

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

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

DIRECTOR'S OFFICE: (406) 444-2074
PO BOX 201601



1539 ELEVENTH AVENUE
HELENA, MONTANA 59620-1601

GOVERNOR GREG GIANFORTE

DNRC DIRECTOR AMANDA KASTER

August 6, 2026

WILLISTON WATER MANAGEMENT LLC
1675 BROADWAY
SUITE 1600
DENVER, CO 80202-4675

Subject: Correct and Complete Application for Beneficial Water Use Permit No. 40S 30175554

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 rights application.

The Department will issue a Draft Preliminary Determination within 60 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,

Kailee Ingalls



Kailee Ingalls | Water Conservation Specialist 3
Water Resources Division, Havre Regional Office
Montana Department of Natural Resources and Conservation
Physical | 210 6th Ave | Havre, MT 59501
Mailing | PO Box 1828 | Havre, MT 59501
DESK: 406-808-7126 **EMAIL:** kailee.ingalls@mt.gov

ELECTRONIC COPY:

Eric Sundberg

Williston Water Management LLC.

Slawson Companies, Inc.

<esundberg@slawsoncompanies.com>



From: [Eric Sundberg](#)
To: [Ingalls, Kailee](#)
Cc: [Candice Kowalski](#)
Subject: [EXTERNAL] Re: Williston Water Management, LLC Responses to 40S 30175554
Date: Wednesday, August 5, 2026 11:54:17 AM
Attachments: [image001.png](#)
[image002.png](#)

Yes, the 10,000 bbl, 5.2M (670 AF) is an accurate estimate for total beneficial water use for the project.

Thanks,

Eric

From: Ingalls, Kailee <Kailee.Ingalls@mt.gov>
Sent: Wednesday, 05 August 2026 11:28:00
To: Eric Sundberg <esundberg@slawsoncompanies.com>
Cc: Candice Kowalski <ckowalski@slawsoncompanies.com>
Subject: RE: Williston Water Management, LLC Responses to 40S 30175554

Hi Eric,

Received. I will add this information to the file and consider it in the Preliminary Determination. After reading the beneficial use portion, I went back into the previous application and pulled the table submitted in the beneficial use section. I have attached it below. Because they are the same project, I recreated the table and quantified the total bbl using your stated 10,000 bbl per stage. The total was 5.2 million bbl, which equates to 670 AF. Is this an accurate representation of the project? If so, I will use the updated table in the Preliminary Determination and make findings from the new table.

42.b. BENEFICIAL USE

- See table below:

Well Name	Lateral Length	Approx. Stages	Water total per Well (bbls)
Outpost 1	13,070	41	307,500
Outpost 2	12,184	39	292,500
Outpost 3	11,660	37	277,500
Outpost 4	12,447	39	292,500
Outpost 5	11,654	37	277,500
Outpost 6	12,208	39	292,500
Outpost 7	13,688	43	322,500
Brigade 1	15,550	49	367,500
Brigade 2	15,455	49	367,500
Brigade 3	15,426	49	367,500
Brigade 4	15,482	49	367,500
Brigade 5	15,430	49	367,500
Totals	164,254	520	3,900,000

New Table with updated Total water per Well (bbl) when applying 10,000 bbl/ stage.

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Well Name	Estimated Lateral Length	Approximate Stages	Total water per Well (bbl)
Outpost 1	13,070	41	410,000
Outpost 2	12,184	39	390,000
Outpost 3	11,660	37	370,000
Outpost 4	12,447	39	390,000
Outpost 5	11,654	37	370,000
Outpost 6	12,208	39	390,000
Outpost 7	13,688	43	430,000
Brigade 1	15,550	49	490,000
Brigade 2	15,455	49	490,000
Brigade 3	15,426	49	490,000
Brigade 4	15,482	49	490,000
Brigade 5	15,430	49	490,000
Totals	164,254	520	5,200,000

Thank you!

Kailee Ingalls | Water Conservation Specialist 3
Water Resources Division, Havre Regional Office
Montana Department of Natural Resources and Conservation
DESK: 406-808-7126 **OFFICE:** 406-265-5516

From: Eric Sundberg <esundberg@slawsoncompanies.com>
Sent: Tuesday, August 4, 2026 2:39 PM
To: Ingalls, Kailee <Kailee.Ingalls@mt.gov>
Cc: Candice Kowalski <ckowalski@slawsoncompanies.com>
Subject: [EXTERNAL] Williston Water Management, LLC Responses to 40S 30175554

Hello Kailee,

Attached is Williston Water Management, LLC's Responses to 40S 3017554. A hard copy of this document will be sent to you via FedEx today.

Please let us know if you have any questions or if additional information is needed.

Thanks,

Eric

Eric Sundberg
Vice President

Williston Water Management, LLC

Responses to 40S 30175554

42.b. BENEFICIAL USE

- Slawson Exploration Company, Inc., the parent company of Williston Water Management, LLC, requires fresh water for the completion of oil & gas wells in Roosevelt County, Montana.
- Slawson Exploration Company's well site (Place of Use) has 12 middle bakken laterals with lengths from 11,654 feet to 15,550 feet. Slawson's current completion design ranges from 37 stages to 49 stages, with each stage needing approximately 10,000 bbls of fresh water that is being pumped at 70-90 barrels per minute to pump down the wellbore and place the desired volume of proppant in each stage. Fresh water is also needed for well work and maintenance during completion operations.
- See the attached table for an example of the current stage design and pump schedule for a horizontal lateral.

46.a. POSSESSORY INTEREST

- See attachment affidavit

Attachment 42.b. BENEFICIAL USE

Slickwater Sand McKenzie County 12 guns							
	Prop	Pump	Clean	Gel	Prop	Prop	Prop
	Conc	Rate	Volume	Conc	Volume	Size	Type
Zones 1 - toe frac							
Stage 1	Pad	90	5000	high FR system (1 gpt)	0	0	
Stage 2	0.5	90	40000	high FR system (4 gpt)	20000	100 mesh	White
Stage 3	1	90	40000	high FR system (5 gpt)	40000	100 mesh	White
Stage 4	2	90	40000	high FR system (5 gpt)	80000	40/70	White
Stage 5	2.3	90	40000	high FR system (6 gpt)	92000	40/70	White
Flush entire wellbore	0	90	35000	high FR system (1 gpt)	0		
Acid		12	500	15% acid	0	0	
Spacer		65	1500	high FR system (1 gpt)	0	0	
Drop balls	0	65	7500	high FR system (1 gpt)	0	0	
PnP portion							
Stage 1	Pad	12	500	15% acid	0	0	
Stage 2		90	6000	Slick Water	0	0	
Stage 3	0.3	90	6000	Slick Water	1800	100 mesh	White
Stage 4	0.5	90	6000	Slick Water	3000	100 mesh	White
Stage 5	0.85	90	6000	Slick Water	5100	100 mesh	White
Stage 6	1.4	90	7000	Slick Water	9800	100 mesh	White
Stage 7	1.85	90	7000	Slick Water	12950	40/70	White
Stage 8	2.3	90	8500	Slick Water	19550	40/70	White
Flush	0	90	6000	Slick Water	0		
Diverter		12	300	diverter stage	0		
Stage 9	Pad	90	6000	Slick Water	0	0	
Stage 10	0.3	90	6000	Slick Water	1800	100 mesh	White
Stage 11	0.5	90	6000	Slick Water	3000	100 mesh	White
Stage 12	0.85	90	6000	Slick Water	5100	100 mesh	White
Stage 13	1.4	90	7000	Slick Water	9800	100 mesh	White
Stage 14	1.85	90	7000	Slick Water	12950	40/70	White
Stage 15	2.3	90	8500	Slick Water	19550	40/70	White
Flush	0	90	6000	Slick Water	0		
Diverter		12	300	diverter stage	0		

Stage 16	Pad	90	6000	Slick Water	0	0	
Stage 17	0.3	90	6000	Slick Water	1800	100 mesh	White
Stage 18	0.5	90	6000	Slick Water	3000	100 mesh	White
Stage 19	0.85	90	6000	Slick Water	5100	100 mesh	White
Stage 20	1.4	90	7000	Slick Water	9800	100 mesh	White
Stage 21	1.85	90	7000	Slick Water	12950	40/70	White
Stage 22	2.3	90	8500	Slick Water	19550	40/70	White
Flush	0	90	6000	Slick Water	0		
Diverter		12	300	diverter stage	0		
Stage 23	Pad	90	6000	Slick Water	0	0	
Stage 24	0.3	90	6000	Slick Water	1800	100 mesh	White
Stage 25	0.5	90	6000	Slick Water	3000	100 mesh	White
Stage 26	0.85	90	6000	Slick Water	5100	100 mesh	White
Stage 27	1.4	90	7000	Slick Water	9800	100 mesh	White
Stage 28	1.85	90	7000	Slick Water	12950	40/70	White
Stage 31	2.3	90	8500	Slick Water	19550	40/70	White
Flush	0	90	6000	Slick Water	0		
Diverter		12	300	diverter stage	0		
Stage 32	Pad	90	6000	Slick Water	0	0	
Stage 33	0.3	90	6000	Slick Water	1800	100 mesh	White
Stage 34	0.5	90	6000	Slick Water	3000	100 mesh	White
Stage 35	0.85	90	6000	Slick Water	5100	100 mesh	White
Stage 36	1.4	90	7000	Slick Water	9800	100 mesh	White
Stage 37	1.85	90	7000	Slick Water	12950	40/70	White
Stage 38	2.3	90	8500	Slick Water	19550	40/70	White
Flush	0	90	6000	Slick Water	0		
Diverter		12	300	diverter stage	0		
Stage 33	Pad	90	6000	Slick Water	0	0	
Stage 34	0.3	90	6000	Slick Water	1800	100 mesh	White
Stage 35	0.5	90	6000	Slick Water	3000	100 mesh	White
Stage 36	0.85	90	6000	Slick Water	5100	100 mesh	White
Stage 37	1.4	90	7000	Slick Water	9800	100 mesh	White
Stage 38	1.85	90	7000	Slick Water	12950	40/70	White
Stage 39	2.3	90	8500	Slick Water	19550	40/70	White
Flush	0	90	6000	Slick Water	0		
Pump guns		12	300	Slick Water	0		

Attachment 46.a. POSSESSORY INTEREST

AFFIDAVIT

STATE OF COLORADO)
)ss.
COUNTY OF DENVER)

Eric Sundberg, being duly sworn, states as follows:

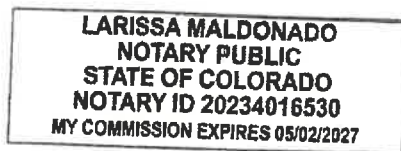
1. I am the Vice President of Environmental and Regulatory Affairs employed by Slawson Companies, Inc. with responsibilities in the state of Montana.
2. Williston Water Management, LLC and Slawson Exploration Company, Inc. are subsidiaries or affiliates of Slawson Companies, Inc.
3. Slawson Companies, Inc., the parent company of Williston Water Management, LLC, has an active interest in the Bakken spacing units and an active federal mineral lease which the place of use is located.
4. I affirm the information submitted in this application is true and correct to the best of my knowledge and belief.

Dated this 3 day of August, 2026.


Eric Sundberg

STATE OF COLORADO)
)ss.
COUNTY OF DENVER)

Subscribed to and sworn before me this 3 day of August, 2026.




Notary Public
State of Colorado
My Commission Expires: 05/02/2027

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

DIRECTOR'S OFFICE: (406) 444-2074
PO BOX 201601



1539 ELEVENTH AVENUE
HELENA, MONTANA 59620-1601

GOVERNOR GREG GIANFORTE

DNRC DIRECTOR AMANDA KASTER

July 31, 2026

Williston Water Management LLC
1675 Broadway
Suite 1600
Denver, CO 80202-4675

Subject: Deficiency Letter for Beneficial Water Use Permit No. 40S 30175554.

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):

BENEFICIAL USE (ARM 36.12.1801)

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.*

In Question 42, 'No' was selected about whether the Department has a volume, period of diversion, or period of use standard for the purposes for which water is proposed, but no response was recorded. Because there is no Department standard for Industrial use outlined in ARM 36.12.112 and ARM 36.12.115, explain how the requested flow rate and volume are reasonable for the purpose and label it "42.b. BENEFICIAL USE". The explanation may include a pump schedule, the number of wells on the pad, average lateral length per well, number of stages per well, and average barrels of water per stage. The number of barrels of fresh water to support adequate completion can then be converted to AF.

POSSESSORY INTEREST

46.a. *In Question 46, "No" was selected due to the Applicant not owning all proposed places of use. Subsequently, Question 46a states: 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.*



The Applicant states that the location has an existing federal mineral lease (see attached documents). When reviewing the Oil & Gas Competitive Public Domain Lease Post 1987 attachment, it appears that the case lessee is listed as Slawson Exploration Company Inc and has 100% interest. Because the Applicant for this Application for Beneficial Water Use Permit is listed as Williston Water Management, no possessory interest can be confirmed, given the differing entity names. Provide an affidavit that clarifies Williston Water Management's relationship with Slawson Exploration Company Inc., to prove that Williston Water Management has met possessory interest requirements and label the attachment "46.a. POSSESSORY INTEREST".

Please submit the information specified above to the Havre Regional Office by November 28, 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.

Best,



Kailee Ingalls | Water Conservation Specialist 3
Water Resources Division, Havre Regional Office
Montana Department of Natural Resources and Conservation
Physical | 210 6th Ave | Havre MT 59501
Mailing | PO Box 1828 | Havre MT 59501
DESK: 406-808-7126 **EMAIL:** kailee.ingalls@mt.gov

ELECTRONIC COPY:

Eric Sundberg
Williston Water Management LLC.
Slawson Companies, Inc.
<esundberg@slawsoncompanies.com>

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, and the fee will not be refunded.*



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 (10/2025)

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.

For Department Use Only

Application # _____ Basin _____
Priority Date _____ Time _____ AM/PM
Rec'd By _____
Fee Rec'd \$ _____ Check # _____
Deposit Receipt # _____
Payor _____
Refund \$ _____ Date _____

Applicant Information: *Add more as necessary.*

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 _____

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

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.

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.

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? _____

16. What is the source name? _____

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	Volume (Acre-Feet)
					☐ GPM ☐ CFS	
Total Flow Rate and Volume Required						

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 table below, where applicable.

Purpose	Requested Information	Response
Domestic or multiple domestic	Number of households and bedrooms served per household	
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)	
Irrigation (flood only)	Design slope	

POINT(S) OF DIVERSION

20. Describe the proposed location of the point(s) diversion to the nearest $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ Section. Label each POD with the POD ID number used for the project map (question 17).

POD #	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	Sec.	Twp.	Rge.	County	Lot	Block	Tract	Subdivision	Gov. Lot

PLACE OF USE

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

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	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	Sec.	Twp.	Rge.	County

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.

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

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.

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.

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.

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.

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.

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)? _____

48. Please describe why this amount of time is needed to complete this project.



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 Eric Sundberg

Applicant Signature  Date: 7/9/2026

Printed Name _____

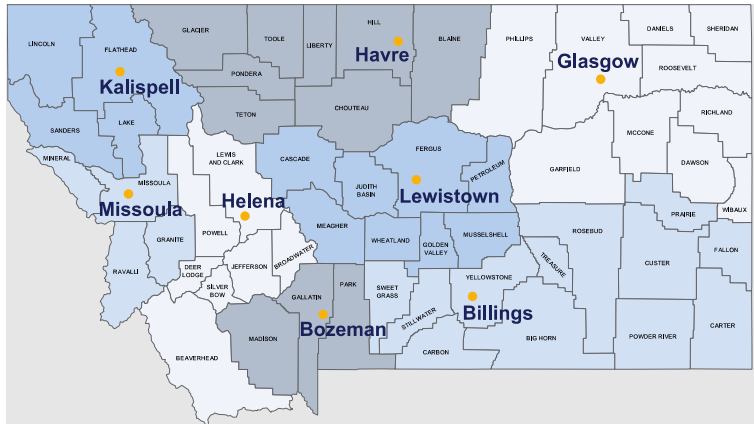
Applicant Signature _____ Date: _____

Printed Name _____

Applicant Signature _____ Date: _____



WATER RESOURCES REGIONAL OFFICES



BILLINGS

Airport Industrial Park, 1371 Rimtop Dr
Billings, MT 59105-9702

PHONE 406-247-4415 FAX 406-247-4416

EMAIL DNRCBillingsWater@mt.gov

Big Horn, Carbon, Carter, Custer, Fallon, Powder River, Prairie, Rosebud, Stillwater, Sweet Grass, Treasure, and Yellowstone Counties



BOZEMAN

2273 Boot Hill Court, Suite 110
Bozeman, MT 59715-7249

PHONE 406-586-3136 FAX 406-587-9726

EMAIL DNRCBozemanWater@mt.gov

Gallatin, Madison, and Park Counties



GLASGOW

222 6th Street South, PO Box 1269
Glasgow, MT 59230-1269

PHONE 406-228-2561

EMAIL DNRCGlasgowWater@mt.gov

Daniels, Dawson, Garfield, McCone, Phillips, Richland, Roosevelt, Sheridan, Valley, and Wibaux Counties



HAVRE

210 6th Ave., PO Box 1828
Havre, MT 59501-1828

PHONE 406-265-5516

EMAIL DNRCHavreWater@mt.gov

Blaine, Chouteau, Glacier, Hill, Liberty, Pondera, Teton, and Toole Counties



HELENA

1424 9th Ave., PO Box 201601,
Helena, MT 59620-1601

PHONE 406-444-6999 FAX 406-444-9317

EMAIL DNRCHelenaWater@mt.gov

Beaverhead, Broadwater, Deer Lodge, Jefferson, Lewis and Clark, Powell, and Silver Bow Counties



KALISPELL

655 Timberwolf Parkway, Suite 4
Kalispell, MT 59901-1215

PHONE 406-752-2288

EMAIL DNRCKalispellWater@mt.gov

Flathead, Lake, Lincoln, and Sanders Counties



LEWISTOWN

613 Northeast Main St., Suite E
Lewistown, MT 59457-2020

PHONE 406-538-7459

EMAIL DNRCLewistownWater@mt.gov

Cascade, Fergus, Golden Valley, Judith Basin, Meagher, Musselshell, Petroleum, and Wheatland Counties



MISSOULA

2705 Spurgin Rd. Bldg. C, PO Box 5004
Missoula, MT 59806-5004

PHONE 406-721-4284 FAX 406-542-5899

EMAIL DNRCMissoulaWater@mt.gov

Granite, Mineral, Missoula, and Ravalli Counties

Applicant: Williston Water Management, LLC

600 APPLICATION FOR BENEFICIAL WATER USE PERMIT Attachments

Plan of Operation

ADEQUATE MEANS OF DIVERSION AND OPERATION

1. Screened suction device floating in Missouri River
2. 10" Aluminum pipe from suction to pump
3. Pioneer 8x6 Super Pump
4. Filter Pod Trailer
5. Flowmeter
6. Hot Oil Trailer (water heater)
7. 12" Lay-flat pipeline
8. Super 8x6 Booster Pump on Slawson Squadron Pad 216 location
9. 35 AEI frac tanks onsite for water storage and distribution to frac equipment.

1. The Applicant plans to divert water at a rate of 3,000 GPM up to 670 AF from the Missouri River, from a diversion point in SWNESE Section 14, T26N, R59E, Roosevelt County, using a portable diesel-powered Pioneer Prime centrifugal 8"x6" pump.

2. Water will flow from the POD into a screened 10" aluminum pipe. The pump will discharge water into a filter pod trailer, which has a 10" McCrometer Dura Mag in-line flow meter capable of taking continuous measurements.

3. The water is then discharged into the 12" lay-flat pipeline. The pipeline extends 1.3 mi to an existing Slawson Squadron Pad 216, where it enters a Pioneer Prime centrifugal 8"x6" Booster Pump. More inline pumps can be installed, if necessary, to maintain adequate pressure and volume.

4. In freezing conditions, water will be discharged into a hot oiler before being diverted into the 12" lay-flat pipeline.

5. Along the route, Williston Water Management and Slawson Exploration Company will secure easements where appropriate for any railway, county road, state highway, or private land crossings where the lay flat line will be laid.

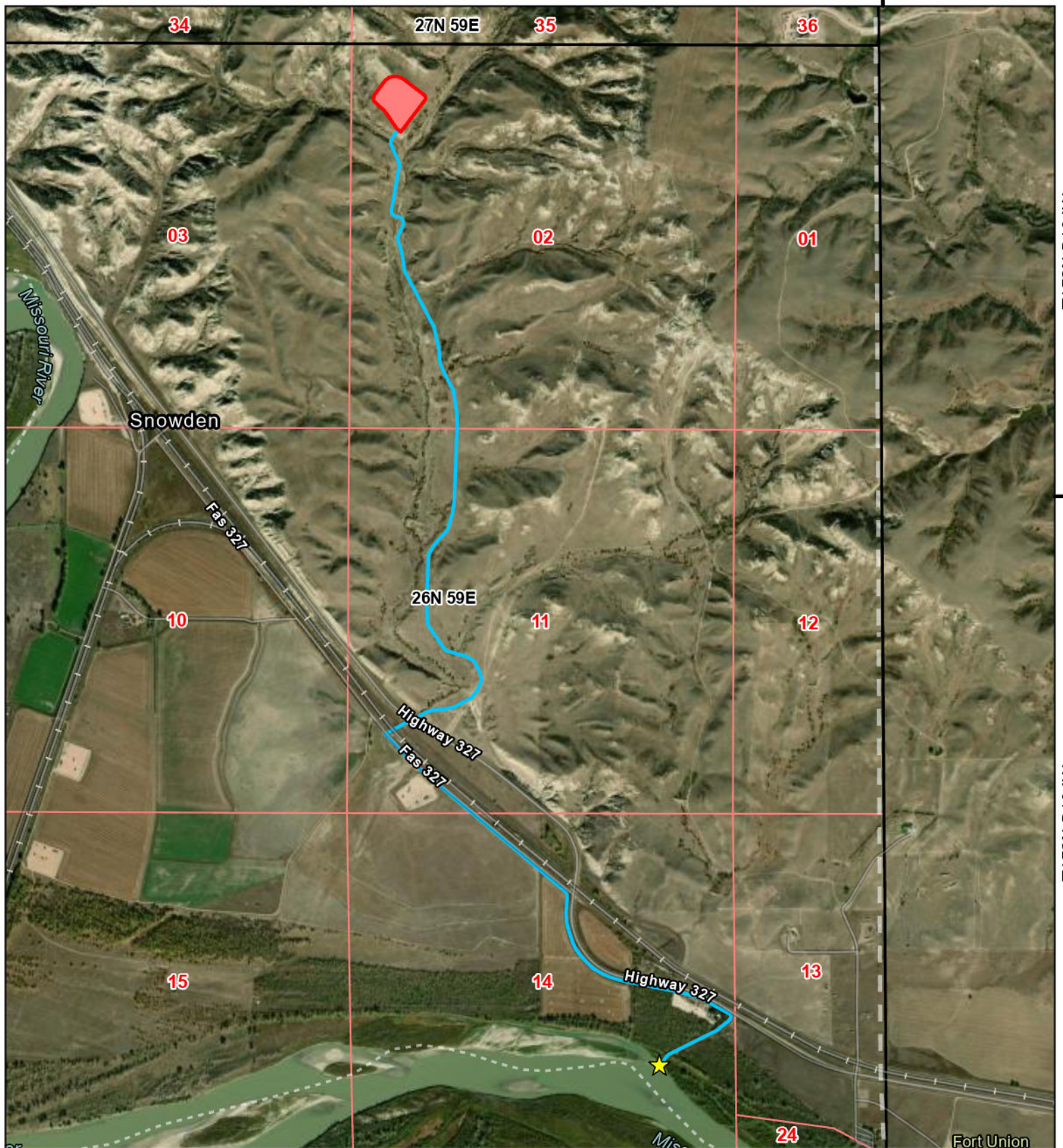
6. Once the water reaches the place of use, in NWNWNW (Lot 4), Section 02, T26N, R59E, Roosevelt County, the 12" lay flat line will end at the beginning of the manifold at 35 AEI frac tanks, each having a 500 BBL capacity, and be opened to 2 10" aluminum manifolds. The frac tanks are onsite and used for water storage and distribution to the frac equipment. At that point, the Applicant will install a 12" gate valve and a 10" McCrometer flow meter.

7. Water Treatment will be done by adding 3% Sodium Hypochlorite at the beginning of the 10" manifold, ensuring that all water onsite is treated before going downhole.

8. A total of 12 oil wells are to be developed on the pad.

ATTACHMENT:

PROJECT MAPS



Background: ESRI Imagery
Data Sources: MSL, Ulteig
Date: 1/27/2026
Created by: M. Phillips

SLAWSON 392 OUTPOST & BRIGADE FEDERAL

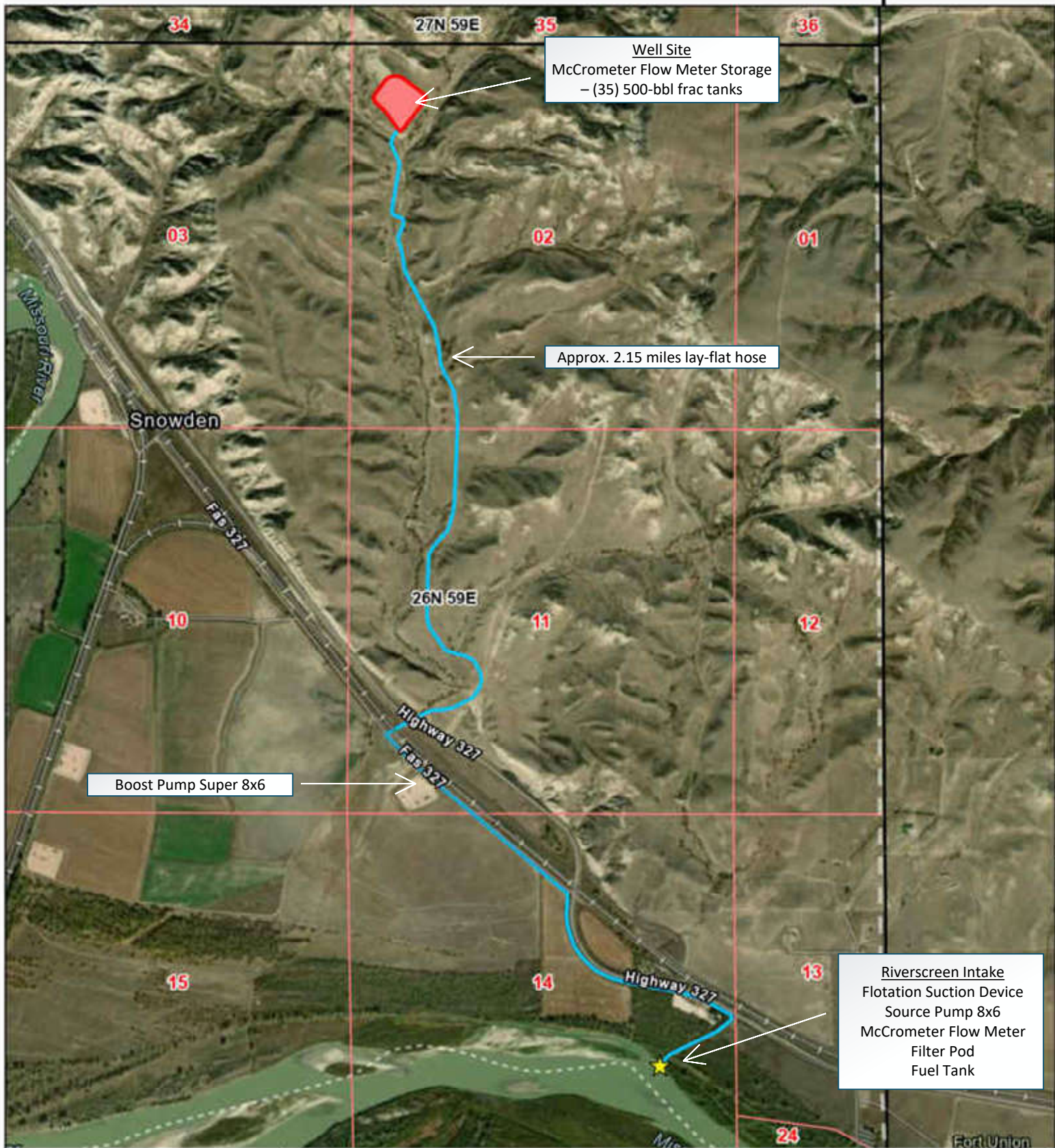
Water Supply

Roosevelt County, MT

0 0.23 0.45 0.9
Miles



- Proposed Pad
- Proposed Layflat Route
- ★ WWM Intake Point



SLAWSON 392 OUTPOST & BRIGADE FEDERAL

Water Supply

Roosevelt County, MT

0 0.23 0.45 0.9 Miles



- Proposed Pad
- Proposed Layflat Route
- ★ WWM Intake Point

Background: ESRI Imagery
Data Sources: MSL, Ulteig
Date: 1/27/2026
Created by: M. Phillips

ATTACHMENT:

POSSESSORY INTEREST

- *Temporary Easement for Point of Diversion and Pipeline with Exhibit A Map Attachment*
- DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Oil and Gas *COMPETITIVE PUBLIC
DOMAIN LEASE POST FOR PLACE OF USE*

TEMPORARY EASEMENT AGREEMENT

This Temporary Easement Agreement ("**Agreement**") is between "**Surface Owner**" and "**Williston Water**" listed below. Surface Owner and Williston Water may be referred to individually as a "**Party**" and collectively as the "**Parties**."

<u>Williston Water:</u> Williston Water Management, LLC 1675 Broadway, Suite 1600 Denver, Colorado 80202-4675 Name: Eric Sundberg Phone: 303 396-2494 Email: ESundberg@slawsoncompanies.com Kurt M. Petersen Phone: 303 919 0645 Email: kpetersen@slawsoncompanies.com	<u>Surface Owner:</u> Name: Dwight & Sheila Vannatta Address: 6740 Highway 327, Bainville, MT 59212-9611 Phone : 406 769-7156
--	--

1. Surface Owner owns the surface of the following lands (the "**Lands**"):

Parcel A, B, C & D, Plat 400A Document 402171 of
Section 14, Township 26 North, Range 59 East
Roosevelt County, Montana

2. **Temporary Easement.** For \$100, the consideration recited below and other good and valuable consideration, Surface Owner grants Williston Water a temporary easement ("**Easement**") on and over the Lands to install, maintain, operate and remove temporary "lay flat" pipelines and pump on the surface of the Lands for the transportation of fresh water across the Lands (the "**Pipeline(s)**"). This grant includes the rights to install, maintain, operate and remove the Pipelines, and the right to conduct such other activities necessary for the Pipelines' transportation of fresh water across the Lands. The Easement is 20 feet wide to allow for the Pipelines and Slawson's activities associated with the Pipelines and includes the right of ingress and egress across the Lands to access the Pipelines.

3. **Term/Effective Date.** This Agreement is effective _____ (the "**Effective Date**"). The Term of this Agreement is for 1 year and begins on the date Williston Water has finished installing the Pipelines. Williston Water may extend the term of this Agreement for up to 1 year in its sole discretion. Williston Water agrees to remove the Pipeline and Pump prior to the end of the Term.

4. **Location of the Easement.** The Easement shall be along the route as agreed to by the Parties and as set forth on Exhibit A.

5. **Payment to Surface Owner.** Williston Water agrees to pay _____ per foot for the Easement (3000 feet) for a total payment of _____ and _____ for the pump; such payment to be made within 10 business days of the execution of this Agreement.

6. **Slawson's Operations on the Lands.** Williston Water agrees to conduct all operations on the Lands in a good and workmanlike manner, in accordance with standard oil field practices, and all applicable federal, state and local laws, rules and regulations.

7. **Release.** Surface Owner acknowledges that the Pipeline will be located on the Lands for the Term, and accordingly, Surface Owner's use of the Lands in the Easement will be limited during the Term. Surface Owner releases and discharges Slawson, its agents, principals, partners, assigns, employees, contractors and subcontractors from any and all liability for ordinary damage and detriment, incident to or growing out of the granting of the Easement and the installation, maintenance, repair and removal of the Pipeline.

8. **Apportionment of Liabilities and Obligations.**

a. **Surface Owner.** Surface Owner agrees to retain and pay, perform, fulfill, discharge and release Williston Water from all losses, costs, expenses and obligations accruing, attributable to and relating to Surface Owner's activities in or on the Lands.

b. **Slawson.** Williston Water agrees to retain and pay, perform, fulfill, discharge and release Surface Owner from all losses, costs, expenses and obligations accruing, attributable to and relating to Slawson's activities in or on the Lands, to the extent such activities are not contemplated by this Agreement.

