountain Range. The subdivision resides about 3 miles east of the Salish mountain range and 1.0 mile north of Flathead Lake. The average elevation of the subdivision is about 2900 feet above mean sea level. The climate at the site is closest to the Creston NCDC Coop Station #242104, which has a mean annual precipitation of 19.61 inches between 1949 and 2005.

Geology

The area surrounding the Flathead Valley is dominated by Upper Pleistocene Glacial Till and Precambrian Belt Supergroup Rocks, and this is assumed to underlay the valley fill. The site itself falls within the Alluvium of Modern Channels and Floodplains from the Holocene (Qal). This alluvium is characterized by sand and silt, with minor components of pebbles and clay. Thickness averages 30 feet but can reach 90 feet. Groundwater in this alluvium is commonly found near the land surfaces and produces significant quantities of water (**Appendix D**). Majestic Meadow is situated on Quaternary age-deposits, significantly above the Belt bedrock. The Quaternary-age deposits are generally made up of till and glacial lake sediments (confining units) and glacial outwash deposits. The glacial sediments were deposited during the glacial advance lasting from approximately 2 Ma to 15,000-20,000 years ago and the subsequent retreat up to present time (LaFave, Smith, and Patton, 2004).

Hydrogeology

The multiuser well intercepts the top of the deep alluvial aquifer in the Flathead Valley; the Flathead River flows north to south, two miles to the east and Flathead Lake is one mile south. Between the Flathead River and the property is a historical river meander, Fennon Slough, which is connected to the river and the shallow aquifer. The groundwater well has numerous clay layers between the shallow aquifer and the deep aquifer, so the water pumped from the well is not the shallow water source. In addition to Fennon Slough, a historical river channel exists which has not observed flowing water in the channel. There are no known surface water rights on the feature.

The Flathead Valley contains several aquifers varying by depth including shallow, intermediate, and a deep alluvial aquifer. Near Majestic Meadow, the deep alluvial aquifer is close to the 600 below ground surface contour (Smith, 2004). The site rests between the 2891 and 2890 ft water level contours pertaining to the shallow aquifer (Konizeski, 1968). Previous studies of the

hydrogeology of the Kalispell Valley area have been completed by Konizeski, Brietkrietz, and McMurtrey (1968), Uthman, Warren, and Corbett (2000), and LaFave and others (2004).

1. PURPOSE AND DIVERSION INFORMATION

The following information is provided in support of the Application for Beneficial Water Use Permit submitted on behalf of RJM Properties LLC. The water right being applied is for annual and perpetual water usage for the subdivision. The beneficial uses include multiple domestic and lawn and garden irrigation. The subdivision boundaries are defined by the Plat for Majestic Meadow, approved by Flathead County Commissioners on February 12, 2025. A pre-application meeting was held on November 26, 2024 and a technical analysis by DNRC was received on January 15, 2025. A variance for the aquifer testing requirements was approved by DNRC on December 26, 2024 (**Appendix G**). The application was not submitted by July 14, 2025 and a new pre-application meeting was not held; thus Form 600 is being filed without the filing fee reduction.

The Plat of Majestic Meadow has been approved as multiuser well Majestic Meadow Water Supply (MMWS), EQ#22-2027, and subdivision Certificate of Subdivision Approval (COSA) per EQ#22-2608 for eight lots being served at 35 gpm, which provides limited irrigation. The goal is to expand the flow rate to 105 gpm with the Provisional Permit for both domestic and lawn and garden irrigation for the eight parcels. The MMWS system was designed to provide peak domestic demand simultaneously with average irrigation that occurs over a seven-hour period overnight for the parcels. The maximum proposed irrigated area is 10 acres or 1.25 acre per lot. The total volume demand is 2.24 AF for multiple domestic and 19.48 AF for the associated lawn and garden irrigation.

2. POINTS OF DIVERSION

MMWS has one point of diversion (POD#1), located at NE1/4, SW¼, NE¼ of Section 17, Township 27 North, Range 20 West – 3.0 miles east of Somers, Montana. The well is located on Lot 2 (Figure 2 in **Appendix A**). The MMWS well is a 6-inch cased well with perforations (open bottom) at 714-ft.

Table 1. Diversion Summary

Purpose for Water	Means of Diversion	Acres Irrigated	Period of Diversion	Period of Use	Flow Rate (GPM)	Volume AF
Multiple Domestic	Pump	N/A	01/01 - 12/31	01/01 - 12/31	22	2.24
Irrigation Lawn Garden	Pump	10	04/15 - 10/15	04/15 - 10/15	82.57	19.48

3. PLACE OF USE

The place of use encompasses eight lots, with one service connect for each lot that has one residence and 1.25-acres of lawn and garden irrigation for a total of 10 acres.

Table 2. Place of Use

Acres	Lot	1/4	1/4	1/4	Sec	Twp	Rge	Geocode
20.299	1 - 8	N2	SW	NE	17	27N	20W	Parent Parcel 07-3835-17-1-04-20-0000

4. SUPPLEMENTAL WATER RIGHTS

The lots do not have water rights for the development, so this application does not include any prior approved supplemental water rights. At the time of submission, all the lots are retained by the owner and the houses within the subdivision are not occupied.

5. ADVERSE EFFECT

The owner will implement and properly regulate the volume diverted during times of water shortage. The owner proposes implementing the following steps:

1) Initially reduce irrigation by 50 percent;
2) Cease irrigation;
3) Initiate domestic water rationing to 50 percent during extreme shortage; and
4) Should a valid call from a senior water holder be requested, the owner will turn off the well pump and temporarily obtain their potable water from an alternative PWS source until the call is lifted.

6. ADEQUATE DIVERSION MEANS AND OPERATION

A submersible pump hung within the 6-inch well will divert through 3-inch drop pipe set at 200 feet bgs. The proposed pump is Grundfos SP90S100-9 (10 horsepower with 9 stages) pump controlled with variable frequency drive (VFD) control panel; set at constant pressure discharge from the pumphouse at 55 psi. The pumphouse has two Flexcon FT266 pressure tanks, which in combination with the VFD, prevents water hammer and short cycling of the pump. The pressure tanks and control panel will be in a pump house on Lot 2 south of the well.

From the pressure tank, water is diverted to Lots 1 - 8 of Majestic Meadow in a 4-inch water main with eight separate service connections. The individual service lines will be 1-1/4-inch diameter in size. No additional storage is required.

Pump house plans include a McCrometer totalizing flow meter to record total flow for the diversion. Periodic measurements will be collected and stored within the pump house. From the totalizer readings, the annual water volume can be computed for the Provisional Permit Notice of Completion.

The well was drilled by William Davis (Davis Drilling from Eureka, Montana) on February 22, 2024. The static water level is approximately 12 feet below top of casing (btoc). The pumping water level was 150 feet btoc while pumping at a rate of 101 gpm after 24-hour period.

The elevation and service pressure requirements are summarized below:

System peak elevation:	2902 feet
Ground elevation well:	2899 feet
Pumping water elevation:	2747 feet (150 ft bgs)
Pump house pressure (55 psi):	115.5 feet

Based upon the William and Hazen Equation with a C (roughness) coefficient of 140 for the galvanized and 150 for PVC/HDPE, following is a summary table of the estimated total dynamic head during peak demands:

Table 3. Transmission Friction Losses

Component	Pipe Length (ft)	C (Rough-ness)	Flow, q (gpm)	Diameter (in)	Friction (ft)
Drop pipe	200	150	105	3	5.15
Well to Pump House (horizontal)	20	150	105	2	3.70
Miscellaneous pump house fittings	50	150	105	2	9.26
Pump House to Main	887	150	105	4	5.63
Service line fittings	50	150	13.1	1.25	1.94
Service line	100	150	13.1	1.25	3.89
Subtotal					5.83

The worst- case maximum flow for the peak evaluation was assessed for the northern distribution line at 887 feet.

A pump curve for the Grundfos SP90S100-9 is provided in **Appendix C** which shows that the pump is capable of supplying 105 gpm at 297.16-feet of total dynamic head with a service pressure of 55 psi to the residences.

The eight lots are expected to divert 250 gpd. The daily average is 1.39 gpm. A system peaking factor of 8 is selected for the subdivision since it has a few lots. Peaking factors range from 1 – 10, with municipalities assigned a 2.3. A peak domestic flow rate of 22.22 gpm for the eight residences. Lawn and garden irrigation is intended overnight, to minimize evaporation during the day. A 7-hour irrigation period demands a flow rate of 82.57 gpm. If the domestic demand and irrigation demand occurred simultaneously, the system flow rate would be 104.79 gpm. The Homeowners Association will monitor the irrigation practices to ensure property ability to provide water for domestic and irrigation within the permitted flow rate.

7. BENEFICIAL USE

Groundwater beneficial use will occur January 1 to December 31 for domestic, with irrigation between April 15 through October 15, per DNRC standards. Domestic use was calculated based upon 8 residences at an average flow of 250 gpd, which amounts to a volume of 2.24 AF/year based on the DNRC Water Calculation Guide.

The water volume necessary to irrigate was established based upon the Creston hydrologic dataset Station No MT 242104 based upon the Irrigation Water Requirements (IWR) software developed by the USDA Natural Resources and Conservation Service (NRCS). The subdivision lies within climatic area III, which has a typical irrigation period from April 15th through October 15th. DNRC has a memorandum titled DNRC Consumptive Use Methodology – Turf Grass March 23, 2010 which standardizes the method for analyzing the irrigation requirement.

The constraints per the memo for IWR pasture grass as representing turf grass:

- Dry year estimates;
- Irrigation start and end dates rely upon a temperature of 45 degree F for the grow dates;
- Use the default 1.0" net irrigation application; and
- Apply 0.25" carryover moisture for both the beginning and end of season.

Model results indicate a net irrigation requirement of 16.36" based upon the dry year analysis, see **Appendix C**.

Sprinkler irrigation is planned at 1.25 acres of lawn and garden for each lot, for total area of 10 acres across the 20 acre subdivision. **Table 4** displays the irrigation demand that incorporate the IWR sprinkler demand for the system. The covenants for the subdivision suggest that irrigation should occur in the evenings between 10 p.m. and 5 a.m. or a seven-hour period. Peak demand for irrigation is established for the seven-hour period.

Table 4. Irrigation at 1.25-acre per lot

Irrigation		
Net Lawn & Garden (dry year 80%)	16.36	inches
Beg Grow Season	15-Apr	
End Grow Season	15-Oct	
Length Grow Season	183	days
Acres Irrigation	10	acres
Season Volume	19.48	AF/season
	34,679	gpd
Average Rate Irrigation for 7 hrs	82.57	gpm

This irrigation volume lies below the DNRC standard for lawn and garden irrigation (2.5 AF/acre) at 1.948 AF/acre.

Based upon domestic and lawn sprinkler irrigation a flow rate of 105 gpm has beneficial diversion purposes for the Provisional Permit groundwater application that align with the proposed diversion equipment for the well.

9. POSSESSORY INTEREST

RJM Properties LLC holds possessory interest in this property, with Rod Macfarlane as representative. Proof of possessory interest is provided in **Appendix F.**

10. PROPOSED COMPLETION PERIOD

Real estate in 2025 has seen a decline in sales, so the period for all eight lots to be sold, developed, and water maximized could be numerous years. A 15-year period will be needed to put all the water to beneficial use. The time requested is to allow the developer to sell the lots and then for the individual lot owners to develop the property residences and put the water to beneficial use.

11. AFFIDAVIT & CERTIFICATION

RJM Properties LLC is held by Rod Macfarlane, the registered agent for the company. The affidavit and certification for the Provisional Permit application was signed by Rod Macfarlane, representative for RJM Properties LLC. The subdivision and lot ownership remain under his management for the water system until numerous lots are sold and then the water rights would be transferred to the Homeowners Association. That transfer has not occurred.

REFERENCES

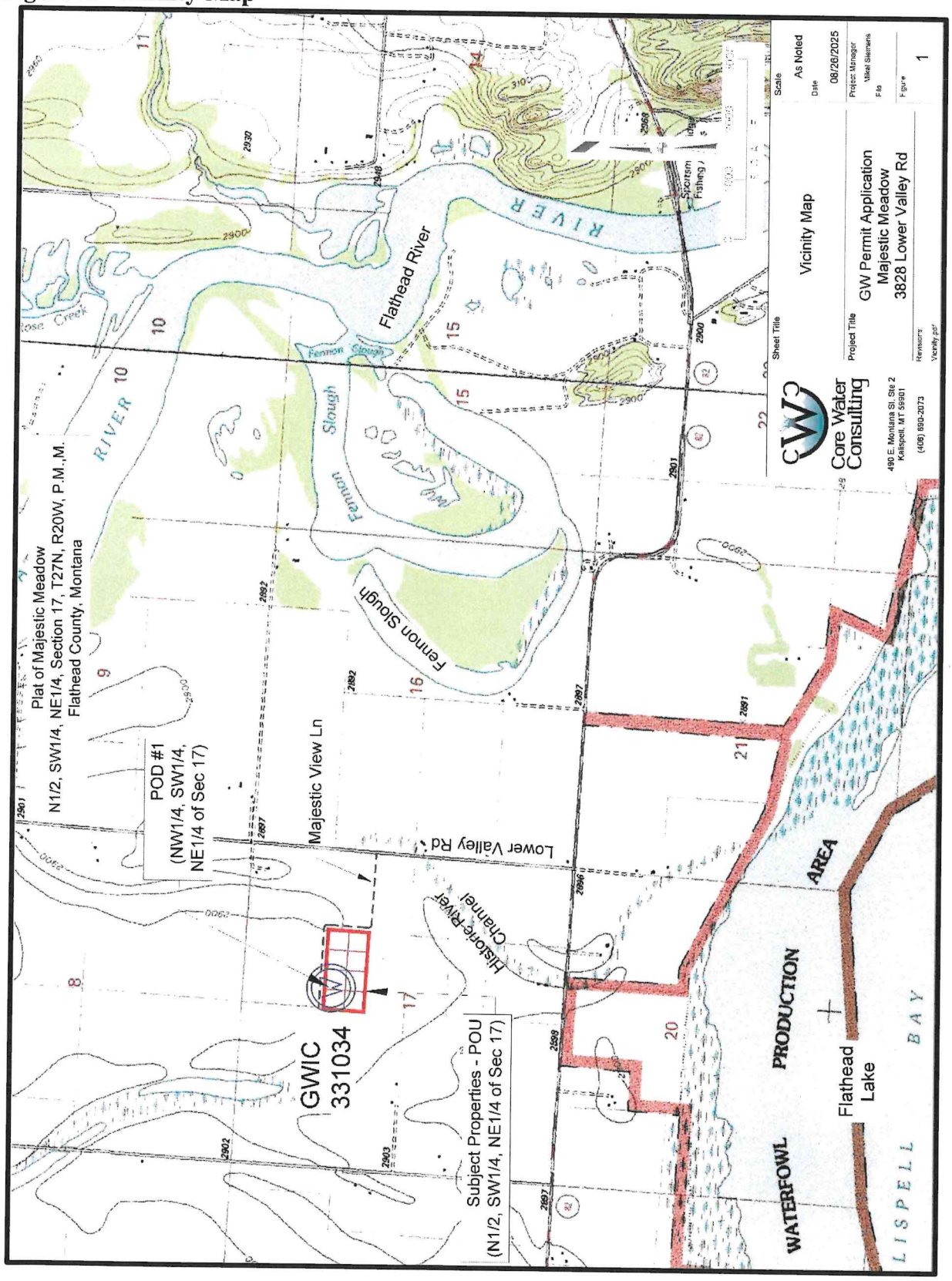
LaFave et al, December 2004, Ground-Water Assessment Atlas No. 2, Ground-Water Resources of the Flathead Lake Area: Flathead, Lake, Missoula, and Sanders Counties, Montana, Part A – Descriptive Overview and Water-Quality Data.

Konizeski, et al, 1968, Geology and Groundwater Resources of the Kalispell Valley, Northwestern, Montana, Bulletin 68, Plate 5: Contours on the Water Table in the Sand Aquifer, Montana Bureau of Mines and Geology, Butte, Montana.

Smith, Larry N., December 2004, Surficial Geologic Map of the upper Flathead River valley (Kalispell valley) Area, Flathead County, Northwestern Montana, Ground Water Assessment Atlas No. 2, Part B, Map 6.

APPENDIX A. FIGURES

Figure 1. Vicinity Map



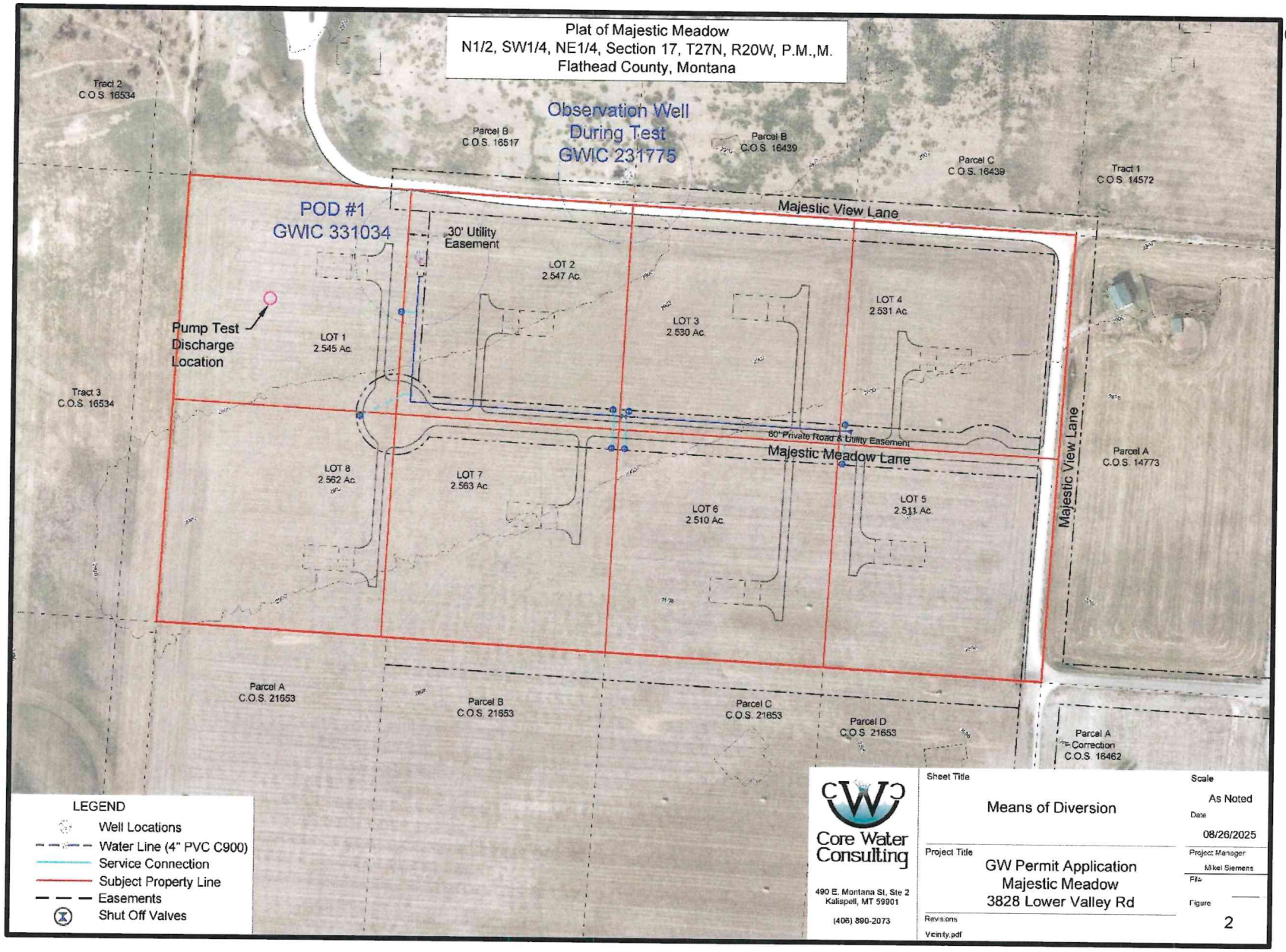


Figure 2. Means of Diversion

Figure 3. Pump House

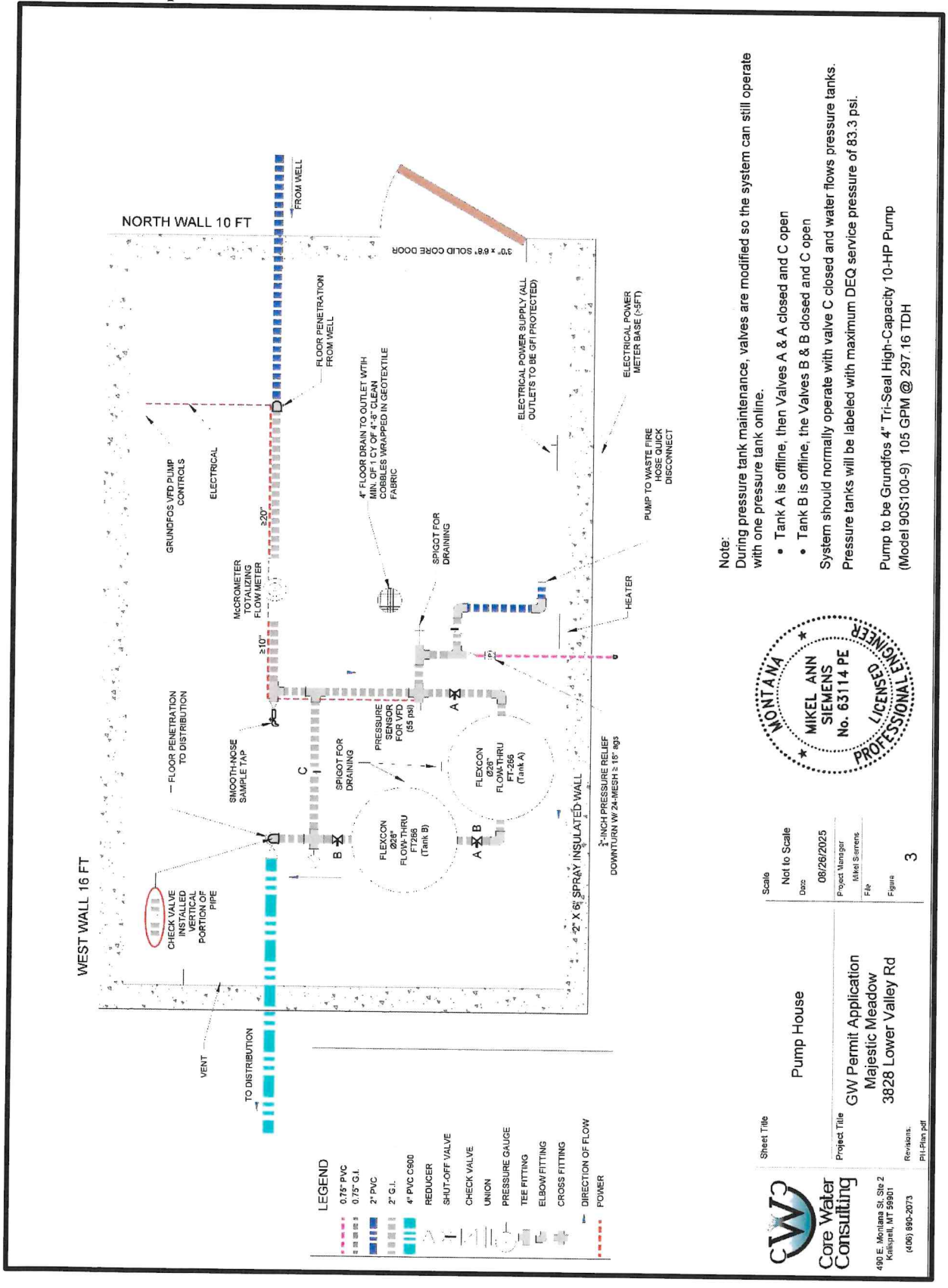
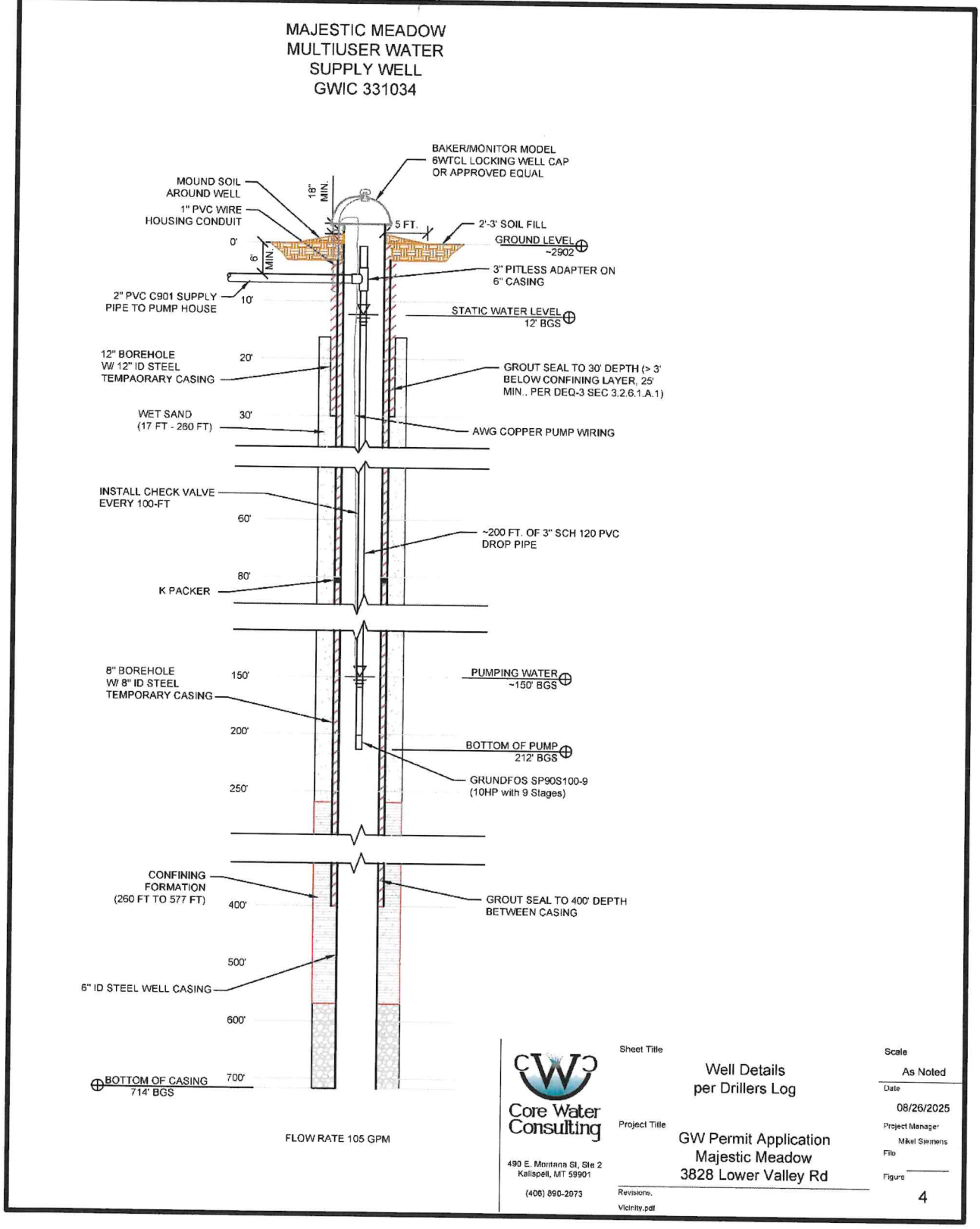
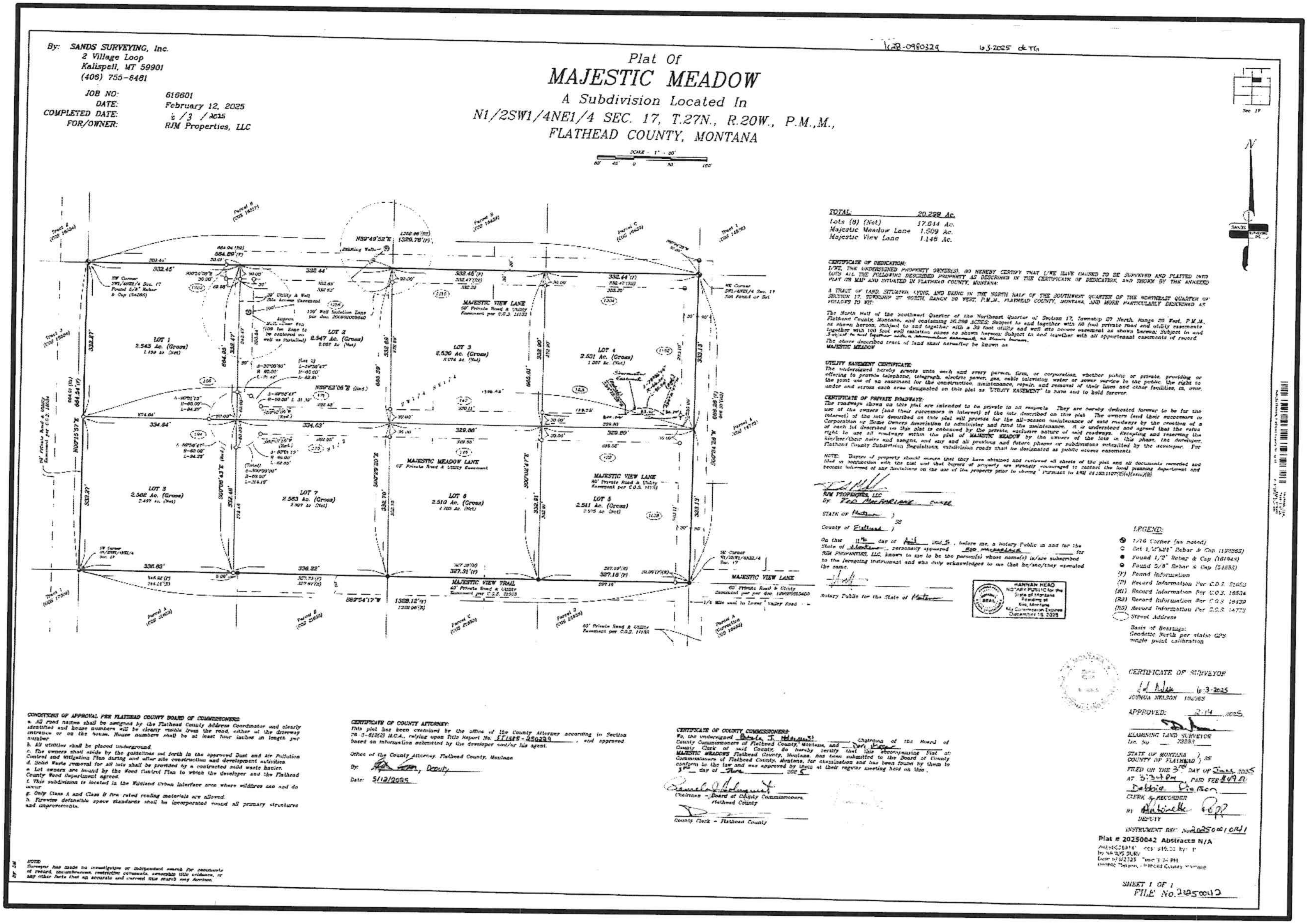