9. **Reclamation.** The Parties anticipate that the Pipeline will have no, or minimal impact on the surface of the Lands. If the Pipeline does impact the surface of the Lands, upon final removal of the Pipeline, Williston Water agrees to restore the impacted portion of the Easement to as near as practical to the original condition.

10. **Governing Law.** This Agreement shall be governed by Montana law.

11. **Electronic Signatures.** The Parties agree that signatures transmitted electronically in pdf or other electronic format are binding.

The Parties have executed this Agreement the dates set forth below.

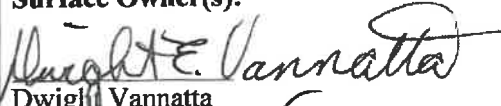
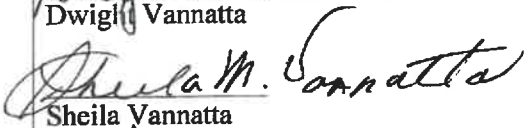
Surface Owner(s):  Dwight Vannatta  Sheila Vannatta Date: Feb 9, 2026	Slawson: Williston Water Management, LLC  Name: Eric Sundberg Title: VP Environmental & Regulatory Affairs Date: Feb 23, 2026
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EXHIBIT A
LOCATION OF THE EASEMENT AND PIPELINE

Layflat Route to Pad 392

Dwight & Sheila Vannatta



 Pump site

 Layflat Route

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION

Run Date/Time: 1/28/2026 11:07 AM
Single Serial Number Report

Serial Register Page
MTMT105543822

Page 1 of 2

Authority

01-12-1983; 096STAT2447; 30USC188; FED O&G ROYALTY
MGT ACT-1982, TITLE IV.

Total Acres

80.2000

Serial Number

MTMT105543822

Agreement

Participating

Acres

Area Acres

Legacy Serial No

0.0000

0.0000

MTM 092455

Product Type: 312021 O&G COMPETITIVE PUBLIC DOMAIN LEASE POST 1987

Commodity: Oil & Gas

Case File Jurisdiction:

Case Disposition: AUTHORIZED

-

04/15/2003

CASE DETAILS

MTMT105543822

MLRS Case Ref C-8238826

Case Name

Unit Agreement
Name

Split Estate

Fed Min Interest

Effective Date 05/01/2003

Split Estate Acres

Future Min Interest

No

Expiration Date

Royalty Rate 12.5%

Future Min Interest Date

Land Type Public Domain

Royalty Rate Other

Acquired Royalty Interest

Formation Name

Approval Date

Held In a Producing Unit

No

Parcel Number 03-03-76

Sale Date

Number of Active Wells

Parcel Status

Sales Status

Production Status

Held by Allocated
Production

Total Bonus Amount 162.00

Related Agreement

Tract Number

Lease Suspended

No

Application Type

Fund Code 145003

Total Rental Amount

CASE CUSTOMERS

MTMT105543822

Name & Mailing Address

Interest Relationship

Percent
Interest

SLAWSON EXPLORATION
COMPANY INC

1675 BROADWAY STE 1600

DENVER CO 80202

LESSEE

100.0000

RECORD TITLE

(No Records Found)

OPERATING RIGHTS

(No Records Found)

ACTIVE LAND RECORDS

MTMT105543822

Mer	Twp	Rng	Sec	Survey Type	Survey Number	Subdivision	Land Status	District / Field Office	County	Mgmt Agency
20	0260N	0590E	002	Aliquot		SWNE	Migrated - Existing Footprint	EASTERN MONTANA/DAKS DO MILES CITY FIELD OFFICE	ROOSEV ELT	BUREAU OF LAND MGMT
20	0260N	0590E	002	Lot		4	Migrated - Existing Footprint	EASTERN MONTANA/DAKS DO MILES CITY FIELD OFFICE	ROOSEV ELT	BUREAU OF LAND MGMT

INACTIVE LAND RECORDS

MTMT105543822

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION

Run Date/Time: 1/28/2026 11:07 AM
Single Serial Number Report

Serial Register Page
MTMT105543822

Page 2 of 2

Mer	Twp	Rng	Sec	Survey Type	Survey Number	Subdivision	Land Status	District / Field Office	County	Mgmt Agency
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CASE ACTIONS						MTMT105543822			
Action Date	Date Filed	Effective Date	Action Name		Action Status	Action Information			
03/24/2003	03/24/2003		CASE ESTABLISHED		APPROVED/ACCEPTED	Action Remarks: 03-03-76;			
03/25/2003	03/25/2003		BID RECEIVED		APPROVED/ACCEPTED	Action Remarks: \$162.00;			
04/15/2003	04/15/2003		AUTOMATED RECORD VERIF		APPROVED/ACCEPTED	Action Remarks: TM			
04/15/2003	04/15/2003		LEASE ISSUED		APPROVED/ACCEPTED	Action Remarks: \$2/AC;			
05/01/2003	05/01/2003		EFFECTIVE DATE		APPROVED/ACCEPTED				
05/01/2003	05/01/2003		FUND CODE		APPROVED/ACCEPTED	Action Remarks: 05;145003			
05/01/2003	05/01/2003		RLTY RATE - 12 1/2%		APPROVED/ACCEPTED				
02/17/2004	02/17/2004		ASGN FILED		APPROVED/ACCEPTED	Action Remarks: /A/ Receipt Number: 824654			
02/20/2004	02/20/2004		ASGN APPROVED		APPROVED/ACCEPTED	Action Remarks: EFF 03/01/04;/A/			
11/20/2011	11/20/2011		HELD BY PROD - ALLOCATED		APPROVED/ACCEPTED				
11/20/2011	11/20/2011		MEMO OF 1ST PROD-ALLOC		APPROVED/ACCEPTED	Action Remarks: /1/MTM106865;			
08/05/2014	08/05/2014		NOTICE SENT-PROD STATUS		APPROVED/ACCEPTED				
08/05/2014	08/05/2014		PRODUCTION DETERMINATION		APPROVED/ACCEPTED	Action Remarks: /1/			
11/19/2014	11/19/2014		LEASE COMMITTED TO COMMUNITIZATION AGREEMENT		APPROVED/ACCEPTED	Action Remarks: MTM106865;			

ASSOCIATED AGREEMENT OR LEASE (RECAPITULATION TABLE) INFO								MTMT105543822
Agreement Serial Number	Agreement Legacy Serial Number		Case Disposition	Product Name	Tract No	Commit- ment Status	Commitment Status Effective Date	Allocation Acres Percent
MTMT105397445	MTM	106865	AUTHORIZED	O&G COMMUNITIZATION AGREEMENT	02		07/01/2015	80.2000 6.2615

LEGACY CASE REMARKS										MTMT105543822	
Legacy Case Remarks includes remarks made for the case in LR2000 up until March 14, 2022. These Case Remarks will no longer be updated in MLRS. This section of the SRP is obsolete. Please reference the MLRS website for more information and refer to the Case Actions section - Action Information on this report for similar data.											

Line Number	Remark Text
0001	/A/ HERCO TO SLAWSON EXPL CO INC 100%

MT 5742

Form 3100-11
(October 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OFFER TO LEASE AND LEASE FOR OIL AND GAS

FOR LESSEE

Serial No.

MTM92455

The undersigned (*reverse*) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 et seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 Op. Atty. Gen. 41), or the

READ INSTRUCTIONS BEFORE COMPLETING

1. Name **HERCO**
Street **P. O. BOX 486**
City, State, Zip Code **BILLINGS, MT 59103**

2. This application/offer/lease is for: (Check only One) ☒ PUBLIC DOMAIN LANDS ☐ ACQUIRED LANDS (percent U.S. interest _____)

Surface managing agency if other than BLM: _____ Unit/Project _____

Legal description of land requested: _____ *Parcel No.: _____ *Sale Date (m/d/y): _____ / _____ / _____

***SEE ITEM 2 IN INSTRUCTIONS BELOW PRIOR TO COMPLETING PARCEL NUMBER AND SALE DATE.**

T. _____ R. _____ Meridian _____ State _____ County _____

Amount remitted: Filing fee \$ _____

Rental fee \$ _____

Total acres applied for _____

Total \$ _____

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:

T. _____ R. _____ Meridian _____ State _____ County _____

T. 26 N, R. 59 E, PMM, MT

sec. 2 LOT 4;

2 SWNE;

Roosevelt County

Total acres in lease 80.20
Rental retained \$ 121.50

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (*except helium*) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid or nomination and those specified on this form.

Type and primary term of lease:

☐ Noncompetitive lease (ten years)

☒ Competitive lease (ten years)

☐ Other _____

THE UNITED STATES OF AMERICA

by

Karen L. Johnson

Chief,

(Signing Officer)

Fluids Adjudication Section

(Title)

APR 15 2003

(Date)

EFFECTIVE DATE OF LEASE May 1, 2003

United States Department of the Interior
Bureau of Land Management
Montana State Office

CONTROLLED SURFACE USE STIPULATION

Serial No. **MTM92455**

Surface occupancy or use is subject to the following special operating constraints.

Prior to surface disturbance on slopes over 30 percent, an engineering/reclamation plan must be approved by the authorized officer. Such plan must demonstrate how the following will be accomplished:

- Site productivity will be restored.
- Surface runoff will be adequately controlled.
- Off-site areas will be protected from accelerated erosion, such as rilling, gullying, piping, and mass wasting.
- Water quality and quantity will be in conformance with state and federal water quality laws.
- Surface-disturbing activities will not be conducted during extended wet periods.
- Construction will not be allowed when soils are frozen.

On the lands described below:

T 26 N, R 59 E, PMM
Sec 2: LOT 4

For the purpose of:

To maintain soil productivity, provide necessary protection to prevent excessive soil erosion on steep slopes, and to avoid areas subject to slope failure, mass wasting, piping, or having excessive reclamation problems.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

MT-3109-4 (7/89)

CONTROLLED SURFACE USE STIPULATION

Serial No. **MTM92455**

Surface occupancy or use is subject to the following special operating constraints.

All surface-disturbing activities, semi-permanent and permanent facilities in VRM Class II, areas may require special design, including location, painting, and camouflage, to blend with the natural surroundings and meet the visual quality objectives for the area.

On the lands described below:

T. 26 N., R. 59 E., PMM
sec. 2: Lot 4
2: SWNE

Purpose:

To control the visual impacts of activities and facilities within acceptable levels.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

CSU (September 1998)

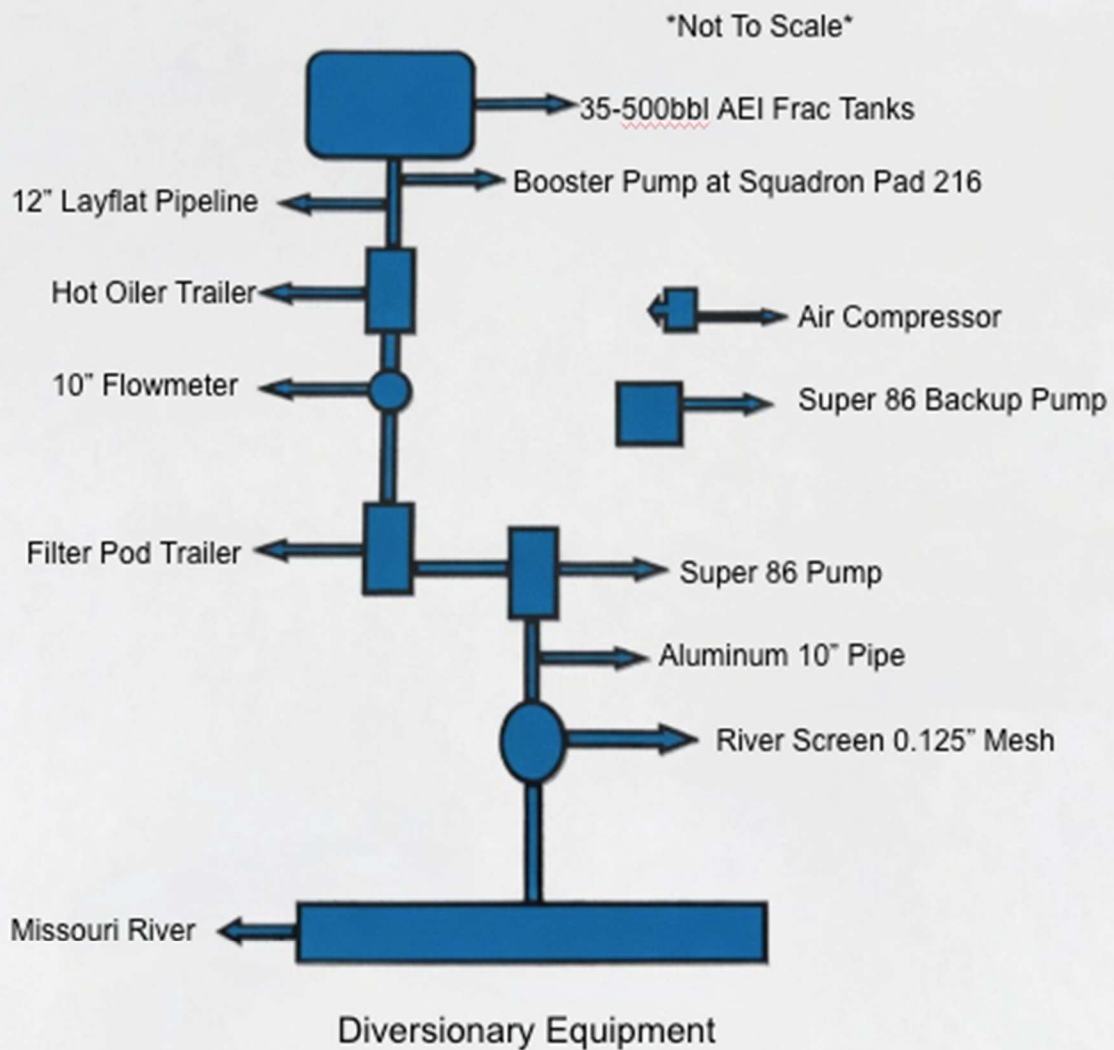
ATTACHMENT:

Adequate Means of Diversion and Operation

- Diagram of Project from POD to POU
- Fuel Tank Photo
- Filter Pod PRM Filtration
- 8x6 Pioneer Prime “Super 86” Pump
Specs and Curve
- Total Line Pressure Calculation Sheet
for Diversionary Pump and Booster
Pump
- ZYfire layflat pipeline
- Hose Clamp Overview

- Elevation Map
- Specification Sheet Dura Mag Flow
Meter

Adequate Means of Diversion and Operation





Fuel Tank:
<https://www.deltatank.com/product/ul-142-tank-500-gallon/>

Mark McKinlay

From: JR@Magnusservices.com
Sent: Thursday, March 12, 2026 1:47 PM
To: Mark McKinlay
Subject: FilterPod Pump Curve
Attachments: Slawson-River Job.kmz

Filter Pod rated for 120 bpm

<https://shop.prmfiltration.com/products/made-in-america-prm-2-304-stainless-steel-20-bag-multi-filter-housing-10-inch-flange-in-out-150-psi>



Super 86

<https://global.pioneerpump.com/emea/product-detail/pumps/pprime/cl/6006/en/pp86c21>

10x8

<https://global.pioneerpump.com/emea/product-detail/pumps/pprime/cl/6006/en/pp108c18>

Source to Pad Pump Pressures

Super 86 pump curve

[South Africa \(/south-africa\)](#) [Brazil \(/brazil\)](#) [SE Asia-Pacific \(/se-asia-pacific\)](#)

Europe, Middle East & North Africa

[Pumps \(/emea/products/pumps\)](#) / [Pioneer Prime \(/emea/products/pumps/pioneer-prime\)](#) / [Clear Liquids \(/emea/products/pumps/pioneer-prime/clear-liquids\)](#) / [PP86C21](#)



PP86C21

Pioneer Prime series - vacuum assisted, end suction centrifugal pump

Pump Size	200 x 150 mm	8 x 6 inches
Max Flow	920 m ³ /h	4,000 USgpm
Max Head	200 metres	650 feet
Solids Size	40 mm	1.5 inches

Product Details

Bare shaft, frame mounted, fully automatic dry priming, vacuum assisted, run dry, heavy duty pump

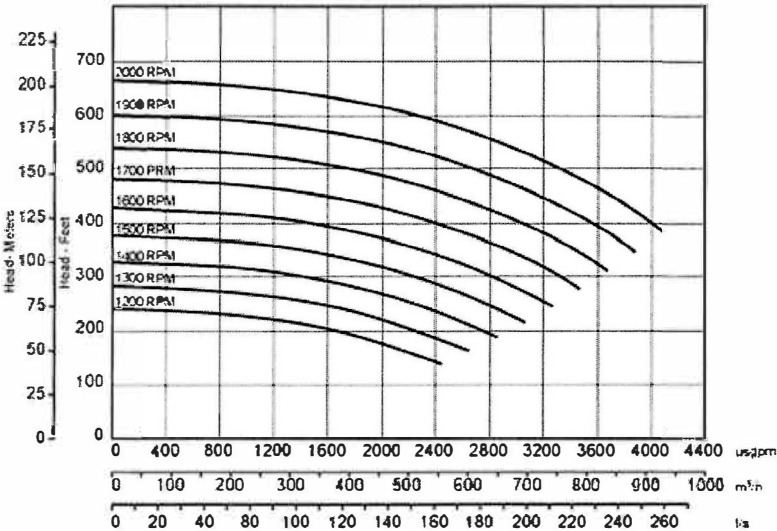
Features

High efficiency design	Lower fuel costs
High flowrate pump	Fewer pumps - lower operations costs

Options

- ☐ Drag skid
- ☐ Electric driven
- ☐ Trailer

Downloads



- Sound attenuated enclosure

Impeller-Variou-Speed-Curve-12860HQ.pdf)

Materials of Construction

	Standard Construction	CD4MCu Stainless Steel
Shaft	17-4 PH Stainless Steel	
Impeller	CA6NM	CD4MCu
Volute	Ductile Iron ASTM A536 65-45-12	CD4MCu
Wear Ring	ASTM A48 Class 40 Gray Iron	316 SS
Suction Cover	Ductile Iron ASTM A536 65-45-12	CD4MCu
Bracket	Ductile Iron ASTM A536 65-45-12	CD4MCu
Backplate	Ductile Iron ASTM A536 65-45-12	CD4MCu

Franklin Electric Co., Inc. © 2026
Corporate

9255 Coverdale Rd.,
Fort Wayne, IN 46809

[Policies \(/emea/policies\)](#)

[\(*\) Intellectual Property \(/emea/intellectual-property\)](#)



<https://www.facebook.com/Pioneerpump>



https://www.youtube.com/channel/UCJ_mdu8LS3XFPR0d9wK



<https://www.linkedin.com/company/pioneer-pump-inc-/>

[Back To Top](#)

PUMP PRESSURE CALCULATION

River Pump

Enter Relevant Data in Green Below				
How Big is your Pipe (ID)?	12.1	Inches		
How long is your pipe in Miles?	1.5	Miles		
What is the START point in your Pipe?	1866	Feet	Gallons/ Minute	Elevation Change
What is the END point of your pipe?	1896	Feet		
How many barrels do you want?	70	Barrels	2,940	30
Source Pump	PSI	Feet Head		
Pump Model:	Super 86	<-- Select		
Pumping Pressure	48	111		
Pressure from Elevation	13	30		
Total Line Pressure	61	141		

Pad to frac locations:

Booster Pump

Enter Relevant Data in Green Below				
How Big is your Pipe (ID)?	12.1	Inches		
How long is your pipe in Miles?	2.25	Miles		
What is the START point in your Pipe?	1896	Feet	Gallons/ Minute	Elevation Change
What is the END point of your pipe?	2033	Feet		
How many barrels do you want?	70	Barrels	2,940	137
Source Pump	PSI	Feet Head		
Pump Model:	Super 86	<-- Select		
Pumping Pressure	72	167		
Pressure from Elevation	59	137		
Total Line Pressure	131	304		

Route:



Application: Water transfer Fracturing

Temperature range: -50°C to 80°C (-58°F to +176°F)

<https://www.riverscreen.com/>

Overview – *Hose Clamp*

12 VIC RIGID CPL EHP 107N

Features

- Pressures up to 750 psi | 5171 kPa | 52 bar
- Sizes from 2 – 12" | DN50 – DN300
- Angled bolt pad provides rigidity
- Optional galvanized coating

Links

- [Specification Sheet](#)
- [Installation Manual](#)
- [Manufacturer Web Site](#)

Specifications

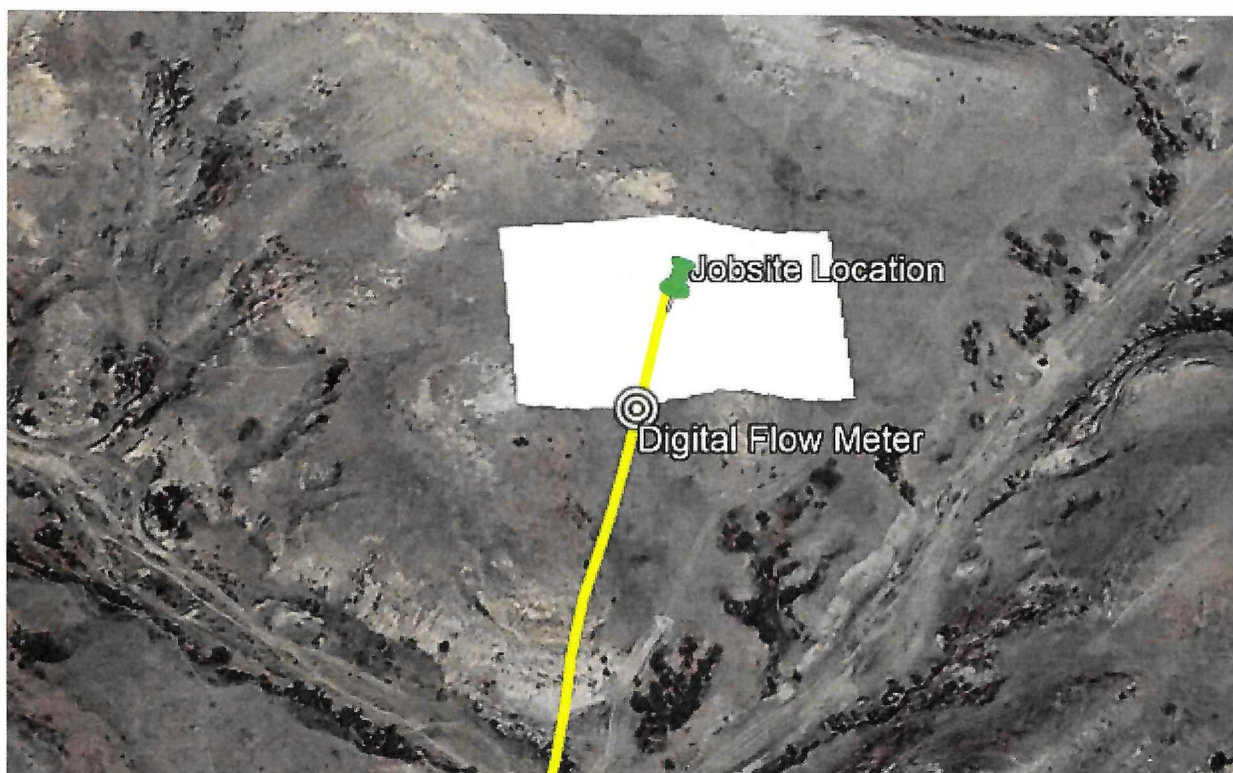
Fitting Type	Couplings
Connection Size	12" x 12"
Connection Type	Grv x Grv
Item Weight	27.7 lb.

Thanks

JR Ewing
208.350.8292 mbl/txt



Scan QR for phone contact card



Elevation Profile



Hose:

<https://www.zyfire.com/product/fracflo-hose>

DESCRIPTION

McCrometer's Dura Mag is the easy choice for tough applications. With a 5-year meter warranty and a 5-year battery life, Dura Mag eliminates the need for AC power connection while providing the easiest installation possible for a flanged mag flow meter.

The meter is available to fit a common range of irrigation line sizes, from 2" to 12" diameter pipe. Dura Mag offers accuracy of +/- 1% with minimal upstream and downstream straight pipe required for most installations, all with the durability that customers have come to expect from McCrometer for over 65 years.

The integrated electronic converter is secured with tamper evident screws. The meter offers flow rate and totalizer with a 5-year battery warranty. Dura Mag features three 3.6V lithium-thionyl chloride (Li-SOCl₂) D size batteries, with two AA batteries serving as back-up power. The main power batteries are easily replaced in the field.

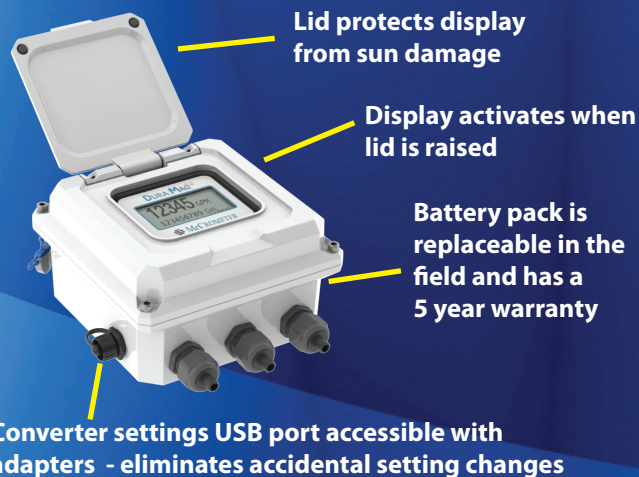
Pulse, 4-20mA, and AMI output are available for remote meter reading or SCADA. Dura Mag is compatible with McCrometer CONNECT wireless systems, which allows users to access flow data by simply logging on to the Internet. This eliminates costly manual meter reading.

KEY APPLICATIONS - Agriculture

- Irrigation
- Center Pivot Systems
- Well Monitoring
- Water Distribution
- Dairy Lagoons
- Surface Water
- Chemigation Downstream
- Golf Course & Park Management
- Sandy Water

KEY FEATURES

- 5-year meter warranty
- 5-year battery warranty
- Lifetime liner guarantee
- Upstream/downstream requirements:
 - 2" & 3": 3D/1D
 - 4" & larger: 2D/1D
- Battery powered for easy installation – eliminate the hassle of cables or AC power
- Durable design – Proven in tough environments
- 10 minute DIY replaceable battery pack, keeps your meter running
- Made in the USA



[illegible]

[illegible]

ProComm Go Part Number Structure

PG -								
Converter Mounting and Cable Connector Options								
Meter Mount Converter (<i>Standard</i>)		M						
Remote Mount (25 ft cable)		R						
Converter Power Options								
Battery Power (<i>Standard</i>)		B						
AC Power, Battery Backup		A						
DC Power, Battery Backup		D						
Converter Output Options								
No Outputs (<i>Standard</i>)		-						
Two Digital Out		1						
4-20mA Analog only		2						
4-20mA Analog + Two Dig Out		3						
AMI Smart Output Only		4						
AMI Smart Output + Two Dig Out		5						
AMI Smart Output + 4-20mA Analog		6						
AMI Smart Output + 4-20mA Analog + Two Dig Out		7						
DC Power/ Analog Out Cable Options								
No DC Power or Outputs (<i>Standard</i>)		-						
No Cable - Output Configured (Quick Conn)		0						
6 ft (Open Leads - Strain Relief)		1						
25 ft (Open Leads)		2						
50 ft (Open Leads)		3						
Pulse Cable Length Options								
No Outputs (<i>Standard</i>)		-						
No Cable - Output Configured (Strain Relief or Quick Conn)		0						
6 ft (Open Leads)		1						
25 ft (Open Leads)		2						
50 ft (Open Leads)		3						
25 ft (7-Pin Male connector for Telemetry)		4						
50 ft (7-Pin Male connector for Telemetry)		5						
Output Cable Terminal Options								
Strain Relief (<i>Standard</i>)		1						
Quick Connect (25 & 50 ft Cable length only)		2						
Smart Output Protocol Options (*5 or 6 output option required)								
No AMI Outputs		-						
Sensus Protocol (6ft cable, Nicor Connector hardwired only)		SEN						
Itron 6 digit Protocol (6ft cable, Nicor Connector hardwired only)		IT6						
Itron 9 digit [100W] Protocol (6ft cable, Nicor Connector hardwired only)		IT9						
ATT Wireless Telemetry System (RTU, Solar Panel, 15 ft 7 pin Cable)		ATT						
Verizon Wireless Telemetry System (RTU, Solar Panel, 15 ft 7 pin Cable)		VZW						

FLOW METER SPECIFICATIONS

Physical Specifications

Directionality	Single direction and bidirectional
Pipe Sizes	2", 3", 4", 6", 8", 10", 12"
Body Style	Unflanged and flanged tube
Power	Battery: Standard: three 3.6V lithium-thionyl chloride (Li-SOCl ₂) D size batteries with two AA backup batteries. Batteries are field replaceable
	AC Power: 120VAC
	DC Power: Linear power supply 10-35VDC, 2.4W
Electrical Connections	Optional quick connect for easy installation
Outputs	Digital output: Digital pulse (open collector) output for volumetric - Two isolated digital pulse (open collector) outputs for volumetric - AMI output
	Analog output: 4-20mA: Galvanically Isolated, 16 Bit resolution. All power configurations (including battery). Note: 9-30 VDC loop power required (not supplied via converter)

Performance and Operational Specifications

Operating Temperature	-4° to 140°F (-20° to 60°C)
Storage Temperature	-40° to 149°F (-40° to 65°C)
Operating Pressure	150 psi
IP Rating	IP67 (converter enclosure)
Accuracy *	±1% or ±0.075% of full-scale flow from low flow cutoff to maximum flow rate
Battery Life	Five-year expected battery life, five-year battery warranty
Pipe Run Requirements	2" & 3": 3D upstream / 1D downstream
	4" and larger: 2D upstream / 1D downstream

Display and Measurement

Display	• Large LCD display (no backlight) • Non-volatile memory • Anti-reverse totalizer (standard) • Bidirectional (optional) - displays both positive and net totals • Total (to 9 digits of precision) • Flow Rate (to 5 digits of precision) • Low battery and empty pipe indication • Opening lid activates display		
	Digits 5 Rate, 9 Total		
Rate Units	Gallons per minute	Imperial gallons per minute	Cubic feet per minute
	Million gallons per day	Miner's inch (9G)	Barrels per minute (55G)
	Cubic feet per second	Miner's inch (11.22G)	Barrels per hour (55G)
	Megaliters per day	Acre-feet per day	Barrels per day (55G)
	Liters per second	Kiloliters per hour	Barrels per minute (42G)
	Cubic meters per hour	Liters per hour	Barrels per hour (42G)
	Liters per minute	Cubic meters per minute	Barrels per day (42G)
	Gallons per hour		

* All Dura Mag meters are calibrated in a NIST traceable gravimetric test stand with a minimum straight run of 10D upstream and 2D downstream. A calibration certification report is provided with each Dura Mag meter certifying the specification accuracy in our laboratory test. Alternative piping configurations or electrical environments may impact the performance of the meter in the field.

FLOW METER SPECIFICATIONS (CONT.)

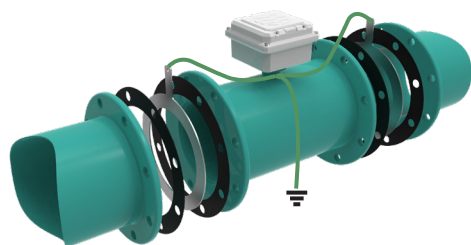
Totalizer Units	Gallons	Barrel (31G)	Miners Inch Minute (11.22G)
	Cubic Feet	Barrel (42G)	Miners Inch Minute (9G)
	Acre Feet	Barrel (46G)	Miners Inch Hour (11.22G)
	Cubic Meters	Barrel (55G)	Miners Inch Day (11.22G)
	Liters	Imperial Gallon	Miners Inch Hour (9G)
	Megaliter	Acre Inch	Miners Inch Day (9G)
	Metric Ton (KL)	Ton (Short)	
Data Logger	• Standard with all models, minimum of five years of data stored		
Other Specifications			
Options and Accessories	• Data Logger - included as standard with five years of data storage at default (12hr) interval. (Cable sold separately)		
	• Bidirectional		
Sensor Cable Lengths	• Epoxy coated carbon steel flanged spool piece (for 2" & 3" wafer style meters)		
	• AC and DC powered with battery backup available		
Warranty	• Remote mount (25' cable length only)		
	• Annual verification / calibration		
Warranty	• Stainless Steel ID tag		
	Feet: 6, 25, 50		
Warranty	Meters: 1.5, 7.6, 15.25		
	Note: 50' is maximum length for pulse cable.		
Warranty	Meter: 5-year warranty		
	Battery: 5-year warranty		
Warranty	Liner: Lifetime guarantee		

METER GROUNDING RECOMMENDATIONS

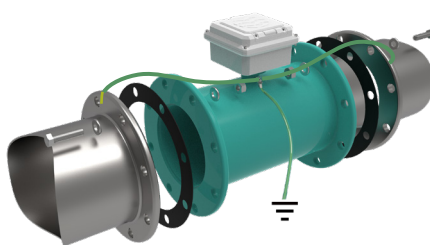
Dura Mag meters come standard with a set of grounding rings for use with the preferred method of grounding Dura Mag meters.