Figure 4. Well Details per Drillers Log




By: SANDS SURVEYING, Inc.
2 Village Loop
Kalispell, MT 59901
(406) 755-6481
JOB NO: 616601
DATE: February 12, 2025
COMPLETED DATE: 6/3/2025
FOR/OWNER: RJM Properties, LLC
Plat Of
MAJESTIC MEADOW
A Subdivision Located In
N1/2SW1/4NE1/4 SEC. 17, T.27N., R.20W., P.M.,M.,
FLATHEAD COUNTY, MONTANA
TOTAL: 20.299 Ac.
Lots (8) (Net) 17.644 Ac.
Majestic Meadow Lane 1.509 Ac.
Majestic View Lane 1.146 Ac.
CERTIFICATE OF DEDICATION:
UTILITY EASEMENT CERTIFICATE:
CERTIFICATE OF PRIVATE ROADWAYS:
MAJESTIC VIEW LANE
MAJESTIC MEADOW LANE
MAJESTIC VIEW TRAIL
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LEGEND:
CERTIFICATE OF SURVEYOR
CERTIFICATE OF COUNTY ATTORNEY:
CERTIFICATE OF COUNTY COMMISSIONERS:
CONDITIONS OF APPROVAL PER FLATHEAD COUNTY BOARD OF COMMISSIONERS:
Plat # 20250042 Abstracts N/A
SHEET 1 OF 1

APPENDIX C. DIVERSION DETAILS

Well Log, GWIC 331034

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report was completed online by the driller. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Site Name: INLINE COMPANY LLC
GWIC Id: 331034

Section 1: Well Owner(s)

1) **INLINE COMPANY LLC** (MAIL)
1191 MAJESTIC VIEW LANE
KALISPELL MT 59901
2) **INLINE COMPANY LLC** (WELL)
3828 LOWER VALLEY RD
KALISPELL MT 59901

Section 2: Location

Township	Range	Section	Quarter Sections
27N	20W	17	

County	Geocode
FLATHEAD	07383517104200000

Latitude	Longitude	Geomethod	Datum

Addition	Block	Lot

Section 3: Proposed Use of Water

DOMESTIC (1)

Section 4: Type of Work

Drilling Method: ROTARY

Section 5: Well Completion Date

Date well completed: Thursday, February 22, 2024

Section 6: Well Construction Details

Meta Data Fields

1. Was borehole completed as a well? YES
2. Was well abandoned? NO

Borehole dimensions

From	To	Diameter
0	30	12
30	400	8
400	714	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-2	714	6	0.250		WELDED	A53B STEEL
10	400	8	0.250		WELDED	A53B STEEL

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
714	714	6			OPEN BOTTOM

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	30	HOLE PLUG 3/8	Y
30	400	HOLE PLUG 3/8	Y
80	82	7X8 K PACKER	

Section 7: Well Test Data

Total Depth: 714
Static Water Level: 5
Water Temperature:

Air Test *

350 gpm with drill stem set at 700 feet for 4 hours.
Time of recovery 2 hours.
Recovery water level 5 feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

PUMP TEST 101 GPM STABILIZED @ 148 -----350+GPM @700' ---- 250+GPM@ 500'-----125GPM@200' ////LAT AND LONG (48.105787 LAT -114.168564 LONG)

Section 9: Well Log

From	To	Description
0	2	TOPSOIL
2	17	SILTY CLAY AND SAND
17	260	WET SAND
260	455	RED SILTY CLAY AND SAND
455	515	BROWN STICKY CLAY
515	577	CEMENTED CLAY AND GRAVEL
577	623	HEAVING SAND
623	710	HEAVING GRAVEL, SAND AND SILT
710	714	GRAVEL, SAND AND WATER

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: WILLIAM (JOE) DAVIS
Company: DAVIS BROTHERS DRILLING
Address: PO BOX 1021
City: EUREKA MT 59917
License No: WWC-651
Date Certified: 4/24/2024

IWR Summary Report

Irrigation Water Requirements

Crop Data Summary

Job: **Majestic Meadows**
Location: **1191 Majestic View Ln, Kalispell**
By: **C. Teska**
Weather Station: **CRESTON**
Latitude: **4811** Longitude: **11408**
Computation Method: **Blaney Criddle (TR21)**
Crop Curve: **Blaney Criddle Perennial Crop**
Begin Growth: **4/15** End Growth: **10/15**

Crop: **Pasture (grass)**
County: **Flathead, MT**
Date: **08/06/25**
Sta No: **MT2104**
Elevation: **2940** feet above sea level

Net irrigation application: **1** inches
Estimated carryover moisture used at season:
Begin: **0.25** inches End: **0.25** inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Reqirements inches (2)	Effective Precipitation inches	Net Irrigation Reqirements inches (2)		
January	0.00	0.00	0.00	0.00	0.00	0.00	
February	0.00	0.00	0.00	0.00	0.00	0.00	
March	0.00	0.00	0.00	0.00	0.00	0.00	
April	0.87	0.31	0.30	0.40	0.22	0.05	
May	3.05	0.97	2.07	1.24	1.80	0.10	0.11
June	4.30	1.16	3.14	1.48	2.82	0.14	0.17
July	5.43	0.81	4.61	1.04	4.38	0.18	0.21
August	4.81	0.66	4.15	0.84	3.97	0.16	0.19
September	2.58	0.62	1.96	0.79	1.78	0.08	0.10
October	0.59	0.22	0.12	0.28	0.06	0.04	
November	0.00	0.00	0.00	0.00	0.00	0.00	
December	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	**21.62**	**4.76**	**16.36**	**6.08**	**15.04**		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

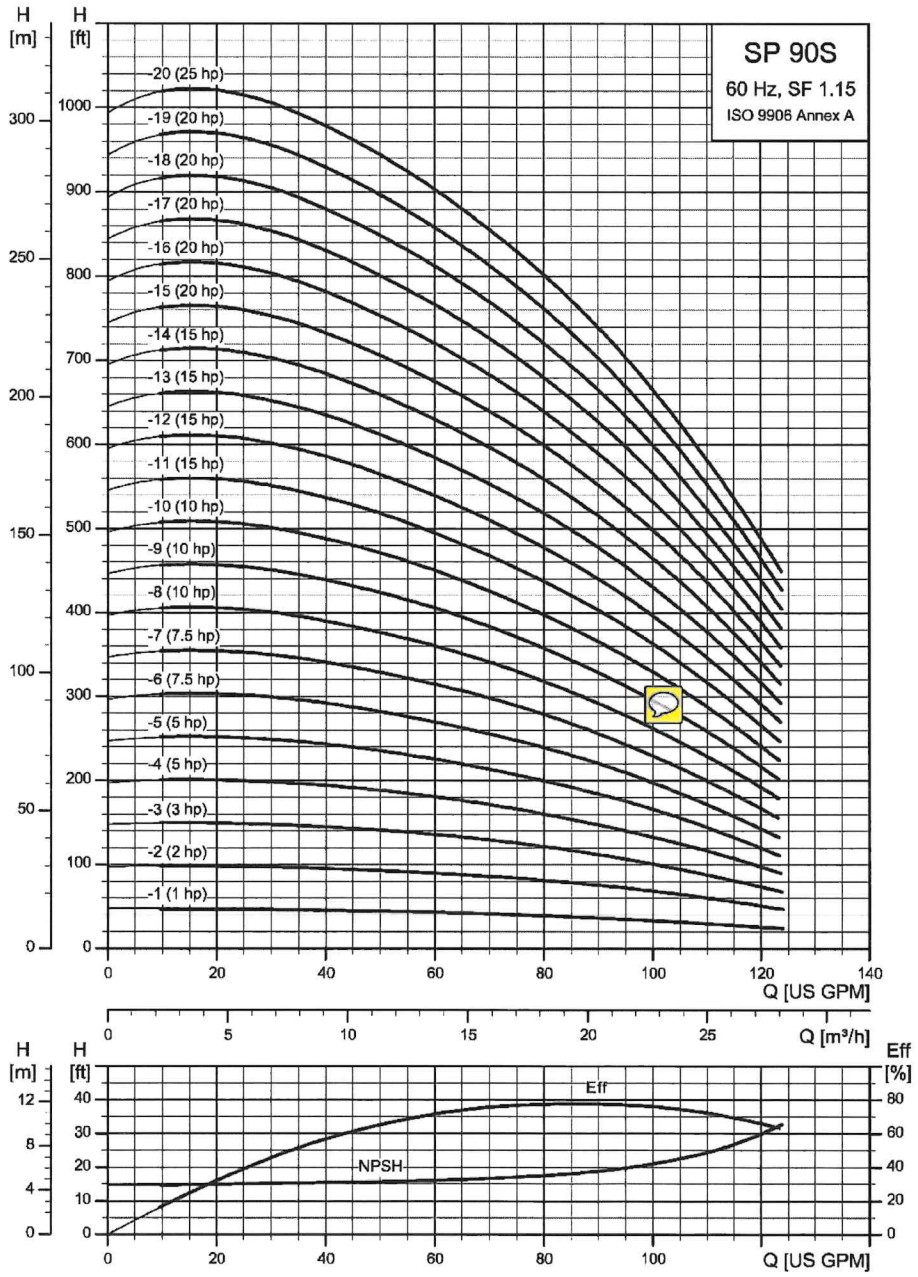
(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moiature used at the end of the growing season.

(3) ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

Date: 8/6/2025

Grundfos Pump, 10 Hp

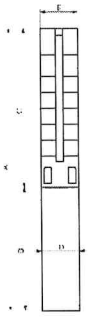
6" and larger wells
SP 90S (90 gpm)



TM064241

SP 90S (90 gpm) pump with 4" motors

Pump model	Nom. head [ft]	Motor				Dimensions [in (mm)]					Net weight (complete) [lb]	90S
		Ph	Volts [V]	[Hp]	[rpm]	A	B	C	D	E		
90S - Motor diameter 4-inch, 3-wire motor,60 Hz, rated flow rate 90 gpm (3" NPT)												
90S10-1	42	1	230	1 ■	3519	25.00 (634)	12.17 (309)	12.80 (325)	3.75 (95)	5.28 (134)	32.2	
		3	230	1 ■	3516	28.62 (727)	15.83 (402)	12.80 (325)	3.75 (95)	5.28 (134)	40.2	
		3	460	1 ■	3516	2.62 (727)	15.83 (402)	12.80 (325)	3.75 (95)	5.28 (134)	40.2	
90S20-2	87	1	230	2 •	3500	34.72 (882)	19.57 (497)	15.16 (385)	3.75 (95)	5.28 (134)	53.1	
	87	3	230	2 •	3491	31.57 (802)	16.42 (417)	15.16 (385)	3.75 (95)	5.28 (134)	45.4	
	88	3	460	2 •	3517	31.57 (802)	16.42 (417)	15.16 (385)	3.75 (95)	5.28 (134)	45.4	
90S30-3	135	1	230	3 •	3520	40.26 (1023)	22.72 (577)	17.56 (446)	3.75 (95)	5.28 (134)	64.9	
	134	3	230	3 •	3531	35.55 (903)	17.99 (457)	17.56 (446)	3.75 (95)	5.28 (134)	51.7	
	135	3	460	3 •	3530	35.55 (903)	17.99 (457)	17.56 (446)	3.75 (95)	5.28 (134)	52.8	
90S50-4	170	1	230	5 •	3482	46.58 (1183)	26.66 (677)	19.93 (506)	3.75 (95)	5.28 (134)	79.0	
	171	3	230	5 •	3502	42.63 (1083)	22.68 (577)	19.93 (506)	3.75 (95)	5.28 (134)	68.0	
	171	3	460	5 •	3500	42.63 (1083)	22.68 (577)	19.93 (506)	3.75 (95)	5.28 (134)	68.0	
90S50-5	215	3	230	5 •	3510	45.03 (1144)	22.68 (577)	22.33 (567)	3.75 (95)	5.28 (134)	71.0	
	215	3	460	5 •	3510	45.03 (1144)	22.68 (577)	22.33 (567)	3.75 (95)	5.28 (134)	71.0	
90S75-6	256	3	230	7.5 •	3490	51.33 (1304)	26.65 (677)	24.69 (627)	3.75 (95)	5.28 (134)	85.0	
	256	3	460	7.5 •	3490	51.33 (1304)	26.65 (677)	24.69 (627)	3.75 (95)	5.28 (134)	85.0	
90S75-7	301	3	460	7.5 •	3503	53.74 (1365)	26.65 (677)	27.09 (688)	3.75 (95)	5.28 (134)	88.1	
90S100-8	342	3	460	10 •	3488	60.03 (1525)	30.59 (777)	29.45 (748)	3.75 (95)	5.28 (134)	99.9	
90S100-9	382	3	460	10 •	3472	62.41 (1585)	30.59 (777)	31.86 (809)	3.75 (95)	5.28 (134)	102.9	



E = Maximum diameter of pump including cable guard and motor

Notes:

Control box is required for 3-wire, single-phase applications. Data does not include control box.

Performance conforms to ISO 9906. 1999 (E) Annex A. Minimum submergence is 5 ft (1.5 m).

■	MS402 motor
•	MS4000C motor

C900
PVC PRESSURE PIPE

4"-12" SPECIFICATION DATA

Diamond (C900) PVC Pipe (4" through 12") is made of 12454 compound per ASTM D1784, in accordance with the dimensional chemical, and physical requirements of AWWA C900.

Diamond (C900) PVC Pipe bears the mark of NSF, International (NSF), the listing of Underwriters Laboratory, Inc. (UL), and (DR14 & DR18) bears the listing of Factory Mutual(FM). Some factory locations produce C900 bearing the mark of the Canadian Standards Association (CSA) and NSF14.

Diamond (C900) PVC Pipe utilizes a gasket, per ASTM F477, to seal the integral bell socket to the spigot of the next joint (which conforms to the requirements of ASTM D3139.) Each male end is beveled to facilitate joint assembly, and the spigot is referenced marked to ensure proper insertion depth. Diamond furnished lubricant is to be used in the joining process. Specialty gaskets may be available upon request.

PHYSICAL PROPERTIES OF PVC 12454:

Property	ASTM Test	Minimum
Specific Gravity	D792	1.40
Tensile Strength, psi	D638	7,000
Tensile Modulus, psi	D638	400,000
IZOD Impact Strength	D256	.65ft., lb./in.

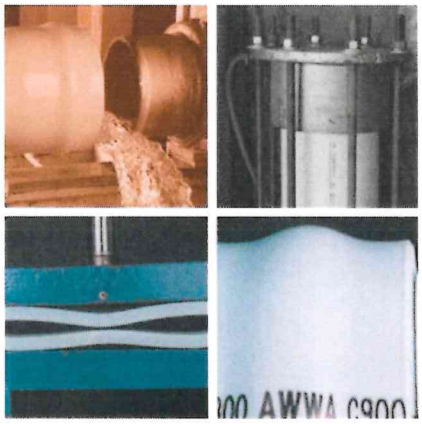
SHORT FORM Specification for Diamond C900 PVC Water Pipe

Diamond C900 PVC Water Pipe shall be made of compounds conforming to ASTM D1784 with a cell classification of 12454. Diamond C900 shall meet all the dimensional, chemical, and physical requirements as outlined in AWWA C900 and will be supplied in 20 and 22 foot laying lengths. Joints shall meet the requirements of ASTM D3139 and shall be formed using Rieber Technology. Gaskets shall meet the requirements of ASTM F477.

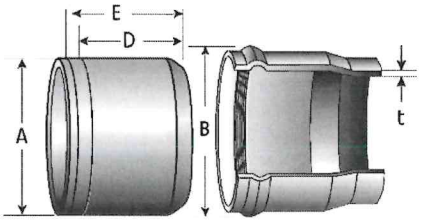
Potable water pipe shall be manufactured from National Sanitation Foundation (NSF) approved compounds.

EXTREME TESTING CONDITIONS

C900 PVC pressure pipe, available in pressure ratings for a wide range of water transfer applications (Available in sizes from 4" through 12")



RIEBER JOINT ILLUSTRATION



C900™

AWWA C900 SPECIFICATION DATA. SUPPLIED IN 20 AND 22 FOOT LAYING LENGTHS.

Nominal Pipe Size in. (mm)	A Outside Dia. Inches	B Bell Dia. Inches	D Assembly Mark 1 Inches *	E Assembly Mark 2 Inches *	t C900 DR-14 305 psi Min Wall Inches	t C900 DR-18 235 psi Min Wall Inches	t C900 DR-25 165 psi Min Wall Inches
4" (100)	4.800	6-1/2"	4-1/4"	5-1/4"	0.343	0.267	0.192
6" (150)	6.900	9-1/4"	4-5/8"	5-5/8"	0.493	0.383	0.276
8" (200)	9.050	11-3/4"	5-1/8"	6-1/8"	0.646	0.503	0.362
10" (250)	11.100	14-1/4"	5-3/4"	6-3/4"	0.793	0.617	0.444
12" (300)	13.200	16-3/4"	6-1/8"	7-1/8"	0.943	0.733	0.528

Prices are subject to a firm policy of "Price in effect at time of shipment on regular purchases"
"Possession of this page does not constitute an offer of sale"
*Tolerance of +/- 1/4" allowed

Underwriters Laboratories Inc.©

Flexcon Pressure Tanks

VFD TANK SIZING

Model	Tank Gallon	Connection Inches	10 GPM	20 GPM	30 GPM	40 GPM	50 GPM	60 GPM	70GPM	80 GPM	90 GPM	100 GPM
			20% RATED FLOW GPM									
			2 GPM	4 GPM	6 GPM	8 GPM	10 GPM	12 GPM	14 GPM	16 GPM	18 GPM	20 GPM
FT8	2.1	1	X									
FT18	4.5	1	X	X								
FT18S	4.5	1	X	X								
FT35	9	1	X	X	X	X						
FT35S	9	1	X	X	X	X						
FTC15	15	1.25	X	X	X	X	X	X	X			
FT66	20	1.25	X	X	X	X	X	X	X	X	X	X
FTC22	22	1.25	X	X	X	X	X	X	X	X	X	X
FTC38SQ	38	1.25	X	X	X	X	X	X	X	X	X	X
FT144	44	1.25	X	X	X	X	X	X	X	X	X	X
FTC50	50	1.25	X	X	X	X	X	X	X	X	X	X
FT266	85	2	X	X	X	X	X	X	X	X	X	X

Pre Charge Calulator

Cut-In PSI	20	30	40	50	60	70	80	90	100
Set Precharge 70%	14	21	28	35	42	49	56	63	70
Set Precharge 80%	16	24	32	40	48	56	64	72	80
Set Precharge 90%	18	27	36	45	54	63	72	81	90

VFD TANK SIZING

Model	Tank Gallon	Connection Inches	10 GPM	20 GPM	30 GPM	40 GPM	50 GPM	60 GPM	70GPM	80 GPM	90 GPM	100 GPM
			20% RATED FLOW GPM									
			2 GPM	4 GPM	6 GPM	8 GPM	10 GPM	12 GPM	14 GPM	16 GPM	18 GPM	20 GPM
FT8	2.1	1	X									
FT18	4.5	1	X	X								
FT18S	4.5	1	X	X								
FT35	9	1	X	X	X	X						
FT35S	9	1	X	X	X	X						
FTC15	15	1.25	X	X	X	X	X	X	X			
FT66	20	1.25	X	X	X	X	X	X	X	X	X	X
FTC22	22	1.25	X	X	X	X	X	X	X	X	X	X
FTC38SQ	38	1.25	X	X	X	X	X	X	X	X	X	X
FT144	44	1.25	X	X	X	X	X	X	X	X	X	X
FTC50	50	1.25	X	X	X	X	X	X	X	X	X	X
FT266	85	2	X	X	X	X	X	X	X	X	X	X

Pre Charge Calulator

Cut-In PSI	20	30	40	50	60	70	80	90	100
Set Precharge 70%	14	21	28	35	42	49	56	63	70
Set Precharge 80%	16	24	32	40	48	56	64	72	80
Set Precharge 90%	18	27	36	45	54	63	72	81	90

REVOLUTIONARY FLOW-THRU DESIGN GUARANTEES THE FRESHEST WATER QUALITY POSSIBLE.

[FLOW-THRU, BECAUSE MOVING WATER DOESN'T STAGNATE]

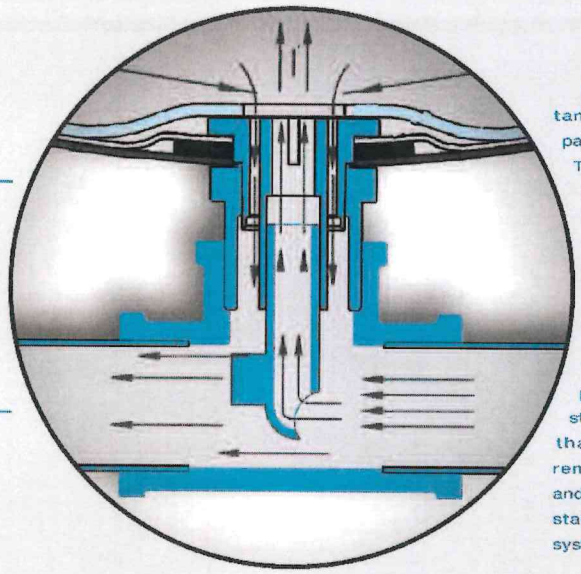
Patented watervane flushes water through the tank eliminating the possibility of stagnant water.

Flow-Thru technology assures total recirculation of the tank's water content.

16 gauge solid steel tank, finished with highest quality urethane paint.

Flow-Thru tanks are also available in a light weight weather proof composite shell.

100% High pressure helium tested. Backed by a 5 year warranty.



Flexcon Patented Flow-Thru Water Connection

All Flexcon Flow-Thru well tanks feature our exclusive patented Flow-Thru technology. This assures your system will provide the freshest water quality possible — simply unattainable with non-Flow-Thru tanks.

The Flow-Thru connection diverts system water into, and more importantly out of the tank while the pump is running. This constant flushing action assures that the water in the tank remains as fresh as possible and eliminates the possibility of stagnant water during normal system operation.

FT 18S includes 2 mounting feet and a stand for mounting a CPWS control box. Can be mounted in a vertical or horizontal position.

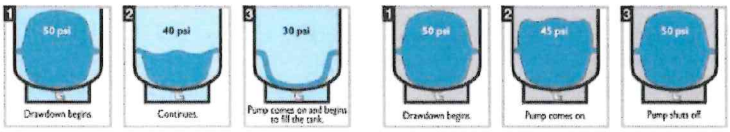
FTC 385Q FT 66 FT 18

Flexcon's steel and new line of composite tanks incorporate CAD-2 our patented controlled action diaphragm. CAD-2's steel clench ring regulates movement and prevents the diaphragm from rubbing against the tank wall. It has made Flexcon tanks the Industry leader.

Flow-Thru is the ideal solution for constant pressure water system installers seeking to store water without the risk of stagnation.

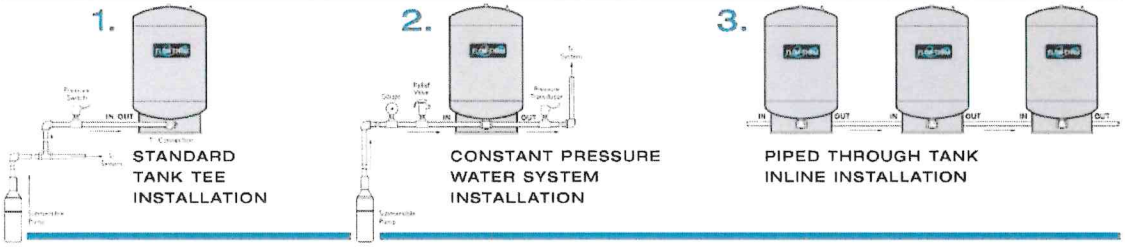
FLEXCON INDUSTRIES
The Reliable Source®

FLOW-THRU



Standard water systems operate with a 20 PSI differential between cut-in and cut-out, the water in the tank is flushed out and replenished every pump cycle, thus greatly reducing the risk of stagnant water in the tank.

Newer constant pressure water systems bring the pump up to speed very quickly by operating on much lower differential pressures, as little as 2-5 PSI. This means stored water is never fully exchanged, only diluted with new system water. This creates the possibility of stagnant water remaining in the pressure tank for extended periods.



1. STANDARD TANK TEE INSTALLATION
2. CONSTANT PRESSURE WATER SYSTEM INSTALLATION
3. PIPED THROUGH TANK INLINE INSTALLATION

FLOW-THRU TANKS ARE AVAILABLE IN STEEL, STAINLESS, COMPOSITE

DIMENSIONS & CAPACITIES, STEEL

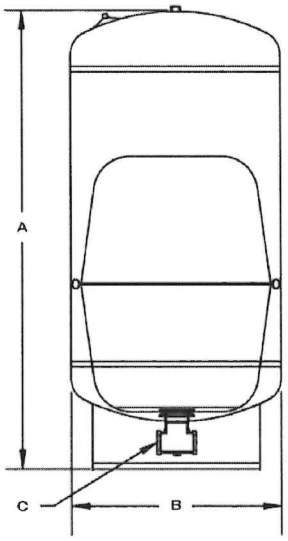
Model	Total Tank Volume		A Height/Length		B Diameter		C Connection	Total Weight	
	gal	liters	in	cm	in	cm		lbs	kilos
FT 35	9	32	18.90	48.10	12.5	31.80	1" NPT	15.4	7.0
FT 35S	9	32	18.90	48.10	12.5	31.80	1" NPT	15.4	7.0
FT 66	20	80	29.00	73.66	16.0	40.64	1 1/4" NPT	36.0	16.4
FT 144	44	170	36.25	92.07	21.0	53.34	1 1/4" NPT	68.0	30.9
FT 266	85	325	44.50	113.03	26.0	66.04	2" NPT	122.0	55.5

DIMENSIONS & CAPACITIES, STAINLESS

Model	Total Tank Volume		A Height/Length		B Diameter		C Connection	Total Weight	
	gal	liters	in	cm	in	cm		lbs	kilos
FT 8	2.1	8	12.0	30.00	8	20.00	1" NPT	5.0	2.3
FT 18	4.5	18	14.5	37.00	11	28.00	1" NPT	10.0	4.6
FT 18S	4.5	18	14.5	37.00	11	28.00	1" NPT	12.0	6.9

DIMENSIONS & CAPACITIES, COMPOSITE

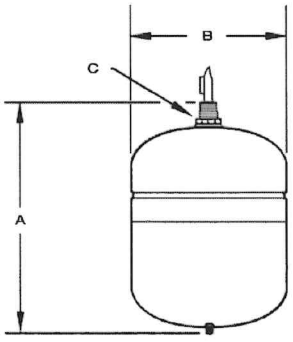
Model	Total Tank Volume		A Height/Length		B Diameter		C Connection	Total Weight	
	gal	liters	in	cm	in	cm		lbs	kilos
FTC 15	15	56.8	25.60	64.0	16.5	41.9	1 1/4" sch 80	19.0	8.6
FTC 22	22	83.0	33.10	84.1	16.5	41.9	1 1/4" sch 80	24.0	10.9
FTC 38SQ	38	143.8	29.75	74.7	24.2	61.5	1 1/4" sch 80	35.0	15.9
FTC 50	50	189.3	42.90	109.0	21.4	54.4	1 1/4" sch 80	41.0	18.6



Maximum working pressure 125 psig. Maximum working temperature, internal & external 140° F. Tank pre-charge 38 psig.

QUICK SIZING CHART, STEEL, STAINLESS, COMPOSITE

Model	Total Tank Volume		Total Drawdown* 50 psi (.23)		60 psi (.24)	
	gal	liters	gal	liters	gal	liters
FT 8	2.1	8.0	.48	1.84	.50	1.92
FT 18(S)	4.5	18.0	1.03	4.14	1.08	4.32
FT 35(S)	9.0	32.0	2.07	7.36	2.16	7.68
FTC 15	15.0	56.8	3.45	13.10	3.60	13.63
FT 66	20.0	80.0	4.60	18.40	4.80	19.20
FTC 22	22.0	83.0	5.06	19.09	5.28	19.92
FTC 38SQ	38.0	143.8	8.74	33.07	9.12	34.51
FT 144	44.0	170.0	10.12	39.10	10.56	40.80
FTC 50	50.0	189.3	11.5	43.54	12.00	45.43
FT 266	85.0	325.0	19.55	74.75	20.40	78.00



*Based on precharge set at 70% of set point of constant pressure controller. Drawdown can be affected by many factors, including temperature, pressure, and elevation.