Grounding the meter body for safety according to national (NEC) or local electrical codes is recommended on ALL meter installations. Dura Mag meters come standard with a set of grounding rings for use with the preferred method of grounding Dura Mag meters.

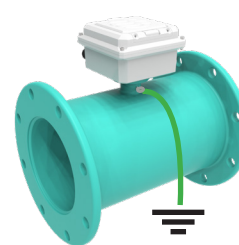
See the Dura Mag IOM Manual, Lit. # 30122-53, for more information on grounding configurations using grounding rods and grounding rings.



Preferred method of grounding



Sensor grounding for meters in an electrically noisy environment



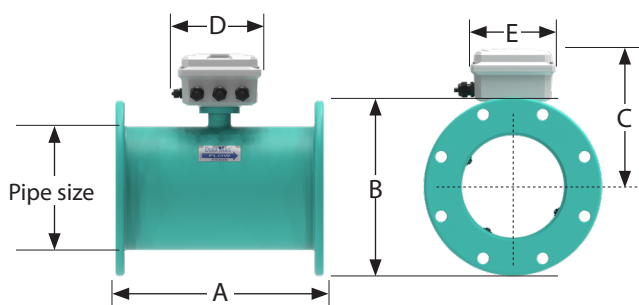
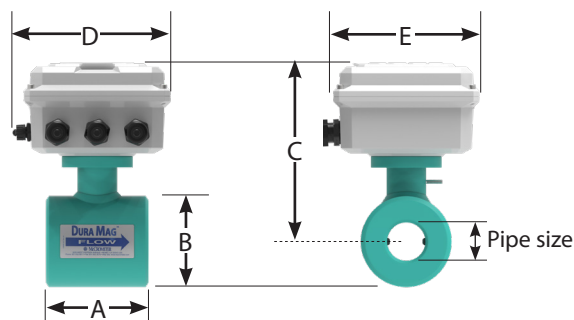
Sensor grounding for meters with minimal ground noise

DIMENSIONS AND WEIGHTS

Body Type	Pipe Size (Nominal)	Standard GPM Flow Ranges Min - Max	DIMENSIONS (Lay Lengths in inches)			Estimated Shipping Weight (lbs.)*
			A	B	C	
Type 1	2"	10-250	4.5	5	8.1	10
	3"	20-550	4.5	5	8.6	11.7
Type 2	4"	30 - 1,000	13.4	9.0	9.25	70
	6"	60 - 2,000	14.6	11.0	10.25	80
	8"	105 - 3,500	16.1	13.5	11.25	115
	10"	165 - 5,500	18.5	16.0	12.5	140
	12"	195 - 6,500	19.7	19.0	13.5	190

D (front)	E (side)
6.94"	6.44"

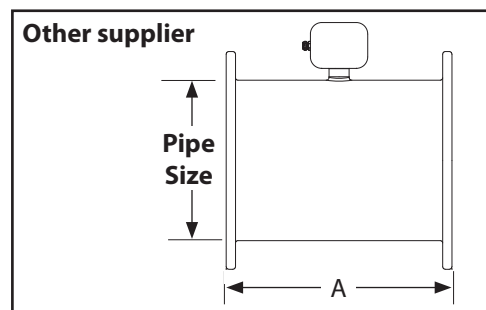
*Shipping weights are estimated and may change due to specific order packaging



Dura Mag S Series and P Series meters are available in lay lengths compatible with products from other meter suppliers. See the tables below for matched lay length options.

Pipe Size (Nominal)	Other Supplier Dimensions*		S Series Dimensions	
	L (in.)	Weight (lbs.)	L (in.)	Weight (lbs.)
4"	10.24	34	10.24	70
6"	12.27	50	12.27	80
8"	14.24	71	14.24	115
10"	18.18	130	18.18	140
12"	19.68	170	19.68	190

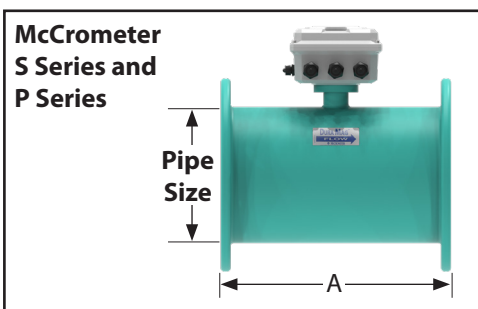
* Seametrics Electromagnetic Meters (Ag3000/Ag3000P or iMag4700 series); Seametrics® is a registered trademark of their respective owners.



Pipe Size (Nominal)	Other Supplier Dimensions**				P Series Dimensions			
	150 lb psi		300 lb psi		150 lb psi		300 lb psi	
	L (in.)	Weight (lbs.)	L (in.)	Weight (lbs.)	L (in.)	Weight (lbs.)	L (in.)	Weight (lbs.)
4"	6	55	6	***	6.25	50	6.25	***
6"	13.38	75	14.88	***	13.38	65	14.88	***
8"	13.38	105	15.40	***	13.38	120	15.40	***
10"	18.15	155	20.55	***	18.15	130	20.55	***
12"	19.40	235	21.78	***	19.40	170	21.78	***

** Sparling Instruments (Tigermag EP FM656); Sparling® is a registered trademark of their respective owners.

*** Contact factory for weight.



PROCOMM GO CONVERTER SPECIFICATIONS

Physical Specifications

Electronic Housing	Diecast aluminum, powder coated enclosure w/ tamper resistant seal, 6½" x 6½" x 43/8" tall
Power	Battery: Standard: three 3.6V lithium-thionyl chloride (Li-SOCl ₂) D size batteries with two AA backup batteries AC Power: 100-240VAC DC Power: Linear power supply 10-35VDC, 2.4W
Electrical Connections	- Optional shielded cable for 10-32VDC/4-20 mA output - Optional shielded cable for pulse out

Performance and Operational Specifications

Battery Life	Five-year expected battery life, five-year battery warranty
Outputs	Digital output: Digital pulse (open collector) output for volumetric - Two isolated digital pulse (open collector) outputs for volumetric - AMI output Analog output: 4-20mA: Galvanically Isolated, 16 Bit resolution. All power configurations (including battery). Note: 9-30 VDC loop power required (not supplied via converter)

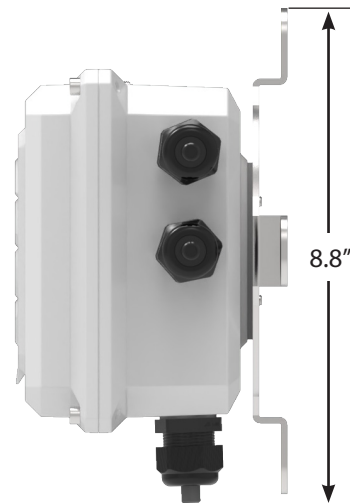
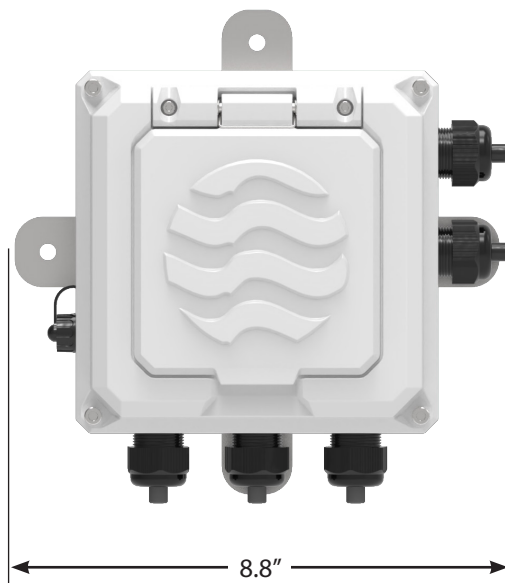
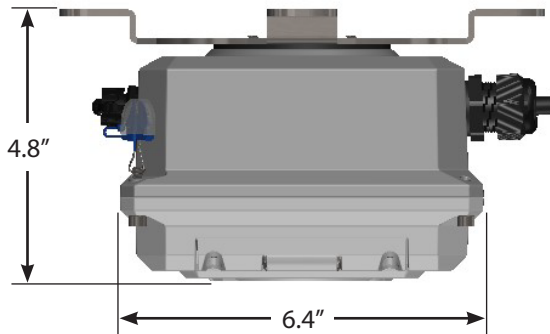
Display and Measurement

Display	• 2-Line LCD display (no backlight) • Non-volatile memory • Anti-reverse totalizer (standard) • Total (to 9 digits of precision)			• Flow rate and velocity (to 5 digits of precision) • Two alarms: low battery and empty pipe (optional) • Opening lid activates display		
	Digits					
Units	5 Rate, 9 Total					
	GPM	Gallons per minute	IGM	Imperial gal per minute	CFM	Cubic feet per minute
	MGD	Mega gal per day	MI9	Miners inch (9G)	B5M	Barrels per minute (55G)
	CFS	Cubic feet per second	MI1	Miners inch (11.22G)	B5H	Barrels per hour (55G)
	MLD	Megaliters per day	APD	Acre feet per day	B5D	Barrels per day (55G)
	LPS	Liters per second	KLH	Kiloliters per hour	B4M	Barrels per minute (42G)
	CMH	Cubic meters per hour	LPH	Liters per hour	B4H	Barrels per hour (42G)
	LPM	Liters per minute	CMM	Cubic meters per minute	B4D	Barrels per day (42G)
	GPH	Gallons per hour	CFM	Cubic feet per minute		
Totalizer Units	GAL	Gallons	B42	Barrel (42G)	MH1	Miners Inch Hour (11.22G)
	CUF	Cubic Feet	B46	Barrel (46G)	MD1	Miners Inch Day (11.22G)
	AFT	Acre Feet	B55	Barrel (55G)	MH9	Miners Inch Hour (9G)
	CUM	Cubic Meters	IMG	Imperial Gallon	MD9	Miners Inch Day (9G)
	LIT	Liters	AIN	Acre Inch	KGL	Kilo Gallons
	MML	Megaliter	TON	Ton (Short)	MGL	Mega Gallons
	MTT	Metric Ton (KL)	MM1	Miners Inch Minute (11.22G)	IN3	Cubic Inch
	B31	Barrel (31G)	MM9	Miners Inch Minute (9G)		
Data Logger	Standard with all models, minimum of five years of data stored					

Other Specifications

Options and Accessories	- Data Logger - included as standard with five years of data storage at default (12hr) interval. (Cable sold separately) - AC, DC, and battery powered with battery backup powered available
--------------------------------	---

PROCOMM GO REMOTE MOUNT CONVERTER DIMENSIONS



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3255 WEST STETSON AVENUE • HEMET, CALIFORNIA 92545 USA
TEL: 951-652-6811 • 800-220-2279 • FAX: 951-652-3078
www.mccrometer.com

Calibration Report



Serial Number: DM20-0179 Test Number: DM20-0179

Converter Serial Number: DuraMag

Model: DM10-1011 Calibration Date: 1/21/2020

Report Date: 1/21/2020

Sold To: McCROMETER HEMET

Description: 10" DURA MAG

Notes: _____

Customer I.D.: 9.7 in
246 mm

KA: 1.1073

KZ: -31957

Calibration Report

	Flow Rate (GPM)		PLBF Accuracy (as % of reading)
	min	max	
1	232.08	525.43	101.65
2	525.43	818.78	101.08
3	818.78	1112.13	100.79
4	1112.13	1405.49	100.59
5	1405.49	1698.84	100.43
6	1698.84	1992.19	100.28
7	1992.19	2285.55	100.14
8	2285.55	2578.90	100.01
9	2578.90	2872.25	99.88
10	2872.25	3165.60	99.75

KL Values

KL00:	032540031
KL01:	097390096
KL02:	162120161
KL03:	000000000
KL04:	000000000
KL05:	000000000
KL06:	000000000
KL07:	000000000
KL08:	000000000
KL09:	000000000
KL10:	000000000
KL11:	000000000

Approved By: *Fernando Ramirez*

Fernando Ramirez
ID#: 266706

Test Fluid: Water

Instrumentation Traceability Kit Number: V0213

Standard Used: Primary

Test Data

	Water Temperature (°C)	Test Time (seconds)	Air Temperature (°C)	Barometric Pressure (kPa)	Relative Humidity (%)	Viscosity (cP)	Average Rate of Flow (m3/sec)	Combined Uncertainty (%) at 95% confidence
1	22.2	32.231	17.2	96.34	56	1	0.19972	0.15
2	22.2	31.931	17.2	96.34	56	1	0.09569	0.15
3	22.2	32.362	17.2	96.34	56	1	0.01464	0.15

This calibration was performed using standards traceable to the National Institute of Standards and Technology (NIST), USA. Certificates of traceability for the individual test measurements listed in this report are documented and serialized by the Test Stand Instrumentation Traceability Kit Number identified above and are available upon request. Combined Uncertainty to a 95% confidence level is developed for each test point according to the methods described in the ANSI/NCSL Z540-2:1997. Methods and procedures used in this calibration are in accordance with the latest revision of the McCrometer Flow Laboratory Technical Manual.



ATTACHMENT:

Technical Analyses

Addendum

Surface Water Permit Technical Analyses Report

Department of Natural Resources and Conservation (DNRC or Department)

Water Resources Division

Kailee Ingalls, Water Resource Specialist, Havre Regional Office

Applicant	WILLISTON WATER MANAGEMENT, LLC.
Application No.	40S 30175554
Proposed Point of Diversion	Lot 1, SWNESE, SECTION 14, T26N, R59E, ROOSEVELT COUNTY.

Overview

This report 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 Surface Water Permit Technical Analyses Report contains the following sections:

Overview.....	1
Variances	1
1.0 Application Details	2
2.0 Surface Water Analysis.....	4
2.1 Source Description	4
2.2 Method of Estimation.....	4
2.3 Monthly Flow Rate and Volume	4
3.0 Area of Potential Impact Analysis	9
Review.....	11
References	11
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Variances

No variance was requested.



1.0 Application Details

The Applicant proposes to divert water at SWNESE, Section 14, T26N, R59E, Roosevelt County, from November 1 to June 30, from the Missouri River at a rate of 3,000 GPM or 6.7 CFS. 670 AF of water would be used between November 1 and June 30 for Industrial use in Lot 4, NWNW, Section 02, T26N, R59E, Roosevelt County. This is a temporary appropriation that will cease on December 31, 2030.

Table 1. Summary of the Proposed Use.

Source	Flow Rate (CFS)	Diverted Volume (AF)	Purpose	Period of Use	Place of Use	Point of Diversion	Period of Diversion
Missouri River	6.7	670	Industrial	11/1 to 6/30	Lot 4, NWNW, Section 02, T26N, R59E, Roosevelt County.	SWNESE, Section 14, T26N, R59E, Roosevelt County.	11/1 to 6/30

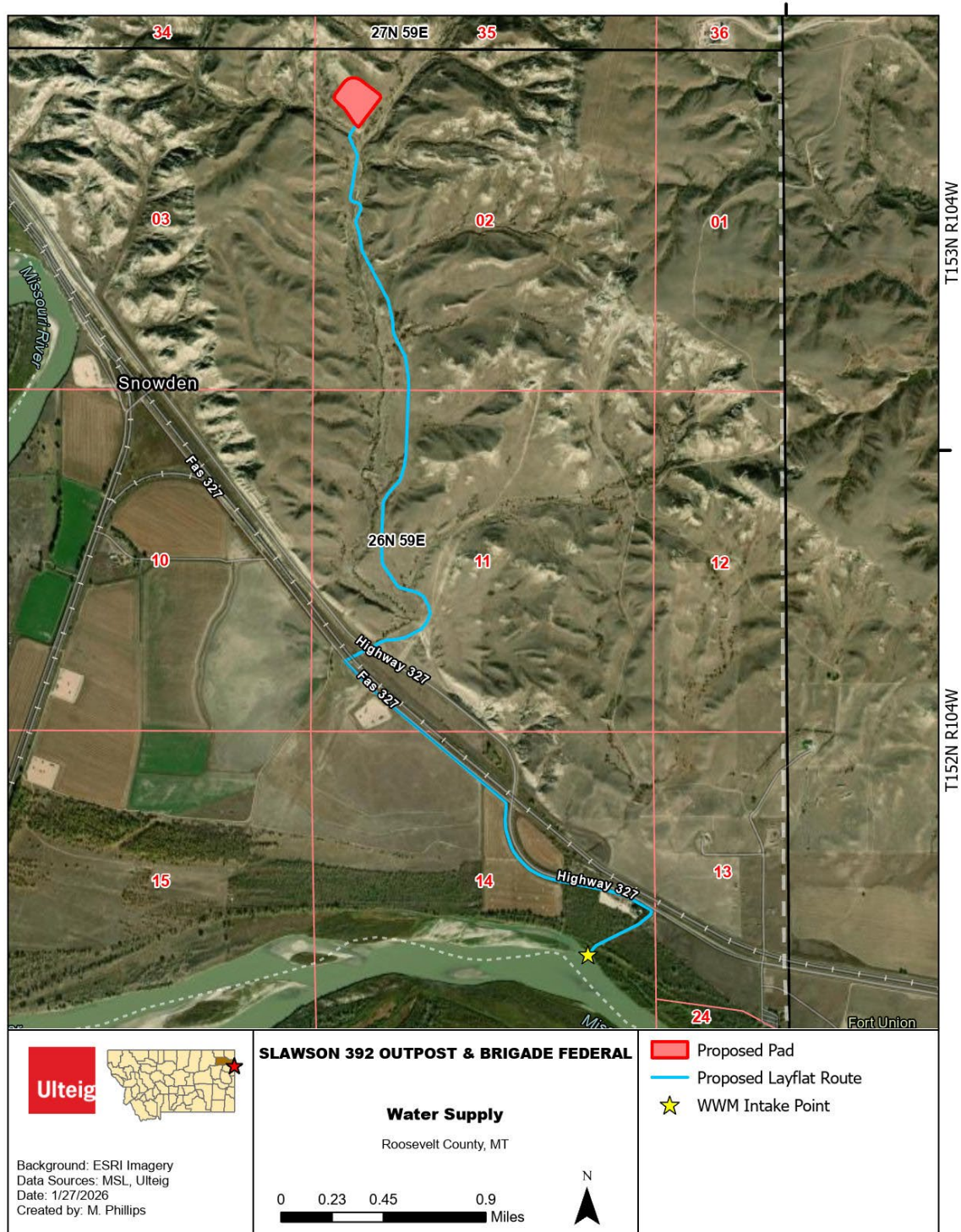


Figure 1. Map of the Applicant's proposed Point of Diversion on the Missouri River and proposed Place of Use, dated January 27, 2026, Applicant Provided.



2.0 Surface Water Analysis

2.1 Source Description

Proposed Source of Water: *Missouri River*

Proposed Source Type: *Perennial*

Proposed Point of Diversion: *Lot 1, SWNESE, Section 14, T26N, R59E, Roosevelt County.*

2.2 Method of Estimation

Gage Name: *Missouri River, near Culbertson, MT.*

Gage Number: *United States Geological Survey (USGS) #06185500*

Period of Record: *July 1941 to October 2024*

Why this gage is considered an appropriate data source: *According to ARM 36.12.1702, available stream gage records will be used to quantify physical availability using the median of the mean monthly flow rate and volume during the proposed months of diversion. United States Geological Survey (USGS) Gage #06185500, Missouri River near Culbertson, is the nearest gage to the proposed point of diversion and is 29.3 miles upstream of the point of diversion. The date range includes only part of the period of record for this gage. DNRC used USGS #06185500, Missouri River, near Culbertson, MT, gage data from April 1958 to October 2024. This eliminated any data that was recorded from July 1941 to March 1958. The full data range was not used for the following reasons:*

- Gage data from 1941 to 1951 shows that the daily flow regime data behaves differently from data observed from 1958 to 2024. The earlier data shows larger data swings, higher highs, and lower lows.*
- The Missouri River Mainstem Reservoir System master water control manual: Missouri River Basin, provides supporting documentation that in 1952, the regulation of the mainstem reservoirs on the Missouri River broadened from a single reservoir to a six-reservoir system, with navigation influencing more controlled releases.*
- Overall, the current monthly flow regime doesn't reflect the longer period of record; thus, the decision was made to eliminate July 1941 to March 1958 from the period of record. Per Department requirements for stream gage records used, the records should reflect current flow regimes.*

2.3 Monthly Flow Rate and Volume

Methodology: *Physical availability of the Missouri River water at the point of diversion will be quantified monthly. Department practice for physical availability analyses in which the gage is upstream of the point of diversion is to subtract the monthly flow rates of existing water rights, **Table 3**, between the gage and the point of diversion from the median of the mean monthly flows at the gage. The DNRC used the method below to quantify physically available monthly flows and volumes at the point of diversion during the proposed period of diversion.*



1. *The Department calculated the median of the mean monthly flow rates in cubic feet per second (CFS) for the Missouri River using USGS Gage #06185500 records for each month of the proposed period of diversion (Table 2, column B). Those flows were converted to monthly volumes in AF (Table 2, column C) using the following equation found on DNRC Water Calculation Guide (formerly Form 615): median of the mean monthly flow (CFS) $\times$ 1.98 (AF/day/1 CFS) $\times$ days per month = AF/month.*
2. *The Department calculated the monthly flows appropriated by existing users upstream of the gage on the source (Table 2, column D) by:*
 - i. *Generating a list of existing water rights from the USGS Gage #06185500 to the proposed point of diversion.*
 - ii. *Designating Irrigation and Lawn and Garden uses with no period of diversion as occurring from April 1 to October 31.*
 - iii. *Designating all other water uses with no period of diversion as year-round uses.*
 - iv. *Calculating the flow rate of all Livestock Direct from Source water rights drinking from the reach of interest using either 30 GPD/AU and adding 35 GPM for Statements of Claim or 15 GPD/AU and adding 35 GPM for all other water rights.*
 - v. *Calculating a volume for all Livestock Direct from Source rights without a designated volume by multiplying the number of AU by 30 GPD/AU for Statements of Claim or 15 GPD/AU.*
 - vi. *Calculating a volume for all Irrigation rights without a designated volume by multiplying the number of acres by 2.69 AF/AC per Department water use standards for a moderate consumptive use climatic area.*
 - vii. *Assuming that the flow rate of each existing right is continuously diverted throughout each month of the period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of existing uses from the source. The Department finds this an appropriate measure of assessing existing rights as it protects existing water users.*
3. *Since the gage used is upstream of the point of diversion, the Department subtracted the flow rates and volumes of the existing rights between USGS Gage #06185500 and the point of diversion (Table 2, column D and E) from the median of the mean monthly gage values (Table 2, column B and C) to determine physical availability (CFS and AF) at the point of diversion (Table 2, column F and G).*



Table 2. Physical Availability at the proposed Point of Diversion on the Missouri River

A	B	C	D	E	F	G
Month	Median of the Mean Monthly Flow at Gage #06185500 (CFS)	Median of the Mean Monthly Volume at Gage #06185500 (AF)	Existing Water Rights from Gage #06185500 to POD (CFS)	Existing Water Rights from Gage #06185500 to POD (AF)	Physically Available Water at POD (CFS)	Physically Available Water at POD (AF)
January	11,209.03	688,010.38	67.09	459.05	11,141.94	687,551.33
February	11,339.66	628,670.47	67.09	459.05	11,272.56	628,211.42
March	9,987.90	613,057.49	68.76	465.72	9,919.14	612,591.77
April	7,999.67	475,180.22	396.22	3,695.98	7,603.44	471,484.24
May	8,655.81	531,293.37	472.39	6,190.04	8,183.41	525,103.33
June	9,546.67	567,072.02	472.39	5,633.38	9,074.27	561,438.64
November	7,259.00	431,184.60	137.15	902.76	7,121.85	430,281.84
December	9,869.35	605,780.98	67.09	459.05	9,802.26	605,321.93

Table 3. Existing Water Rights between the USGS Gage #06185500 and the Point of Diversion

Water Right Number	Flow Rate (CFS)	Volume (AF)	Period of Diversion	Water Right Type
40S 77646 00	0.68	365	01/01 to 12/31	WATER RESERVATION
40S 188165 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 13498 00	2.23	324	05/01 to 10/01	PROVISIONAL PERMIT
40S 97742 00	2.67	542.7	05/01 to 09/30	PROVISIONAL PERMIT
40S 30142629	0.08	0.34	01/01 to 12/31	STATEMENT OF CLAIM
40S 186739 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 186742 00	2.9	544	04/15 to 10/19	STATEMENT OF CLAIM
40S 30142666	0.08	0.1	01/01 to 12/31	STATEMENT OF CLAIM
40S 106915 00	3.9	520	4/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 30071102	0.02	1.25	04/01 to 10/31	PROVISIONAL PERMIT
40S 106914 00	5.1	804	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 188166 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 137580 00	0.08	0.54	01/01 to 12/31	STATEMENT OF CLAIM
40S 30123529	0.1	13.6	01/01 to 12/31	STATEMENT OF CLAIM
40S 188167 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 30142623	0.08	0.1	01/01 to 12/31	STATEMENT OF CLAIM
40S 30142624	0.08	0.54	01/01 to 12/31	STATEMENT OF CLAIM
40S 114654 00	2.7	451	04/01 to 10/15	CONSERVATION DISTRICT RECORD



40S 106990 00	4.2	636	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 74618 00	2.23	540	04/01 to 9/15	PROVISIONAL PERMIT
40S 186744 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 137593 00	0.08	1.29	01/01 to 12/31	STATEMENT OF CLAIM
40S 30142622	0.08	2.45	01/01 to 12/31	STATEMENT OF CLAIM
40S 186743 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 30113093	4.2	243	01/01 to 12/31	PROVISIONAL PERMIT
40S 137594 00	0.08	1.9	01/01 to 12/31	STATEMENT OF CLAIM
40S 137592 00	0.08	0.88	01/01 to 12/31	STATEMENT OF CLAIM
40S 30153305	1.5	210	01/01 to 12/31	PROVISIONAL PERMIT
40S 30161904	6.68	600	01/01 to 12/31	PROVISIONAL PERMIT
40S 137576 00	0.08	1.29	01/01 to 12/31	STATEMENT OF CLAIM
40S 186738 00	0.14	43.06	01/01 to 12/31	STATEMENT OF CLAIM
40S 171255 00	15.6	1827.36	04/15 to 10/19	STATEMENT OF CLAIM
40S 30142668	0.08	0.07	01/01 to 12/31	STATEMENT OF CLAIM
40S 12708 00	8.02	1388	04/15 to 11/15	PROVISIONAL PERMIT
40S 135792 00	0.09	7.89	01/01 to 12/31	STATEMENT OF CLAIM
40S 215560 00	1.44	102.22	04/01 to 11/04	STATEMENT OF CLAIM
40S 30172430	0	124.45	04/01 to 10/19	CONSERVATION DISTRICT RECORD
40S 30132248	0.68	17	01/01 to 12/31	STATEMENT OF CLAIM
40S 188168 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 135791 00	0.09	10.34	01/01 to 12/31	STATEMENT OF CLAIM
40S 99060 00	2.23	309.7	05/01 to 09/30	PROVISIONAL PERMIT
40S 172261 00	41.1	1296	04/01 to 11/30	STATEMENT OF CLAIM
40S 66293 00	8.91	408	04/20 to 10/01	PROVISIONAL PERMIT
40S 66294 00	8.91	165	04/20 to 10/01	PROVISIONAL PERMIT
40S 7775 00	6.68	1500	04/15 to 10/15	PROVISIONAL PERMIT
40S 114723 00	2.2	340	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30072269	4.01	396.4	04/15 to 10/15	PROVISIONAL PERMIT
40S 17852 00	8.91	200	05/01 to 10/01	PROVISIONAL PERMIT
40S 109530 00	21.4	282	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 111449 00	10.00	408	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 172341 00	0.13	34	01/01 to 12/31	STATEMENT OF CLAIM
40S 106912 00	5.60	150	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 4010 00	13.37	1440	05/01 to 10/01	PROVISIONAL PERMIT
40S 30164987	8.9	755	01/01 to 12/31	TEMPORARY PERMIT
40S 109529 00	10.67	-	04/01 to 10/15	PROVISIONAL PERMIT



40S 7832 00	4.46	2125	04/01 to 10/15	PROVISIONAL PERMIT
40S 41349 00	9	491.4	05/01 to 09/19	STATEMENT OF CLAIM
40S 30063074	4.5	140	01/01 to 12/31	PROVISIONAL PERMIT
40S 30142625	0.08	0.204	01/01 to 12/31	STATEMENT OF CLAIM
40S 30142667	0.08	0.204	01/01 to 12/31	STATEMENT OF CLAIM
40S 30004263	3	330	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30043999	8.91	159.6	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30030363	20.05	498.15	04/15 to 10/19	STATEMENT OF CLAIM
40S 135793 00	0.1	13.6	01/01 to 12/31	STATEMENT OF CLAIM
40S 135782 00	0.8	0.27	01/01 to 12/31	STATEMENT OF CLAIM
40S 135783 00	0.08	0.48	01/01 to 12/31	STATEMENT OF CLAIM
40S 135784 00	0.08	0.54	01/01 to 12/31	STATEMENT OF CLAIM
40S 130566 00	10.53	675.54	04/01 to 10/31	STATEMENT OF CLAIM
40S 30031187	2.67	168.7	04/15 to 10/15	PROVISIONAL PERMIT
40S 7826 00	5.56	380	04/15 to 10/15	PROVISIONAL PERMIT
40S 74095 00	8.91	130	04/01 to 10/31	PROVISIONAL PERMIT
40S 84851 00	21.83	1451	04/01 to 11/01	PROVISIONAL PERMIT
40S 3227 00	20.05	1693	04/01 to 10/31	STATEMENT OF CLAIM
40S 30142615	0.08	0.48	01/01 to 12/31	STATEMENT OF CLAIM
40S 77506 00	11.14	416	04/01 to 10/01	PROVISIONAL PERMIT
40S 30142670	0.08	0.48	01/01 to 12/31	STATEMENT OF CLAIM
40S 30069082	1.55	60	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 9852 00	1.67	60	01/01 to 12/31	PROVISIONAL PERMIT
40S 187284 00	0.01	3	01/01 to 12/31	STATEMENT OF CLAIM
40S 30164889	12	860.17	01/01 to 12/31	PROVISIONAL PERMIT
40S 30010979	6.7	536	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30015443	0.33	20	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30048277	4.5	522.1	01/01 to 12/31	PROVISIONAL PERMIT
40S 30003106	0	24	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 130516 00	1.67	60	03/01 to 11/30	STATEMENT OF CLAIM
40S 11818 00	1.67	184	04/15 to 10/15	PROVISIONAL PERMIT
40S 187283 00	0.08	2.04	01/01 to 12/31	STATEMENT OF CLAIM
40S 103653 00	1.30	147	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 130567 00	11.14	172	01/01 to 12/31	STATEMENT OF CLAIM
40S 171828 00	1.78	285	04/01 to 10/31	STATEMENT OF CLAIM
40S 111301 00	5.1	302	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 135790 00	0.08	0.88	01/01 to 12/31	STATEMENT OF CLAIM



40S 114722 00	3.4	203	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 19231 00	25.06	3340	05/01 to 06/30	PROVISIONAL PERMIT
40S 5477 00	10.03	600	05/01 to 08/31	STATEMENT OF CLAIM
40S 12810 00	13.37	540	03/01 to 11/01	PROVISIONAL PERMIT
40S 137598 00	0.09	7.75	01/01 to 12/31	STATEMENT OF CLAIM
40S 30 00	25.06	3340	07/01 to 09/30	PROVISIONAL PERMIT
40S 142799 00	0.89	225	01/01 to 12/31	STATEMENT OF CLAIM
40S 171290 00	4.46	170.1	04/15 to 11/04	STATEMENT OF CLAIM
40S 30152855	5.71	925	01/01 to 12/31	TEMPORARY PERMIT
40S 46536 00	2.5	267.3	04/01 to 10/31	STATEMENT OF CLAIM
40S 104510 00	2.6	145	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 30142626	0.08	0.31	01/01 to 12/31	STATEMENT OF CLAIM
40S 5479 00	2.67	50	05/01 to 08/31	STATEMENT OF CLAIM

Table Key	Irrigation - Volume via Climatic Area
	Irrigation - Volume as Claimed
	Livestock Direct from Source
	Flow Rate Only
	Assigned Period of Diversion

3.0 Area of Potential Impact Analysis

The Area of Potential Impact for this application is: *The Area of Potential Impact is approximately 0.8 mi downstream of the proposed point of diversion. A total of 5 surface water rights exist within the reach. A list of rights can be found in **Appendix A: Tables 4, 5, 6, 7, and 8.***

Why this is an appropriate Area of Potential Impact: *The area of potential impact is located from the proposed point of diversion (Lot 1, SWNESE, Section 14, T26N, R59E, Roosevelt County) to the Montana/North Dakota State Border (Section 24, T26N, R59E, Richland County), where the Missouri River flows East, leaving Montana.*

Methodology: *A list of water rights that divert from the Missouri River at a point of diversion in Lot 1, SWNESE, Section 14, T26N, R59E, Roosevelt County, to 0.8 miles downstream was compiled using the DNRC GIS web application Water Mapper and DNRC Water Rights Query System. Water rights could include all active Statements of Claim, Provisional Permits, Conservation District Reservations, Instream Flow Reservations, Federally Reserved Water Rights, and Hydropower Water Rights.*

One Provisional Permit exists in the reach. (Table. 4)



The Montana Fish, Wildlife & Parks Instream Flow Right, 40S 30017671, exists within the reach. The proposed period of diversion and use is January through December. (Table. 5)

The Fort Peck Tribal Reserved Claim (Fort Peck-Montana Compact, MCA §85-20-201, Article III, F.1) exists year-round within the reach. Water is diverted from April through October. The flow rate was calculated by dividing the monthly volume in AF by the number of days in the month by 1.98 AF/day. (Table. 6)

Richland County Conservation District (40S 8450000) and Roosevelt County Conservation District (40S 8450100) are Water Reservations granted by the Lower Missouri River Basin Final Order of the Board of Natural Resources and Conservation, dated December 30, 1994, that exist in the reach. The full granted flow rate and volume are available and diverted from April through October. (Table. 7)

In addition, a list of Conservation District Records for Richland County Conservation District (40S 8450000) and Roosevelt County Conservation District (40S 8450100), that exist above the proposed point of diversion, was compiled. The Department assumes that the records are diverted from April to October. (Table. 8)



Review

This document has been reviewed by the Department's Water Resources Division Havre Regional Manager, Matt Miles, on June 12, 2026.