> www.flexconind.com
> 781-986-2424
> 300 Pond Street
> Randolph, MA 02368

FLEXCON INDUSTRIES
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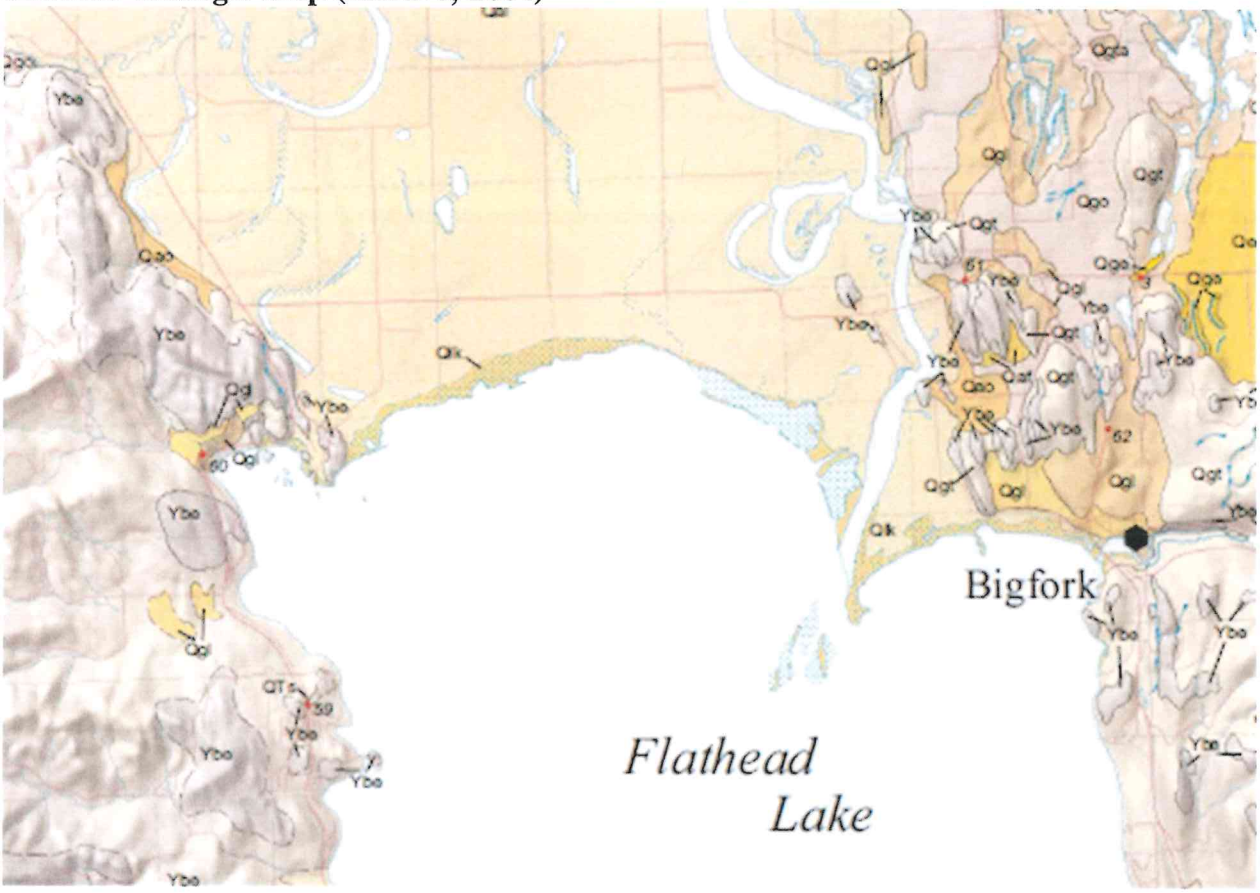
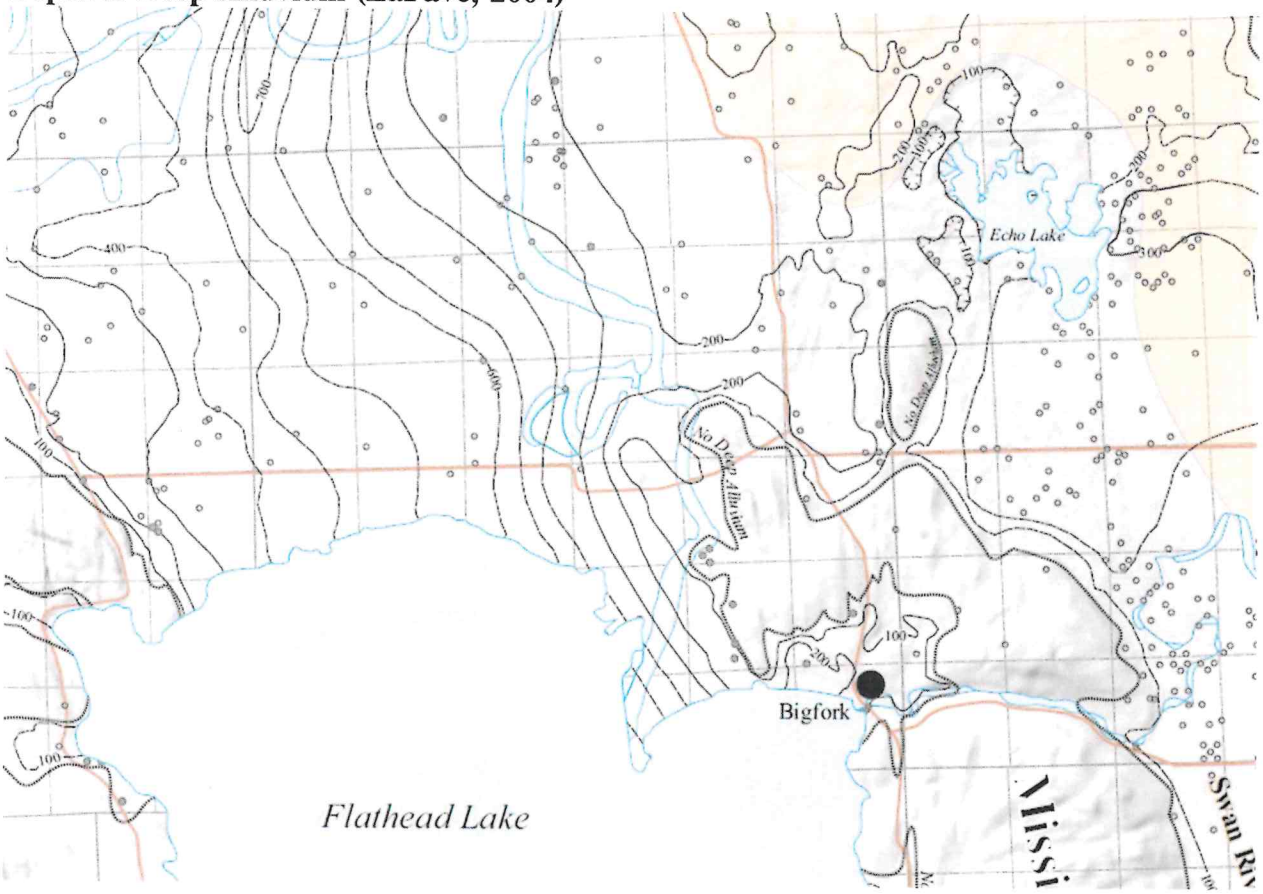
APPENDIX D. HYDROGEOLOGIC MAPS

Surficial Geologic Map (LaFave, 2004)

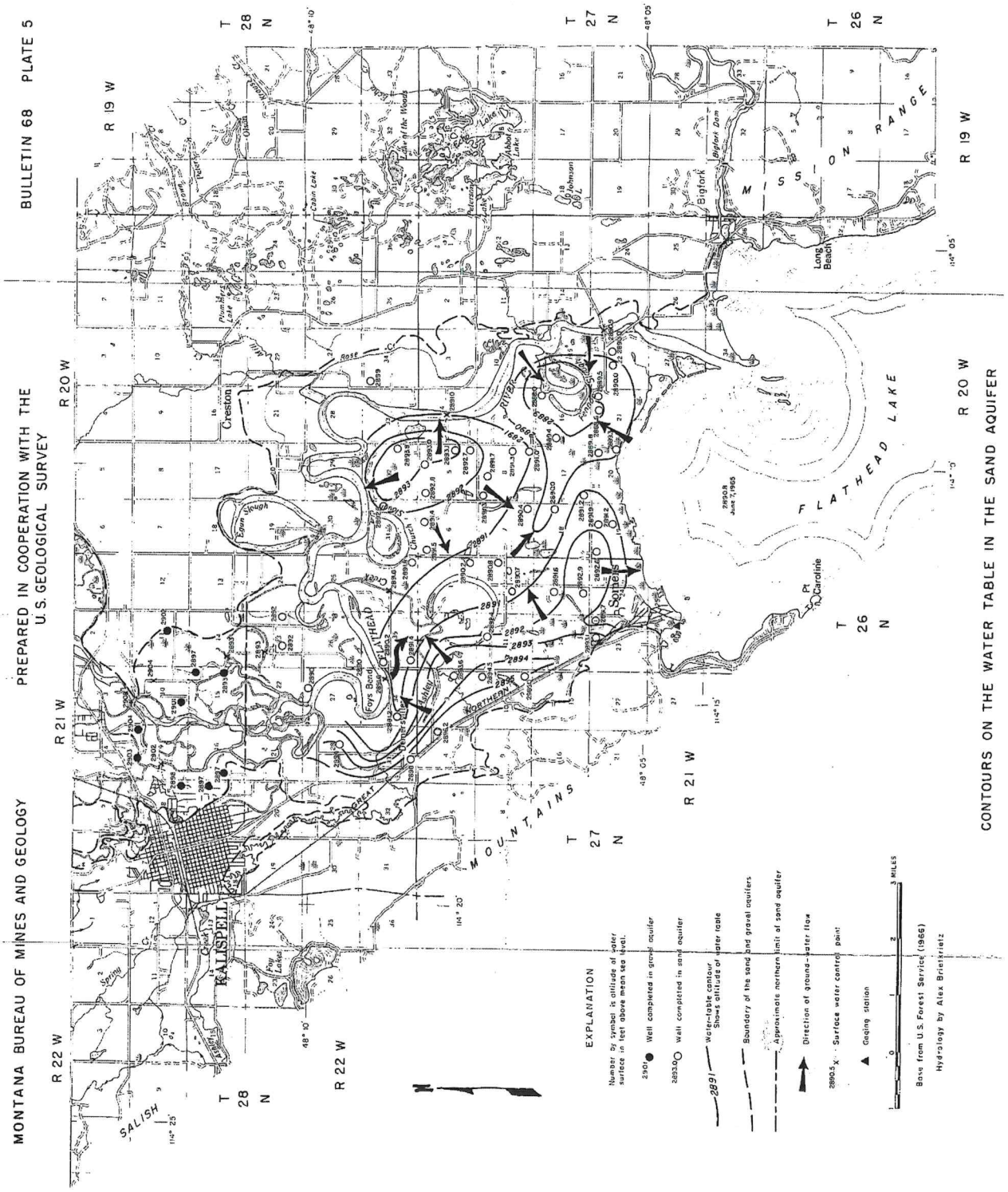


Qal — ALLUVIUM OF MODERN CHANNELS AND FLOODPLAINS (Holocene) - Light to medium brown and grayish brown sand and silt, and lesser amounts of pebbles, cobbles, and clay along active stream valleys and areas of sheetwash; contains minor amount of colluvium along the bases of steep slopes; thicknesses average 30 feet, but reach 90 feet in paleochannels south and southeast of Kalispell; ground water commonly near land surface; produces significant quantities of water.

Depth to Deep Alluvium (LaFave, 2004)



Map of Contours of the Perched Aquifers in Kalispell (Konizeski, 1968)



APPENDIX E. PUMP TEST GRAPHS & FORM 633

Form 633 Pump Test

Form 633 will be emailed to DNRC.

DNRC/DEQ Form No. 633 Revised 2/2024	Form No. 633 Aquifer Test Data							
Grey Cells Require User Input								
Water-Right Applicant:	In-Line Company LLC				DNRC Application #:		DEQ Application #:	22-2027
Applicant Address:	1191 Majestic View Lane, Kalispell, MT				County:	Flathead		
Test Site Location:	SW 1/4	NE 1/4	Section:	17	Township (#, N/S):	27N	Range (#, E/W):	20W
Date(s) Aquifer Test Conducted (MM/YY - MM/YY):	3/6/20			Test Type:		Drawdown and Yield		
Person(s) Conducting Test:	Mikel Siemens, PE; Core Water Consulting, Inc			Company Conducting Test:		Core Water Consulting		
Production Well ID:	Multiuser Well Majestic Meadow			Pumping Rates (gpm):		101.12		
Production Well GWIC ID:	GWIC 331034	Depth (feet):	714	Diameter (inches):	6	Perf. Zone(s):	Open Bottom	
Production Well GPS Coordinates:	Latitude:	48.105787	Longitude:	-114.168564	Datum:	NAD 83		
Author of Technical Report								

Observation Well ID(s)	GWIC ID(s)	GPS Coordinates		Depth (feet)	Diameter (inches)	Perforated Zone(s) (feet)	Distance from Test Well (feet)	Bearing from Test Well (degrees)
		Latitude	Longitude					
Wantaja	231775	48.10461745	-114.1683111	620	6	656-676	1,992	??

Specify Water-Level Monitoring Equipment:	Electronic pressure transducer/data logger	Vented Logger:	YES
Specify Monitoring Equipment Model:	In-Situ Level logger		

Production Well Water-Level Data

Static Water Level (swl) to 0.01 ft:	12.25
Date/Time (MM/DD/YY HH:MM) Measured:	3/09/20 10:41
How swl Measured:	Avg Flow Atop
Measurement Point (MP) ID:	Top of Casing
MP elevation (feet):	2903.0
How MP Measured:	Google Earth

Aquifer Test Time Data

Pumping Start Date/Time (MM/DD/YY HH:MM)	3/9/24 10:41
Pumping End Date/Time (MM/DD/YY HH:MM)	3/10/24 12:42
Recovery End Date/Time (MM/DD/YY HH:MM)	3/11/24 8:46

Aquifer-Test Duration:	
Pumping (HH:MM)	26:01
Recovery (HH:MM)	20:04
Pumping (total minutes)	1561
Recovery (total minutes)	1204

Discharge Information

Specify method of discharge conveyance, distance and direction of the discharge point from the pumping well:

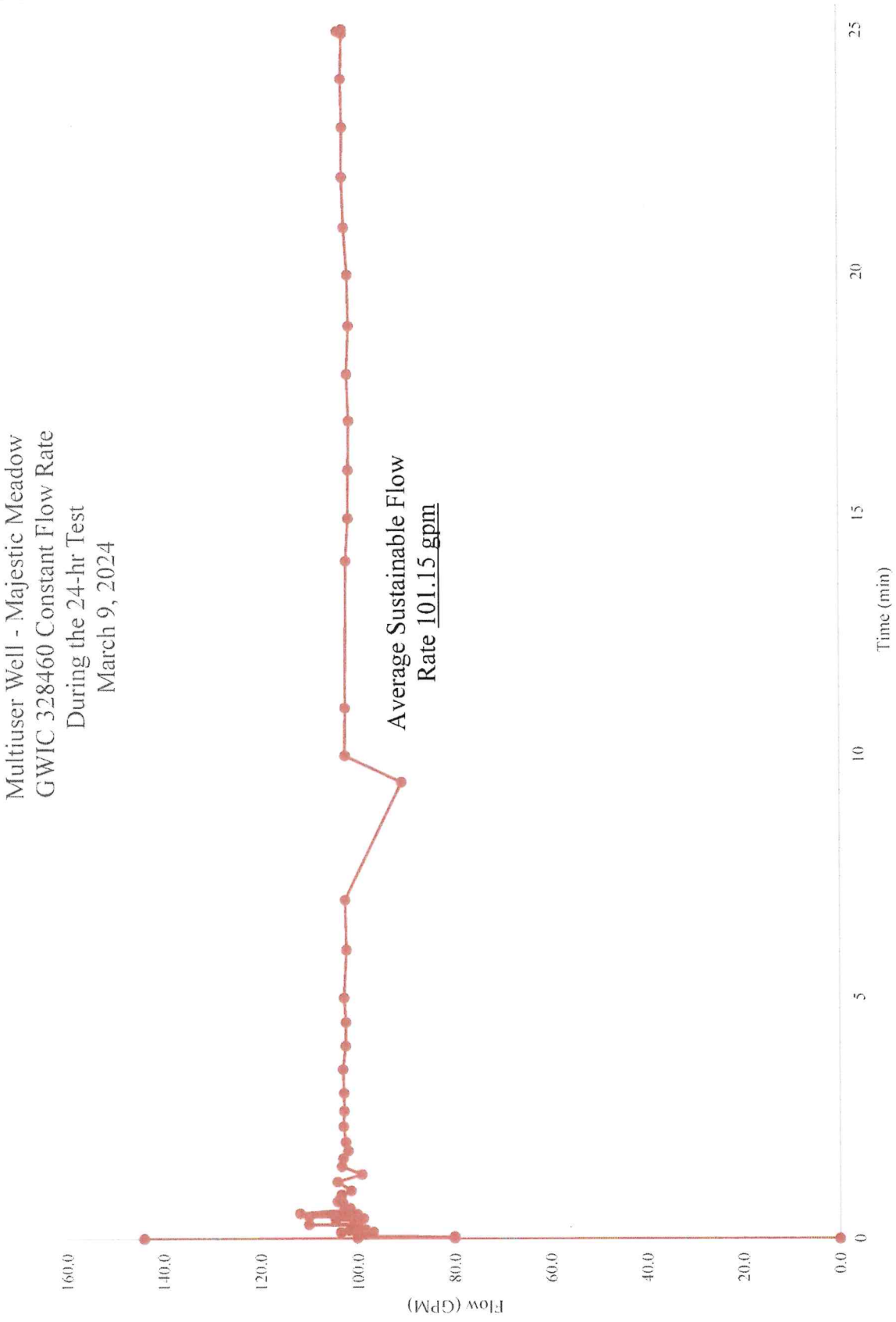
Dishcharge to be measured several times per hour during the first 3 hours of pumping and thereafter several times per hour if discharge fluctuates and requires frequent adjustment. Otherwise, hourly measurements if discharge remains constant and requires little or no adjustment. Discharge must be reported in gallons per minute (gpm) if using flow meter; in cumulative gallons if using

Specify Discharge Measurement Equipment:

McCrometer 4" Flow Meter (Reading X 10) gpm.

Notes:

Totalizer

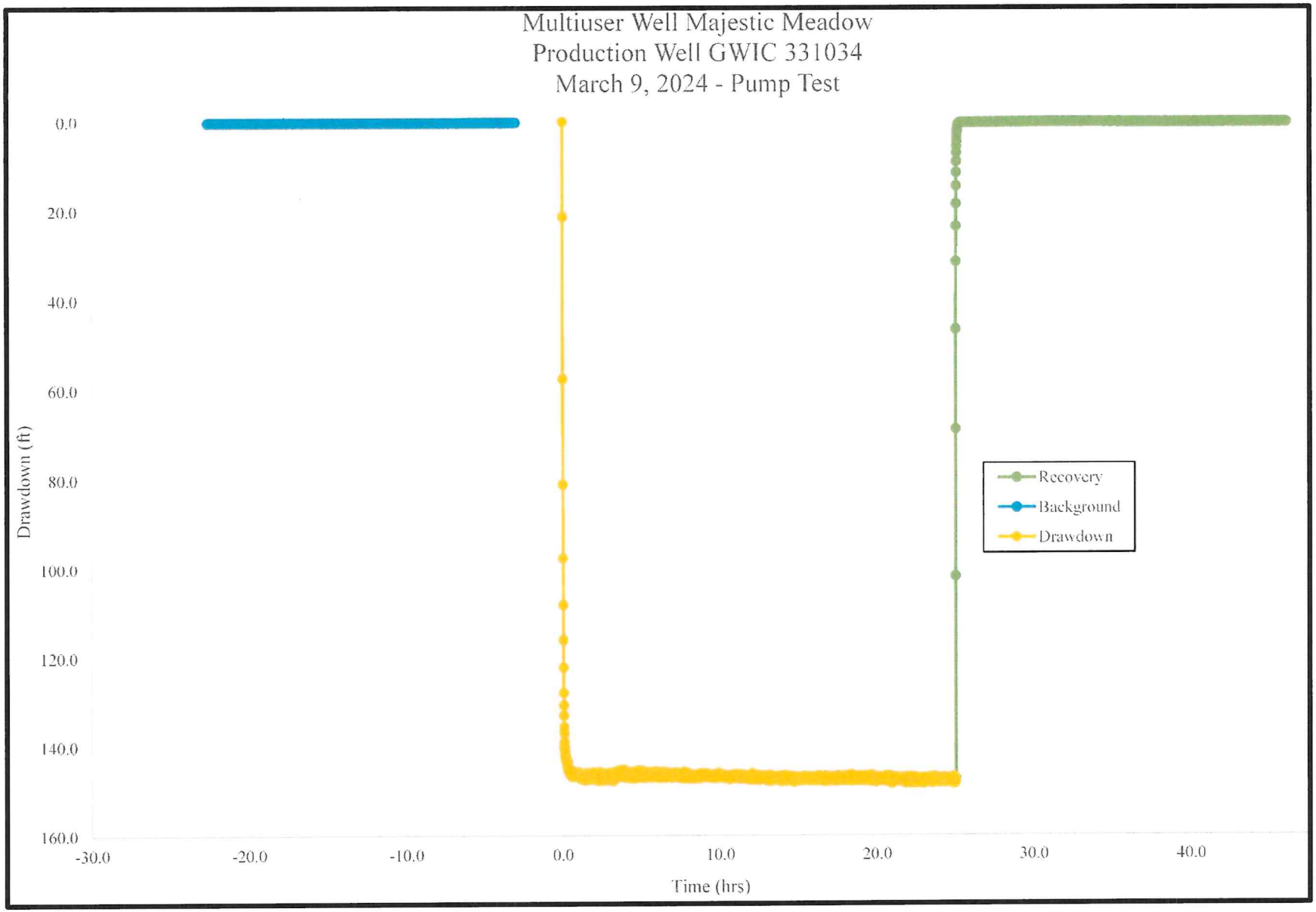

Multiuser Well - Majestic Meadow
GWIC 328460 Constant Flow Rate
During the 24-hr Test
March 9, 2024
Average Sustainable Flow
Rate 101.15 gpm
Flow (GPM)
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
0
5
10
15
20
25
Time (min)

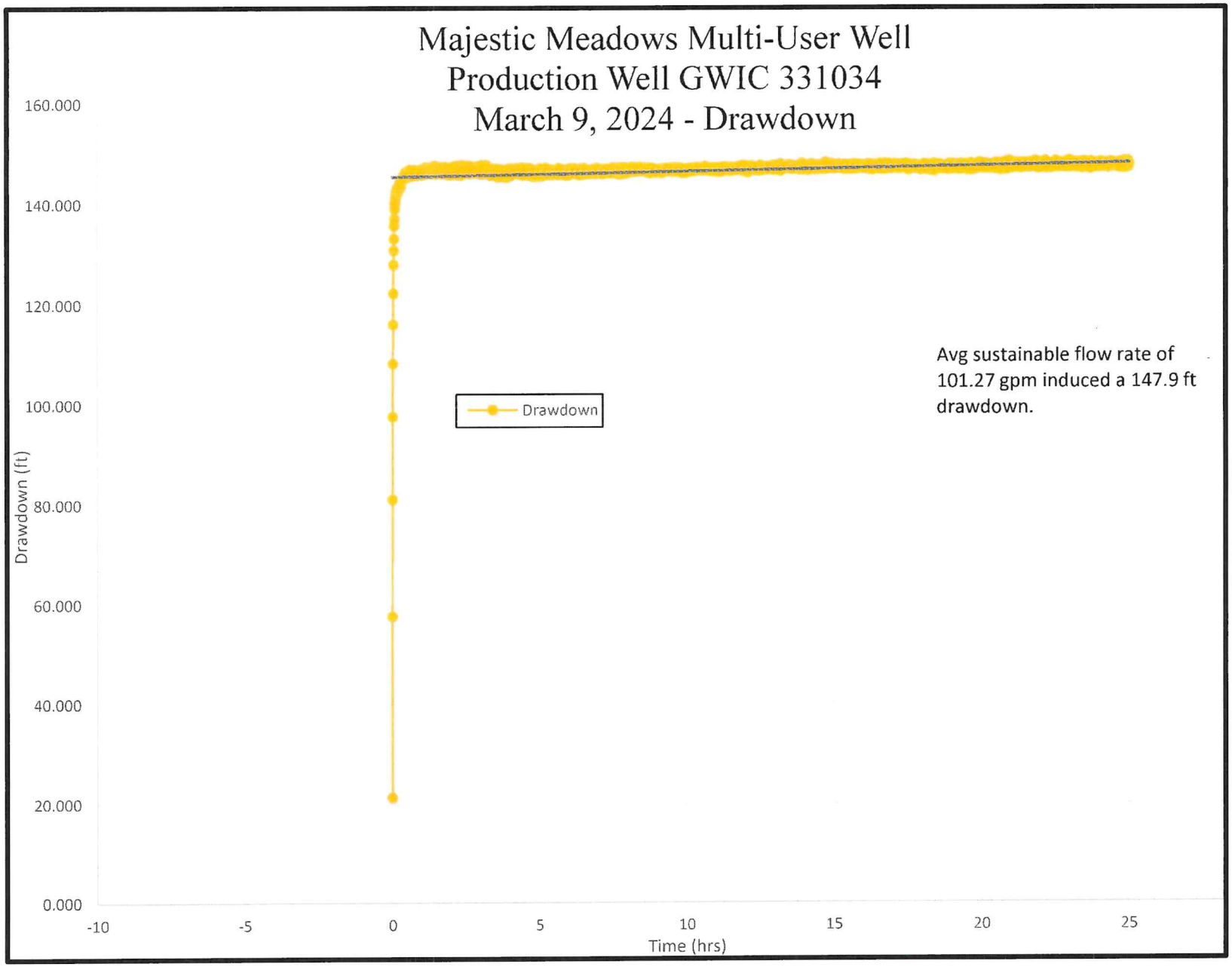
Measured Discharge						
Aquifer Test Discharge Data						
Date/Time (MM/DD/YY HH:MM)	Elapsed time (minutes)	Average discharge (gallons per minute)	Deviation from average measured discharge (percent)*	Totalizer Readings (gallons)	Totalizer discharge (gallons per minute)*	Deviation from average totalizer discharge (percent)*
3/9/24 10:41 AM	0.42			327790.00		
3/9/24 10:41 AM	0.92	144.0	-26.7%	327830.00	80.0	-20.80%
3/9/24 10:42 AM	1.4	109.09	-5.6%	327880.00	100.0	-1.00%
3/9/24 10:42 AM	1.9	105.88	-4.2%	327930.00	100.0	-1.00%
3/9/24 10:43 AM	2.4	104.35	-3.3%	327980.00	100.0	-1.00%
3/9/24 10:43 AM	2.9	103.45	-19.5%	328020.00	80.0	-20.80%
3/9/24 10:44 AM	3.4	99.43	0.5%	328070.00	100.0	-1.00%
3/9/24 10:44 AM	3.9	99.51	0.4%	328120.00	100.0	-1.00%
3/9/24 10:45 AM	4.4	99.57	0.4%	328170.00	100.0	-1.00%
3/9/24 10:45 AM	4.9	99.62	0.3%	328220.00	100.0	-1.00%
3/9/24 10:46 AM	5.4	99.66	0.3%	328270.00	100.0	-1.00%
3/9/24 10:46 AM	5.9	99.69	0.3%	328320.00	100.0	-1.00%
3/9/24 10:47 AM	6.4	99.72	0.3%	328370.00	100.0	-1.00%
3/9/24 10:47 AM	6.9	99.74	0.2%	328420.00	100.0	-1.00%
3/9/24 10:48 AM	7.4	99.76	0.2%	328470.00	100.0	-1.00%
3/9/24 10:48 AM	7.9	99.78	0.2%	328520.00	100.0	-1.00%
3/9/24 10:49 AM	8.4	99.79	3.4%	328570.00	103.4	2.41%
3/9/24 10:49 AM	8.9	100.00	-3.0%	328620.00	96.8	-4.19%
3/9/24 10:50 AM	9.4	99.81	0.2%	328670.00	100.0	-1.00%
3/9/24 10:50 AM	9.9	99.82	0.2%	328720.00	100.0	-1.00%
3/9/24 10:51 AM	10.9	99.83	1.7%	328820.00	101.7	0.68%
3/9/24 10:52 AM	11.9	100.00	-1.5%	328920.00	98.4	-2.62%
3/9/24 10:53 AM	12.4	99.86	0.1%	328970.00	100.0	-1.00%
3/9/24 10:53 AM	12.9	99.87	0.1%	329020.00	100.0	-1.00%
3/9/24 10:54 AM	13.4	99.87	0.1%	329070.00	100.0	-1.00%
3/9/24 10:54 AM	13.9	99.88	0.1%	329120.00	100.0	-1.00%
3/9/24 10:55 AM	14.4	99.88	0.1%	329170.00	100.0	-1.00%
3/9/24 10:55 AM	14.9	99.88	0.1%	329220.00	100.0	-1.00%
3/9/24 10:56 AM	15.9	99.89	0.1%	329320.00	100.0	-1.00%
3/9/24 10:57 AM	16.9	99.90	0.1%	329420.00	100.0	-1.00%
3/9/24 10:58 AM	17.9	99.90	9.5%	329530.00	110.0	8.90%
3/9/24 10:59 AM	18.9	100.47	-0.4%	329630.00	100.0	-1.00%
3/9/24 11:00 AM	19.9	100.44	-0.4%	329730.00	100.0	-1.00%
3/9/24 11:01 AM	20.9	100.42	-0.4%	329830.00	100.0	-1.00%
3/9/24 11:02 AM	21.9	100.40	-0.4%	329930.00	100.0	-1.00%
3/9/24 11:05 AM	24.5	100.38	3.7%	330200.00	104.5	3.47%
3/9/24 11:01 AM	25.9	100.82	-1.9%	330340.00	98.8	-2.16%
3/9/24 11:01 AM	26.9	100.71	-0.7%	330440.00	100.0	-1.00%
3/9/24 11:01 AM	27.9	100.68	8.9%	330550.00	110.0	8.90%
3/9/24 11:09 AM	28.9	101.01	-1.0%	330650.00	100.0	-1.00%
3/9/24 11:10 AM	29.9	100.98	-0.9%	330750.00	100.0	-1.00%
3/9/24 11:11 AM	30.9	100.95	-0.9%	330850.00	100.0	-1.00%
3/9/24 11:12 AM	31.9	100.92	10.5%	330960.00	111.9	10.75%
3/9/24 11:16 AM	35.9	101.25	1.1%	331370.00	102.5	1.48%
3/9/24 11:19 AM	38.1	101.39	0.1%	331590.00	101.5	0.52%
3/9/24 11:20 AM	39.9	101.40	1.2%	331780.00	102.7	1.68%
3/9/24 11:25 AM	44.8	101.46	1.4%	332280.00	103.1	2.06%
3/9/24 11:27 AM	46.4	101.64	2.3%	332450.00	104.1	3.04%
3/9/24 11:31 AM	50.1	101.72	1.7%	332830.00	103.6	2.60%
3/9/24 11:36 AM	55.1	101.86	1.3%	333350.00	103.3	2.28%
3/9/24 11:41 AM	60.1	102.00	-0.6%	333860.00	101.3	0.31%
3/9/24 11:52 AM	71.1	101.94	1.8%	335000.00	104.1	3.07%
3/9/24 12:01 AM	80.2	102.27	-2.8%	335900.00	99.1	-1.91%
3/9/24 12:10 AM	90.0	101.91	1.2%	336910.00	103.2	2.20%
3/9/24 12:21 AM	100.2	102.06	0.8%	337960.00	102.9	1.91%
3/9/24 12:30 AM	109.8	102.15	-0.2%	338940.00	101.9	0.89%
3/9/24 12:41 AM	120.2	102.13	0.2%	340010.00	102.4	1.37%
3/9/2024 13:00:53 PM	140.0	102.15	0.6%	342040.00	102.9	1.84%
3/9/2024 13:19:56 PM	158.9	102.25	0.4%	343990.00	102.7	1.69%
3/9/2024 13:42:25 PM	181.4	102.31	0.4%	346300.00	102.7	1.72%
3/9/2024 14:11:39 PM	210.7	102.36	0.5%	349310.00	103.0	1.94%
3/9/2024 14:40:51 PM	239.9	102.44	0.0%	352300.00	102.4	1.37%
3/9/2024 15:10:16 PM	269.3	102.44	-0.1%	355310.00	102.3	1.30%
3/9/2024 15:40:27 PM	299.5	102.43	0.2%	358410.00	102.7	1.68%
3/9/2024 16:40:03 PM	359.1	102.45	-0.2%	364500.00	102.2	1.16%
3/9/2024 17:42:01 PM	421.0	102.41	0.1%	370850.00	102.5	1.45%
3/9/2024 20:08:16 PM	567.3	102.42	-8.7%	384130.00	90.8	-10.10%
3/9/2024 20:41:15 PM	600.3	99.42	2.9%	387510.00	102.5	1.45%
3/9/2024 21:40:42 PM	659.7	99.59	2.6%	393600.00	102.4	1.41%
3/10/24 12:42 AM	842.0	99.85	1.8%	412230.00	102.2	1.18%
3/10/24 1:35 AM	895.0	100.36	1.3%	417620.00	101.7	0.68%
3/10/24 2:35 AM	954.9	100.44	1.1%	423710.00	101.6	0.62%
3/10/24 3:37 AM	1016.2	100.51	0.9%	429930.00	101.5	0.48%
3/10/24 4:34 AM	1073.9	100.57	1.2%	435810.00	101.9	0.86%
3/10/24 5:34 AM	1133.6	100.64	0.8%	441870.00	101.5	0.49%
3/10/24 6:38 AM	1197.0	100.69	1.0%	448320.00	101.7	0.72%
3/10/24 7:36 AM	1255.7	100.74	1.6%	454330.00	102.4	1.42%
3/10/24 8:39 AM	1318.3	100.82	1.9%	460770.00	102.8	1.79%
3/10/24 9:41 AM	1380.0	100.92	1.7%	467110.00	102.8	1.73%
3/10/24 10:41 AM	1440.0	101.00	1.9%	473290.00	103.0	1.97%
3/10/24 11:37 AM	1496.2	101.08	1.6%	479060.00	102.8	1.73%
3/10/24 11:39 AM	1498.9	101.15	2.5%	479340.00	103.7	2.67%
3/10/24 11:42 AM	1501.3	101.15	1.6%	479590.00	102.7	1.71%
		101.1534576				