References

Department Standard Practice for Determining Physical Availability of Surface Water

Department Standard Practice for Area of Potential Impact Analysis

U.S Army Corps of Engineers, Northwestern Division. (2018, November). *Missouri River Mainstem Reservoir System master water control manual: Missouri River Basin*.



Appendix A: Water Rights within the Area of Potential Impact



Table 4. Area of Potential Impact: Statements of Claim, Provisional Permits, Temporary Permits

Water Right Number	Flow Rate (CFS)	Volume (AF)	Type of Right	Period of Diversion
40S 4213 00	8.91	176	Provisional Permit	5/1 to 9/30

Table 5. Area of Potential Impact: Montana Fish, Wildlife & Parks Instream Flow Right

Water Right Number	Flow Rate (CFS)	Volume (AF)	Type of Right	Period of Diversion
40S 30017671	5,178	3,748,500	Water Reservation	01/01 to 12/31

Table 6. Area of Potential Impact: Fort Peck-Montana Compact, MCA §85-20-201, Article III F.1

Month	Fort Peck Tribal Right (CFS)*	Fort Peck Tribal Right (AF)
January	652	40,000
February	722	40,000
March	652	40,000
April	842	50,000
May	1711	105,000
June	2441	145,000
July	3503	215,000
August	2933	180,000
September	1768	105,000
October	815	50,000
November	673	40,000
December	652	40,000

* Flow Rate in CFS is calculated by dividing the monthly volume in AF by the number of days in the month by 1.98 AF/day.



Table 7. Area of Potential Impact: Conservation District Water Reservations Full Reservation Granted per Month for Water Reservation 40S 8450000 and 40S 8450100.

Month	Richland County (40S 8450000) Flow Rate (CFS)	Richland County (40S 8450000) Volume (AF)*	Roosevelt County (40S 8450100) Flow Rate (CFS)	Roosevelt County (40S 8450100) Volume (AF)*
January	-	-	-	-
February	-	-	-	-
March	-	-	-	-
April	186.9	3,621	558.8	10,445
May	186.9	3,621	558.8	10,445
June	186.9	3,621	558.8	10,445
July	186.9	3,621	558.8	10,445
August	186.9	3,621	558.8	10,445
September	186.9	3,621	558.8	10,445
October	186.9	3,621	558.8	10,445
November	-	-	-	-
December	-	-	-	-

* Monthly volume was calculated by dividing the annual volume by the number of months in accordance with the reservation granted to each Conservation District outlined in the *Lower Missouri River Basin Final Order of the Board of Natural Resources and Conservation*, dated December 30, 1994.

Table 8. Conservation District Records above the Proposed Point of Diversion

Richland County (40S 8450000)			Roosevelt County (40S 8450100)		
Record Number	Flow Rate (CFS)	Volume (AF)	Record Number	Flow Rate (CFS)	Volume (AF)
40S 30006748	1.6	125.95	40S 111430 00	4.9	676.5
40S 111449 00	10	408	40S 30043999	8.91	159.6
40S 30027588	3.9	272.8	40S 30015443	0.33	20
40S 30043641	0.5	60	40S 30003106	0	24
40S 30062765	1.52	182	40S 106983 00	6.91	1,114
40S 30150186	0.78	69	40S 109530 00	21.4	282
40S 30159245	2.23	220	40S 111429 00	4.9	628.1
40S 30005493	6	768	40S 103653 00	1.3	147
40S 104421 00	4	590	40S 101092 00	3.6	636
40S 114723 00	2.2	340	40S 30044041	1.78	176.9
40S 116904 00	6.7	68	40S 102771 00	9	1,420
40S 30164956	8.7	590.25	40S 30006005	2.67	240



Richland County (40S 8450000)			Roosevelt County (40S 8450100)		
Record Number	Flow Rate (CFS)	Volume (AF)	Record Number	Flow Rate (CFS)	Volume (AF)
40S 101055 00	3.6	560	40S 30004263	3.01	330
40S 111301 00	5.1	302	40S 30010979	6.7	536
40S 106990 00	4.2	636	40S 106984 00	2.93	284
40S 30072073	1.73	224	40S 103671 00	2.5	360
40S 30172430	0	124.45	40S 30002059	4.9	569
40S 30164483	0	82.6	40S 106914 00	5.1	804
40S 101074 00	5.8	927	40S 30069082	1.56	60
40S 114741 00	6.55	312.5	40S 30004260	6	421.25
40S 30063091	1.45	92	40S 106915 00	3.9	520
40S 30165160	1.8	294	40S 30148181	5.3	35.75
40S 114654 00	2.7	451			
40S 30001844	2.6	364			
40S 114722 00	3.4	203			
40S 30024907	2.2	272			
40S 30104412	1.1	161			
40S 30041682	6	802			
40S 30165163	2.7	368			
40S 104484 00	2.7	264			
40S 104510 00	2.6	145			
40S 30012791	6	413.6			
40S 30027595	4.1	283.6			
40S 30025552	2.8	228			
40S 106912 00	5.6	150			

Technical Analyses Report/ Scientific Credibility Review

- Departmental Technical Analyses Report/ Scientific Credibility Review
- Any correspondence relating to the Technical Analyses Report

Technical Analyses
Report /
Scientific Credibility
Review

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

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GOVERNOR GREG GIANFORTE

DNRC DIRECTOR AMANDA KASTER

June 17, 2026

WILLISTON WATER MANAGEMENT LLC
1675 BROADWAY
SUITE 1600
DENVER, CO 80202-4675

Subject: Completed Technical Analyses Report for Beneficial Water Use Permit Preapplication No. 40S 30175554

Dear Applicant,

As designated on the submitted Preapplication Meeting Form per §85-2-302(3)(b), MCA, the Department of Natural Resources and Conservation (DNRC or Department) has completed the technical analyses for Beneficial Water Use Permit Preapplication No. 40S 30175554 based on the information provided in your Preapplication Meeting Form accepted by the Department on June 12, 2026. The technical analyses can be found in the attached report.

This Technical Analyses Report **IS**: A collection of facts that the DNRC has gathered, including content provided in the Preapplication Meeting Form materials. The Department will use these data to analyze the criteria in §85-2-311, MCA, if you submit an application for the project described in the completed Preapplication Meeting Form.

This Technical Analyses Report **IS NOT**: An analysis or discussion of whether the Preapplication Meeting Form as filed meets the criteria (§85-2-311, MCA).

You have 180 days to submit the Beneficial Water Use Permit Application Form 600, considering the information provided in the technical analyses and Preapplication Meeting Form. If the Application Form is not submitted to the Havre Regional Office by December 14, 2026, a new preapplication meeting will be required to process the Application with expedited timelines (ARM 36.12.1302(6)(b)). If any details described in the submitted Application are changed from those of the submitted Preapplication Meeting Form, the discounted filing fee and expedited timelines will not apply (ARM 36.12.1302(6)(a)). Please note that the technical analyses will expire one year from the date of this letter (ARM 36.12.1302(8)).

Please let me know if you have any questions.

Best,

A handwritten signature in black ink that reads "Kaitlin Legally". The signature is written in a cursive, flowing style.





Kailee Ingalls | Water Resource Specialist
Water Resources Division, Havre Regional Office
Montana Department of Natural Resources and Conservation
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Denver, Colorado 80202-4675



Surface Water Permit Technical Analyses Report

Department of Natural Resources and Conservation (DNRC or Department)

Water Resources Division

Kailee Ingalls, Water Resource Specialist, Havre Regional Office

Applicant	WILLISTON WATER MANAGEMENT, LLC.
Application No.	40S 30175554
Proposed Point of Diversion	Lot 1, SWNESE, SECTION 14, T26N, R59E, ROOSEVELT COUNTY.

Overview

This report 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 Surface Water Permit Technical Analyses Report contains the following sections:

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Variances

No variance was requested.



1.0 Application Details

The Applicant proposes to divert water at SWNESE, Section 14, T26N, R59E, Roosevelt County, from November 1 to June 30, from the Missouri River at a rate of 3,000 GPM or 6.7 CFS. 670 AF of water would be used between November 1 and June 30 for Industrial use in Lot 4, NWNW, Section 02, T26N, R59E, Roosevelt County. This is a temporary appropriation that will cease on December 31, 2030.

Table 1. Summary of the Proposed Use.

Source	Flow Rate (CFS)	Diverted Volume (AF)	Purpose	Period of Use	Place of Use	Point of Diversion	Period of Diversion
Missouri River	6.7	670	Industrial	11/1 to 6/30	Lot 4, NWNW, Section 02, T26N, R59E, Roosevelt County.	SWNESE, Section 14, T26N, R59E, Roosevelt County.	11/1 to 6/30

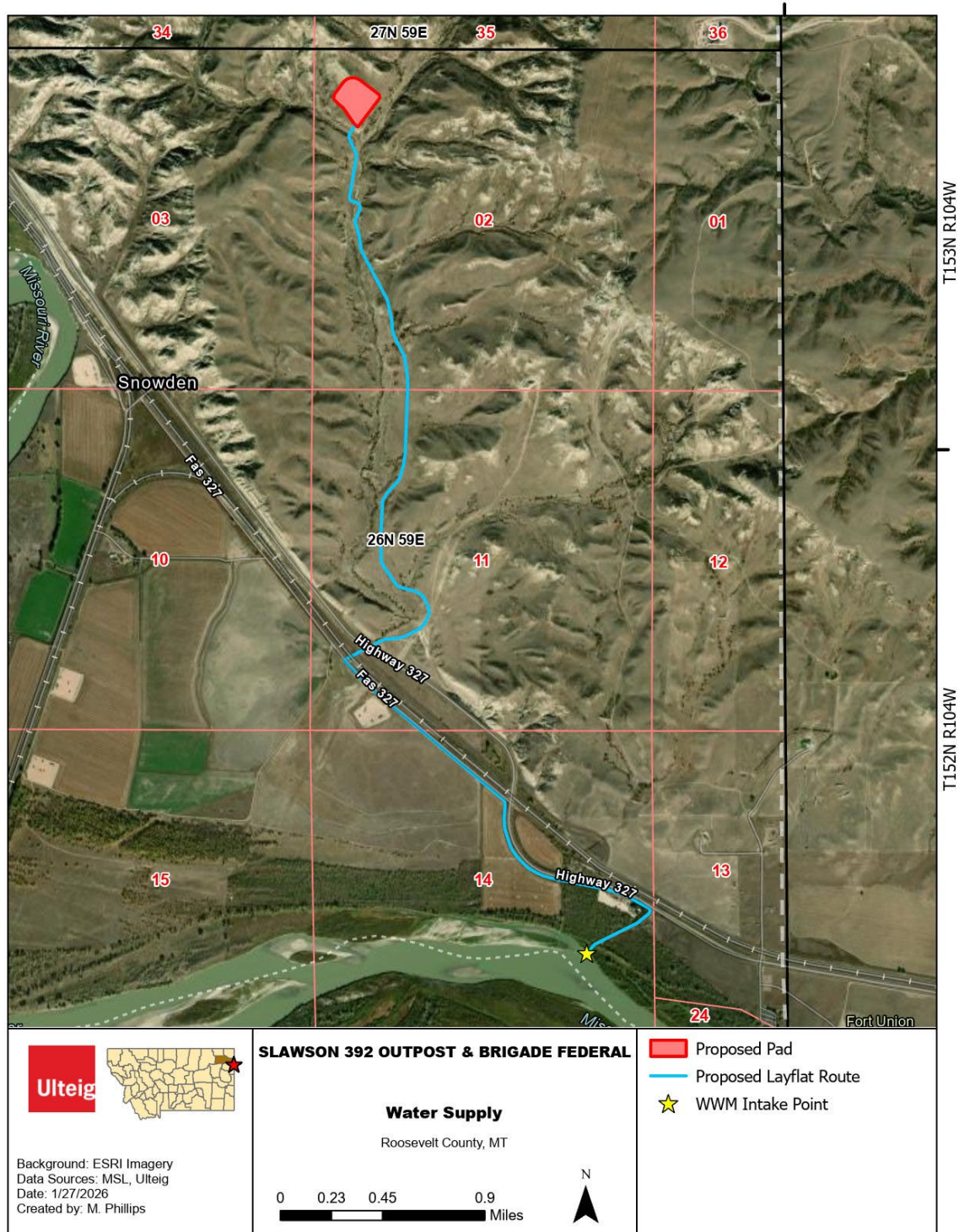


Figure 1. Map of the Applicant's proposed Point of Diversion on the Missouri River and proposed Place of Use, dated January 27, 2026, Applicant Provided.



2.0 Surface Water Analysis

2.1 Source Description

Proposed Source of Water: *Missouri River*

Proposed Source Type: *Perennial*

Proposed Point of Diversion: *Lot 1, SWNESE, Section 14, T26N, R59E, Roosevelt County.*

2.2 Method of Estimation

Gage Name: *Missouri River, near Culbertson, MT.*

Gage Number: *United States Geological Survey (USGS) #06185500*

Period of Record: *July 1941 to October 2024*

Why this gage is considered an appropriate data source: *According to ARM 36.12.1702, available stream gage records will be used to quantify physical availability using the median of the mean monthly flow rate and volume during the proposed months of diversion. United States Geological Survey (USGS) Gage #06185500, Missouri River near Culbertson, is the nearest gage to the proposed point of diversion and is 29.3 miles upstream of the point of diversion. The date range includes only part of the period of record for this gage. DNRC used USGS #06185500, Missouri River, near Culbertson, MT, gage data from April 1958 to October 2024. This eliminated any data that was recorded from July 1941 to March 1958. The full data range was not used for the following reasons:*

- Gage data from 1941 to 1951 shows that the daily flow regime data behaves differently from data observed from 1958 to 2024. The earlier data shows larger data swings, higher highs, and lower lows.*
- The Missouri River Mainstem Reservoir System master water control manual: Missouri River Basin, provides supporting documentation that in 1952, the regulation of the mainstem reservoirs on the Missouri River broadened from a single reservoir to a six-reservoir system, with navigation influencing more controlled releases.*
- Overall, the current monthly flow regime doesn't reflect the longer period of record; thus, the decision was made to eliminate July 1941 to March 1958 from the period of record. Per Department requirements for stream gage records used, the records should reflect current flow regimes.*

2.3 Monthly Flow Rate and Volume

Methodology: *Physical availability of the Missouri River water at the point of diversion will be quantified monthly. Department practice for physical availability analyses in which the gage is upstream of the point of diversion is to subtract the monthly flow rates of existing water rights, **Table 3**, between the gage and the point of diversion from the median of the mean monthly flows at the gage. The DNRC used the method below to quantify physically available monthly flows and volumes at the point of diversion during the proposed period of diversion.*



1. *The Department calculated the median of the mean monthly flow rates in cubic feet per second (CFS) for the Missouri River using USGS Gage #06185500 records for each month of the proposed period of diversion (Table 2, column B). Those flows were converted to monthly volumes in AF (Table 2, column C) using the following equation found on DNRC Water Calculation Guide (formerly Form 615): median of the mean monthly flow (CFS) $\times$ 1.98 (AF/day/1 CFS) $\times$ days per month = AF/month.*
2. *The Department calculated the monthly flows appropriated by existing users upstream of the gage on the source (Table 2, column D) by:*
 - i. *Generating a list of existing water rights from the USGS Gage #06185500 to the proposed point of diversion.*
 - ii. *Designating Irrigation and Lawn and Garden uses with no period of diversion as occurring from April 1 to October 31.*
 - iii. *Designating all other water uses with no period of diversion as year-round uses.*
 - iv. *Calculating the flow rate of all Livestock Direct from Source water rights drinking from the reach of interest using either 30 GPD/AU and adding 35 GPM for Statements of Claim or 15 GPD/AU and adding 35 GPM for all other water rights.*
 - v. *Calculating a volume for all Livestock Direct from Source rights without a designated volume by multiplying the number of AU by 30 GPD/AU for Statements of Claim or 15 GPD/AU.*
 - vi. *Calculating a volume for all Irrigation rights without a designated volume by multiplying the number of acres by 2.69 AF/AC per Department water use standards for a moderate consumptive use climatic area.*
 - vii. *Assuming that the flow rate of each existing right is continuously diverted throughout each month of the period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of existing uses from the source. The Department finds this an appropriate measure of assessing existing rights as it protects existing water users.*
3. *Since the gage used is upstream of the point of diversion, the Department subtracted the flow rates and volumes of the existing rights between USGS Gage #06185500 and the point of diversion (Table 2, column D and E) from the median of the mean monthly gage values (Table 2, column B and C) to determine physical availability (CFS and AF) at the point of diversion (Table 2, column F and G).*



Table 2. Physical Availability at the proposed Point of Diversion on the Missouri River

A	B	C	D	E	F	G
Month	Median of the Mean Monthly Flow at Gage #06185500 (CFS)	Median of the Mean Monthly Volume at Gage #06185500 (AF)	Existing Water Rights from Gage #06185500 to POD (CFS)	Existing Water Rights from Gage #06185500 to POD (AF)	Physically Available Water at POD (CFS)	Physically Available Water at POD (AF)
January	11,209.03	688,010.38	67.09	459.05	11,141.94	687,551.33
February	11,339.66	628,670.47	67.09	459.05	11,272.56	628,211.42
March	9,987.90	613,057.49	68.76	465.72	9,919.14	612,591.77
April	7,999.67	475,180.22	396.22	3,695.98	7,603.44	471,484.24
May	8,655.81	531,293.37	472.39	6,190.04	8,183.41	525,103.33
June	9,546.67	567,072.02	472.39	5,633.38	9,074.27	561,438.64
November	7,259.00	431,184.60	137.15	902.76	7,121.85	430,281.84
December	9,869.35	605,780.98	67.09	459.05	9,802.26	605,321.93

Table 3. Existing Water Rights between the USGS Gage #06185500 and the Point of Diversion

Water Right Number	Flow Rate (CFS)	Volume (AF)	Period of Diversion	Water Right Type
40S 77646 00	0.68	365	01/01 to 12/31	WATER RESERVATION
40S 188165 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 13498 00	2.23	324	05/01 to 10/01	PROVISIONAL PERMIT
40S 97742 00	2.67	542.7	05/01 to 09/30	PROVISIONAL PERMIT
40S 30142629	0.08	0.34	01/01 to 12/31	STATEMENT OF CLAIM
40S 186739 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 186742 00	2.9	544	04/15 to 10/19	STATEMENT OF CLAIM
40S 30142666	0.08	0.1	01/01 to 12/31	STATEMENT OF CLAIM
40S 106915 00	3.9	520	4/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 30071102	0.02	1.25	04/01 to 10/31	PROVISIONAL PERMIT
40S 106914 00	5.1	804	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 188166 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 137580 00	0.08	0.54	01/01 to 12/31	STATEMENT OF CLAIM
40S 30123529	0.1	13.6	01/01 to 12/31	STATEMENT OF CLAIM
40S 188167 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 30142623	0.08	0.1	01/01 to 12/31	STATEMENT OF CLAIM
40S 30142624	0.08	0.54	01/01 to 12/31	STATEMENT OF CLAIM
40S 114654 00	2.7	451	04/01 to 10/15	CONSERVATION DISTRICT RECORD



40S 106990 00	4.2	636	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 74618 00	2.23	540	04/01 to 9/15	PROVISIONAL PERMIT
40S 186744 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 137593 00	0.08	1.29	01/01 to 12/31	STATEMENT OF CLAIM
40S 30142622	0.08	2.45	01/01 to 12/31	STATEMENT OF CLAIM
40S 186743 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 30113093	4.2	243	01/01 to 12/31	PROVISIONAL PERMIT
40S 137594 00	0.08	1.9	01/01 to 12/31	STATEMENT OF CLAIM
40S 137592 00	0.08	0.88	01/01 to 12/31	STATEMENT OF CLAIM
40S 30153305	1.5	210	01/01 to 12/31	PROVISIONAL PERMIT
40S 30161904	6.68	600	01/01 to 12/31	PROVISIONAL PERMIT
40S 137576 00	0.08	1.29	01/01 to 12/31	STATEMENT OF CLAIM
40S 186738 00	0.14	43.06	01/01 to 12/31	STATEMENT OF CLAIM
40S 171255 00	15.6	1827.36	04/15 to 10/19	STATEMENT OF CLAIM
40S 30142668	0.08	0.07	01/01 to 12/31	STATEMENT OF CLAIM
40S 12708 00	8.02	1388	04/15 to 11/15	PROVISIONAL PERMIT
40S 135792 00	0.09	7.89	01/01 to 12/31	STATEMENT OF CLAIM
40S 215560 00	1.44	102.22	04/01 to 11/04	STATEMENT OF CLAIM
40S 30172430	0	124.45	04/01 to 10/19	CONSERVATION DISTRICT RECORD
40S 30132248	0.68	17	01/01 to 12/31	STATEMENT OF CLAIM
40S 188168 00	0.13	37.96	01/01 to 12/31	STATEMENT OF CLAIM
40S 135791 00	0.09	10.34	01/01 to 12/31	STATEMENT OF CLAIM
40S 99060 00	2.23	309.7	05/01 to 09/30	PROVISIONAL PERMIT
40S 172261 00	41.1	1296	04/01 to 11/30	STATEMENT OF CLAIM
40S 66293 00	8.91	408	04/20 to 10/01	PROVISIONAL PERMIT
40S 66294 00	8.91	165	04/20 to 10/01	PROVISIONAL PERMIT
40S 7775 00	6.68	1500	04/15 to 10/15	PROVISIONAL PERMIT
40S 114723 00	2.2	340	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30072269	4.01	396.4	04/15 to 10/15	PROVISIONAL PERMIT
40S 17852 00	8.91	200	05/01 to 10/01	PROVISIONAL PERMIT
40S 109530 00	21.4	282	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 111449 00	10.00	408	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 172341 00	0.13	34	01/01 to 12/31	STATEMENT OF CLAIM
40S 106912 00	5.60	150	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 4010 00	13.37	1440	05/01 to 10/01	PROVISIONAL PERMIT
40S 30164987	8.9	755	01/01 to 12/31	TEMPORARY PERMIT
40S 109529 00	10.67	-	04/01 to 10/15	PROVISIONAL PERMIT



40S 7832 00	4.46	2125	04/01 to 10/15	PROVISIONAL PERMIT
40S 41349 00	9	491.4	05/01 to 09/19	STATEMENT OF CLAIM
40S 30063074	4.5	140	01/01 to 12/31	PROVISIONAL PERMIT
40S 30142625	0.08	0.204	01/01 to 12/31	STATEMENT OF CLAIM
40S 30142667	0.08	0.204	01/01 to 12/31	STATEMENT OF CLAIM
40S 30004263	3	330	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30043999	8.91	159.6	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30030363	20.05	498.15	04/15 to 10/19	STATEMENT OF CLAIM
40S 135793 00	0.1	13.6	01/01 to 12/31	STATEMENT OF CLAIM
40S 135782 00	0.8	0.27	01/01 to 12/31	STATEMENT OF CLAIM
40S 135783 00	0.08	0.48	01/01 to 12/31	STATEMENT OF CLAIM
40S 135784 00	0.08	0.54	01/01 to 12/31	STATEMENT OF CLAIM
40S 130566 00	10.53	675.54	04/01 to 10/31	STATEMENT OF CLAIM
40S 30031187	2.67	168.7	04/15 to 10/15	PROVISIONAL PERMIT
40S 7826 00	5.56	380	04/15 to 10/15	PROVISIONAL PERMIT
40S 74095 00	8.91	130	04/01 to 10/31	PROVISIONAL PERMIT
40S 84851 00	21.83	1451	04/01 to 11/01	PROVISIONAL PERMIT
40S 3227 00	20.05	1693	04/01 to 10/31	STATEMENT OF CLAIM
40S 30142615	0.08	0.48	01/01 to 12/31	STATEMENT OF CLAIM
40S 77506 00	11.14	416	04/01 to 10/01	PROVISIONAL PERMIT
40S 30142670	0.08	0.48	01/01 to 12/31	STATEMENT OF CLAIM
40S 30069082	1.55	60	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 9852 00	1.67	60	01/01 to 12/31	PROVISIONAL PERMIT
40S 187284 00	0.01	3	01/01 to 12/31	STATEMENT OF CLAIM
40S 30164889	12	860.17	01/01 to 12/31	PROVISIONAL PERMIT
40S 30010979	6.7	536	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30015443	0.33	20	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 30048277	4.5	522.1	01/01 to 12/31	PROVISIONAL PERMIT
40S 30003106	0	24	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 130516 00	1.67	60	03/01 to 11/30	STATEMENT OF CLAIM
40S 11818 00	1.67	184	04/15 to 10/15	PROVISIONAL PERMIT
40S 187283 00	0.08	2.04	01/01 to 12/31	STATEMENT OF CLAIM
40S 103653 00	1.30	147	04/01 to 10/15	CONSERVATION DISTRICT RECORD
40S 130567 00	11.14	172	01/01 to 12/31	STATEMENT OF CLAIM
40S 171828 00	1.78	285	04/01 to 10/31	STATEMENT OF CLAIM
40S 111301 00	5.1	302	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 135790 00	0.08	0.88	01/01 to 12/31	STATEMENT OF CLAIM



40S 114722 00	3.4	203	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 19231 00	25.06	3340	05/01 to 06/30	PROVISIONAL PERMIT
40S 5477 00	10.03	600	05/01 to 08/31	STATEMENT OF CLAIM
40S 12810 00	13.37	540	03/01 to 11/01	PROVISIONAL PERMIT
40S 137598 00	0.09	7.75	01/01 to 12/31	STATEMENT OF CLAIM
40S 30 00	25.06	3340	07/01 to 09/30	PROVISIONAL PERMIT
40S 142799 00	0.89	225	01/01 to 12/31	STATEMENT OF CLAIM
40S 171290 00	4.46	170.1	04/15 to 11/04	STATEMENT OF CLAIM
40S 30152855	5.71	925	01/01 to 12/31	TEMPORARY PERMIT
40S 46536 00	2.5	267.3	04/01 to 10/31	STATEMENT OF CLAIM
40S 104510 00	2.6	145	04/15 to 10/15	CONSERVATION DISTRICT RECORD
40S 30142626	0.08	0.31	01/01 to 12/31	STATEMENT OF CLAIM
40S 5479 00	2.67	50	05/01 to 08/31	STATEMENT OF CLAIM

Table Key	Irrigation - Volume via Climatic Area
	Irrigation - Volume as Claimed
	Livestock Direct from Source
	Flow Rate Only
	Assigned Period of Diversion

3.0 Area of Potential Impact Analysis

The Area of Potential Impact for this application is: *The Area of Potential Impact is approximately 0.8 mi downstream of the proposed point of diversion. A total of 5 surface water rights exist within the reach. A list of rights can be found in **Appendix A: Tables 4, 5, 6, 7, and 8.***

Why this is an appropriate Area of Potential Impact: *The area of potential impact is located from the proposed point of diversion (Lot 1, SWNESE, Section 14, T26N, R59E, Roosevelt County) to the Montana/North Dakota State Border (Section 24, T26N, R59E, Richland County), where the Missouri River flows East, leaving Montana.*

Methodology: *A list of water rights that divert from the Missouri River at a point of diversion in Lot 1, SWNESE, Section 14, T26N, R59E, Roosevelt County, to 0.8 miles downstream was compiled using the DNRC GIS web application Water Mapper and DNRC Water Rights Query System. Water rights could include all active Statements of Claim, Provisional Permits, Conservation District Reservations, Instream Flow Reservations, Federally Reserved Water Rights, and Hydropower Water Rights.*

One Provisional Permit exists in the reach. (Table. 4)



The Montana Fish, Wildlife & Parks Instream Flow Right, 40S 30017671, exists within the reach. The proposed period of diversion and use is January through December. (Table. 5)

The Fort Peck Tribal Reserved Claim (Fort Peck-Montana Compact, MCA §85-20-201, Article III, F.1) exists year-round within the reach. Water is diverted from April through October. The flow rate was calculated by dividing the monthly volume in AF by the number of days in the month by 1.98 AF/day. (Table. 6)

Richland County Conservation District (40S 8450000) and Roosevelt County Conservation District (40S 8450100) are Water Reservations granted by the Lower Missouri River Basin Final Order of the Board of Natural Resources and Conservation, dated December 30, 1994, that exist in the reach. The full granted flow rate and volume are available and diverted from April through October. (Table. 7)

In addition, a list of Conservation District Records for Richland County Conservation District (40S 8450000) and Roosevelt County Conservation District (40S 8450100), that exist above the proposed point of diversion, was compiled. The Department assumes that the records are diverted from April to October. (Table. 8)



Review

This document has been reviewed by the Department's Water Resources Division Havre Regional Manager, Matt Miles, on June 12, 2026.

References

Department Standard Practice for Determining Physical Availability of Surface Water

Department Standard Practice for Area of Potential Impact Analysis

U.S Army Corps of Engineers, Northwestern Division. (2018, November). *Missouri River Mainstem Reservoir System master water control manual: Missouri River Basin.*



Appendix A: Water Rights within the Area of Potential Impact



Table 4. Area of Potential Impact: Statements of Claim, Provisional Permits, Temporary Permits

Water Right Number	Flow Rate (CFS)	Volume (AF)	Type of Right	Period of Diversion
40S 4213 00	8.91	176	Provisional Permit	5/1 to 9/30

Table 5. Area of Potential Impact: Montana Fish, Wildlife & Parks Instream Flow Right

Water Right Number	Flow Rate (CFS)	Volume (AF)	Type of Right	Period of Diversion
40S 30017671	5,178	3,748,500	Water Reservation	01/01 to 12/31

Table 6. Area of Potential Impact: Fort Peck-Montana Compact, MCA §85-20-201, Article III F.1

Month	Fort Peck Tribal Right (CFS)*	Fort Peck Tribal Right (AF)
January	652	40,000
February	722	40,000
March	652	40,000
April	842	50,000
May	1711	105,000
June	2441	145,000
July	3503	215,000
August	2933	180,000
September	1768	105,000
October	815	50,000
November	673	40,000
December	652	40,000

* Flow Rate in CFS is calculated by dividing the monthly volume in AF by the number of days in the month by 1.98 AF/day.



Table 7. Area of Potential Impact: Conservation District Water Reservations Full Reservation Granted per Month for Water Reservation 40S 8450000 and 40S 8450100.

Month	Richland County (40S 8450000) Flow Rate (CFS)	Richland County (40S 8450000) Volume (AF)*	Roosevelt County (40S 8450100) Flow Rate (CFS)	Roosevelt County (40S 8450100) Volume (AF)*
January	-	-	-	-
February	-	-	-	-
March	-	-	-	-
April	186.9	3,621	558.8	10,445
May	186.9	3,621	558.8	10,445
June	186.9	3,621	558.8	10,445
July	186.9	3,621	558.8	10,445
August	186.9	3,621	558.8	10,445
September	186.9	3,621	558.8	10,445
October	186.9	3,621	558.8	10,445
November	-	-	-	-
December	-	-	-	-

* Monthly volume was calculated by dividing the annual volume by the number of months in accordance with the reservation granted to each Conservation District outlined in the *Lower Missouri River Basin Final Order of the Board of Natural Resources and Conservation*, dated December 30, 1994.

Table 8. Conservation District Records above the Proposed Point of Diversion

Richland County (40S 8450000)			Roosevelt County (40S 8450100)		
Record Number	Flow Rate (CFS)	Volume (AF)	Record Number	Flow Rate (CFS)	Volume (AF)
40S 30006748	1.6	125.95	40S 111430 00	4.9	676.5
40S 111449 00	10	408	40S 30043999	8.91	159.6
40S 30027588	3.9	272.8	40S 30015443	0.33	20
40S 30043641	0.5	60	40S 30003106	0	24
40S 30062765	1.52	182	40S 106983 00	6.91	1,114
40S 30150186	0.78	69	40S 109530 00	21.4	282
40S 30159245	2.23	220	40S 111429 00	4.9	628.1
40S 30005493	6	768	40S 103653 00	1.3	147
40S 104421 00	4	590	40S 101092 00	3.6	636
40S 114723 00	2.2	340	40S 30044041	1.78	176.9
40S 116904 00	6.7	68	40S 102771 00	9	1,420
40S 30164956	8.7	590.25	40S 30006005	2.67	240



Richland County (40S 8450000)			Roosevelt County (40S 8450100)		
Record Number	Flow Rate (CFS)	Volume (AF)	Record Number	Flow Rate (CFS)	Volume (AF)
40S 101055 00	3.6	560	40S 30004263	3.01	330
40S 111301 00	5.1	302	40S 30010979	6.7	536
40S 106990 00	4.2	636	40S 106984 00	2.93	284
40S 30072073	1.73	224	40S 103671 00	2.5	360
40S 30172430	0	124.45	40S 30002059	4.9	569
40S 30164483	0	82.6	40S 106914 00	5.1	804
40S 101074 00	5.8	927	40S 30069082	1.56	60
40S 114741 00	6.55	312.5	40S 30004260	6	421.25
40S 30063091	1.45	92	40S 106915 00	3.9	520
40S 30165160	1.8	294	40S 30148181	5.3	35.75
40S 114654 00	2.7	451			
40S 30001844	2.6	364			
40S 114722 00	3.4	203			
40S 30024907	2.2	272			
40S 30104412	1.1	161			
40S 30041682	6	802			
40S 30165163	2.7	368			
40S 104484 00	2.7	264			
40S 104510 00	2.6	145			
40S 30012791	6	413.6			
40S 30027595	4.1	283.6			
40S 30025552	2.8	228			
40S 106912 00	5.6	150			

Preapplication Materials

- Preapplication Meeting Request
- Preapplication Meeting Form
- All attachments
- All correspondence prior to application receipt

Preapplication Materials

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

DIRECTOR'S OFFICE: (406) 444-2074
PO BOX 201601



1539 ELEVENTH AVENUE
HELENA, MONTANA 59620-1601

GOVERNOR GREG GIANFORTE

DNRC DIRECTOR AMANDA KASTER

June 12, 2026

WILLISTON WATER MANAGEMENT LLC
1675 BROADWAY
SUITE 1600
DENVER, CO 80202-4675

Subject: Complete Preapplication Form for Beneficial Water Use Permit Preapplication No. 40S 30175554

Dear Applicant,

The Havre Regional Office of the Department of Natural Resources and Conservation (DNRC or Department) received your Preapplication Meeting Form and preapplication meeting fee on June 12, 2026, and the Department deemed the submitted Preapplication Meeting Form to be successfully completed per ARM 36.12.1302 on June 12, 2026.

As designated on the submitted Preapplication Meeting Form per § 85-2-302(3)(b), MCA, the Department will produce the technical analyses based on the parameters included in the Preapplication Meeting Form (ARM 36.12.1302(4)) within 45 days of June 12, 2026.

Please let me know if you have any questions.

Best,



Kailee Ingalls | Water Resource Specialist
Water Resources Division, Havre Regional Office
Montana Department of Natural Resources and Conservation
Physical | 210 6th Ave | Havre MT 59501
Mailing | PO Box 1828 | Havre MT 59501
DESK: 406-808-7126 **EMAIL:** kailee.ingalls@mt.gov

CC: Eric Sundberg
Williston Water Management, LLC.
Slawson Companies, Inc.
<esundberg@slawsoncompanies.com>
1675 Broadway Suite 1600
Denver, Colorado 80202-4675





Application # 30175554 Basin 40S
Form Received 6/12/26
Fee Rec'd \$ 500 Check # _____
Deposit Receipt # HVS2630608
Payor _____
Form Returned _____
Refund \$ _____ Date _____

\$ 500

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)).

The following guidelines are applicable to both the "Follow-up Responses" and "Amended Responses" documents. Clearly label all question numbers. Answer questions in the same format as Form 600P-A. For responses in the form of checkboxes, write "Y", "N", or "S". Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses and tables. Tables must have the exact headings found on the form. Questions that require items to be submitted to the Department may be marked "S" when the required item is included with the document.

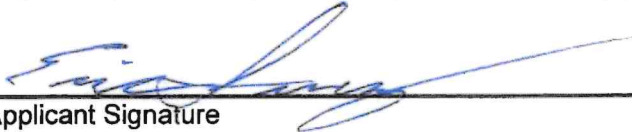
- a. Date form was returned ("Form Returned" date found in "For Department Use Only" box on the previously submitted Form 600P-B): _____
- b. If a "Follow-up Responses" or "Amended Responses" document is required by questions 2 or 3, submit complete updated documents with responses that stand-alone. The Department will only use the most recently submitted "Follow-up Responses" and "Amended Responses" documents for departmental technical analyses or scientific credibility review; the Department will not use multiple versions of a document.

- a. ☐ **S** Submit "Follow-up Responses" document for all questions requiring follow-up.



FOLLOW-UP AND AMENDED RESPONSES AFFIDAVIT & CERTIFICATION

"I attest that this preapplication meeting form (Form 600P-A and Form 600P-B), follow-up, and amended responses accurately portray the proposed project. 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 change any element of the proposed application from the preapplication meeting form, amended responses, or follow-up materials (ARM 36.12.1302(6)(a))."

 6-12-26
Applicant Signature Date

Applicant Signature Date

"We confirm that the preapplication form (Form 600P-A and Form 600P-B), amended responses, and follow-up information are adequate for the Department to proceed with technical analyses in ARM 36.12.1303. Or, if the Applicant has elected to complete technical analyses, we confirm they have submitted each required element of technical analysis based on the proposed project and the Department is able to proceed with the scientific credibility review (ARM 36.12.1303(8))."

Matt Miles

Digitally signed by Matt Miles
Date: 2026.06.12 10:47:35
-06'00'

Department Signature Date

Department Signature Date





**PREAPPLICATION MEETING
FORM: PART A
PERMIT**

§ 85-2-302, MCA
Form No. 600P-A (Revised 10/2025)

For Department Use Only

Application # 30175554 Basin # 40S
Meeting Date 6/12/26 Time 9AM
Variance Request Deadline N/A
Completed Form Deadline _____

PREAPPLICATION MEETING FEE

\$ 500

FILING FEE REDUCTION & EXPEDITED TIMELINE

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)).

The Department will fill out Permit Preapplication Meeting Form Part A (Form 600P-A) and will identify items for follow-up during the preapplication meeting. The Department and Applicant will sign the Preapplication Meeting Affidavit and Certification within 10 business days. Within 180 days of the preapplication meeting, the Applicant will complete Preapplication Meeting Form Part B (Form 600P-B), including identified follow-up, any amended responses, and Follow-up and Amended Responses Affidavit & Certification. Variance requests must be submitted on Form 653 to the Department on or before the Variance Request Deadline, which is day 138 of the 180 day-deadline for a completed preapplication meeting form. Form 653 may be submitted earlier than the Variance Request Deadline. The Department has 30 business days to process the Form 653.

Applicant Information: Add more as necessary.

Applicant Name Williston Water Management, LLC
Mailing Address 1675 Broadway, Suite 1600 City Denver State CO Zip 80202-467
Phone Numbers: Home 720-420-6975 Work _____ Cell _____
Email Address esundberg@slawson.com

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 (describe) V.P Slawson Co.
Contact/Representative Name Eric Sundberg
Mailing Address 1675 Broadway, Suite 1600 City Denver State _____ Zip 80202-46
Phone Numbers: Home 720-420-6975 Work _____ Cell 303-396-2494
Email Address esundberg@slawson.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 applicant will receive all correspondences, and a copy may be sent to the contact person (ARM 36.12.122(3)).

Meeting Attendees: Add more as necessary.

Name	Role	Name	Role
Eric Sundberg	Williston Water Management		
Kailee Ingalls	DNRC Water Resource Specialist HRO		
Matt Miles	DNRC HRO Manager		
Mark McKinlay	WWM Field Sup.		



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APPLICATION DETAILS

The following questions are mandatory and must be filled out before the Preapplication Meeting Form is determined to be complete. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, mark the see attachment ("A") checkbox 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 the see attachment ("A") checkbox must be marked. Label units in narrative responses and tables. Questions that require Applicant to submit items to the Department have a submitted ("S") checkbox, which is marked when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. For all questions where follow-up is necessary, mark the "F" checkbox in the "Follow-Up" column and write the question number on the "Follow-Up Page".

S = Submitted. Use when required item is included with form.

A = See attachment. Use when additional space is needed to answer a question.

F = Follow-up. Use when follow-up is necessary.

Questions, Narrative Responses, and Tables	Check-boxes	Follow-up
1. Do you elect to have DNRC conduct Technical Analyses?	☒ Y ☐ N	☐ F
2. Provide a map created on an aerial photograph or topographic map that shows the following: section corners, township and range, scale bar, north arrow, all proposed points of diversion labeled with a unique POD ID number (include GWIC ID, if available, for wells), all proposed places of use, all proposed conveyance structures (including ditches and pipelines), all proposed places of storage, and places of use for all overlapping water rights. More than one map may be submitted, if necessary to clearly convey all required information.	☒ S	☐ F
3. Is the project located in a Controlled Groundwater Area or Basin Closure Area? If yes, immediately go to Mandatory Project-Specific questions 54 to 56 because Form 600 may be the incorrect form, or this project may not meet the requirements for the Department to accept a Form 600.	☐ Y ☒ N	☐ F
4. Is the proposed use temporary?	☒ Y ☐ N	☐ F
a. If yes, when will the appropriation cease? <u>December 31, 2030</u>	☐ A	☐ F



5. Describe the proposed purpose information, including period of diversion (MM/DD-MM/DD), period of use (MM/DD-MM/DD), flow rate (GPM or CFS) and volume (AF).	☐ A	☐ F
--	----------------------------	----------------------------

Purpose	Period of Diversion	Period of Use	Flow Rate			Volume
	(MM/DD-MM/DD)	(MM/DD-MM/DD)	Flow Rate	GPM	CFS	(AF)
Industrial	11/1 - 6/30	11/1 - 6/30	3,000	☒	☐	670
				☐	☐	
				☐	☐	
				☐	☐	
				☐	☐	
Total			3,000	☒	☐	670

6. Does the proposed use include one or more of the following purposes: domestic, multiple domestic, stock, or irrigation? If yes, fill out the following table, where applicable.	☐ Y ☒ N	☐ F
---	--	----------------------------

Purpose	Requested Information	Response
Domestic or multiple domestic	Number of households and bedrooms served per household	
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)	
Irrigation (flood only)	Design slope	

7. Describe the proposed location of the point(s) diversion to the nearest 10 acres, if source is groundwater (GW) or surface water (SW), source name, and means of diversion (e.g., pump, headgate, well). Label each POD with the POD # used for the project map (question 2).	☐ A	☐ F
---	----------------------------	----------------------------

POD #	¼	¼	¼	Sec	Twp	Rge	County	Lot	Block	Tract	Subdivision	Gov Lot	SW or GW	Source Name	Means
1	SW	NE	SE	14	26N	59E	ROOSEVE	1					SW	MISSOURI RIV	PUMP



8. What are the geocodes of the place of use?		☐ A	☐ F
17-3810-02-2-02-01-0000 (BLM)			

9. Describe the legal land description for the proposed place of use and, if an irrigation or lawn and garden purpose, list the number of irrigated acres.									☐ A	☐ F
Acres	Gov't Lot	Block	1/4	1/4	1/4	Sec	Twp	Rge	County	
	4			NW	NW	2	26N	59E	ROOSEVELT	
Total										

10. Will other water rights supplement or overlap the place of use to contribute to the purpose(s)?		☐ Y ☒ N	☐ F
a. If yes, summarize how the water rights will be operated as a whole to serve the purpose(s).		☐ A	☐ F



11. For each supplemental or overlapping water right, please list the water right number, purpose, typical period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed.	☐ A	☐ F
---	----------------------------	----------------------------

Water Right No.	Avg. Period of Diversion	Avg. Period of Use	Flow Rate			Volume Contributed
	<i>MM/DD-MM/DD</i>	<i>MM/DD-MM/DD</i>	<i>Flow Rate</i>	<i>GPM</i>	<i>CFS</i>	<i>AF</i>
				☒	☐	
				☐	☐	
				☐	☐	
				☐	☐	
				☐	☐	

12. Will this application supplement contract water from a Federal Project, ditch company, or other source?	☐ Y ☒ N	☐ F
a. If yes, explain. 	☐ A	☐ F
13. Does the project involve one or more places of storage? 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)). If yes, answer the following questions once for each place of storage. Use an "Additional Place of Storage (600P)" sheet if more than one. Additionally, you may choose to answer non-mandatory questions 76 to 80 for place of storage.	☐ Y ☒ N	☐ F
a. Is this application to enlarge an existing reservoir? If yes, list the water right numbers for the existing reservoir.	☐ Y ☐ N	☐ F
b. Is the place of storage located on-stream?	☐ Y ☐ N	☐ F
c. What is the capacity of the proposed place of storage or the existing place of storage after it is enlarged? Use bathymetry data, survey, or engineering plans for capacity. Submit the data source used with this form. In lieu of these data sources, use the following equation: $Surface\ Acres \times Maximum\ Depth\ (FT) \times 0.5 = Capacity\ (AF)$	☐ A	☐ F



d. What is the surface area of the place of storage? _____	☐ A	☐ F
14. Will your system be designed to discharge water from the project?	☐ Y ☒ N	☐ F
a. If yes, explain the wastewater disposal method. A discharge permit may be required to comply with §§ 75-5-410 and 85-2-364, MCA. _____ _____ _____	☐ A	☐ F
15. Does the project involve an appropriation that is greater than 5.5 CFS and 4,000 AF? If yes, you must submit a Criteria Addendum Application for Beneficial Water Use Permit for Appropriations Greater than 5.5 CFS and 4,000 AF (Form 600-B) with application submittal. The criteria are found in §85-2-311(3), MCA.	☐ Y ☒ N	☐ F
16. Will you be transporting water for use outside of Montana? If yes, you must submit an Out-of-State Use Addendum (Form 600/606-OSA) with the application. The out-of-state use criteria are outlined in §85-2-402(6), MCA.	☐ Y ☒ N	☐ F
17. Does the project include the water marketing purpose? If yes, you may choose to answer non-mandatory questions 81 to 85 for water marketing. A Water Marketing Purpose Addendum (Form 600/606-WMA) will be required with application submittal.	☐ Y ☒ N	☐ F
18. Are you proposing a point of diversion and/or place of use on State of Montana Trust Land? If yes, documentation of consent from the DNRC Trust Lands Management Division will be required at application submittal.	☐ Y ☒ N	☐ F
19. Is the project located in designated sage grouse habitat? If yes, a review letter from the Montana Sage Grouse Habitat Conservation Program will be required at application submittal.	☐ Y ☒ N	☐ F



SURFACE WATER

☒ **Applicable**, move on to question 20. ☐ **Not Applicable**, skip to question 30.

The following questions are mandatory for surface water permit applications and must be filled out before the Preapplication Meeting Form is determined to be complete.

Surface Water Analysis

Questions, Narrative Responses, and Tables						Check-boxes	Follow-up
20. What is the flow rate (GPM or CFS), volume (AF), period of diversion start date and end date (MM/DD-MM/DD), and source type (e.g., perennial, ephemeral) at each point of diversion? Use the same POD # as the project map (question 2) to label each point of diversion.						☐ A	☐ F
POD #	Flow Rate			Volume	Period Start	Period End	
	Flow Rate	GPM	CFS	AF	MM/DD	MM/DD	
1	3,000	☒	☐	670	11/01	6/30	
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				
21. Is the source type of the diversion perennial or intermittent, ephemeral, lake, or other? PERENNIAL						☐ A	☐ F
Perennial or intermittent	Answer questions 22 to 25	Ephemeral	Answer question 26	Lake	Answer question 27	Other	Answer questions 28 to 29

Surface Water Analysis: Perennial or Intermittent

☒ **Applicable** ☐ **Not Applicable**

22. Are stream gage data available?	☒ Y ☐ N	☐ F
a. If yes, answer question 23.		
b. If no, answer question 24.		



23. Stream gage data are available.			
a. Is one stream gage located above the most upstream POD and one stream gage located below the most upstream POD?		☒ Y ☐ N	☐ F
i. If no, is only one stream gage located near the most upstream POD?		☒ Y ☐ N	☐ F
1. If yes, is the stream gage located upstream or downstream? UPSTREAM			☐ F
b. List the gage name(s). Write "N/A" for Gage 2 if one gage is available. Gage 1: <u>USGS 06185500 Missouri River near Culbertson, MT.</u> Gage 2: <u>N/A</u>			☐ F
c. What is the distance between the gage(s) and the most upstream POD? Write "N/A" for Gage 2 if one gage is available. Gage 1: <u>29.3 MI</u> Gage 2: <u>N/A</u>			☐ F
d. Is there a limiting or controlling factor on the source between the stream gage(s) and the most upstream POD? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, the Regional Office may provide assistance.		☐ Y ☒ N	☐ F
i. If yes, explain. _____ _____ _____		☐ A	☐ F
e. How long is the period of record? Write "N/A" for Gage 2 if one gage is available. Gage 1: <u>April 1958 to October 2024; 1941 to 1951 data removed, due to skewed data.</u> Gage 2: <u>N/A</u>			☐ F
f. Who operates and maintains the gage(s)? Write "N/A" for Gage 2 if one gage is available. Gage 1: <u>USGS</u> Gage 2: <u>N/A</u>			☐ F



g. Is each available stream gage operated and maintained by USGS or DNRC?	☒ Y ☐ N	☐ F
i. If yes, skip to question 23.h.		
ii. If no, answer the following questions for each gage not operated and maintained by USGS or DNRC.		
1. How frequently are stage data recorded? Write "N/A" for Gage 2 if only one gage is not operated or maintained by USGS. Gage 1: _____ Gage 2: _____		☐ F
2. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?		
a. Gage 1. _____	☐ Y ☐ N	☐ F
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N	☐ F
3. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?		
a. Gage 1. _____	☐ Y ☐ N	☐ F
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N	☐ F
4. Were requirements established and followed for maintaining a permanent gage datum and meeting specified accuracy limits?		
a. Gage 1. _____	☐ Y ☐ N	☐ F
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N	☐ F

h. Do the data for one or more available stream gages meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☒ Y ☐ N	☐ F
i. If yes, record how many meet the standard, then skip to question 54 because this section is complete. <u>FULL DATA RECORD, USED MANY TIMES IN PREVIOUS RECENT APPS</u>		☐ F
ii. If no, answer question 24.		
24. If no gage data are available or if available gage data do not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion, is the source otherwise measured?	☐ Y ☐ N	☐ F
a. If no, measurements may be necessary. The Department cannot deem the preapplication meeting form adequately completed until the Department receives gage data and/or measurements that meet the requirements of ARM 36.12.1702 or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria. Skip to question 25.		
b. If yes,		
i. Submit available measurements to the Department.	☐ S	☐ F
ii. Who collected the measurements? _____	☐ A	☐ F
iii. With what method were the data collected? _____ _____	☐ A	☐ F
iv. What is the period of record? _____		☐ F
v. What is the frequency of measurement? _____		☐ F
vi. Are there gaps in the data?	☐ Y ☐ N	☐ F



1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? 	☐ A	☐ F
vii. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
1. If yes, explain. 	☐ A	☐ F
viii. Do available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N	☐ F
1. If yes, this section is complete. Skip to question 54.		
2. If no, answer question 25.		
25. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a Department-accepted estimation technique?	☐ Y ☐ N	☐ F
a. If yes,		
i. Describe how the measurements are representative of high, moderate, and low flows. 	☐ A	☐ F
ii. Describe the estimation technique. 	☐ A	☐ F
b. If no, but a Department-accepted estimation technique will be appropriate for the source:		



i. Will measurements be collected prior to submission of Form 600P-B that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?	☐ Y ☐ N	☐ F
1. If yes,		
a. With what method will the data be collected? _____ _____	☐ A	☐ F
b. What will be the interval of measurement? _____		☐ F
c. Describe the proposed estimation technique. _____ _____ _____ _____ _____	☐ A	☐ F
2. If no, do you plan on requesting a variance from measurement requirements pursuant to ARM 36.12.1702(1)(b)? If you plan to request a variance, you must submit Form 653 on or before the Variance Request Deadline. The Department cannot deem the preapplication meeting form adequately completed until the Department receives measurements that meet the requirements of ARM 36.12.1702(1)(b) or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N	☐ F
c. If no, because no Department-accepted estimation technique will be appropriate for the source:		
i. Describe why no Department-accepted estimation technique is appropriate for the source characteristics. _____ _____ _____	☐ A	☐ F
ii. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard for monthly measurements throughout the proposed period of diversion pursuant to ARM 36.12.1702(4)?	☐ Y ☐ N	☐ F



1. If no, will measurements be collected prior to submission of a completed Form 600P that meet the Department's standard of monthly measurements throughout the proposed period of diversion?	☐ Y ☐ N	☐ F
a. If yes, with what method will the data be collected? _____ _____	☐ A	☐ F
b. If no, do you plan on requesting a variance from measurement requirements pursuant to ARM 36.12.1702(4)? If you plan to request a variance, you must submit Form 653 on or before the Variance Request Deadline. The Department cannot deem the preapplication meeting form adequately completed until the Department receives measurements that meet the requirements of ARM 36.12.1702(4) or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N	☐ F

Surface Water Analysis: Ephemeral

☐ Applicable ☒ Not Applicable

26. Did you elect for the Department to conduct the Technical Analyses?	☐ Y ☐ N	☐ F
a. If yes, do you have climate or drainage area data you would like the Department to consider during Technical Analyses?	☐ Y ☐ N	☐ F
i. If yes, submit this information to the Department.	☐ S	☐ F
b. If no,		
i. Describe the estimation technique you propose to use to estimate physical availability at the point of diversion. _____ _____ _____	☐ A	☐ F
ii. What is the net annual precipitation? Include the source of this information. _____ _____	☐ A	☐ F



iii. What is the drainage area upstream of the point of diversion and how was this figure calculated? _____ _____ _____	☐ A	☐ F
--	----------------------------	----------------------------

Surface Water Analysis: Lakes

☐ Applicable ☒ Not Applicable

27. Has the lake volume been quantified by a qualified entity based on bathymetric data?	☐ Y ☐ N	☐ F
a. If yes, provide this information to DNRC.	☐ S	☐ F
b. If no, answer the following questions,		
i. When do you plan to collect this information? _____		☐ F
ii. What data collection method will you use? _____ _____	☐ A	☐ F

Surface Water Analysis: Other

☐ Applicable ☒ Not Applicable

28. Explain why the source type is "other". _____ _____	☐ A	☐ F
29. Have you measured the source?	☐ Y ☐ N	☐ F
a. If yes, answer the following questions,		
i. With what method was the measurement data collected? _____ _____	☐ A	☐ F



ii. What is the measurement interval? _____		☐ F
1. Does the interval meet the Department's standard for monthly measurements throughout the proposed period of diversion pursuant to ARM 36.12.1702(4)?	☐ Y ☐ N	☐ F
a. If no, do you plan on requesting a variance from measurement requirements pursuant to ARM 36.12.1702(4)? If you plan to request a variance, you must submit Form 653 on or before the Variance Request Deadline.	☐ Y ☐ N	☐ F
b. If no,		
i. When do you plan to measure? _____		☐ F
ii. What data collection method will be used? _____ _____ _____	☐ A	☐ F
iii. Do you plan on requesting a variance from measurement requirements pursuant to ARM 36.12.1702(4)? If you plan to request a variance, you must submit Form 653 on or before the Variance Request Deadline. The Department cannot deem the preapplication meeting form adequately completed until the Department receives measurements that meet the requirements of ARM 36.12.1702(4) or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N	☐ F

Area of Potential Impact Analysis

No additional information needed for Technical Analyses.



GROUNDWATER

☐ **Applicable**, move on to question 30. ☒ **Not Applicable**, skip to question 54.

The following questions are mandatory for groundwater permit applications and must be filled out before the Preapplication Meeting Form is determined to be complete.

Groundwater Analysis for Permits

Questions, Narrative Responses, and Tables					Check-boxes	Follow-up
30. What is the type of groundwater diversion? _____					☐ A	☐ F
Well/Pumping Pit	Answer questions 31 to 35	Developed Spring	Answer question 36	Pond	Answer questions 37 to 39	

Groundwater Analysis for Permits: Well/Pumping Pit

☐ Applicable ☐ Not Applicable

31. Per ARM 36.12.121 a 24- or 72-hour aquifer test is required; do you propose not to conduct the test? An 8-hour test will be required, if no aquifer test is completed.					☐ Y ☐ N	☐ F
a. If yes, explain. The Department will let you know if the request is reasonable and identify additional data needs. _____ _____ _____ _____ _____					☐ A	☐ F



32. Submit Aquifer Test Data Form (Form 633). If a variance is requested, Form 633 must be submitted on or before the Variance Request Deadline. If no variance is requested, Form 633 is due by the time the preapplication meeting form is complete but may be submitted earlier. However, if the Department determines a variance is needed and the Variance Request Deadline has passed, to submit the Form 653 you must reschedule the preapplication meeting or submit the application without expedited fees and timelines (ARM 36.12.1302(6)).	☐ S	☐ F
33. Submit the Aquifer Testing Addendum (Form 600/606-ATA) and associated materials (e.g., well logs). If you request a variance, Form 600/606-ATA must be submitted on or before the Variance Request Deadline. If no variance is requested, Form 600/606-ATA is due by the time the preapplication meeting form is complete but may be submitted earlier. However, if the Department determines a variance is needed and the Variance Request Deadline has passed, to submit the Form 653 you must reschedule the preapplication meeting or submit the application without expedited fees and timelines (ARM 36.12.1302(6)).	☐ S	☐ F
34. Are you requesting a variance from ARM 36.12.121? If you are unsure if a variance request will be needed, mark follow-up and answer this question once Form 600/606-ATA and Form 633 are complete. A variance must be requested by the Variance Request Deadline.	☐ Y ☐ N	☐ F
a. If yes, submit Form 653, Form 600/606-ATA, and Form 633 together on or before the Variance Request Deadline.	☐ S	☐ F
b. If no, you may choose to submit Form 600/606-ATA and Form 633 before the Variance Request Deadline, and the Department will review these two forms. However, if the Department determines a variance is needed after the Variance Request Deadline, to submit the Form 653 you must reschedule the preapplication meeting or submit the application without expedited fees and timelines (ARM 36.12.1302(6)).		
35. Have all proposed wells/pumping pits been constructed?	☐ Y ☐ N	☐ F
a. If no, answer the following questions:		
i. Submit a list of the POD IDs for all wells/pumping pits and mark whether they have or have not been constructed.	☐ S	☐ F
ii. When will all proposed wells/pumping pits be constructed? _____		☐ F
iii. Is the requested volume for each proposed well/pumping pit known?	☐ Y ☐ N	☐ F
1. If yes, list the flow rate and volume requested for each proposed well/pumping pit. Label with POD ID. _____ _____ _____	☐ A	☐ F



2. If no, what is the total requested volume (AF) and the number of proposed PODs? _____		☐ F
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Groundwater Analysis for Permits: Developed Spring

☐ Applicable ☐ Not Applicable

36. Have you measured the source?	☐ Y ☐ N	☐ F
a. If yes, submit the measurements and answer the following questions,	☐ S	☐ F
i. Do you have flow rate (GPM or CFS) and volume measurements?	☐ Y ☐ N	☐ F
ii. With what method were measurements collected? _____ _____	☐ A	☐ F
iii. What is the interval of measurements? _____		☐ F
iv. Is the interval of measurements sufficient to comply with ARM 36.12.1703(1)?	☐ Y ☐ N	☐ F
b. If no, or if measurements do not comply with ARM 36.12.1703(1), answer the following questions. The Department cannot deem the preapplication meeting form adequately completed until the Department receives measurements that meet the requirements of ARM 36.12.1703(1). Variances from ARM 36.12.1703(1) are not allowed.		
i. When do you plan to measure? _____		☐ F
ii. With what method and at what interval will measurements be collected? _____ _____	☐ A	☐ F



Groundwater Analysis for Permits: Pond

☐ Applicable ☐ Not Applicable

37. Submit Form 653 to apply for a variance from ARM 36.12.121 for the Aquifer Test on or before the Variance Request Deadline.	☐ S	☐ F
38. Submit pond bathymetry data, survey, or engineering plans to the Department.	☐ S	☐ F
39. Is the pond fed or drained by surface water?	☐ Y ☐ N	☐ F
a. If yes,		
i. Explain.	☐ A	☐ F

ii. Submit measurements of the connected surface water source. These may include inflow and outflow measurements.	☐ S	☐ F

Surface Water Depletion Analysis

40. Is the type of groundwater diversion for your proposed project a developed spring? If yes, skip to question 45 because this section is complete. If no, move onto question 41.	☐ Y ☐ N	☐ F
41. Is the type of groundwater diversion for your proposed project a pond? If yes, answer question 41.a, then skip to question 45 because this section is complete. If no, move onto question 42.	☐ Y ☐ N	☐ F
a. Will any of the ponds have diversions for out-of-pond use that differ from, if year-round use, an allocation of diverted volume by the number of days in the month, or, if irrigation/lawn and garden use, the 80% dry year net irrigation requirement (IWR, NRCS 2003)?	☐ Y ☐ N	☐ F
i. If yes, provide a schedule of the diversions for out-of-pond use in the table below. Use the same POD # as the project map (question 2). Attach any additional schedules with POD # labeled.	☐ A	☐ F

POD #			
Month	Diversions for Out-of-Pond Use Volume (AF)	Month	Diversions for Out-of-Pond Use Volume (AF)
January		July	
February		August	
March		September	
April		October	
May		November	
June		December	



42. What is the flow rate (GPM or CFS), volume (AF), and period of diversion required (MM/DD-MM/DD) at each well/pumping pit? What is the well/pumping pit depth (FT), if available, or estimated well/pumping pit depth (FT). Please use the same POD # as the project map (question 2) to match this information with the location information.	☐ A	☐ F
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POD #	Flow Rate			Volume	Period of Diversion	Depth	Measured or Estimated
	Flow Rate	GPM	CFS	AF	MM/DD-MM/DD	FT	
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				

43. Will any of the <i>new</i> wells/pumping pits have a monthly pumping schedule that differs from, if year-round use, an allocation of diverted volume by the number of days in the month, or, if irrigation/lawn and garden use, the 80% dry year net irrigation requirement (IWR, NRCS 2003)?	☐ Y ☐ N	☐ F
a. If yes, provide the alternative pumping schedule(s) in the table below. Use the same POD # as the project map (question 2). Attach any additional pumping schedules with POD # labeled.	☐ A	☐ F

POD #				POD #			
Month	Volume (AF)	Month	Volume (AF)	Month	Volume (AF)	Month	Volume (AF)
January		July		January		July	
February		August		February		August	
March		September		March		September	
April		October		April		October	
May		November		May		November	
June		December		June		December	



44. Will one or more <i>existing</i> wells/pumping pits be used for the proposed project?				☐ Y ☐ N		☐ F	
a. If yes, will any of the <i>existing</i> wells/pumping pits have a monthly pumping schedule, before or after the proposed project, that differs from an allocation of diverted volume by the number of days in the month (if year-round use) or the 80% dry year net irrigation requirement (if irrigation/lawn and garden use) (IWR, NRCS 2003)?				☐ Y ☐ N		☐ F	
i. If yes, provide the pumping schedules before and after the proposed project in the table below. Use the same POD # as the project map (question 2). Attach any additional pumping schedules with POD # and before/after proposed project labeled.				☐ A		☐ F	
Before proposed project: POD #				After proposed project: POD #			
Month	Volume (AF)	Month	Volume (AF)	Month	Volume (AF)	Month	Volume (AF)
January		July		January		July	
February		August		February		August	
March		September		March		September	
April		October		April		October	
May		November		May		November	
June		December		June		December	

Surface Water Analysis of Depleted Surface Water

45. Based on the preliminary net depletion data provided by the Department at this preapplication meeting, what are the hydraulically connected surface water source(s)? <i>*Net depletion data provided by the Department at the preapplication meeting is preliminary and is subject to change during Technical Analyses. If the source or location of net depletion data changes during Technical Analyses, then surface water analysis of depleted surface water source(s) will reflect the Technical Analyses; this will not constitute a change of any element to the proposed application pursuant to ARM 36.12.1302(6)(a).</i> If the type of groundwater diversion for your proposed project is a developed spring, write "NA" and skip to question 51 because this section is complete.		☐ A	☐ F
46. Answer the questions in this section one time for each hydraulically connected source. Use the "Additional Hydraulically Connected Source (600P)" sheet, as necessary. For which hydraulically connected source are you answering questions 47 to 50? _____			☐ F
47. Are stream gage data available?		☐ Y ☐ N	☐ F
a. If yes, answer question 48.			
b. If no, answer question 49.			



48. Stream gage data are available			
a. Is one stream gage located above and one stream gage located below the start of the depleted reach?		☐ Y ☐ N	☐ F
i. If no, is only one stream gage located near the start of the depleted reach?		☐ Y ☐ N	☐ F
1. If yes, is the stream gage upstream or downstream? _____			☐ F
b. List the gage name(s). Write "N/A" for Gage 2 if one gage available. Gage 1: _____ Gage 2: _____			☐ F
c. What is the distance between the gage(s) and the start of the depleted reach? Write "N/A" for Gage 2 if one gage available. Gage 1: _____ Gage 2: _____			☐ F
d. Is there a limiting or controlling factor on the source between the stream gage(s) and the start of the depleted reach? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, the Regional Office may provide assistance.		☐ Y ☐ N	☐ F
i. If yes, explain. _____ _____ _____		☐ A	☐ F
e. How long is the period of record? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____			☐ F
f. Who operates and maintains the gage(s)? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____			☐ F
g. Is each available stream gage operated and maintained by USGS or DNRC?		☐ Y ☐ N	☐ F
i. If yes, skip to question 48.h.			
ii. If no, answer the following questions for each gage not operated and maintained by USGS or DNRC.			



1. How frequently is stage data recorded? Write "N/A" for Gage 2 if only one gage is not operated or maintained by USGS. Gage 1: _____ Gage 2: _____		☐ F
2. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N	☐ F
a. Gage 1. _____	☐ Y ☐ N	☐ F
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N	☐ F
3. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?	☐ Y ☐ N	☐ F
a. Gage 1. _____	☐ Y ☐ N	☐ F
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N	☐ F
4. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
a. Gage 1. _____	☐ Y ☐ N	☐ F
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N	☐ F
h. Do the data for one or more available stream gages meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions?	☐ Y ☐ N	☐ F
i. If yes, record how many meet the standard, then skip to question 54 because this section is complete. _____		
ii. If no, answer question 49.		
49. If no gage data are available or if available gage data do not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions, is the source otherwise measured?	☐ Y ☐ N	☐ F



a. If no, measurements may be necessary. The Department cannot deem the preapplication meeting form adequately completed until the Department receives gage data and/or measurements that meet the Department's measurement standards or, in combination with an approved request to deviate from the Department's standards, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria. Skip to question 50.		
b. If yes,		
i. Submit measurements to the Department.	☐ S	☐ F
ii. Who collected the measurements? _____	☐ A	☐ F
iii. With what method was the data collected? _____ _____	☐ A	☐ F
iv. What is the period of record? _____		☐ F
v. What is the frequency of measurement? _____		☐ F
vi. Are there gaps in the data?	☐ Y ☐ N	☐ F
1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____ _____	☐ A	☐ F
vii. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
1. If yes, explain. _____ _____ _____	☐ A	☐ F
viii. Do available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions?	☐ Y ☐ N	☐ F
1. If yes, this section is complete. Skip to question 54.		
2. If no, answer question 50.		



50. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?	☐ Y ☐ N	☐ F
a. If yes,		
i. Describe how the measurements are representative of high, moderate, and low flows. _____ _____ _____ _____	☐ A	☐ F
ii. Describe the estimation technique. _____ _____ _____ _____ _____	☐ A	☐ F
b. If no, but a Department-accepted estimation technique will be appropriate for the hydraulically connected surface water source:		
i. Will measurements be collected prior to submission of a completed Form 600P-B that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?	☐ Y ☐ N	☐ F
1. If yes,		
a. With what method will the data be collected? _____ _____	☐ A	☐ F
b. What will be the interval of measurement? _____		☐ F



c. Describe the proposed estimation technique. _____ _____ _____ _____	☐ A	☐ F
2. If no, do you plan on requesting to deviate from the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique? The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet Department measurement standards, or in combination with a request to deviate, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N	☐ F
c. If no, because no Department-accepted estimation technique will be appropriate for the hydraulically connected surface water source:		
i. Describe why no Department-accepted estimation technique is appropriate for the source characteristics. _____ _____ _____	☐ A	☐ F
ii. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard for monthly measurements throughout the months with net depletions?	☐ Y ☐ N	☐ F
1. If no, will measurements be collected prior to submission of a completed Form 600P that meet the Department's standard of monthly measurements throughout the months with net depletions?	☐ Y ☐ N	☐ F
a. If yes, with what method will the data be collected? _____ _____	☐ A	☐ F



b. If no, do you plan on requesting to deviate from the Department's standard for monthly measurements throughout the months with net depletions? The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet Department measurement standards, or in combination with a request to deviate, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N	☐ F
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Area of Potential Impact Analysis of Depleted Surface Water

All information for area of potential impact of depleted surface water was collected in previous questions.

Hydrogeologic Report

51. Does your project include one or more wells, pumping pits, or ponds that are in a basin closure area? If yes, fill out questions 52 to 53. Your project must have a Hydrogeologic Report that conforms with § 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.	☐ Y ☐ N	☐ F
52. Did you elect in question 1 for the Department to conduct the Technical Analyses?	☐ Y ☐ N	☐ F
a. If yes, the Basin Closure Area Addendum (Form 600-BCA), Form 600-HRA, and Hydrogeologic Report are not required at this time. The Department's Technical Analyses will meet requirements of §85-2-360, MCA for a Hydrogeologic Report and Form 600-HRA. Form 600-BCA will be required with application submittal.		
b. If no, submit the Basin Closure Area Addendum (Form 600-BCA) and Hydrogeologic Report Addendum (600-HRA) with your Technical Analyses.	☐ S	☐ F
53. If the Hydrogeologic Report indicates that the proposed groundwater use will impact a surface water source, identify and explain which of the following three options best describes your plan to mitigate depletions of hydraulically connected surface water and respond to the relevant questions below. ☐ Application to Change a Water Right to mitigate the adverse effects created ☐ Alternative mitigation plan ☐ Documentation to show a mitigation plan is not required		
a. Application to Change a Water Right to mitigate the adverse effects created: Submit a summary of your initial proposal. <i>A separate Preapplication Meeting will be required for each Application to Change a Water right to a mitigation or aquifer recharge purpose to qualify for expedited timelines and reduced filing fees for the project per ARM 36.12.1302(7)(a).</i>	☐ S	☐ F
b. Alternative mitigation plan: Submit a summary of your initial proposal.	☐ S	☐ F



i. Do you propose to use water with a marketing for mitigation/aquifer recharge purpose?	☐ Y ☐ N	☐ F
1. If yes,		
a. List the change authorization number(s) for all water rights proposed for use. _____	☐ A	☐ F
b. What is the area defined for marketing for all water rights proposed for use? _____	☐ A	☐ F
c. If Marketing for aquifer recharge, submit the analysis of the monthly accretions to hydraulically connected surface water(s); otherwise write "NA". _____	☐ S	☐ F
c. Documentation to show a mitigation plan is not required: Submit all documentation.	☐ S	☐ F



MANDATORY PROJECT-SPECIFIC QUESTIONS

The following questions are mandatory when applicable and must be filled out before the Preapplication Meeting Form is determined to be complete.

Project-Specific Questions: Controlled Groundwater Areas and Basin Closures

Questions, Narrative Responses, and Tables	Check-boxes	Follow-up
54. Does the project include one or more groundwater points of diversion located in the East Valley Controlled Groundwater Area (EVCGWA)?	☐ Y ☒ N	☐ F
a. If yes, is the use over 35 GPM or 10 AF/YR?	☐ Y ☐ N	☐ F
i. If no, this is the incorrect form. Use instead Form 600-EVCGWA: East Valley Controlled Groundwater Area Permit Application.		
ii. If yes, how does this project meet the specific requirements of the East Valley Controlled Groundwater Area? Include any relevant documentation. 	☐ A	☐ F
b. If no, skip to question 55.		
55. Does the project include one or more groundwater points of diversion located in the Yellowstone Controlled Groundwater Area?	☐ Y ☒ N	☐ F
a. If yes, is the proposed flow rate and volume over 35 GPM or 10 AF/YR?	☐ Y ☐ N	☐ F
i. If no, this is the incorrect form. Use instead Form 600-YCGA: Yellowstone Controlled Groundwater Area Permit Application.		
ii. If yes, answer the remaining parts of question 55 and submit <i>Form 600 YCGA: A Yellowstone Controlled Groundwater Area Addendum Over 35 gallons per minute</i> with the application.		
1. Does the proposed use require a point of diversion with water temperature of 60 degrees Fahrenheit or more?	☐ Y ☐ N	☐ F
2. If an application is in a basin tributary to a category 3 or 4 stream (generally in or upstream of Yellowstone National Park), submit with the application a report prepared by a qualified professional verifying that the appropriation is not hydrologically connected to surface flow that is tributary to the reserved portion of category 3 or 4 streams.		
b. If no, skip to question 56.		



56. Is the project for surface water or groundwater and subject to one or more of the Controlled Groundwater Areas; administrative, Department ordered, or legislative basin closures; or compact closures listed on the Department's website (https://dnrc.mt.gov/Water-Resources/Water-Rights/Basin-Closures-Stream-Depletion-Controlled-Ground-Water-Areas) not covered in questions 54 to 55?	☐ Y ☒ N	☐ F
a. If yes, identify each area and describe how the proposed project meets its requirements. An application must meet the specific requirements of the Controlled Groundwater Area or closure to be accepted by the Department.	☐ A	☐ F



NON-MANDATORY QUESTIONS FOR CRITERIA ANALYSIS

The following questions are not mandatory. They should be discussed in the Preapplication Meeting, but do not need to be filled out before the Preapplication Meeting Form is determined to be complete.

Adverse Effect

Questions, Narrative Responses, and Tables	Check-boxes
57. Describe your plan to ensure that existing water rights will be satisfied during times of water shortage. 	☒ A
58. Explain how you can control your diversion in response to call being made. 	☒ A
59. Are you aware of any calls that have been made on the source of supply or depleted surface water source? a. If yes, explain.	☐ Y ☒ N ☐ A
60. Does a water commissioner distribute water or oversee water distribution on your proposed source or depleted surface water source?	☐ Y ☒ N



61. Will the point of diversion or conveyance infrastructure be shared with one or more existing water rights?	☐ Y ☒ N
a. If yes, explain how capacity of the shared point of diversion and/or conveyance infrastructure is sufficient for all water rights. 	☐ A

Adequate Diversion Means and Operation

62. Submit a diagram of how you will operate your system from the point of diversion to the place of use.	☒ S
63. Describe specific information about the capacity of the diversionary structure(s). This may include, where applicable: pump curves and total dynamic head calculations, headgate design specifications, and dike or dam height and length. 	☒ A



64. Describe the size, materials, capacity, and configuration of infrastructure to convey water from point of diversion to place 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. You may work with the Department to estimate ditch conveyance losses but will need to provide sufficient baseline information; which includes ditch slope, dimensions, length, lining material, soil type, and location.	☐ A
65. 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.	☐ A
66. 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.	☐ A



67. Does the proposed conveyance require easements?	☒ Y ☐ N
a. If yes, explain. 	☒ A
68. Do you own the land where all proposed points of diversion are located?	☐ Y ☒ N
a. If no, documentation to show you have the right to use all points of diversion located on each property you do not own will be required upon application submittal. 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.	
69. Describe any places of storage, including whether drainage devices will be installed, and provide preliminary designs, if available. Preliminary designs will be required at application submittal. N/A 	☐ A
70. Do you have any plans to measure your diversion and use?	☒ Y ☐ N
a. If yes, describe the plan and the type of measurements you will take. 	☒ A

Beneficial Use

71. Does the Department have a standard for any of the purposes for which water is used? Department standards can be found in ARM 36.12.112 and ARM 36.12.115.	☐ Y ☒ N
a. If yes, list the purposes for which the Department has a standard and note whether the proposed use falls within or outside the standard. 	



72. If no Departmental standard exists for any proposed purpose, or if any proposed purpose falls outside of Department standards, explain how the use is reasonable for that purpose Volume ↓ 5199996 = 670.2445907 Oil barrel ↓ Acre-foot ↓ Formula: for an approximate result, divide the volume value by 7758	☒ A
73. Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?	☐ Y ☒ N
a. If yes,	
i. Have you researched or consulted with DEQ regarding those requirements?	☐ Y ☐ N
74. Are you proposing to use surface water for in-house domestic use?	☐ Y ☒ N
a. If yes, does a COSA exist for the proposed place of use?	☐ Y ☐ N
i. If yes, please submit the COSA.	☐ S
ii. If no, have you researched or consulted with DEQ regarding their requirements?	☐ Y ☐ N

Possessory Interest

75. 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.	☐ Y ☒ N
a. If yes, explain.	☐ A



b. If no,	
i. Do you own all proposed places of use?	☐ Y ☒ N
1. If no,	
a. Explain. Documentation that shows you either have possessory interest or written permission of the parties with possessory interest of the place of use will be required at application submittal. _____ _____ _____ _____	☒ A
b. 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.	☐ Y ☒ N
i. If no, explain. _____ _____ _____	☒ A

Non-Mandatory Project Specific Questions

Place of Storage

76. Does the proposal include at least one place of storage? If yes, answer questions 77 to 80 for each individual place of storage (use "Additional Place of Storage (600P)" sheet for additional places of storage). A Permit Storage Addendum (Form 600-SA) will be required at application submittal. If no, this section is complete, and you can skip to question 81.	☐ Y ☒ N
77. Are preliminary designs available? Preliminary designs will be required at application submittal.	☐ S
a. If yes, submit preliminary designs.	☐ Y ☐ N
78. Will the place of storage be lined?	☐ Y ☐ N
79. What is the annual net evaporation of water from the place of storage, based on the Department's gridded net evaporation layer? If you propose a different method, attach an explanation and justification of the method. _____	☐ A



80. Is the place of storage capacity calculated to be greater than 50 AF?	☐ Y ☐ N
a. If yes, have you made an application to the DNRC Water Operations Bureau for a determination of whether the dam or reservoir is a high-hazard dam? This will be required by application submittal.	☐ Y ☐ N

Project-Specific Questions: Water Marketing

81. Does the proposal include water marketing? If yes, please answer the questions in this section (questions 82 to 85). A Water Marketing Addendum Purpose Addendum (600/606-WMA) will be required at application submittal. If no, this section is complete.	☐ Y ☒ N
82. For what purpose(s) will the marketed water be used? _____ _____ _____	☐ A
83. How will you control or limit access to the water? _____ _____ _____	☐ A
84. Do you have contracts for the entire volume and flow rate sought?	☐ Y ☐ N
85. Provide a service area map. Create map on an aerial photograph or topographic map and show the following: general service area boundary, section corners, township and range, scale bar, and north arrow.	☐ S



The tables below will identify all questions marked for follow-up. Applicant follow-up will be submitted with the completed Preapplication Meeting Form: Part B (Form 600P-B). Applicant will provide all responses to questions marked for follow-up on a separate Predocument entitled "Follow-up Responses." At the preapplication meeting, the Department may offer to provide the Applicant with information pertinent to identified follow-up. In this case, record in the notes column what information the Department will provide and the date by which the Department will email this information to the Applicant. This information will supplement but not replace Applicant follow-up. It is the responsibility of the Applicant to provide all follow-up, including questions supplemented by Department information, in the "Follow-up Responses" document.

The “Follow-up Responses” document must conform to the following standards. Label all responses with the question number. Answer questions in the same format as the form. For responses in the form of checkboxes, write “Y”, “N”, “S”. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses and tables. Tables must have the exact headings found on the form. Questions that require items to be submitted to the Department may be marked “S” when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted.

The Applicant may not alter the Preapplication Meeting Form: Part A (Form 600P-A) signed at the Preapplication Meeting. Instead, the Applicant must use the Amended Responses procedure defined in Form 600P-B. Do not include additional information for questions that were not marked for follow-up on this table; instead include any additional information pursuant to the process for amending responses defined in Form 600P-B.

[illegible]

PREAPPLICATION MEETING AFFIDAVIT & CERTIFICATION

"We attest that the information on this form accurately describes the proposed project discussed during the preapplication meeting, and that the items marked for follow-up will require the Applicant to provide additional information before the form is deemed complete."

"Applicant acknowledges that any information provided by the Department during the preapplication meeting is preliminary and subject to change."

"Applicant acknowledges that if the follow-up information provided to the Department substantially changes the proposed project, for example in a way that alters which sections of the form are applicable or which technical analyses are required, or who is to complete the technical analyses, the applicant will need to schedule a new preapplication meeting so that the Department can identify any additional information necessary for completion of the technical analyses (ARM 36.12.1302(3)(c))."

Upon Department receipt of the completed form (within 180 days following the meeting), the Department reserves five business days to return the form to the applicant if:

- 1 – the completed form does not include all necessary follow-up information identified in the meeting, OR
- 2 – the completed form is not adequate for the Department to proceed with technical analyses, OR
- 3 – the applicant has elected to complete technical analyses and has not submitted each piece of technical analysis required, OR
- 4 – the applicant has substantially changed the details of the proposed project, such as in a way that alters which sections of the form are applicable, which technical analyses are required, or who is to complete the technical analyses.

If the Department returns the form to the Applicant within these five days due to reasons 1-3 above, the Applicant can use the balance of their 180-day period in ARM 36.12.1302(4) or (5) to gather the remaining follow-up information needed. If there is no time remaining in the 180-day period, the Applicant can submit a written request for a new preapplication meeting, pursuant to ARM 36.12.1302(2). Even if there is still time remaining, the Applicant can choose to schedule a new preapplication meeting. The Department shall transfer the \$500 payment received to the new preapplication meeting or refund the payment to the Applicant if the Applicant desires. If the Department returns the form to the Applicant within these five days due to reason (4) above, the Applicant must submit a written request for a new preapplication meeting, pursuant to ARM 36.12.1302(2). The Department shall transfer the \$500 payment received to the new preapplication meeting or refund the payment to the Applicant if the Applicant desires.


Applicant Signature

6-12-26

Date

Applicant Signature

Date

Matt Miles

Digitally signed by Matt Miles
Date: 2026.06.12 10:50:21 -06'00'

Department Signature

Date



FORM 600P-A

PREAPPLICATION MEETING AFFIDAVIT & CERTIFICATION

Adverse Effect

F600 Question 26

F600P-A Question 58

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

Answer: Upon receiving a call from a Sr. user, the pump at the point of diversion can be turned off. If a lower flow rate is needed, the pump rpm can be turned down, and valves can be pinched back if further slowing of the rate is desired. Diversion will be measured at the POD and at the POU by a 10" McCrometer Dura Mag in-line flow meter.

F600 Question 27

F600P-A Question 57

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

Answer: Upon receiving a call from a Sr. user, the pump at the point of diversion can be turned off. If a lower flow rate is needed, the pump rpm can be turned down, and valves can be pinched back if further slowing of the rate is desired. Diversion will be measured at the POD and at the POU by a 10" McCrometer Dura Mag in-line flow meter.

ADEQUATE MEANS OF DIVERSION AND OPERATION

F600 Question 33

F600P-A Question 63

Question: 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.

Answer: The water intake will be a floating pump operating at a rate of 3,000 GPM and transporting water through a 12" lay-flat hose to the delivery point, which is an oil and gas location.

Plan of Operation

1. Screened suction device floating in Missouri River
2. 10" Aluminum pipe from suction to pump

3. Pioneer 8x6 Super Pump
 4. Filter Pod Trailer
 5. Flowmeter
 6. Hot Oil Trailer (water heater)
 7. 12" Lay-flat pipeline
 8. Super 8x6 Booster Pump on Slawson Squadron Pad 216 location
1. The Applicant plans to divert water at a rate of 3,000 GPM up to 670 AF from the Missouri River, from a diversion point in Lot 1, SWNESE Section 14, T26N, R59E, Roosevelt County, using a portable diesel-powered Pioneer Prime centrifugal 8"x6" pump.
 2. Water will flow from the POD into a screened 10" aluminum pipe. The pump will discharge water into a filter pod trailer, which has a 10" McCrometer Dura Mag in-line flow meter capable of taking continuous measurements.
 3. The water is then discharged into the 12" lay-flat pipeline. The pipeline extends 1.3 mi to an existing Slawson Squadron Pad 216, where it enters a Pioneer Prime centrifugal 8"x6" Booster Pump. More inline pumps can be installed, if necessary, to maintain adequate pressure and volume.
 4. In freezing conditions, water will be discharged into a hot oiler before being diverted into the 12" lay-flat pipeline.
- See attached pump specs and elevation calculation for additional information.

F600 Question 34

F600P-A Question 64

Question: Describe the size, materials, capacity, and configuration of infrastructure to convey water from point of diversion to place 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.

Answer:

A 12" lay flat hose will be used to transport the water from the POD to the POU. See attachments for lay-flat pipeline route and pump locations.

Two Super 86 pumps; one at the river and one at an existing Slawson Squadron Pad 216 will be used to control the flow rate and line pressure. There should be no losses from the line unless there is a hole or tear in the lay-flat line. In this case, we immediately stop flow operations and repair leaks. A 12" lay flat hose will be used to transport the water from the POD point to the location (POU).

Plan of Operation

- The water is then discharged into the 12" lay-flat pipeline. The pipeline extends 1.3 mi to an existing Slawson Squadron Pad 216, where it enters a Pioneer Prime centrifugal 8"x6" Booster Pump. More inline pumps can be installed, if necessary, to maintain adequate pressure and volume.
- In freezing conditions, water will be discharged into a hot oiler before being diverted into the 12" lay-flat pipeline.
- Along the route, Williston Water Management and Slawson Exploration Company will secure easements where appropriate for any railway, county road, state highway, or private land crossings where the lay flat line will be laid.

See attachments for pump specs, elevation calculation, and lay flat pipe specs for additional information.

F600 Question 35

F600P-A Question 65

Question: 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.

Answer: A floating pump at the POD will control the flow and volume, and a McCrometer Dura Mag meter will track the flow and volumes for reporting.

Depending on elevation and overall transfer distance, additional in-line pumps may be necessary to transport water at the required rate.

An additional pump, if needed, will be another Super 86.

See the pump pressure calculation sheet and pump specs for more details.

F600 Question 36

F600P-A Question 66

Question: 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.

Answer: The 12" lay flat line will end at the beginning of the manifold at 35 AEI frac tanks, each having a 500 BBL capacity, and be open to 2 10" aluminum manifolds. The frac tanks are on site and used for water storage and distribution to the frac equipment. A 12" gate valve and a 10" McCrometer flow meter will be installed. Water treatment will be done by adding 3% Sodium

Hypochlorite at the beginning of the 10" manifold; all water on site is treated before going down hole. 12 oil wells to be developed on the pad (See plan of operation)

- Once the water reaches the place of use, in NWNWNW (Lot 4), Section 02, T26N, R59E, Roosevelt County, the 12" lay flat line will end at the beginning of the manifold at 35 AEI frac tanks, each having a 500 BBL capacity, and be opened to 2 10" aluminum manifolds. The frac tanks are onsite and used for water storage and distribution to the frac equipment. At that point, the Applicant will install a 12" gate valve and a 10" McCrometer flow meter.
- Water Treatment will be done by adding 3% Sodium Hypochlorite at the beginning of the 10" manifold, ensuring that all water onsite is treated before going downhole.
- A total of 12 oil wells is to be developed on the pad.

F600 Question 37

F600P-A Question 67

Question: Does the proposed conveyance require easements?

Answer: Williston Water Management, LLC will acquire a temporary easement for the placement of the lay-flat hose where appropriate. These will be obtained approximately 60 to 90 days before the in-service date.

F600 Question 40.a

F600P-A Question 70

Question: Do you have any plans to measure your diversion and use?

Answer: A McCrometer Dura Mag flow meter will be utilized at the POD and at the POU. Meter details are attached in the Appendix.

Beneficial Use

F600 Question 42.b

F600P-A Question 72

Question: If no Departmental standard exists for any proposed purpose, or if any proposed purpose falls outside of Department standards, explain how the use is reasonable for that purpose.

Answer: The well site has 12 planned horizontal Bakken laterals and will require approximately 433,333 BBL of water per lateral (well) for a project total of 5.2M BBL or 670 AF.

Possessory Interest

F600 Question 46.a

F600P-A Question 75.a

Question: Explain. Documentation that shows you either have possessory interest or written permission of the parties with possessory interest of the place of use will be required at application submittal.

Answer: The applicant has an easement with the landowner at the point of diversion. Slawson Companies, Inc., the parent company of Williston Water Management, LLC, has an active interest in the Bakken spacing units and an active federal mineral lease; the place of use is located.

F600 Question 46.b.i

F600P-A Question 75.b.

Question: 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. If no, explain.

Answer: It is not necessary for the water right to be appurtenant to the land, as it will be used for temporary industrial purposes during the completion of the wells. The place of use will no longer be able to use the point of diversion once the Williston Water Management, LLC, lay-flat hose system is removed, after the operator's hydraulic stimulation work has concluded.

Applicant: Williston Water Management, LLC

600 APPLICATION FOR BENEFICIAL WATER USE PERMIT Attachments

Plan of Operation

ADEQUATE MEANS OF DIVERSION AND OPERATION

1. Screened suction device floating in Missouri River
2. 10" Aluminum pipe from suction to pump
3. Pioneer 8x6 Super Pump
4. Filter Pod Trailer
5. Flowmeter
6. Hot Oil Trailer (water heater)
7. 12" Lay-flat pipeline
8. Super 8x6 Booster Pump on Slawson Squadron Pad 216 location
9. 35 AEI frac tanks onsite for water storage and distribution to frac equipment.

1. The Applicant plans to divert water at a rate of 3,000 GPM up to 670 AF from the Missouri River, from a diversion point in SWNESE Section 14, T26N, R59E, Roosevelt County, using a portable diesel-powered Pioneer Prime centrifugal 8"x6" pump.

2. Water will flow from the POD into a screened 10" aluminum pipe. The pump will discharge water into a filter pod trailer, which has a 10" McCrometer Dura Mag in-line flow meter capable of taking continuous measurements.

3. The water is then discharged into the 12" lay-flat pipeline. The pipeline extends 1.3 mi to an existing Slawson Squadron Pad 216, where it enters a Pioneer Prime centrifugal 8"x6" Booster Pump. More inline pumps can be installed, if necessary, to maintain adequate pressure and volume.

4. In freezing conditions, water will be discharged into a hot oiler before being diverted into the 12" lay-flat pipeline.

5. Along the route, Williston Water Management and Slawson Exploration Company will secure easements where appropriate for any railway, county road, state highway, or private land crossings where the lay flat line will be laid.

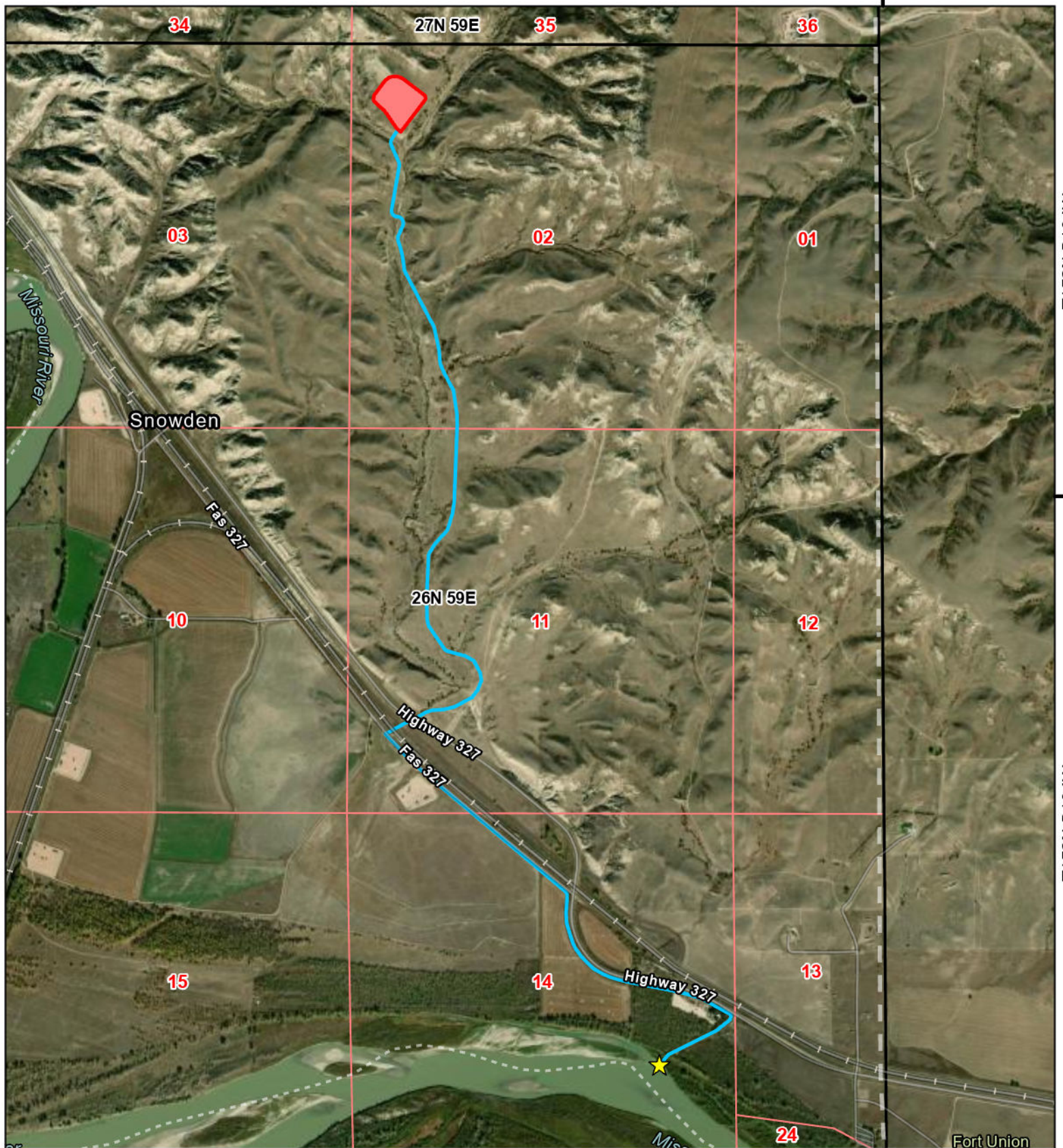
6. Once the water reaches the place of use, in NWNWNW (Lot 4), Section 02, T26N, R59E, Roosevelt County, the 12" lay flat line will end at the beginning of the manifold at 35 AEI frac tanks, each having a 500 BBL capacity, and be opened to 2 10" aluminum manifolds. The frac tanks are onsite and used for water storage and distribution to the frac equipment. At that point, the Applicant will install a 12" gate valve and a 10" McCrometer flow meter.

7. Water Treatment will be done by adding 3% Sodium Hypochlorite at the beginning of the 10" manifold, ensuring that all water onsite is treated before going downhole.

8. A total of 12 oil wells are to be developed on the pad.

ATTACHMENT:

PROJECT MAPS



Background: ESRI Imagery
Data Sources: MSL, Ulteig
Date: 1/27/2026
Created by: M. Phillips

SLAWSON 392 OUTPOST & BRIGADE FEDERAL

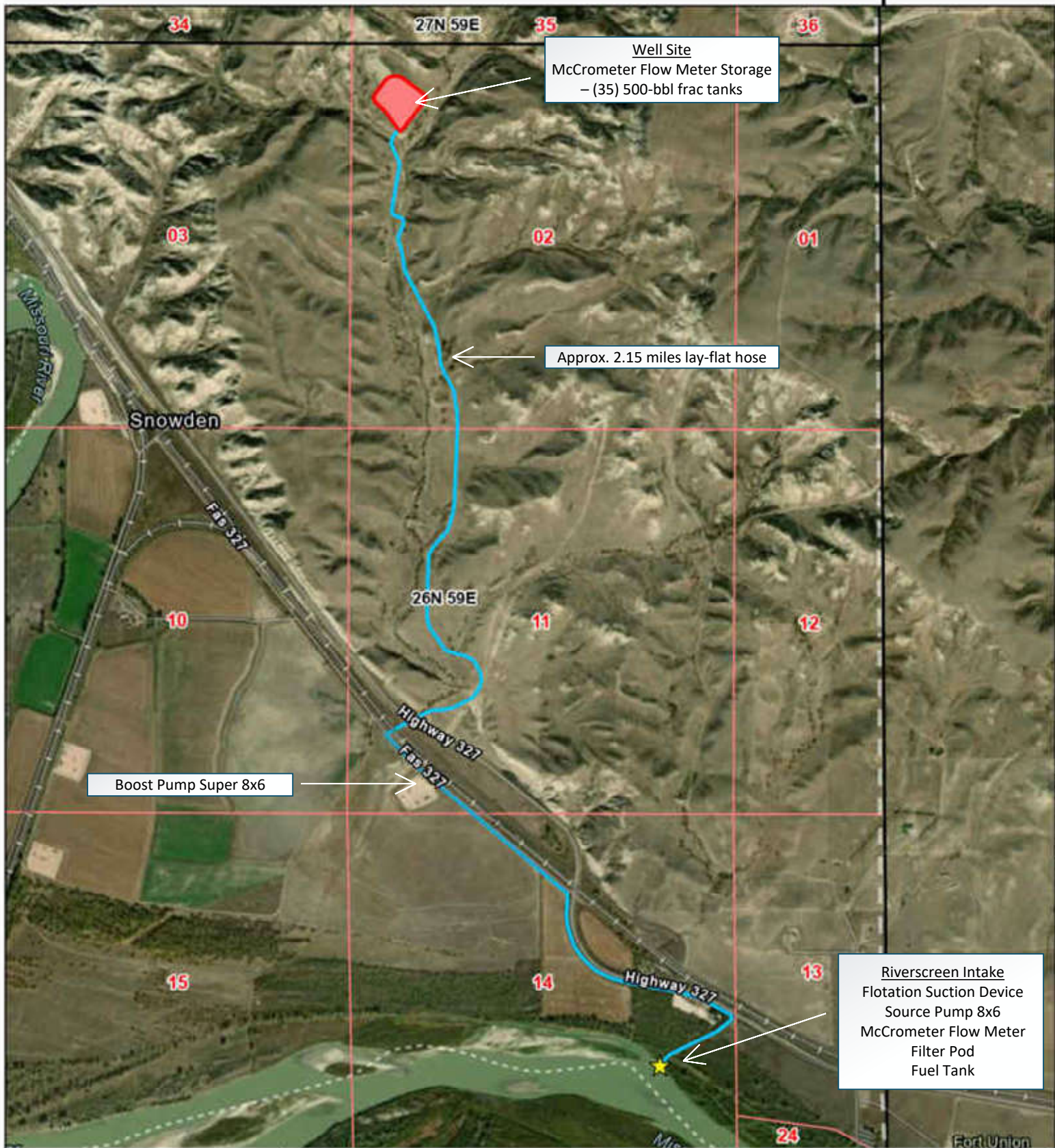
Water Supply

Roosevelt County, MT

0 0.23 0.45 0.9
Miles



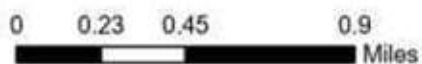
- Proposed Pad
- Proposed Layflat Route
- ★ WWM Intake Point



SLAWSON 392 OUTPOST & BRIGADE FEDERAL

Water Supply

Roosevelt County, MT



- Proposed Pad
- Proposed Layflat Route
- WWM Intake Point

Background: ESRI Imagery
Data Sources: MSL, Ulteig
Date: 1/27/2026
Created by: M. Phillips

ATTACHMENT:

POSSESSORY INTEREST

- *Temporary Easement for Point of Diversion and Pipeline with Exhibit A Map Attachment*
- DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Oil and Gas *COMPETITIVE PUBLIC
DOMAIN LEASE POST FOR PLACE OF USE*

TEMPORARY EASEMENT AGREEMENT

This Temporary Easement Agreement (“**Agreement**”) is between “**Surface Owner**” and “**Williston Water**” listed below. Surface Owner and Williston Water may be referred to individually as a “**Party**” and collectively as the “**Parties**.”

<u>Williston Water:</u> Williston Water Management, LLC 1675 Broadway, Suite 1600 Denver, Colorado 80202-4675 Name: Eric Sundberg Phone: 303 396-2494 Email: ESundberg@slawsoncompanies.com Kurt M. Petersen Phone: 303 919 0645 Email: kpetersen@slawsoncompanies.com	<u>Surface Owner:</u> Name: Dwight & Sheila Vannatta Address: 6740 Highway 327, Bainville, MT 59212-9611 Phone : 406 769-7156
--	--

1. Surface Owner owns the surface of the following lands (the “**Lands**”):

Parcel A, B, C & D, Plat 400A Document 402171 of
Section 14, Township 26 North, Range 59 East
Roosevelt County, Montana

2. **Temporary Easement.** For \$100, the consideration recited below and other good and valuable consideration, Surface Owner grants Williston Water a temporary easement (“**Easement**”) on and over the Lands to install, maintain, operate and remove temporary “lay flat” pipelines and pump on the surface of the Lands for the transportation of fresh water across the Lands (the “**Pipeline(s)**”). This grant includes the rights to install, maintain, operate and remove the Pipelines, and the right to conduct such other activities necessary for the Pipelines’ transportation of fresh water across the Lands. The Easement is 20 feet wide to allow for the Pipelines and Slawson’s activities associated with the Pipelines and includes the right of ingress and egress across the Lands to access the Pipelines.

3. **Term/Effective Date.** This Agreement is effective _____ (the “**Effective Date**.”). The Term of this Agreement is for 1 year and begins on the date Williston Water has finished installing the Pipelines. Williston Water may extend the term of this Agreement for up to 1 year in its sole discretion. Williston Water agrees to remove the Pipeline and Pump prior to the end of the Term.

4. **Location of the Easement.** The Easement shall be along the route as agreed to by the Parties and as set forth on Exhibit A.

5. **Payment to Surface Owner.** Williston Water agrees to pay _____ per foot for the Easement (3000 feet) for a total payment of _____ and _____ for the pump; such payment to be made within 10 business days of the execution of this Agreement.

6. **Slawson's Operations on the Lands.** Williston Water agrees to conduct all operations on the Lands in a good and workmanlike manner, in accordance with standard oil field practices, and all applicable federal, state and local laws, rules and regulations.

7. **Release.** Surface Owner acknowledges that the Pipeline will be located on the Lands for the Term, and accordingly, Surface Owner's use of the Lands in the Easement will be limited during the Term. Surface Owner releases and discharges Slawson, its agents, principals, partners, assigns, employees, contractors and subcontractors from any and all liability for ordinary damage and detriment, incident to or growing out of the granting of the Easement and the installation, maintenance, repair and removal of the Pipeline.

8. **Apportionment of Liabilities and Obligations.**

a. **Surface Owner.** Surface Owner agrees to retain and pay, perform, fulfill, discharge and release Williston Water from all losses, costs, expenses and obligations accruing, attributable to and relating to Surface Owner's activities in or on the Lands.

b. **Slawson.** Williston Water agrees to retain and pay, perform, fulfill, discharge and release Surface Owner from all losses, costs, expenses and obligations accruing, attributable to and relating to Slawson's activities in or on the Lands, to the extent such activities are not contemplated by this Agreement.

9. **Reclamation.** The Parties anticipate that the Pipeline will have no, or minimal impact on the surface of the Lands. If the Pipeline does impact the surface of the Lands, upon final removal of the Pipeline, Williston Water agrees to restore the impacted portion of the Easement to as near as practical to the original condition.

10. **Governing Law.** This Agreement shall be governed by Montana law.

11. **Electronic Signatures.** The Parties agree that signatures transmitted electronically in pdf or other electronic format are binding.

The Parties have executed this Agreement the dates set forth below.

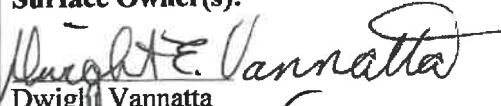
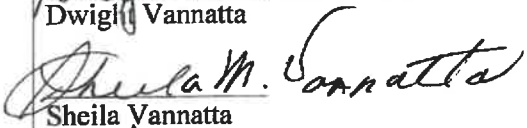
Surface Owner(s):  Dwight Vannatta  Sheila Vannatta Date: Feb 9, 2026	Slawson: Williston Water Management, LLC  Name: Eric Sundberg Title: VP Environmental & Regulatory Affairs Date: Feb 23, 2026
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EXHIBIT A
LOCATION OF THE EASEMENT AND PIPELINE

Layflat Route to Pad 392

Dwight & Sheila Vannatta



 Pump site

 Layflat Route

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION

Run Date/Time: 1/28/2026 11:07 AM
Single Serial Number Report

Serial Register Page
MTMT105543822

Page 1 of 2

Authority

01-12-1983; 096STAT2447; 30USC188; FED O&G ROYALTY
MGT ACT-1982, TITLE IV.

Total Acres

80.2000

Serial Number

MTMT105543822

Agreement

Participating

Acres

Area Acres

Legacy Serial No

0.0000

0.0000

MTM 092455

Product Type: 312021 O&G COMPETITIVE PUBLIC DOMAIN LEASE POST 1987

Commodity: Oil & Gas

Case File Jurisdiction:

Case Disposition: AUTHORIZED

-

04/15/2003

CASE DETAILS

MTMT105543822

MLRS Case Ref C-8238826

Case Name

Unit Agreement
Name

Split Estate

Fed Min Interest

Effective Date 05/01/2003

Split Estate Acres

Future Min Interest

No

Expiration Date

Royalty Rate 12.5%

Future Min Interest Date

Land Type Public Domain

Royalty Rate Other

Acquired Royalty Interest

Formation Name

Approval Date

Held In a Producing Unit

No

Parcel Number 03-03-76

Sale Date

Number of Active Wells

Parcel Status

Sales Status

Production Status

Held by Allocated
Production

Total Bonus Amount 162.00

Related Agreement

Tract Number

Lease Suspended

No

Application Type

Fund Code 145003

Total Rental Amount

CASE CUSTOMERS

MTMT105543822

Name & Mailing Address

Interest Relationship

Percent
Interest

SLAWSON EXPLORATION
COMPANY INC

1675 BROADWAY STE 1600

DENVER CO 80202

LESSEE

100.0000

RECORD TITLE

(No Records Found)

OPERATING RIGHTS

(No Records Found)

ACTIVE LAND RECORDS

MTMT105543822

Mer	Twp	Rng	Sec	Survey Type	Survey Number	Subdivision	Land Status	District / Field Office	County	Mgmt Agency
20	0260N	0590E	002	Aliquot		SWNE	Migrated - Existing Footprint	EASTERN MONTANA/DAKS DO MILES CITY FIELD OFFICE	ROOSEV ELT	BUREAU OF LAND MGMT
20	0260N	0590E	002	Lot		4	Migrated - Existing Footprint	EASTERN MONTANA/DAKS DO MILES CITY FIELD OFFICE	ROOSEV ELT	BUREAU OF LAND MGMT

INACTIVE LAND RECORDS

MTMT105543822

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION

Run Date/Time: 1/28/2026 11:07 AM
Single Serial Number Report

Serial Register Page
MTMT105543822

Page 2 of 2

Mer	Twp	Rng	Sec	Survey Type	Survey Number	Subdivision	Land Status	District / Field Office	County	Mgmt Agency
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CASE ACTIONS						MTMT105543822			
Action Date	Date Filed	Effective Date	Action Name		Action Status	Action Information			
03/24/2003	03/24/2003		CASE ESTABLISHED		APPROVED/ACCEPTED	Action Remarks: 03-03-76;			
03/25/2003	03/25/2003		BID RECEIVED		APPROVED/ACCEPTED	Action Remarks: \$162.00;			
04/15/2003	04/15/2003		AUTOMATED RECORD VERIF		APPROVED/ACCEPTED	Action Remarks: TM			
04/15/2003	04/15/2003		LEASE ISSUED		APPROVED/ACCEPTED	Action Remarks: \$2/AC;			
05/01/2003	05/01/2003		EFFECTIVE DATE		APPROVED/ACCEPTED				
05/01/2003	05/01/2003		FUND CODE		APPROVED/ACCEPTED	Action Remarks: 05;145003			
05/01/2003	05/01/2003		RLTY RATE - 12 1/2%		APPROVED/ACCEPTED				
02/17/2004	02/17/2004		ASGN FILED		APPROVED/ACCEPTED	Action Remarks: /A/ Receipt Number: 824654			
02/20/2004	02/20/2004		ASGN APPROVED		APPROVED/ACCEPTED	Action Remarks: EFF 03/01/04;/A/			
11/20/2011	11/20/2011		HELD BY PROD - ALLOCATED		APPROVED/ACCEPTED				
11/20/2011	11/20/2011		MEMO OF 1ST PROD-ALLOC		APPROVED/ACCEPTED	Action Remarks: /1/MTM106865;			
08/05/2014	08/05/2014		NOTICE SENT-PROD STATUS		APPROVED/ACCEPTED				
08/05/2014	08/05/2014		PRODUCTION DETERMINATION		APPROVED/ACCEPTED	Action Remarks: /1/			
11/19/2014	11/19/2014		LEASE COMMITTED TO COMMUNITIZATION AGREEMENT		APPROVED/ACCEPTED	Action Remarks: MTM106865;			

ASSOCIATED AGREEMENT OR LEASE (RECAPITULATION TABLE) INFO								MTMT105543822
Agreement Serial Number	Agreement Legacy Serial Number		Case Disposition	Product Name	Tract No	Commit- ment Status	Commitment Status Effective Date	Allocation Acres Percent
MTMT105397445	MTM	106865	AUTHORIZED	O&G COMMUNITIZATION AGREEMENT	02		07/01/2015	80.2000 6.2615

LEGACY CASE REMARKS										MTMT105543822	
Legacy Case Remarks includes remarks made for the case in LR2000 up until March 14, 2022. These Case Remarks will no longer be updated in MLRS. This section of the SRP is obsolete. Please reference the MLRS website for more information and refer to the Case Actions section - Action Information on this report for similar data.											

Line Number	Remark Text
0001	/A/ HERCO TO SLAWSON EXPL CO INC 100%

MT 5742

Form 3100-11
(October 1992)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FOR LESSEE

Serial No.

MTM92455

OFFER TO LEASE AND LEASE FOR OIL AND GAS

The undersigned (reverse) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 et seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 Op. Atty. Gen. 41), or the

READ INSTRUCTIONS BEFORE COMPLETING

1. Name
Street
City, State, Zip Code

HERCO
P. O. BOX 486
BILLINGS, MT 59103

2. This application/offer/lease is for: (Check only One) ☒ PUBLIC DOMAIN LANDS ☐ ACQUIRED LANDS (percent U.S. interest _____)

Surface managing agency if other than BLM: _____ Unit/Project _____

Legal description of land requested: _____ *Parcel No.: _____ *Sale Date (m/d/y): _____ / _____ / _____

*SEE ITEM 2 IN INSTRUCTIONS BELOW PRIOR TO COMPLETING PARCEL NUMBER AND SALE DATE.

T. _____ R. _____ Meridian _____ State _____ County _____

Amount remitted: Filing fee \$ _____

Rental fee \$ _____

Total acres applied for _____

Total \$ _____

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:

T. _____ R. _____ Meridian _____ State _____ County _____

T. 26 N, R. 59 E, PMM, MT

sec. 2 LOT 4;

2 SWNE;

Roosevelt County

Total acres in lease 80.20
Rental retained \$ 121.50

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid or nomination and those specified on this form.

Type and primary term of lease:

☐ Noncompetitive lease (ten years)

☒ Competitive lease (ten years)

☐ Other _____

THE UNITED STATES OF AMERICA

by

Karen L. Johnson

Chief,

(Signing Officer)

Fluids Adjudication Section

(Title)

APR 15 2003

(Date)

EFFECTIVE DATE OF LEASE May 1, 2003

United States Department of the Interior
Bureau of Land Management
Montana State Office

CONTROLLED SURFACE USE STIPULATION

Serial No. **MTM92455**

Surface occupancy or use is subject to the following special operating constraints.

Prior to surface disturbance on slopes over 30 percent, an engineering/reclamation plan must be approved by the authorized officer. Such plan must demonstrate how the following will be accomplished:

- Site productivity will be restored.
- Surface runoff will be adequately controlled.
- Off-site areas will be protected from accelerated erosion, such as rilling, gullying, piping, and mass wasting.
- Water quality and quantity will be in conformance with state and federal water quality laws.
- Surface-disturbing activities will not be conducted during extended wet periods.
- Construction will not be allowed when soils are frozen.

On the lands described below:

T 26 N, R 59 E, PMM
Sec 2: LOT 4

For the purpose of:

To maintain soil productivity, provide necessary protection to prevent excessive soil erosion on steep slopes, and to avoid areas subject to slope failure, mass wasting, piping, or having excessive reclamation problems.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

MT-3109-4 (7/89)

CONTROLLED SURFACE USE STIPULATION

Serial No. **MTM92455**

Surface occupancy or use is subject to the following special operating constraints.

All surface-disturbing activities, semi-permanent and permanent facilities in VRM Class II, areas may require special design, including location, painting, and camouflage, to blend with the natural surroundings and meet the visual quality objectives for the area.

On the lands described below:

T. 26 N., R. 59 E., PMM
sec. 2: Lot 4
2: SWNE

Purpose:

To control the visual impacts of activities and facilities within acceptable levels.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

CSU (September 1998)

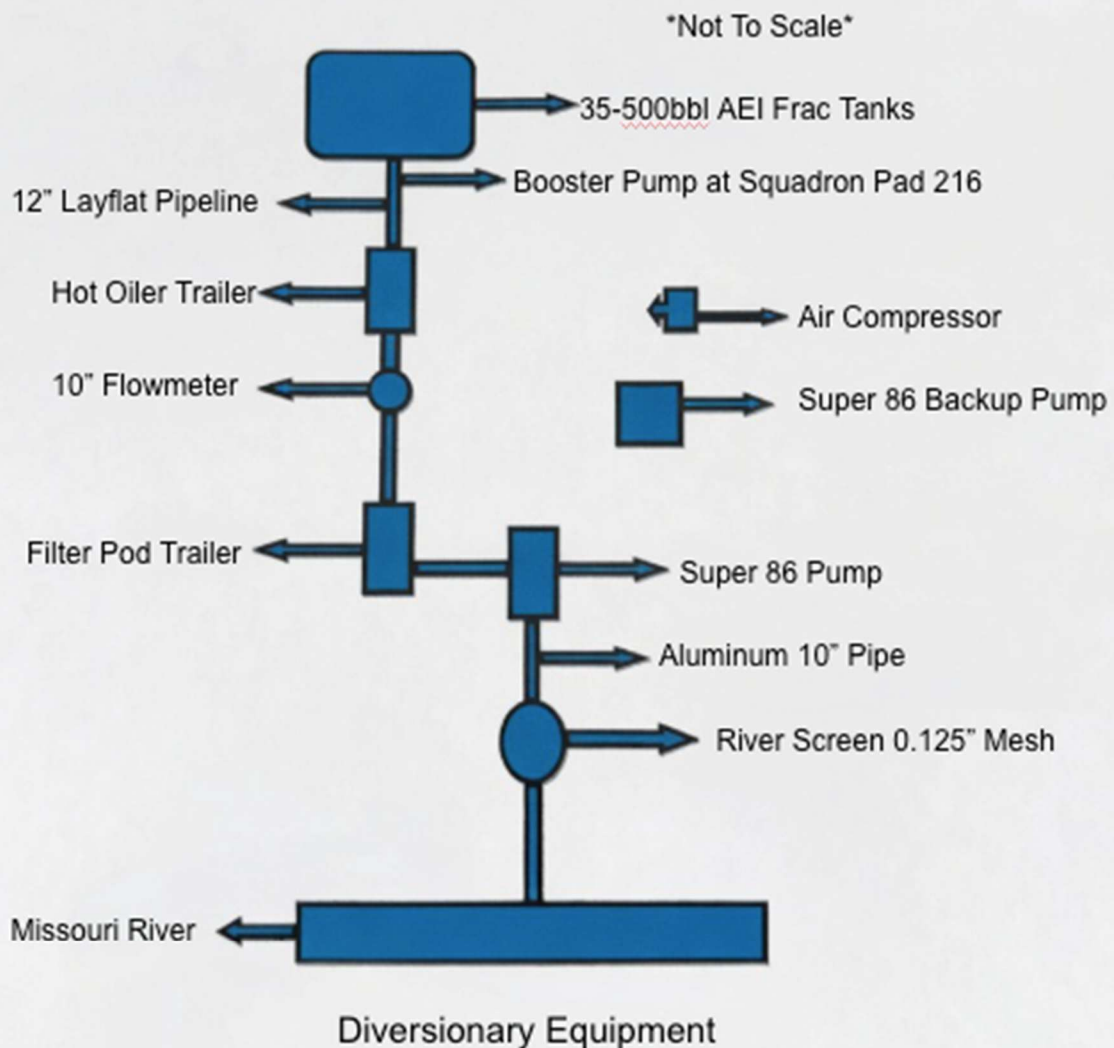
ATTACHMENT:

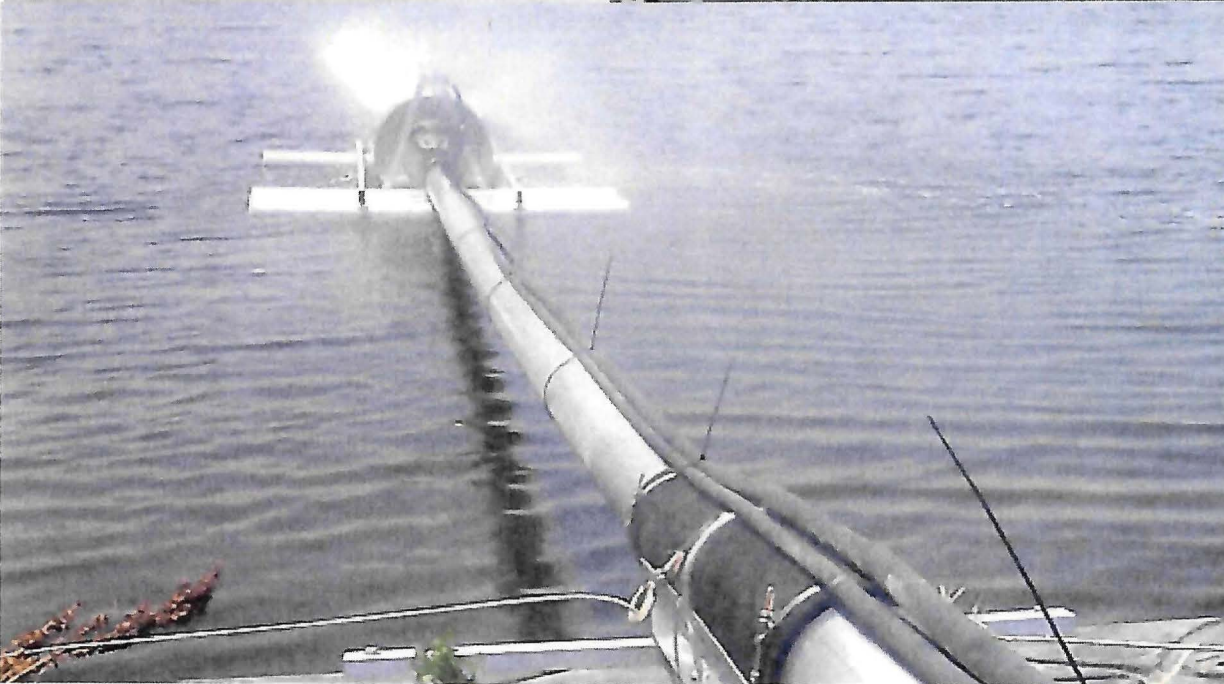
Adequate Means of Diversion and Operation

- Diagram of Project from POD to POU
- Fuel Tank Photo
- Filter Pod PRM Filtration
- 8x6 Pioneer Prime “Super 86” Pump
Specs and Curve
- Total Line Pressure Calculation Sheet
for Diversionary Pump and Booster
Pump
- ZYfire layflat pipeline
- Hose Clamp Overview

- Elevation Map
- Specification Sheet Dura Mag Flow
Meter

Adequate Means of Diversion and Operation





Fuel Tank:
<https://www.deltatank.com/product/ul-142-tank-500-gallon/>

Mark McKinlay

From: JR@Magnusservices.com
Sent: Thursday, March 12, 2026 1:47 PM
To: Mark McKinlay
Subject: FilterPod Pump Curve
Attachments: Slawson-River Job.kmz

Filter Pod rated for 120 bpm

<https://shop.prmfiltration.com/products/made-in-america-prm-2-304-stainless-steel-20-bag-multi-filter-housing-10-inch-flange-in-out-150-psi>



Super 86

<https://global.pioneerpump.com/emea/product-detail/pumps/pprime/cl/6006/en/pp86c21>

10x8

<https://global.pioneerpump.com/emea/product-detail/pumps/pprime/cl/6006/en/pp108c18>

Source to Pad Pump Pressures

Super 86 pump curve

[South Africa \(/south-africa\)](#) [Brazil \(/brazil\)](#) [SE Asia-Pacific \(/se-asia-pacific\)](#)

Europe, Middle East & North Africa

[Pumps \(/emea/products/pumps\)](#) / [Pioneer Prime \(/emea/products/pumps/pioneer-prime\)](#) / [Clear Liquids \(/emea/products/pumps/pioneer-prime/clear-liquids\)](#) / [PP86C21](#)



PP86C21

Pioneer Prime series - vacuum assisted, end suction centrifugal pump

Pump Size	200 x 150 mm	8 x 6 inches
Max Flow	920 m ³ /h	4,000 USgpm
Max Head	200 metres	650 feet
Solids Size	40 mm	1.5 inches

Product Details

Bare shaft, frame mounted, fully automatic dry priming, vacuum assisted, run dry, heavy duty pump

Features

High efficiency design

Lower fuel costs

High flowrate pump

Fewer pumps - lower operations costs

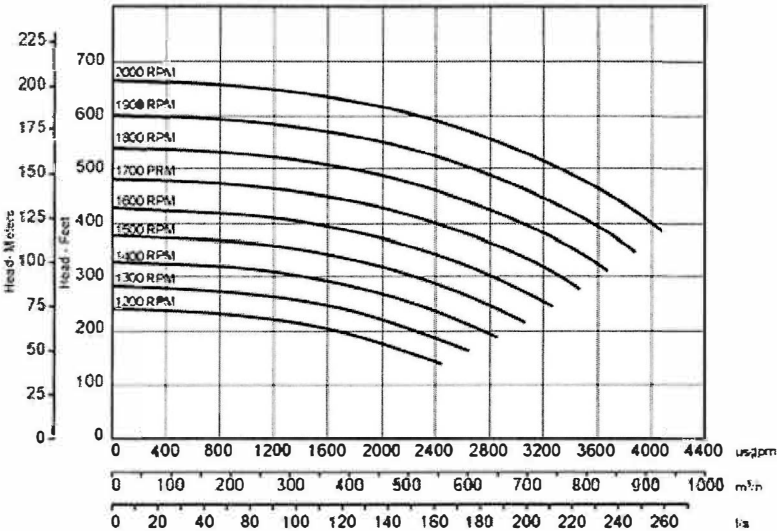
Options

■ Drag skid

■ Electric driven

■ Trailer

Downloads



- Sound attenuated enclosure

Impeller-Variou-Speed-Curve-12860HQ.pdf)

Materials of Construction

	Standard Construction	CD4MCu Stainless Steel
Shaft	17-4 PH Stainless Steel	
Impeller	CA6NM	CD4MCu
Volute	Ductile Iron ASTM A536 65-45-12	CD4MCu
Wear Ring	ASTM A48 Class 40 Gray Iron	316 SS
Suction Cover	Ductile Iron ASTM A536 65-45-12	CD4MCu
Bracket	Ductile Iron ASTM A536 65-45-12	CD4MCu
Backplate	Ductile Iron ASTM A536 65-45-12	CD4MCu

Franklin Electric Co., Inc. © 2026
Corporate

9255 Coverdale Rd.,
Fort Wayne, IN 46809

[Policies \(/emea/policies\)](#)

[\(*\) Intellectual Property \(/emea/intellectual-property\)](#)



<https://www.facebook.com/Pioneerpump>



https://www.youtube.com/channel/UCJ_mdu8LS3XFPR0d9wK



<https://www.linkedin.com/company/pioneer-pump-inc-/>

[Back To Top](#)

PUMP PRESSURE CALCULATION

River Pump

Enter Relevant Data in Green Below				
How Big is your Pipe (ID)?	12.1	Inches		
How long is your pipe in Miles?	1.5	Miles		
What is the START point in your Pipe?	1866	Feet	Gallons/ Minute	Elevation Change
What is the END point of your pipe?	1896	Feet		
How many barrels do you want?	70	Barrels	2,940	30
Source Pump	PSI	Feet Head		
Pump Model:	Super 86	<-- Select		
Pumping Pressure	48	111		
Pressure from Elevation	13	30		
Total Line Pressure	61	141		

Pad to frac locations:

Booster Pump

Enter Relevant Data in Green Below				
How Big is your Pipe (ID)?	12.1	Inches		
How long is your pipe in Miles?	2.25	Miles		
What is the START point in your Pipe?	1896	Feet	Gallons/ Minute	Elevation Change
What is the END point of your pipe?	2033	Feet		
How many barrels do you want?	70	Barrels	2,940	137
Source Pump	PSI	Feet Head		
Pump Model:	Super 86	<-- Select		
Pumping Pressure	72	167		
Pressure from Elevation	59	137		
Total Line Pressure	131	304		

Route:



Application: Water transfer Fracturing

Temperature range: -50°C to 80°C (-58°F to +176°F)

<https://www.riverscreen.com/>

Overview – *Hose Clamp*

12 VIC RIGID CPL EHP 107N

Features

- Pressures up to 750 psi | 5171 kPa | 52 bar
- Sizes from 2 – 12" | DN50 – DN300
- Angled bolt pad provides rigidity
- Optional galvanized coating

Links

- [Specification Sheet](#)
- [Installation Manual](#)
- [Manufacturer Web Site](#)

Specifications

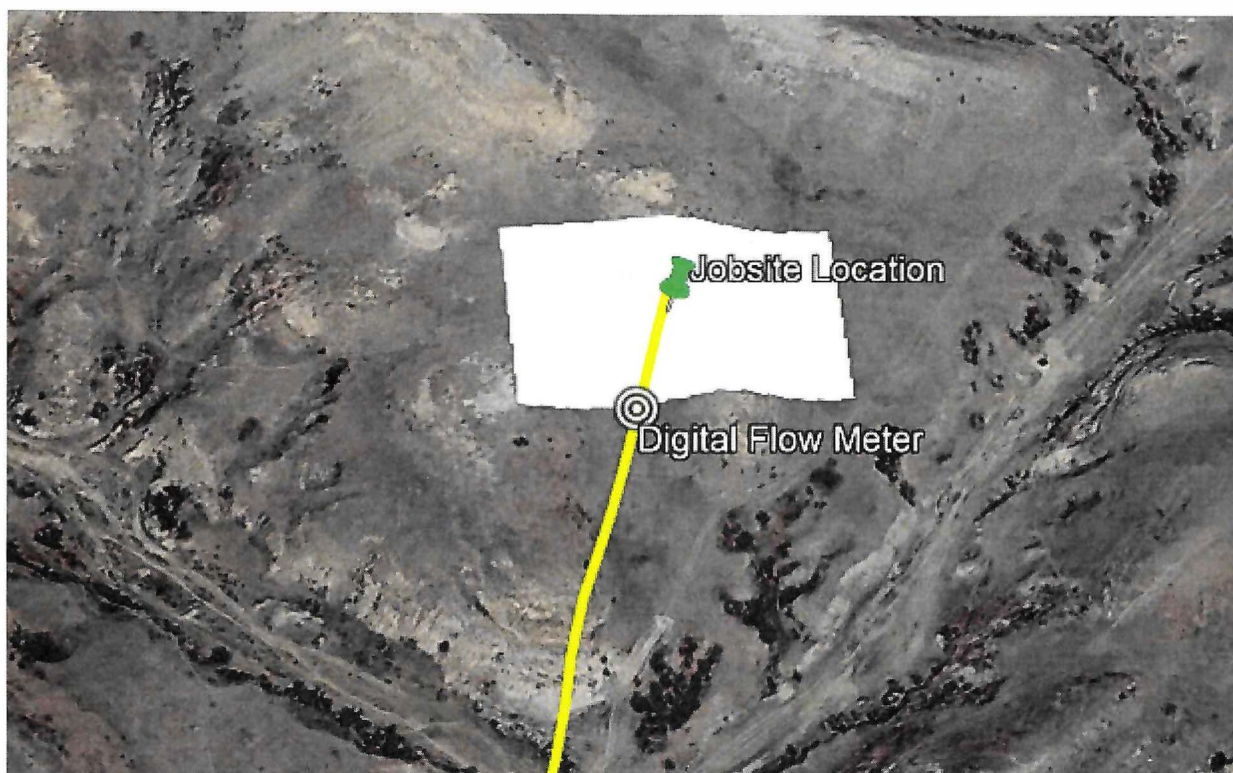
Fitting Type	Couplings
Connection Size	12" x 12"
Connection Type	Grv x Grv
Item Weight	27.7 lb.

Thanks

JR Ewing
208.350.8292 mbl/txt



Scan QR for phone contact card



Elevation Profile



Hose:

<https://www.zyfire.com/product/fracflo-hose>

DESCRIPTION

McCrometer's Dura Mag is the easy choice for tough applications. With a 5-year meter warranty and a 5-year battery life, Dura Mag eliminates the need for AC power connection while providing the easiest installation possible for a flanged mag flow meter.

The meter is available to fit a common range of irrigation line sizes, from 2" to 12" diameter pipe. Dura Mag offers accuracy of +/- 1% with minimal upstream and downstream straight pipe required for most installations, all with the durability that customers have come to expect from McCrometer for over 65 years.

The integrated electronic converter is secured with tamper evident screws. The meter offers flow rate and totalizer with a 5-year battery warranty. Dura Mag features three 3.6V lithium-thionyl chloride (Li-SOCl₂) D size batteries, with two AA batteries serving as back-up power. The main power batteries are easily replaced in the field.

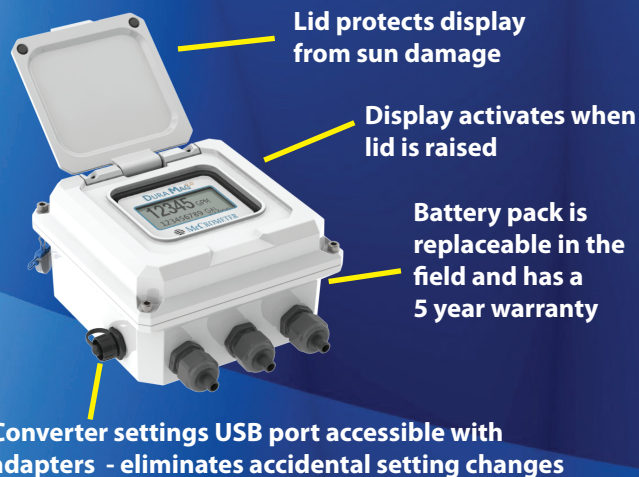
Pulse, 4-20mA, and AMI output are available for remote meter reading or SCADA. Dura Mag is compatible with McCrometer CONNECT wireless systems, which allows users to access flow data by simply logging on to the Internet. This eliminates costly manual meter reading.

KEY APPLICATIONS - Agriculture

- Irrigation
- Center Pivot Systems
- Well Monitoring
- Water Distribution
- Dairy Lagoons
- Surface Water
- Chemigation Downstream
- Golf Course & Park Management
- Sandy Water

KEY FEATURES

- 5-year meter warranty
- 5-year battery warranty
- Lifetime liner guarantee
- Upstream/downstream requirements:
 - 2" & 3": 3D/1D
 - 4" & larger: 2D/1D
- Battery powered for easy installation – eliminate the hassle of cables or AC power
- Durable design – Proven in tough environments
- 10 minute DIY replaceable battery pack, keeps your meter running
- Made in the USA



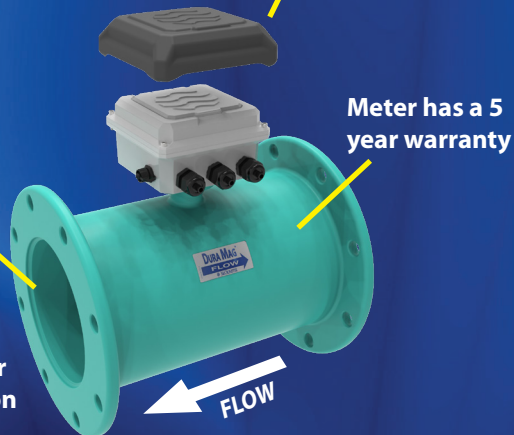
Included canopy protects converter from weather and extreme temperatures

New 2" and 3" wafer design



Lifetime guarantee for liner

Epoxy coating replaces liner, eliminating risk of separation or water intrusion



Meter has a 5 year warranty

[illegible]

[illegible]

ProComm Go Part Number Structure

PG	-							
Converter Mounting and Cable Connector Options								
Meter Mount Converter (Standard)	M							
Remote Mount (25 ft cable)	R							
Converter Power Options								
Battery Power (Standard)	B							
AC Power, Battery Backup	A							
DC Power, Battery Backup	D							
Converter Output Options								
No Outputs (Standard)	-							
Two Digital Out	1							
4-20mA Analog only	2							
4-20mA Analog + Two Dig Out	3							
AMI Smart Output Only	4							
AMI Smart Output + Two Dig Out	5							
AMI Smart Output + 4-20mA Analog	6							
AMI Smart Output + 4-20mA Analog + Two Dig Out	7							
DC Power/ Analog Out Cable Options								
No DC Power or Outputs (Standard)	-							
No Cable - Output Configured (Quick Conn)	0							
6 ft (Open Leads - Strain Relief)	1							
25 ft (Open Leads)	2							
50 ft (Open Leads)	3							
Pulse Cable Length Options								
No Outputs (Standard)	-							
No Cable - Output Configured (Strain Relief or Quick Conn)	0							
6 ft (Open Leads)	1							
25 ft (Open Leads)	2							
50 ft (Open Leads)	3							
25 ft (7-Pin Male connector for Telemetry)	4							
50 ft (7-Pin Male connector for Telemetry)	5							
Output Cable Terminal Options								
Strain Relief (Standard)	1							
Quick Connect (25 & 50 ft Cable length only)	2							
Smart Output Protocol Options (*5 or 6 output option required)								
No AMI Outputs	-							
Sensus Protocol (6ft cable, Nicor Connector hardwired only)	SEN							
Itron 6 digit Protocol (6ft cable, Nicor Connector hardwired only)	IT6							
Itron 9 digit [100W] Protocol (6ft cable, Nicor Connector hardwired only)	IT9							
ATT Wireless Telemetry System (RTU, Solar Panel, 15 ft 7 pin Cable)	ATT							
Verizon Wireless Telemetry System (RTU, Solar Panel, 15 ft 7 pin Cable)	VZW							

FLOW METER SPECIFICATIONS

Physical Specifications

Directionality	Single direction and bidirectional
Pipe Sizes	2", 3", 4", 6", 8", 10", 12"
Body Style	Unflanged and flanged tube
Power	Battery: Standard: three 3.6V lithium-thionyl chloride (Li-SOCl ₂) D size batteries with two AA backup batteries. Batteries are field replaceable AC Power: 120VAC DC Power: Linear power supply 10-35VDC, 2.4W
Electrical Connections	Optional quick connect for easy installation
Outputs	Digital output: Digital pulse (open collector) output for volumetric - Two isolated digital pulse (open collector) outputs for volumetric - AMI output Analog output: 4-20mA: Galvanically Isolated, 16 Bit resolution. All power configurations (including battery). Note: 9-30 VDC loop power required (not supplied via converter)

Performance and Operational Specifications

Operating Temperature	-4° to 140°F (-20° to 60°C)
Storage Temperature	-40° to 149°F (-40° to 65°C)
Operating Pressure	150 psi
IP Rating	IP67 (converter enclosure)
Accuracy *	±1% or ±0.075% of full-scale flow from low flow cutoff to maximum flow rate
Battery Life	Five-year expected battery life, five-year battery warranty
Pipe Run Requirements	2" & 3": 3D upstream / 1D downstream 4" and larger: 2D upstream / 1D downstream

Display and Measurement

Display	• Large LCD display (no backlight) • Non-volatile memory • Anti-reverse totalizer (standard) • Bidirectional (optional) - displays both positive and net totals • Total (to 9 digits of precision) • Flow Rate (to 5 digits of precision) • Low battery and empty pipe indication • Opening lid activates display		
Digits	5 Rate, 9 Total		
Rate Units	Gallons per minute Million gallons per day Cubic feet per second Megaliters per day Liters per second Cubic meters per hour Liters per minute Gallons per hour	Imperial gallons per minute Miner's inch (9G) Miner's inch (11.22G) Acre-feet per day Kiloliters per hour Liters per hour Cubic meters per minute	Cubic feet per minute Barrels per minute (55G) Barrels per hour (55G) Barrels per day (55G) Barrels per minute (42G) Barrels per hour (42G) Barrels per day (42G)

* All Dura Mag meters are calibrated in a NIST traceable gravimetric test stand with a minimum straight run of 10D upstream and 2D downstream. A calibration certification report is provided with each Dura Mag meter certifying the specification accuracy in our laboratory test. Alternative piping configurations or electrical environments may impact the performance of the meter in the field.

FLOW METER SPECIFICATIONS (CONT.)

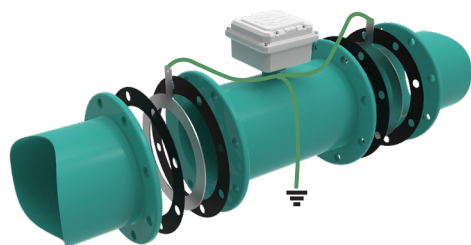
Totalizer Units	Gallons	Barrel (31G)	Miners Inch Minute (11.22G)
	Cubic Feet	Barrel (42G)	Miners Inch Minute (9G)
	Acre Feet	Barrel (46G)	Miners Inch Hour (11.22G)
	Cubic Meters	Barrel (55G)	Miners Inch Day (11.22G)
	Liters	Imperial Gallon	Miners Inch Hour (9G)
	Megaliter	Acre Inch	Miners Inch Day (9G)
	Metric Ton (KL)	Ton (Short)	
Data Logger	• Standard with all models, minimum of five years of data stored		
Other Specifications			
Options and Accessories	• Data Logger - included as standard with five years of data storage at default (12hr) interval. (Cable sold separately)		
	• Bidirectional		
Sensor Cable Lengths	• Epoxy coated carbon steel flanged spool piece (for 2" & 3" wafer style meters)		
	• AC and DC powered with battery backup available		
Warranty	• Remote mount (25' cable length only)		
	• Annual verification / calibration		
Warranty	• Stainless Steel ID tag		
	Feet: 6, 25, 50		
Warranty	Meters: 1.5, 7.6, 15.25		
	Note: 50' is maximum length for pulse cable.		
Warranty	Meter: 5-year warranty		
	Battery: 5-year warranty		
Warranty	Liner: Lifetime guarantee		

METER GROUNDING RECOMMENDATIONS

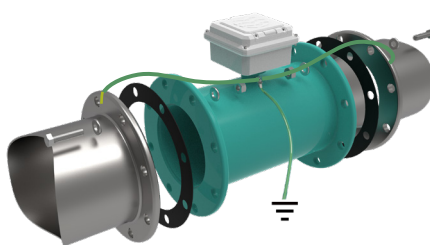
Dura Mag meters come standard with a set of grounding rings for use with the preferred method of grounding Dura Mag meters.

Grounding the meter body for safety according to national (NEC) or local electrical codes is recommended on ALL meter installations. Dura Mag meters come standard with a set of grounding rings for use with the preferred method of grounding Dura Mag meters.

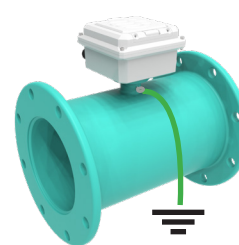
See the Dura Mag IOM Manual, Lit. # 30122-53, for more information on grounding configurations using grounding rods and grounding rings.



Preferred method of grounding



Sensor grounding for meters in an electrically noisy environment



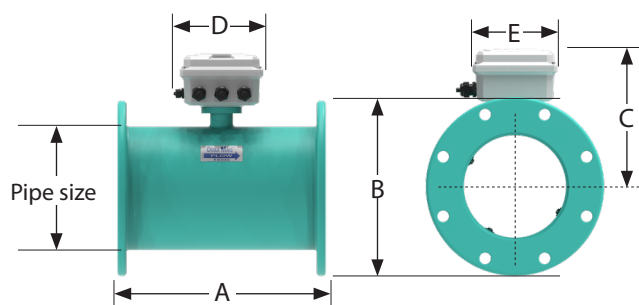
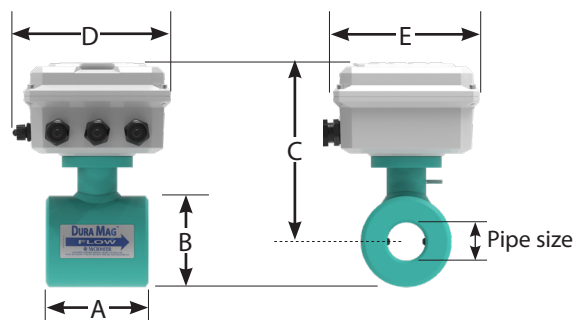
Sensor grounding for meters with minimal ground noise

DIMENSIONS AND WEIGHTS

Body Type	Pipe Size (Nominal)	Standard GPM Flow Ranges Min - Max	DIMENSIONS (Lay Lengths in inches)			Estimated Shipping Weight (lbs.)*
			A	B	C	
Type 1	2"	10-250	4.5	5	8.1	10
	3"	20-550	4.5	5	8.6	11.7
Type 2	4"	30 - 1,000	13.4	9.0	9.25	70
	6"	60 - 2,000	14.6	11.0	10.25	80
	8"	105 - 3,500	16.1	13.5	11.25	115
	10"	165 - 5,500	18.5	16.0	12.5	140
	12"	195 - 6,500	19.7	19.0	13.5	190

D (front)	E (side)
6.94"	6.44"

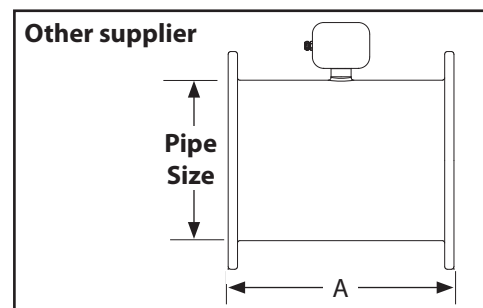
*Shipping weights are estimated and may change due to specific order packaging



Dura Mag S Series and P Series meters are available in lay lengths compatible with products from other meter suppliers. See the tables below for matched lay length options.

Pipe Size (Nominal)	Other Supplier Dimensions*		S Series Dimensions	
	L (in.)	Weight (lbs.)	L (in.)	Weight (lbs.)
4"	10.24	34	10.24	70
6"	12.27	50	12.27	80
8"	14.24	71	14.24	115
10"	18.18	130	18.18	140
12"	19.68	170	19.68	190

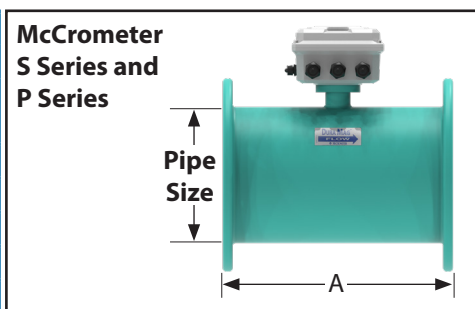
* Seametrics Electromagnetic Meters (Ag3000/Ag3000P or iMag4700 series); Seametrics® is a registered trademark of their respective owners.



Pipe Size (Nominal)	Other Supplier Dimensions**				P Series Dimensions			
	150 lb psi		300 lb psi		150 lb psi		300 lb psi	
	L (in.)	Weight (lbs.)	L (in.)	Weight (lbs.)	L (in.)	Weight (lbs.)	L (in.)	Weight (lbs.)
4"	6	55	6	***	6.25	50	6.25	***
6"	13.38	75	14.88	***	13.38	65	14.88	***
8"	13.38	105	15.40	***	13.38	120	15.40	***
10"	18.15	155	20.55	***	18.15	130	20.55	***
12"	19.40	235	21.78	***	19.40	170	21.78	***

** Sparling Instruments (Tigermag EP FM656); Sparling® is a registered trademark of their respective owners.

*** Contact factory for weight.



PROCOMM GO CONVERTER SPECIFICATIONS

Physical Specifications

Electronic Housing	Diecast aluminum, powder coated enclosure w/ tamper resistant seal, 6½" x 6½" x 43/8" tall
Power	Battery: Standard: three 3.6V lithium-thionyl chloride (Li-SOCl ₂) D size batteries with two AA backup batteries AC Power: 100-240VAC DC Power: Linear power supply 10-35VDC, 2.4W
Electrical Connections	- Optional shielded cable for 10-32VDC/4-20 mA output - Optional shielded cable for pulse out

Performance and Operational Specifications

Battery Life	Five-year expected battery life, five-year battery warranty
Outputs	Digital output: Digital pulse (open collector) output for volumetric - Two isolated digital pulse (open collector) outputs for volumetric - AMI output Analog output: 4-20mA: Galvanically Isolated, 16 Bit resolution. All power configurations (including battery). Note: 9-30 VDC loop power required (not supplied via converter)

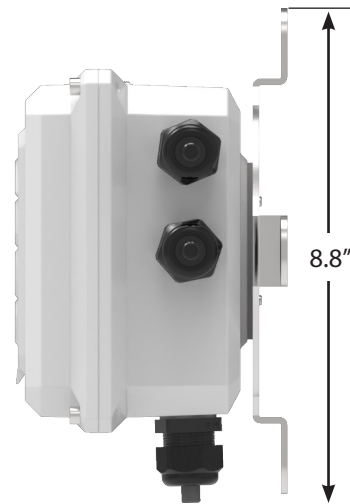
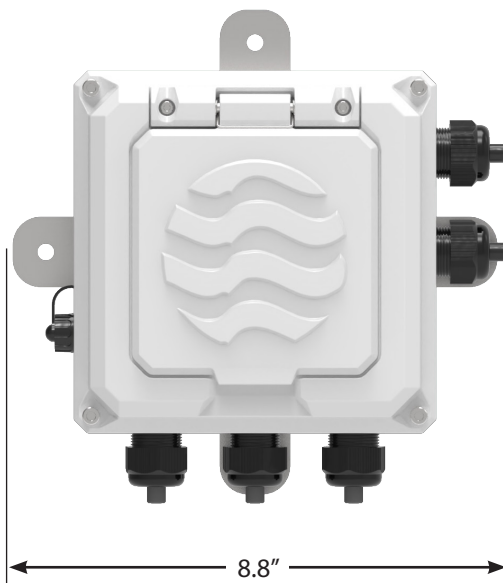
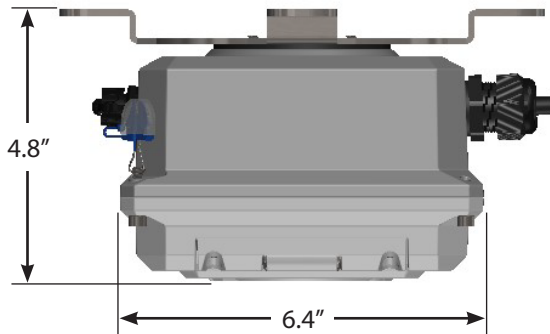
Display and Measurement

Display	• 2-Line LCD display (no backlight) • Non-volatile memory • Anti-reverse totalizer (standard) • Total (to 9 digits of precision)			• Flow rate and velocity (to 5 digits of precision) • Two alarms: low battery and empty pipe (optional) • Opening lid activates display		
	Digits					
Units	5 Rate, 9 Total					
	GPM	Gallons per minute	IGM	Imperial gal per minute	CFM	Cubic feet per minute
	MGD	Mega gal per day	MI9	Miners inch (9G)	B5M	Barrels per minute (55G)
	CFS	Cubic feet per second	MI1	Miners inch (11.22G)	B5H	Barrels per hour (55G)
	MLD	Megaliters per day	APD	Acre feet per day	B5D	Barrels per day (55G)
	LPS	Liters per second	KLH	Kiloliters per hour	B4M	Barrels per minute (42G)
	CMH	Cubic meters per hour	LPH	Liters per hour	B4H	Barrels per hour (42G)
	LPM	Liters per minute	CMM	Cubic meters per minute	B4D	Barrels per day (42G)
	GPH	Gallons per hour	CFM	Cubic feet per minute		
Totalizer Units	GAL	Gallons	B42	Barrel (42G)	MH1	Miners Inch Hour (11.22G)
	CUF	Cubic Feet	B46	Barrel (46G)	MD1	Miners Inch Day (11.22G)
	AFT	Acre Feet	B55	Barrel (55G)	MH9	Miners Inch Hour (9G)
	CUM	Cubic Meters	IMG	Imperial Gallon	MD9	Miners Inch Day (9G)
	LIT	Liters	AIN	Acre Inch	KGL	Kilo Gallons
	MML	Megaliter	TON	Ton (Short)	MGL	Mega Gallons
	MTT	Metric Ton (KL)	MM1	Miners Inch Minute (11.22G)	IN3	Cubic Inch
	B31	Barrel (31G)	MM9	Miners Inch Minute (9G)		
Data Logger	Standard with all models, minimum of five years of data stored					

Other Specifications

Options and Accessories	- Data Logger - included as standard with five years of data storage at default (12hr) interval. (Cable sold separately) - AC, DC, and battery powered with battery backup powered available
--------------------------------	---

PROCOMM GO REMOTE MOUNT CONVERTER DIMENSIONS



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3255 WEST STETSON AVENUE • HEMET, CALIFORNIA 92545 USA
TEL: 951-652-6811 • 800-220-2279 • FAX: 951-652-3078
www.mccrometer.com

Calibration Report



Serial Number: DM20-0179 Test Number: DM20-0179

Converter Serial Number: DuraMag

Model: DM10-1011 Calibration Date: 1/21/2020

Report Date: 1/21/2020

Sold To: McCROMETER HEMET

Description: 10" DURA MAG

Notes: _____

Customer I.D.: 9.7 in
246 mm

KA: 1.1073

KZ: -31957

Calibration Report

	Flow Rate (GPM)		PLBF Accuracy (as % of reading)
	min	max	
1	232.08	525.43	101.65
2	525.43	818.78	101.08
3	818.78	1112.13	100.79
4	1112.13	1405.49	100.59
5	1405.49	1698.84	100.43
6	1698.84	1992.19	100.28
7	1992.19	2285.55	100.14
8	2285.55	2578.90	100.01
9	2578.90	2872.25	99.88
10	2872.25	3165.60	99.75

KL Values

KL00:	032540031
KL01:	097390096
KL02:	162120161
KL03:	000000000
KL04:	000000000
KL05:	000000000
KL06:	000000000
KL07:	000000000
KL08:	000000000
KL09:	000000000
KL10:	000000000
KL11:	000000000

Approved By: Fernando Ramirez

Fernando Ramirez
ID#: 266706

Test Fluid: Water

Instrumentation Traceability Kit Number: V0213

Standard Used: Primary

Test Data

	Water Temperature (°C)	Test Time (seconds)	Air Temperature (°C)	Barometric Pressure (kPa)	Relative Humidity (%)	Viscosity (cP)	Average Rate of Flow (m3/sec)	Combined Uncertainty (%) at 95% confidence
1	22.2	32.231	17.2	96.34	56	1	0.19972	0.15
2	22.2	31.931	17.2	96.34	56	1	0.09569	0.15
3	22.2	32.362	17.2	96.34	56	1	0.01464	0.15

This calibration was performed using standards traceable to the National Institute of Standards and Technology (NIST), USA. Certificates of traceability for the individual test measurements listed in this report are documented and serialized by the Test Stand Instrumentation Traceability Kit Number identified above and are available upon request. Combined Uncertainty to a 95% confidence level is developed for each test point according to the methods described in the ANSI/NCSL Z540-2-1997. Methods and procedures used in this calibration are in accordance with the latest revision of the McCrometer Flow Laboratory Technical Manual.





REQUEST FOR PREAPPLICATION MEETING

ARM 36.12.1302(2)

(Revised 02/2025)

Instructions

Use this optional form to submit a written request for a preapplication meeting, as required in ARM 36.12.1302(2) for applicants electing to complete a preapplication meeting with the department prior to submitting an application for a beneficial water use permit or change in appropriation right pursuant to § 85-2-302, MCA. Use additional sheets as necessary.

Submit this form to the appropriate regional office; see contact information on the last page of this form.

For Department Use Only

Date Received _____

Received By _____

Scheduled Meeting Date _____

1. **Applicant Name** _____

Mailing Address _____

City _____ State _____ Zip _____

Home Phone _____ Other Phone _____

Email: _____

2. **Representative Name** (if other than Applicant) _____

☐ Representative is Consultant ☐ Representative is Attorney ☐ Representative is Other

Mailing Address _____

City _____ State _____ Zip _____

Home Phone _____ Other Phone _____

Email: _____

3. **Are you requesting a preapplication meeting for a permit or change application?**

☐ Permit ☐ Change

4. **Describe your project:**



5. Identify the following elements of the proposed permit or change in appropriation.

a) The flow rate and volume of water required:

Flow Rate _____ ☐ GPM ☐ CFS Volume _____ Acre-Feet

b) The point of diversion:

Point of Diversion #1 _____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ ☐ N ☐ S, Range _____ ☐ E ☐ W
County _____

Lot/Tract _____ Block _____ Subdivision Name _____

Point of Diversion #2 _____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ ☐ N ☐ S, Range _____ ☐ E ☐ W
County _____

Lot/Tract _____ Block _____ Subdivision Name _____

c) The place of use:

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ ☐ N ☐ S, Rge _____ ☐ E ☐ W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ ☐ N ☐ S, Rge _____ ☐ E ☐ W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ ☐ N ☐ S, Rge _____ ☐ E ☐ W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ ☐ N ☐ S, Rge _____ ☐ E ☐ W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ ☐ N ☐ S, Rge _____ ☐ E ☐ W

d) The source of water: _____

e) The proposed purpose: _____

f) For a change in appropriation right, the water right(s) proposed for change:

Type of water right _____ Basin _____ Water Right # _____

Type of water right _____ Basin _____ Water Right # _____

Type of water right _____ Basin _____ Water Right # _____

Identify the water right elements proposed for change, with a checkmark for each water right proposed for change.

Water Right #					
Point of diversion	☐	☐	☐	☐	☐
Place of use	☐	☐	☐	☐	☐
Purpose of use	☐	☐	☐	☐	☐
Place of storage	☐	☐	☐	☐	☐

g) For a change in appropriation right, an explanation of historical use of the right(s) proposed for change:

h) Any proposed place of storage, if applicable (only if storage capacity is greater than 0.1 acre-feet):

#1 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____ Acre-Feet

Location: _____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ ☐ N ☐ S, Range _____ ☐ E ☐ W

#2 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____ Acre-Feet

Location: _____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ ☐ N ☐ S, Range _____ ☐ E ☐ W

#3 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____ Acre-Feet

Location: _____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ ☐ N ☐ S, Range _____ ☐ E ☐ W

i) For applications proposing a well or wells, the well depth(s) and location. If more than two wells, attach a separate sheet to this request:

Well #1 ☐ New Well ☐ Existing Well

For existing well, if available, Water Right # _____ GWIC ID _____

_____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ ☐ N ☐ S, Range _____ ☐ E ☐ W

County _____

Lot/Tract _____ Block _____ Subdivision Name _____

Estimated Well Depth _____ Feet

Well #2 ☐ New Well ☐ Existing Well

For existing well, if available, Water Right # _____ GWIC ID _____

_____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ ☐ N ☐ S, Range _____ ☐ E ☐ W

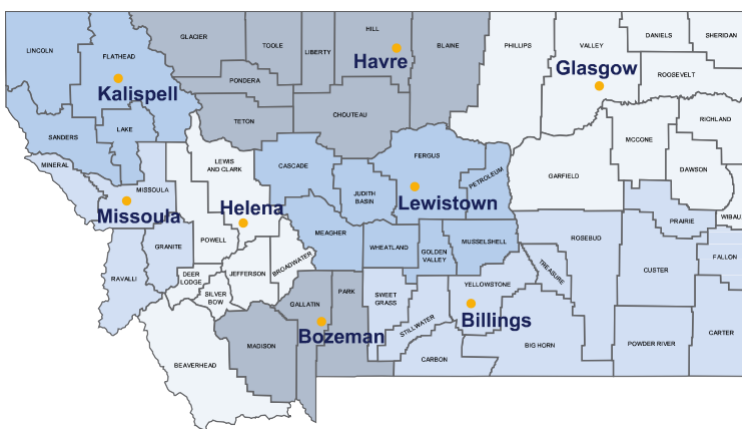
County _____

Lot/Tract _____ Block _____ Subdivision Name _____

Estimated Well Depth _____ Feet



WATER RESOURCES REGIONAL OFFICES



BILLINGS

Airport Industrial Park, 1371 Rimtop Dr
Billings, MT 59105-9702

PHONE 406-247-4415 FAX 406-247-4416

EMAIL DNRCBillingsWater@mt.gov

Big Horn, Carbon, Carter, Custer, Fallon, Powder River, Prairie, Rosebud, Stillwater, Sweet Grass, Treasure, and Yellowstone Counties



BOZEMAN

2273 Boot Hill Court, Suite 110
Bozeman, MT 59715-7249

PHONE 406-586-3136 FAX 406-587-9726

EMAIL DNRCBozemanWater@mt.gov

Gallatin, Madison, and Park Counties



GLASGOW

222 6th Street South, PO Box 1269
Glasgow, MT 59230-1269

PHONE 406-228-2561

EMAIL DNRCGlasgowWater@mt.gov

Daniels, Dawson, Garfield, McCone, Phillips, Richland, Roosevelt, Sheridan, Valley, and Wibaux Counties



HAVRE

210 6th Ave., PO Box 1828
Havre, MT 59501-1828

PHONE 406-265-5516

EMAIL DNRCHavreWater@mt.gov

Blaine, Chouteau, Glacier, Hill, Liberty, Pondera, Teton, and Toole Counties



HELENA

1424 9th Ave., PO Box 201601,
Helena, MT 59620-1601

PHONE 406-444-6999 FAX 406-444-9317

EMAIL DNRCHelenaWater@mt.gov

Beaverhead, Broadwater, Deer Lodge, Jefferson, Lewis and Clark, Powell, and Silver Bow Counties



KALISPELL

655 Timberwolf Parkway, Suite 4
Kalispell, MT 59901-1215

PHONE 406-752-2288

EMAIL DNRCKalispellWater@mt.gov

Flathead, Lake, Lincoln, and Sanders Counties



LEWISTOWN

613 Northeast Main St., Suite E
Lewistown, MT 59457-2020

PHONE 406-538-7459

EMAIL DNRCLeWistownWater@mt.gov

Cascade, Fergus, Golden Valley, Judith Basin, Meagher, Musselshell, Petroleum, and Wheatland Counties



MISSOULA

2705 Spurgin Rd. Bldg. C, PO Box 5004
Missoula, MT 59806-5004

PHONE 406-721-4284 FAX 406-542-5899

EMAIL DNRCMissoulaWater@mt.gov

Granite, Mineral, Missoula, and Ravalli Counties



MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
Water Resources Division – Water Rights Bureau
<https://dnrc.mt.gov/Water-Resources/Water-Rights/>

Additional Correspondence

- Emails
- Any other Correspondence

Additional
Correspondence