Drawdown Production Well

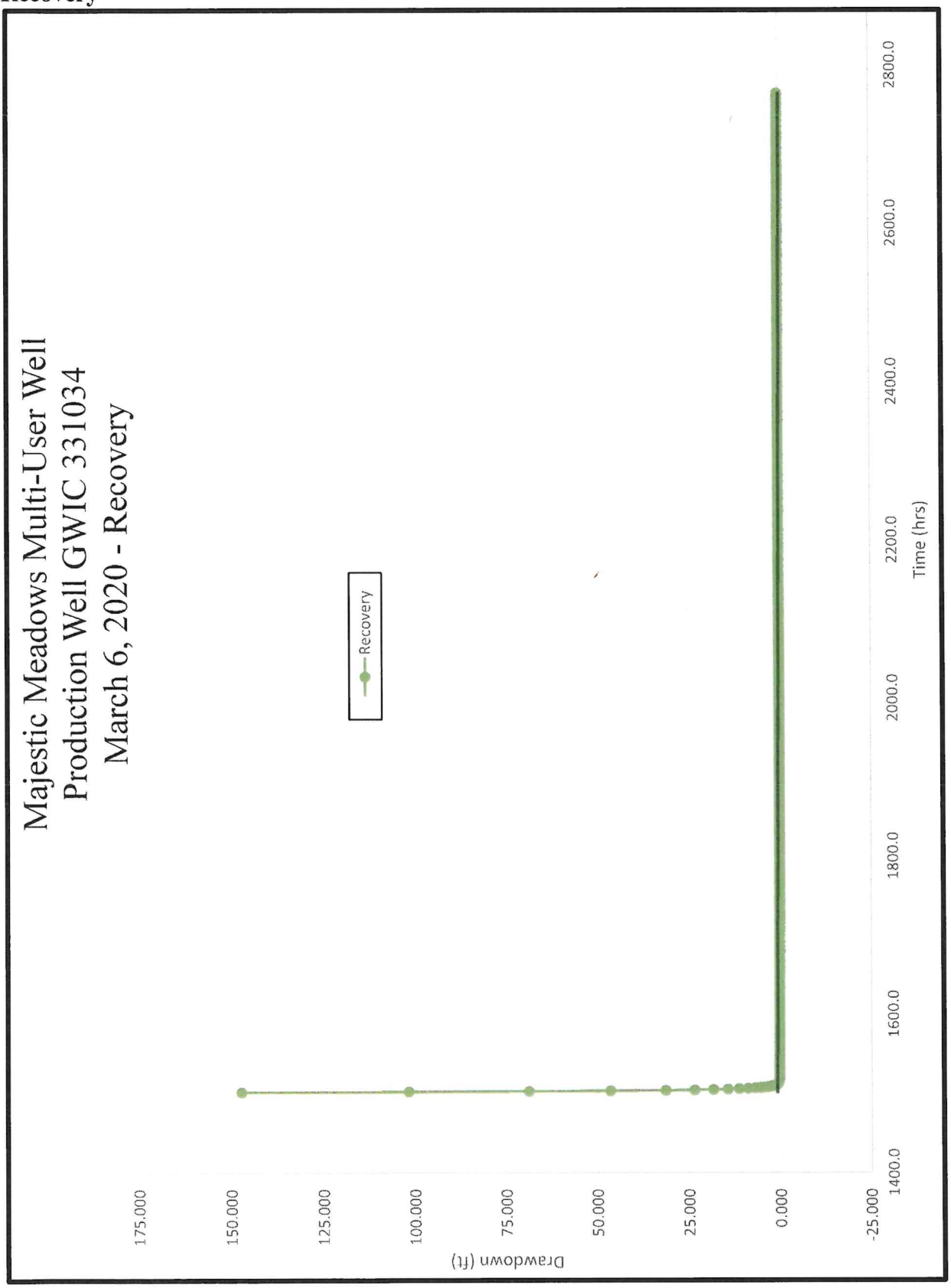
Drawdown Phase of Aquifer Test					Grey Cells Require User Input
Drawdown Data for Production Well					
Date/Time (MM/DD/YY HH:MM)	Time Increment	Elapsed time (minutes)	Drawdown from MP (to 0.01 foot)	Drawdown (to 0.01 foot)*	Test Comments
3/9/24 10:41 AM	30 seconds	0.0	33.53	21.28	
3/9/24 10:41 AM		0.5	69.81	57.56	
3/9/24 10:42 AM		1.0	93.39	81.14	
3/9/24 10:42 AM		1.5	109.90	97.65	
3/9/24 10:43 AM		2.0	120.50	108.25	
3/9/24 10:43 AM		2.5	128.31	116.06	
3/9/24 10:44 AM		3.0	134.52	122.27	
3/9/24 10:44 AM		3.5	140.20	127.95	
3/9/24 10:45 AM		4.0	143.02	130.77	
3/9/24 10:45 AM		4.5	145.36	133.11	
3/9/24 10:46 AM		5.0	147.94	135.69	
3/9/24 10:46 AM		5.5	149.34	137.09	
3/9/24 10:47 AM		6.0	151.31	139.06	
3/9/24 10:47 AM		6.5	152.44	140.19	
3/9/24 10:48 AM		7.0	152.94	140.69	
3/9/24 10:48 AM		7.5	153.27	141.02	
3/9/24 10:49 AM		8.0	153.62	141.37	
3/9/24 10:49 AM		8.5	154.46	142.21	
3/9/24 10:50 AM		9.0	154.66	142.41	
3/9/24 10:50 AM		9.5	154.22	141.97	
3/9/24 10:51 AM		10.0	154.91	142.66	
3/9/24 10:51 AM		10.5	154.29	142.04	
3/9/24 10:52 AM		11.0	155.15	142.90	
3/9/24 10:52 AM		11.5	155.44	143.19	
3/9/24 10:53 AM		12.0	155.04	142.79	
3/9/24 10:53 AM		12.5	155.30	143.05	
3/9/24 10:54 AM		13.0	155.35	143.10	
3/9/24 10:54 AM		13.5	155.81	143.56	
3/9/24 10:55 AM		14.0	155.14	142.89	
3/9/24 10:55 AM		14.5	155.11	142.86	
3/9/24 10:56 AM		15.0	156.03	143.78	
3/9/24 10:56 AM		15.5	155.25	143.00	
3/9/24 10:57 AM		16.0	156.03	143.78	
3/9/24 10:57 AM		16.5	156.46	144.21	
3/9/24 10:58 AM		17.0	156.04	143.79	
3/9/24 10:58 AM		17.5	155.98	143.73	
3/9/24 10:59 AM		18.0	156.01	143.76	
3/9/24 10:59 AM		18.5	155.82	143.57	
3/9/24 11:00 AM		19.0	156.55	144.30	
3/9/24 11:00 AM		19.5	157.16	144.91	
3/9/24 11:01 AM		20.0	157.25	145.00	
3/9/24 11:01 AM		20.5	157.54	145.29	
3/9/24 11:02 AM		21.0	157.49	145.24	
3/9/24 11:02 AM		21.5	157.07	144.82	
3/9/24 11:03 AM		22.0	157.70	145.45	
3/9/24 11:03 AM		22.5	157.30	145.05	
3/9/24 11:04 AM		23.0	157.75	145.50	
3/9/24 11:04 AM		23.5	157.42	145.17	
3/9/24 11:05 AM		24.0	157.29	145.04	
3/9/24 11:05 AM		24.5	157.65	145.40	
3/9/24 11:06 AM		25.0	158.13	145.88	

3/10/24 11:14 AM	1473.0	160.03	147.78
3/10/24 11:14 AM	1473.5	159.81	147.56
3/10/24 11:15 AM	1474.0	160.30	148.05
3/10/24 11:15 AM	1474.5	159.62	147.37
3/10/24 11:16 AM	1475.0	159.73	147.48
3/10/24 11:16 AM	1475.5	160.30	148.05
3/10/24 11:17 AM	1476.0	160.16	147.91
3/10/24 11:17 AM	1476.5	159.73	147.48
3/10/24 11:18 AM	1477.0	159.65	147.40
3/10/24 11:18 AM	1477.5	160.06	147.81
3/10/24 11:19 AM	1478.0	160.14	147.89
3/10/24 11:19 AM	1478.5	159.44	147.19
3/10/24 11:20 AM	1479.0	159.72	147.47
3/10/24 11:20 AM	1479.5	160.33	148.08
3/10/24 11:21 AM	1480.0	159.79	147.54
3/10/24 11:21 AM	1480.5	159.62	147.37
3/10/24 11:22 AM	1481.0	160.14	147.89
3/10/24 11:22 AM	1481.5	160.51	148.26
3/10/24 11:23 AM	1482.0	159.59	147.34
3/10/24 11:23 AM	1482.5	159.90	147.65
3/10/24 11:24 AM	1483.0	160.56	148.31
3/10/24 11:24 AM	1483.5	160.25	148.00
3/10/24 11:25 AM	1484.0	159.33	147.08
3/10/24 11:25 AM	1484.5	159.69	147.44
3/10/24 11:26 AM	1485.0	160.13	147.88
3/10/24 11:26 AM	1485.5	159.83	147.58
3/10/24 11:27 AM	1486.0	159.37	147.12
3/10/24 11:27 AM	1486.5	159.82	147.57
3/10/24 11:28 AM	1487.0	160.46	148.21
3/10/24 11:28 AM	1487.5	159.66	147.41
3/10/24 11:29 AM	1488.0	159.66	147.41
3/10/24 11:29 AM	1488.5	160.37	148.12
3/10/24 11:30 AM	1489.0	160.34	148.09
3/10/24 11:30 AM	1489.5	159.67	147.42
3/10/24 11:31 AM	1490.0	160.00	147.75
3/10/24 11:31 AM	1490.5	160.28	148.03
3/10/24 11:32 AM	1491.0	159.96	147.71
3/10/24 11:32 AM	1491.5	159.38	147.13
3/10/24 11:33 AM	1492.0	160.36	148.11
3/10/24 11:33 AM	1492.5	160.79	148.54
3/10/24 11:34 AM	1493.0	159.24	146.99
3/10/24 11:34 AM	1493.5	160.02	147.77
3/10/24 11:35 AM	1494.0	160.50	148.25
3/10/24 11:35 AM	1494.5	159.99	147.74
3/10/24 11:36 AM	1495.0	159.72	147.47
3/10/24 11:36 AM	1495.5	160.09	147.84
3/10/24 11:37 AM	1496.0	160.14	147.89
3/10/24 11:37 AM	1496.5	160.15	147.90
3/10/24 11:38 AM	1497.0	160.60	148.35
3/10/24 11:38 AM	1497.5	160.56	148.31
3/10/24 11:39 AM	1498.0	160.55	148.30
3/10/24 11:39 AM	1498.5	160.74	148.49
3/10/24 11:40 AM	1499.0	160.44	148.19
3/10/24 11:40 AM	1499.5	159.50	147.25
3/10/24 11:41 AM	1500.0	159.71	147.46
3/10/24 11:41 AM	1500.5	159.92	147.67
3/10/24 11:42 AM	1501.0	160.31	148.06
3/10/24 11:42 AM	1501.5	160.15	147.90

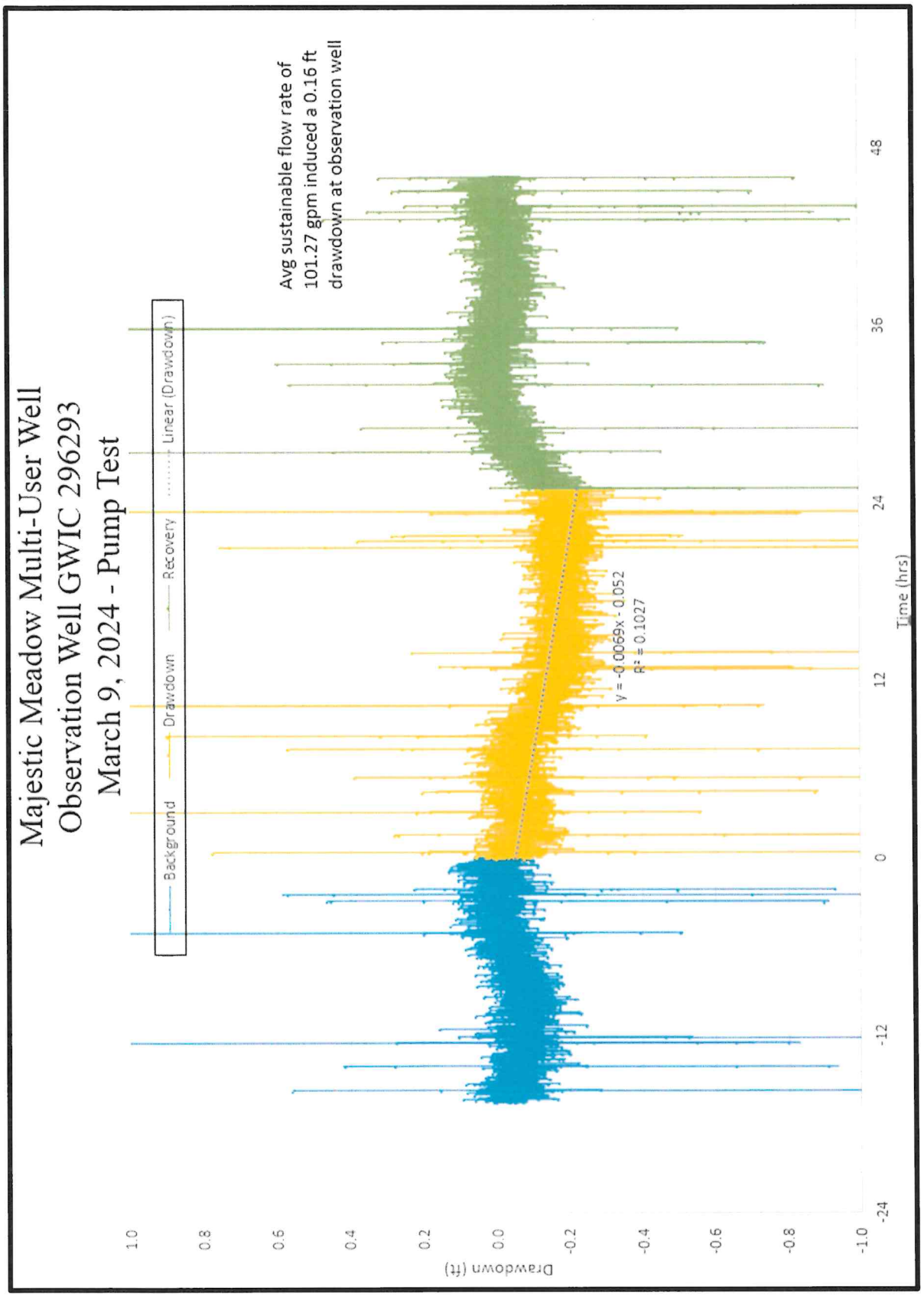

Multiuser Well Majestic Meadow
Production Well GWIC 331034
March 9, 2024 - Pump Test
Drawdown (ft)
0.0
20.0
40.0
60.0
80.0
100.0
120.0
140.0
160.0
-30.0
-20.0
-10.0
0.0
10.0
20.0
30.0
40.0
Time (hrs)
Recovery
Background
Drawdown


Majestic Meadows Multi-User Well
Production Well GWIC 331034
March 9, 2024 - Drawdown
160.000
140.000
120.000
100.000
80.000
60.000
40.000
20.000
0.000
Drawdown (ft)
Drawdown
Avg sustainable flow rate of 101.27 gpm induced a 147.9 ft drawdown.
-10
-5
0
5
10
15
20
25
Time (hrs)

Recovery


Majestic Meadows Multi-User Well
Production Well GWIC 331034
March 6, 2020 - Recovery
Recovery
Drawdown (ft)
175.000
150.000
125.000
100.000
75.000
50.000
25.000
0.000
-25.000
1400.0
1600.0
1800.0
2000.0
2200.0
2400.0
2600.0
2800.0
Time (hrs)

Observation Well Data

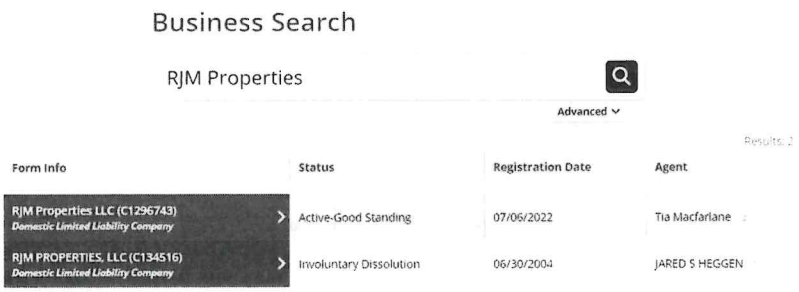


Drawdown Phase of Aquifer Test	
Grey Cells Require User Input	
Observation Well 1 Water-Level Data	
Static Water Level (swl) to 0.01 ft:	12.25
Date/Time Measured:	3/10/24 11:43 AM
How swl Measured:	Average Flow Atop
Measurement Point (MP) ID:	Top of Casing
MP Elevation (feet):	2903
How MP Measured:	Google Earth

Drawdown Data for Observation Well 1					
Date/Time (MM/DD/YY HH:MM)	Time Increment	Elapsed time (minutes)	Depth to water from MP (to 0.01 foot)	Drawdown (to 0.01 foot)*	Test comments
3/9/2024 10:41	30 seconds	0	12.17	-0.08	
3/9/2024 10:41		0.5	12.23	-0.02	Observation well was being pump
3/9/2024 10:42		1	12.22	-0.03	Individual cycles cause drawdown, which
3/9/2024 10:42		1.5	12.28	0.03	also causes rebound when pumping ceases
3/9/2024 10:43		2	12.24	-0.01	General Trend shows 0.16-ft drawdown
3/9/2024 10:43		2.5	12.17	-0.08	Due to 101.27 gpm diversion
3/9/2024 10:44		3	91.10	-0.06	
3/9/2024 10:44		3.5	91.14	-0.02	
3/9/2024 10:45		4	91.11	-0.05	
3/9/2024 10:45		4.5	91.18	0.02	
3/9/2024 10:46		5	91.08	-0.08	
3/9/2024 10:46		5.5	91.17	0.01	
3/9/2024 10:47		6	91.14	-0.02	
3/9/2024 10:47		6.5	91.10	-0.01	
3/9/2024 10:48		7	91.21	-0.06	
3/9/2024 10:48		7.5	91.04	-0.09	
3/9/2024 10:49		8	91.04	0.05	
3/9/2024 10:49		8.5	91.16	-0.09	
3/9/2024 10:50		9	91.22	-0.12	
3/9/2024 10:50		9.5	91.09	-0.08	
3/9/2024 10:51		10	91.10	-0.12	
3/9/2024 10:51		10.5	91.07	-0.13	
3/9/2024 10:52		11	91.13	0.00	
3/9/2024 10:52		11.5	91.11	-0.03	
3/9/2024 10:53		12	91.08	0.06	
3/9/2024 10:53		12.5	91.10	-0.09	
3/9/2024 10:54		13	91.13	-0.07	
3/9/2024 10:54		13.5	89.01	-0.07	
3/9/2024 10:55		14	91.09	-0.06	
3/9/2024 10:55		14.5	91.15	-0.03	
3/9/2024 10:56		15	90.78	-0.09	
3/9/2024 10:56		15.5	91.34	-0.05	
3/9/2024 10:57		16	91.06	-0.03	
3/9/2024 10:57		16.5	91.10	-0.07	
3/9/2024 10:58		17	91.16	-0.05	
3/9/2024 10:58		17.5	91.18	-0.13	
3/9/2024 10:59		18	91.10	-0.08	
3/9/2024 10:59		18.5	91.12	-0.03	
3/9/2024 11:00		19	91.13	-0.06	
3/9/2024 11:00		19.5	91.06	-0.03	
3/9/2024 11:01		20	91.18	-0.03	
3/9/2024 11:01		20.5	91.00	0.05	
3/9/2024 11:02		21	91.08	-2.15	
3/9/2024 11:02		21.5	91.03	0.20	
3/9/2024 11:03		22	91.10	-0.07	
3/9/2024 11:03		22.5	91.44	0.78	

3/10/2024 11:18	1478	11.93	-0.32
3/10/2024 11:19	1478.5	11.98	-0.27
3/10/2024 11:19	1479	12.01	-0.24
3/10/2024 11:20	1479.5	12.16	-0.09
3/10/2024 11:20	1480	12.17	-0.08
3/10/2024 11:21	1480.5	12.05	-0.20
3/10/2024 11:21	1481	12.05	-0.20
3/10/2024 11:22	1481.5	12.07	-0.18
3/10/2024 11:22	1482	12.10	-0.15
3/10/2024 11:23	1482.5	12.14	-0.11
3/10/2024 11:23	1483	12.05	-0.20
3/10/2024 11:24	1483.5	12.11	-0.14
3/10/2024 11:24	1484	12.01	-0.24
3/10/2024 11:25	1484.5	12.11	-0.14
3/10/2024 11:25	1485	12.02	-0.23
3/10/2024 11:26	1485.5	12.06	-0.19
3/10/2024 11:26	1486	12.00	-0.25
3/10/2024 11:27	1486.5	12.03	-0.22
3/10/2024 11:27	1487	12.16	-0.09
3/10/2024 11:28	1487.5	12.09	-0.16
3/10/2024 11:28	1488	12.10	-0.15
3/10/2024 11:29	1488.5	12.00	-0.25
3/10/2024 11:29	1489	12.17	-0.08
3/10/2024 11:30	1489.5	12.05	-0.20
3/10/2024 11:30	1490	11.95	-0.30
3/10/2024 11:31	1490.5	12.07	-0.18
3/10/2024 11:31	1491	12.06	-0.19
3/10/2024 11:32	1491.5	12.12	-0.13
3/10/2024 11:32	1492	12.11	-0.14
3/10/2024 11:33	1492.5	12.02	-0.23
3/10/2024 11:33	1493	12.07	-0.19
3/10/2024 11:34	1493.5	11.92	-0.33
3/10/2024 11:34	1494	12.13	-0.12
3/10/2024 11:35	1494.5	12.02	-0.23
3/10/2024 11:35	1495	12.10	-0.15
3/10/2024 11:36	1495.5	11.99	-0.26
3/10/2024 11:36	1496	12.07	-0.18
3/10/2024 11:37	1496.5	12.10	-0.15
3/10/2024 11:37	1497	12.08	-0.17
3/10/2024 11:38	1497.5	12.01	-0.24
3/10/2024 11:38	1498	11.99	-0.26
3/10/2024 11:39	1498.5	12.12	-0.13
3/10/2024 11:39	1499	12.12	-0.13
3/10/2024 11:40	1499.5	12.10	-0.15
3/10/2024 11:40	1500	12.10	-0.15
3/10/2024 11:41	1500.5	12.09	-0.16
3/10/2024 11:41	1501	12.09	-0.16
3/10/2024 11:42	1501.5	12.12	-0.13

APPENDIX F. PROOF OF POSSESSORY INTEREST



APPENDIX G. DNRC APPROVALS

Aquifer Testing Requirements Variance Approval

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION
Water Resources Division
1424 9th Ave, Helena, MT 59620-1601 Phone: (406) 444-6601 Fax: (406) 444-0533

GREG GIANFORTE, GOVERNOR 1539 ELEVENTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE: (406) 444-2074
FAX: (406) 444-2684

PO BOX 201601
HELENA, MONTANA 59620-1601

December 26, 2024

Core Water Consulting

RE: Granted Variance for Pre-Application No. 76LJ 30164921 – RJM Real Estate

Dear Ms. Siemens,

The Applicant (through its consultant) requested a variance from the aquifer testing requirements for the subject line permit application.

Variances from the following rules are needed for the aquifer test conducted on the well.

- ARM 36.12.121(3)(a) requires a maintained flow rate throughout the test that does not deviate more than 5% from the average rate.
- ARM 36.12.121(3)(b) requires the average pumping rate meet or exceeds the requested rate.
- ARM 36.12.121(3)(f) requires specific observation well data.
- ARM 36.12.121(3)(g) requires 48 hours of background data on the tested well.

The Department grants variances of aquifer testing from the ARM noted directly above.

Sincerely,

Jim Ferch
Kalispell Water Resources Regional Manager
jferch@mt.gov
406-752-2706

Groundwater Permit Technical Analyses Report - Part A

Department of Natural Resources and Conservation (DNRC)
Water Resources Division
Kim Bolhuis, Groundwater Hydrologist, Water Sciences Bureau (WSB)

Application No.	76LJ 30164921	**Point of Diversion Legal Land Description**	Sec 17, Township 27 North, Range 20 West
Applicant	RJM Real Estate, LLC		

Overview

This report is Part A of a two-part publication which analyzes data submitted by the Applicant in support of the above-mentioned water right application. This report provides technical analyses as required under the Administrative Rules of Montana (ARM) 36.12.1303 in support of the water rights criteria assessment as required in §85-2-311, Montana Code Annotated (MCA). For applications in closed basins, this report fulfills the requirements of MCA 85-2-361.

This Groundwater Permit Technical Analyses Report – Part A contains the following sections:

Groundwater Permit Technical Analyses Report – Part B

Department of Natural Resources and Conservation (DNRC or Department)
Water Resources Division
Kristal Kiel, Water Resource Specialist, Kalispell Regional Office

Application No.	76LJ 30164921	**Proposed Point of Diversion**	NW ¼ of the SW ¼ of the NE ¼ of Section 17, Township 27 N, Range 20 W, Flathead County, Montana.
Applicant	RJM Properties, LLC		

Overview

This report is Part B of a two-part publication which analyzes data submitted by the Applicant in support of the above-mentioned water right application. This report provides technical analyses as required under the Administrative Rules of Montana (ARM) 36.12.1303 in support of the water rights criteria assessment as required in §85-2-311, Montana Code Annotated (MCA).

This Groundwater Permit Technical Analyses Report – Part B contains the following sections: