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MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

September 2, 2026

Montana Board of Oil and Gas Conservation
2535 St. Johns Avenue
Billings, MT 59102

Attn: Mr. John Gizicki
UIC Program Manager

RE: Application for UIC Permit and Authorization to Drill a Class II Injection Well
Location of proposed Disposal Well & Facility: Panasuk 34X-12
Location: Section 12, Township 23N, Range 58E
Richland County, Montana

Dear Mr. John Gizicki,

MorningStar Operating LLC (MorningStar) respectfully requests approval of an Underground Injection Control (UIC) permit for the referenced location and as described in the attached application. MorningStar has included a Form 2 Sundry Notice request to convert the existing well to a salt water disposal well.

Proposed operations will be performed by MorningStar in conformity with this application and the terms and conditions under which it is approved. MorningStar requests this application be placed on the docket for the MBOGC hearing scheduled October 15th, 2026.

If you have any questions concerning the enclosed application, please contact Amy Doebele at (435) 789-1017 or Erin Donovan with MorningStar Operating LLC at (817) 334-7871.

Sincerely,

Brodie Savage
Vice President – Northern Operations
MorningStar Operating LLC
bsavage@txopartners.com
(817) 334-7745

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MORNINGSTAR
OPERATING

Underground Injection Control Application

Panasuk 34X-12

Section 12 of T23N-R58E

Richland County, Montana

Board of Oil and Gas Conservation

Of the State of Montana

Docket No: TBD

October 15, 2026



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Underground Injection Control (UIC) Permit Application

Panasuk 34X-12 Injection

The following report and justification are submitted in support of the application by MorningStar Operating, LLC to permit the conversion of the Panasuk 34X-12, which is a Bakken producer, for the purpose of water injection into the Dakota/Lakota, as required by Rule 36.22.1403 of the Rules and Regulations of the Montana Board of Oil and Gas Conservation.

1 (a) Location of Injection Well:

The Panasuk 34X-12 well is herein proposed for conversion to a water injection well. This well was originally drilled horizontally to the Devonian Bakken formation in 2011. The Bakken was successfully produced from 2012 until economic limits were reached in 2020. Exhibit 1 shows the surface location and a circle of a quarter (1/4) mile or 1,320 feet radius representing the area of review (AOR).

Well Name	Footage Calls	Section Calls
Panasuk 34X-12	275' FSL, 1350' FEL	SW SE of Sec 12 of T23N R58E

1 (b) Location and Mechanical Condition of Wells within a Quarter Mile (1,320 feet) Area of Review (AOR) which Penetrate Injection Zone:

There are no producing oil and gas wells within the ¼ mile radius of the proposed SWD conversion.

1 (c) Location of all pipelines which will be used to transport fluids to the well:

Produced water from Bakken MorningStar Operating wells will be delivered to the location by truck.

If pipeline installations can be justified economically, MorningStar may opt to install transfer lines to minimize truck traffic on both county and lease roads, particularly from new development activity, for example. If this occurs, the lines would be flushed with freshwater first and pressure tested prior to use. Meters would be assigned to all associated sites to verify shipment and injection water volumes are aligned.

1 (d) Area Producing Formations, Freshwater Aquifers, and Water Well Information:

There are no oil and gas wells located with the ¼ mile AOR. There is 1 producing well with lateral penetrating the ½ mile radius at around 10368' TVD in the Middle Bakken, the Peterson 42X-18 (SE NE of section 18 of T23N R59E), which is operated by Morning Star Operating, and whose surface hole is located 6861 feet to the southeast of the proposed SWD.

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Submit In Quadruplicate To:

**MONTANA BOARD OF OIL AND GAS CONSERVATION
2535 ST. JOHNS AVENUE
BILLINGS, MONTANA 59102****MONTANA BOARD OF OIL &
GAS CONSERVATION • BILLINGS****SUNDRY NOTICES AND REPORT OF WELLS**

Operator MORNINGSTAR OPERATING LLC

Address 400 7TH STREET

City FORT WORTH State TX Zip Code 76102

Telephone 817-334-7800 Fax

Location of well (1/4-1/4 section and footage measurements):

SHL: SWSE 275' FSL 1350' FEL, SECTION 12, T23N, R58E

Lease Name:

Panasuk

Type (Private/State/Federal/Tribal/Allotted):

Private

Well Number:

34X-12

Unit Agreement Name:

Field Name or Wildcat:

Wildcat

Township, Range, and Section:

T23N, R58E, SECTION 12

API Number:

25 | 083 | 22882

State County Well

Well Type (oil, gas, injection, other):

INJECTION

County:

Richland

Indicate below with an X the nature of this notice, report, or other data:

Notice of Intention to Change Plans ☐Notice of Intention to Run Mechanical Integrity Test ☐Notice of Intention to Stimulate or to Chemically Treat ☐Notice of Intention to Perforate or to Cement ☐Notice of Intention to Abandon Well ☐Notice of Intention to Pull or Alter Casing ☐Notice of Intention to Change Well Status ☐Supplemental Well History ☐Other (specify) Intent to convert to Class II Injection Well ☒Subsequent Report of Mechanical Integrity Test ☐Subsequent Report of Stimulation or Treatment ☐Subsequent Report of Perforation or Cementing ☐Subsequent Report of Well Abandonment ☐Subsequent Report of Pulled or Altered Casing ☐Subsequent Report of Drilling Waste Disposal ☐Subsequent Report of Production Waste Disposal ☐Subsequent Report of Change in Well Status ☐Subsequent Report of Gas Analysis (ARM 36.22.1222) ☐**Describe Proposed or Completed Operations:**

Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as necessary. Indicate the intended starting date for proposed operations or the completion date for completed operations.

MorningStar Operating LLC proposes to convert the Panasuk 34X-12 for Class II injection.

Please see procedure below, and attached wellbore diagrams (current/proposed).

1. Plug and abandon the Bakken lateral. PBTD 5780' TVD.

2. Perforate Dakota/Lakota 5,382-5,729'

3. Swab for fluid sample analysis.

4. Establish injection rate and acidize to clean up perforations.

5. Install injection packer @ 5,307'.

6. Perform MIT and Step Rate Test.

7. After all approvals received, begin injection.

BOARD USE ONLY

Approved _____

Date

Name

Title

The undersigned hereby certifies that the information contained on this application is true and correct:

9/2/2026

Date

Signed (Agent)

Holly Wood, Senior Regulatory Analyst

Print Name and Title

Telephone: 817-344-8088

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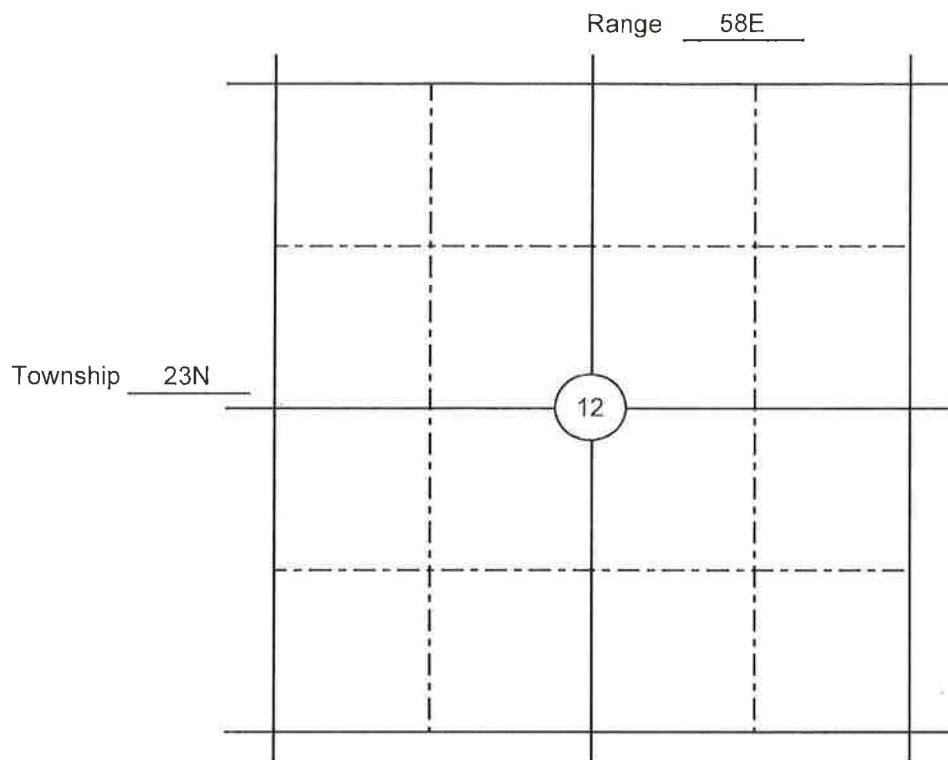
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SUPPLEMENTAL INFORMATION

NOTE: Additional information or attachments may be required by Rule or by special request.

Plot the location of the well or site that is the subject of this notice or report.

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BOARD USE ONLY

CONDITIONS OF APPROVAL

The operator must comply with the following condition(s) of approval:

Failure to comply with the conditions of approval may void this permit.

Panasuk 34X12

Richland County MT
Wellbore Schematic

Last update: 8/6/2026

API# 25-083-22882

SW 3/4 section 12 T23N 58E
175' FSL 1350' FEL

Surface casing:

9 5/8" 36# K-55 at 1,737'
470 sacks cement

Production Casing

7" 29# and 32# HCP-110 at 10,774'
cmt with 1040 sls

29# from surface to 6654'
32# from 6654'-7357'
29# from 7357'-8123'
32# from 8123'-9089'
29# from 9089'-10,774'

4.5" liner

4.5" 1305# P-110 liner from 9921-19713'
end section pre drilled 0.25" holes/ft: 19,485'-19,709'
23 TAM free Cap 1 water swelling packers evenly spaced

GL elev: 2143'

KB elev: 2165'

KB: 22'

conductor 16" set at 32'

TOC at 3000' CBL 1/19/2012

Production Tbg: 10/19/2018

304 jts of 2 7/8" 6.5# L-30
16 jts 2 7/8" J-55 boronized
SN at 9860'
7" TAC at 9362'
6' lb sub
4.5" GA
bull plug
EOI at 9899'

Rod Design: 10/22/2018

1.5" polish rod
8 1" pony rod
146 NP7 7/8" rods
230 NP7 3/4" rods
10 1.5" sinker bars
4' scrappier pony
on/off tool
1.5" insert pump

KOP at 9925' MD

Liner hanger and PRR 5" ID X 15' at 9921'
first well packer at 9940'
23 total well packers evenly spaced

TD 19,760' MD Avg TVD 10,393'
Perforations from 10,851'-19,713'

Current Wellbore Diagram
 Panasuk 34X-12
 Section 12 of T23N-R58E
 Richland County, Montana

Last update: 9/1/2026

Panasuk 34X12

Richland County MT

Proposed Wellbore Schematic

API# 25-083-22882

SW 3/4 section 12 T23N 58E
275' FSL 1350' FEL

Surface casing:

9 3/8" 36# K-55 at 1737'
470 sacks cement

Production Casing

7" 29# and 32# HCP-110 at 10,774'
cmt with 1040 sks

29# from surface to 6654'
32# from 6654-7357'
29# from 7357-8123'
32# from 8123-9089'
29# from 9089-10,774'

4.5" liner

4.1" 13,504 P-110 liner from 9921-19713'
and section pre drilled 0.21" holes/ft: 19,485- 19,709'
23 TAM free Cap 1 water swelling packers evenly spaced

KOP at 9921' HHD

GL elev: 2143'
KB elev: 2165'
KB: 22'

conductor 16" set at 32'

TOC at 300V CBL 1/19/2012

Proposed Tubing install

4.5" 12.75# L80 ERW/T&C B2 Enercube lined tubg
on/off tool w/ X profile nipple
Injection Packer at 5307' with wireline entry guide.

Perforate Dakota/Lakota and acidize: Proposed depths 112' total

5382-5389' 5411-5422' 5564-5566'
5572-5631' 5672-5673' 5677-5682'
5685-5689' 5704-5723' 5727-5729'

Set CCBP at 5830' w/ 50' cement on top. (9 sacks cement 1.15 yield)

Pump Balanced cement plug from 8110' to 8410' to cover base of Charles Salt (55 sacks 1.15 yield cement)

Set CCBP at 9940'

Squeeze Disken lateral w/ 29 sacks cement (4.5% Solids)
Pump 50' cement top of CCBP (2 sacks)

Liner hanger and PBR 5" ID X 15' at 9921'

First well packer at 9940'

23 total well packers evenly spaced

TD 19,760' MD Avg TVD 18,293'
Perforations from 19,851'-19,713'

Proposed Wellbore Diagram

Panasuk 34X-12

Section 12 of T23N-R58E

Richland County, Montana



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Gartner 21-13 (C NE NW, Section 13 of T23N R58E) is a plugged wellbore located 2215 feet to the southwest of the proposed SWD. The Gartner 21-13 was completed in the Ratcliffe in 1978 (perms: 8964-9032'). The well was plugged in August 1994. Plugging operations were setting a CICR at 8900', pumping 75 sacks cement under CICR, pumping 5 sacks cement on top of CICR. Then, 5.5" production casing was cut at 1655' (collar shot) and pulled. A 50 sack cement plug was pumped at the top of casing stub at 1655', and a second 50 sack cement plug was pumped at 100'.

Fresh water well data was obtained from the Ground Water Information Center (MBMG Data Center) website <https://mbmggwic.mtech.edu/>. There is 1 freshwater well which is produced within the AOR of the proposed injector. Water wells located outside the AOR but in the general vicinity of the planned Panasuk 34X-12 have been drilled no deeper than 300 feet. See Exhibit 2 for their location.

Well Name	GWIC ID	Location	Use	Distance from Proposed SWD (ft)	Total Depth (ft)
RASMUSSEN, C.W.	36450	Sec 12, 23N, 58E 47.762528, -104.219115	Unused	1918	90
TYLER, JACK	36451	Sec 12, 23N, 58E 47.762528, -104.219115	Domestic	1918	70
PEIRCE DAVID	222419	Sec 12, 23N, 58E 47.762072, -104.218425	Domestic	1753	50
GARTNER 21-13	903418	Sec 13, 23N, 58E 47.760463, -104.218456	Not available	1898	NA
GARTNER 21-13	916414	Sec 13, 23N, 58E 47.759997, -104.220486	Not available	2424	NA
M K WEEDEN CONSTRUCTION INC.	271397	Sec 12, 23N, 58E 47.764167, -104.214722	Commercial	1050	300
MK WEEDEN CONSTRUCTION INC.	272231	Sec 12, 23N, 58E 47.763056, -104.2175	Industrial	1538	210

There is a very thin Glacial Till near the surface in this area, which normally does not produce much water.

There is an upper member of the Fort Union, the Tongue River, with water production normally less than 200 feet from the surface. There have been several shallow water wells drilled for stock water and domestic use that appear to be in this zone.

The Hell Creek and Fox Hills zones act as potential sources of freshwater as well. The depth to the Fox Hills-Lower Hell Creek Aquifer is approximately 1300 feet at the Panasuk 34X-12 per mapping work by Larry Smith entitled "Depth to the Fox Hills-Lower Hell Creek Aquifer, Lower Yellowstone River Area" published in MBMG's GWAA-Montana Ground-Water Assessment Atlas (1-B-03), 1998. Surface casing has been cemented to the surface in the wellbore to protect these shallow freshwater zones.



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Any potential Underground Sources of Drinking Water (USDW) are protected from the proposed injection zone by surface casing set in the Panasuk 34X-12 to 1737' MD and cemented with 470 sacks. An intermediate 7-inch casing was set at 10774' MD (at approximately 90°) and cemented with 1040 sacks of cement followed by an uncemented 4.5" liner run in the lateral. A CBL was run in January 2012 which documents a TOC at 3000' MD. Tubing and an injection packer will result in further isolation of fresh USDW from produced water.

1 (e) Name and Geologic Description of Injection Zone:

DAKOTA AND LAKOTA SANDSTONE DESCRIPTION

The Panasuk 34X-12 will be completed for disposal into the Dakota and Lakota formations. The Dakota/Lakota in this well is comprised of fine to medium grained sandstone deposited in a channel environment as part of the Cretaceous system.

Formation	Lithology	TVD Top (ft)	TVD Base (ft)	Net pay (ft)	Pressure (PSI)	Porosity
Dakota	Sandstone	5224	5671	71	2272	15%
Lakota	Sandstone	5671	5738	32	2467	15%

Depth and net pay for each of the proposed injection zones are estimated from the Cement Bond Log with Gamma Ray ran January 6, 2012, on the Panasuk 34X-12. The porosity is based on sonic and density log estimates from the following wellbores: Gartner 21-13 (1/2 miles SW) and Rasmussen 1 (1.5 miles NW). The porosity was derived from log curves calculated using a consolidated sandstone matrix. Formation pressure was estimated using a water gradient of 0.435 psi/ft.

The upper confining formation for the proposed injection zone is the Cretaceous Skull Creek formation. It is comprised of clastic, shallow marine deposits composed of medium-dark gray shales, calcareous, micaceous, and glauconitic in part, interbedded with siltstones. The Skull Creek is 145 feet thick in this area.

The lower confining formation for the proposed injection zone is the Jurassic Morrison, Swift, and Rierdon formations. The aforementioned formations lie immediately below the Lakota and are primarily made up of transgressive-regressive, clastic, shallow marine deposits composed of dark gray-green shales, slightly calcareous, dark gray-green, waxy shales, and is commonly interbedded with glauconitic siltstones and sandstones with occasional carbonate packstones and grainstones. The lower confining interval is approximately 771 feet of impermeable rock facies.

The actual fracture gradients for these confining zones are unknown, but fracture gradients for the confining shale layers are known to be higher than those for the underlying sandstone injection zone.



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Formation	Lithology	TVD Top (ft)	TVD Base (ft)	Thickness (ft)
Skull Creek	Shale	5079	5224	145
Mrsn/Swft/Rrdn	Shale	5738	6509	771

Considering the vertical distance to any USDW and the maximum feasible injection rate that could occur, the likelihood of a fracture extending from the proposed disposal zone to any USDW under any reasonable disposal conditions is considered low.

For proposed injection interval see Exhibit 3: Cross Section, Exhibit 4: Log of Injection Interval, and Exhibit 5A and B: Water Analysis of Injection Intervals.

1 (f) Additional Information on Producing Wells within the AOR:

There are no oil and gas wells producing with a surface hole or vertical penetration of the proposed disposal zone located within the AOR. There is one well with a surface hole within the ½ mile area, the Gartner 21-13, which is plugged out.

1 (g) Open Hole Logs:

Logs and geologic information of the Panasuk 34X-12 well are currently on file with the MBOGC. A cement bond log currently exists for the Panasuk 34X-12 with the top of cement at 3000' MD.

1 (h) Description of the Wellbore Construction:

The current configuration of the wellbore is as indicated on Exhibit 6. The well is currently not producing. Surface casing was run to 1737' MD and cemented with 470 sacks. Intermediate 7" casing was run to 10774' MD, where 1040 sacks of cement were pumped through the 7" shoe and cement circulated up to ~3000'. The lateral was drilled to a TD of 19760' and a 4.5" uncemented liner with swell packer isolation was run. The lateral was completed with a fracture stimulation in February 2012.

The primary interval proposed for disposal will be the Dakota/Lakota. The well is currently non-producing. For abandonment, MorningStar proposes to set a CICR in the 7" at 9900' MD above the top of liner, pump 90 sacks of cement below and spot 50' of cement on top. Then spot a balanced plug over the Charles from 8110' to 8410' MD. The proposal also includes setting a CIBP at ~5830' MD with 50' of cement on top. Pressure testing of the wellbore will be conducted. See Exhibit 7 for the proposed wellbore diagram.

The Dakota/Lakota section will be perforated. Water samples will be collected and tested for chlorides levels for UIC review and approval before converting to SWD. This interval will likely be treated with a 15% HCl stimulation. Nickel plated packer and lined injection tubing will be utilized to mitigate corrosion. Packer fluid will be circulated behind the injection string in the 4.5"x7" annulus to also protect from corrosion.



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(i) Description of Injection Fluid:

The fluid to be injected will consist entirely of water produced from the Bakken formation in multiple offsetting MorningStar wells. The anticipated injection volumes will be in the range of 3000 to 6000 BWPd. Actual injection rates may vary. Volumes will be determined by the injection capacity tested during the Step-Rate test. Exhibit 8 is a representative analysis of Bakken formation water chemistry. No incompatibilities are expected.

Surface injection pressures will not be allowed to exceed a maximum set by MBOGC. Using the EPA accepted fracture gradient of 0.733 psi/ft and the following equation, an estimated maximum injection pressure is as follows:

$$IP_{max} = (FG) \cdot (D_{top}) - (SG) \cdot (0.433) \cdot (D_{top})$$

Where: IP_{max} = Maximum Surface Injection Pressure (psi)

FG = Assumed Fracture Gradient in Confining Zone = 0.733 psi/ft

SG = Specific Gravity of Injection Fluid = 1.17

D_{top} = Depth at top of injection zone (ft) = 5382

The computed maximum injection pressure would be:

$$= (0.733) \cdot (5382) - (1.17) \cdot (0.433) \cdot (5382) = \mathbf{1218 \text{ psi} = IP_{max}}$$

The computed maximum injection pressure for the Dakota/Lakota sand is 1218 psi. An injection step-rate test will be performed to determine the final injection pressures and volumes to ensure the formation parting pressure (i.e. fracture pressure) is not reached during injection operations.

1 (j) Names and addresses of the leasehold owners, including unleased mineral owners, and the surface owners within the area of review of the input well(s):

The names and addresses of lease hold and surface owners within the area of review for the proposed injection well are listed in Exhibit 9.

MorningStar Operating, LLC will notify leasehold owners, surface owners, and unleased minerals in accordance with 36.22.1410(1) notification requirements for an underground injection permit. Affidavit of Notification of Surface and Mineral Owners along with an example of the mailed notice is attached in Exhibit 10.



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List of All Exhibits

- | | |
|------------|--|
| Exhibit 1 | Map of General Area with Area of Review (AOR) |
| Exhibit 2 | Map of Fresh Water Wells within Area of Review (AOR) |
| Exhibit 3 | Geologic Cross Section of the Proposed Injection and Confining Intervals |
| Exhibit 4 | Log of Injection Interval |
| Exhibit 5A | Water Analysis of Injection Interval – Lower Dakota |
| Exhibit 5B | Water Analysis of Injection Interval – Upper Dakota |
| Exhibit 6 | Current Wellbore Diagram |
| Exhibit 7 | Proposed Wellbore Diagram |
| Exhibit 8 | Bakken Water Analysis |
| Exhibit 9 | Surface and Mineral Owner List |
| Exhibit 10 | Affidavit of Notification to Surface and Mineral Owners |

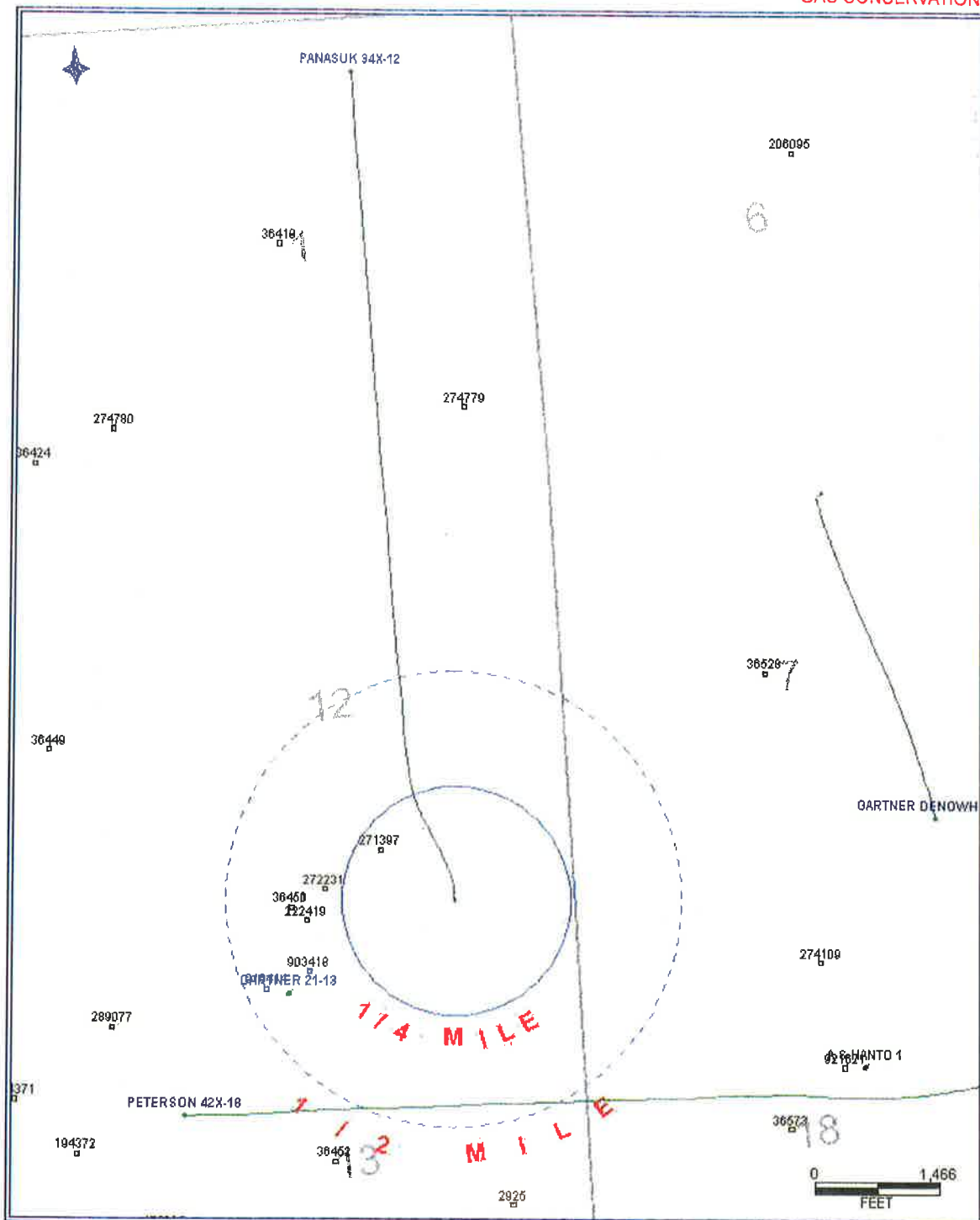


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Map of Freshwater Wells
Panasuk 34X-12
Section 12 of T23N-R58E
Richland County, Montana

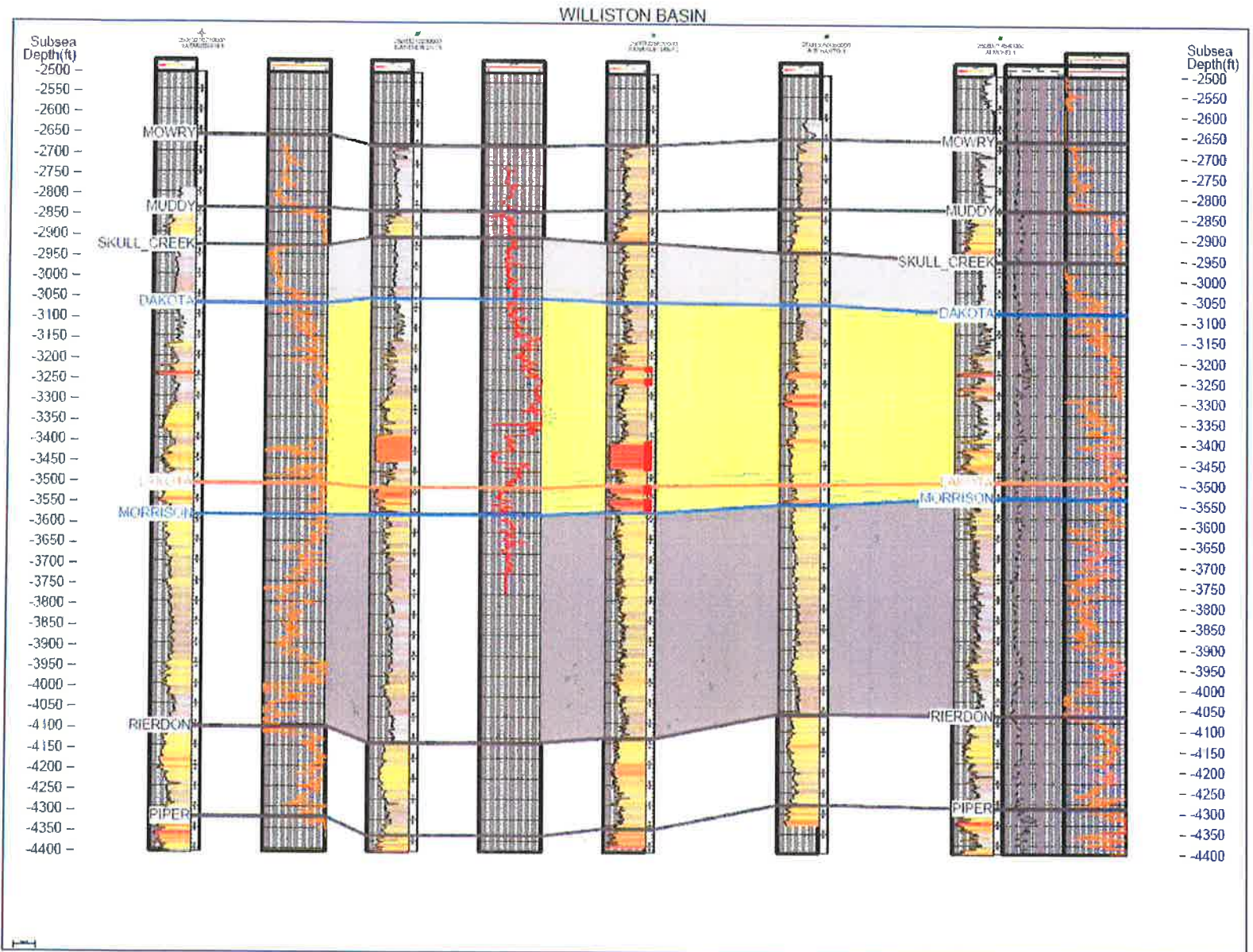


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Cross Section
Panasuk 34X-12
Section 12 of T23N-R58E
Richland County, Montana

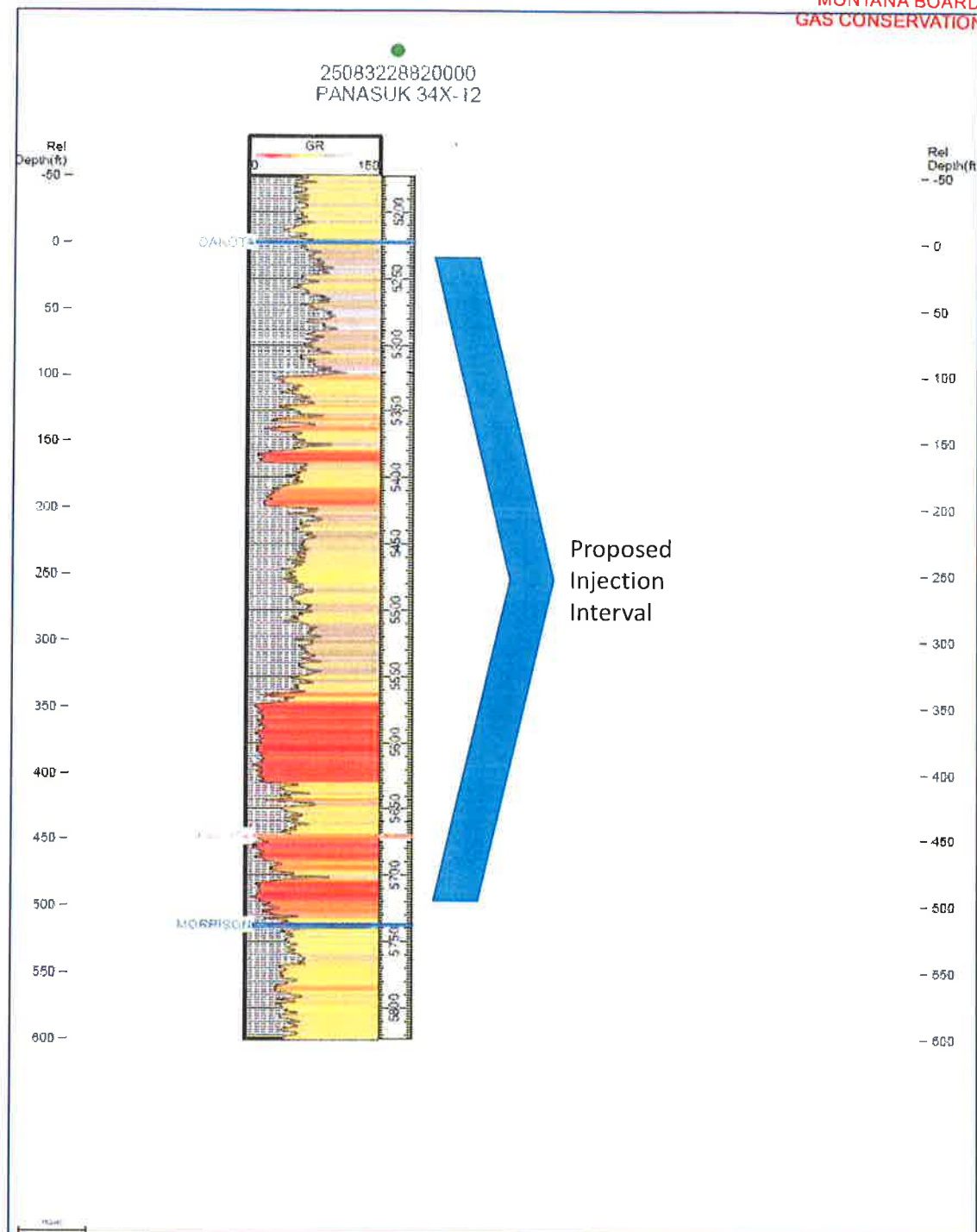


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Log of Injection Interval
Panasuk 34X-12
Section 12 of T23N-R58E
Richland County, Montana



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Water Analysis of Injection Interval- Lower Dakota
Panasuk 34X-12
Richland County, MT

SATHE ANALYTICAL LABORATORY, INC.

301 W. 2ND STREET

BILLINGS 15707
WILLISDALE, ND, 58060

701 572-3670

WATER ANALYSIS REPORT

OPERATOR: ENERPLUS RESOURCES L.P. DATE: 4/7/09
WELL NO.: LONG TREE EDNA 1-12 LAB NO.: W-09-1694
FIELD: not listed FORMATION: Lower Dakota
COUNTY: Richland INTERVAL: 2844 - 5664'
STATE: MT DST #:
LOG: not listed SAMPLE 11TH SWAB RUN-TOTAL 105 BBLS

CATIONS	MG/L	MEQ/L	ANIONS	MG/L	MEQ/L
SODIUM	3580.0	158.2	CHLORIDE	3766.1	106.2
CALCIUM	29.6	1.8	CARBONATE	0.0	0.0
MAGNESIUM	11.4	0.9	BICARBONATE	1415.7	33.2
IRON	0.2	0.0	SULFATE	1532.0	31.9
POTASSIUM	17.4	0.4	NITRATE	0.0	0.0
BARIUM	0.0	0.0			
CHROMIUM	0.0	0.0			

SPECIFIC GRAVITY @ 77°F 1.000 PH 7.55
RESISTIVITY @ 77°F, ohm-meters 0.912 HCL (Calc.) 6210.7
TOTAL DISSOLVED SOLIDS (Calc.) MG/L 10220.5 HYDROGEN SULFIDE NEG

WATER ANALYSIS PATTERN - MEQ/L



REMARKS - 11th RUN SWAB - TOTAL 105 BBL 4/6/09.
Received 4/7/09.

DISTRIBUTION OF RESULTS
Rocky Border - Sidney MT.
Lynn Sundby - Halliburton - Williston ND.



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Water Analysis of Injection Interval- Upper Dakota
Panasuk 34X-12
Richland County, MT

SATHE ANALYTICAL LABORATORY, INC.

701 W. 2ND STREET

P.O. BOX 1577
WILLISTON, ND 58854

701-572-3630

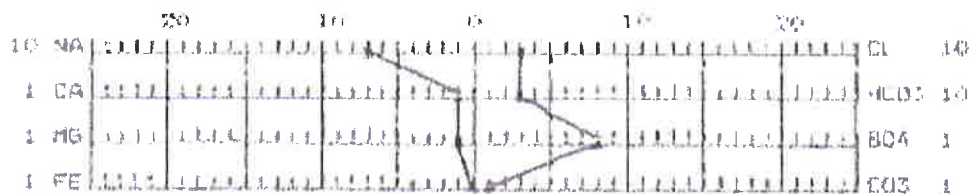
WATER ANALYSIS REPORT

OPERATOR: ENERPLUS L.P. DATE: 4/8/09
WELL NO.: LONG TREE EDNA 1-12 LAB NO.: W-09-1705
FIELD: not listed FORMATION: Upper Dakota
COUNTY: Richland INTERVAL: 2308-2600
STATE: MT DST: 0r
LOG: not listed SAMPLE RUN #16-SAMPLE 130 80LS BACK

CATIONS	MG/L	MEQ/L	ANIONS	MG/L	MEQ/L
SODIUM	1690.0	75.1	CHLORIDE	1114.7	31.4
CALCIUM	14.8	0.7	CARBONATE	31.8	1.1
MAGNESIUM	7.6	0.7	BICARBONATE	1922.1	31.8
IRON	1.7	0.1	SULFATE	591.2	5.1
POTASSIUM	7.9	0.1	NITRATE	0.0	0.0
BARIUM	0.0	0.0			
CHROMIUM	0.0	0.0			

SPECIFIC GRAVITY @ 77°F 1.000 PH 7.85
RESISTIVITY @ 77°F, ohm-centimeters 1.569 NAPE (Calc.) 1839.1
TOTAL DISSOLVED SOLIDS (Calc.) MG/L 5173.0 HYDROGEN SULFIDE NEG

WATER ANALYSIS FACTORIAL MEQ/L



REMARKS - Run #16 Sample 130 80LS Back.
Received 4/8/09.

DISTRIBUTION OF RESULTS
Rocky Gopher -- Sidney MT.
Lyon Sandby -- Halliburton -- Williston ND.



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Panasuk 34X12

Richland County MT
Wellbore schematic

Last update: 8/6/2026

API# 25-083-22882

SW 5E section 12 T3N R58E
275' FSL 1850' FEL

Surface casing:

9 5/8" 36# K-55 at 1737'
470 sacks cement

Production Casing

7" 29# and 32# HCP-110 at 10,774'
cmt with 1040 sks

29# from surface to 6654'

32# from 6654-7357'

29# from 7357-8123'

32# from 8123-9089'

29# from 9089-10,774'

GL elev: 2143'

KB elev: 2165'

KB: 22'

conductor 16' set at 62'

TOC at 3000' CBL 1/19/2012

Production Tbg: 10/19/2018

304 jts of 2 7/8" 6.5# L-80

16 jts 2 7/8" P-55 barozincized

SN at 9860'

7" TAC at 9862'

6" to sub

4.5" GA

ball plug

EOT at 9999'

Rod Design: 10/22/2018

1.5" polish rod

6 1/2" pony rod

146 NP7 7/8" rods

230 NP7 3/4" rods

10 1.5" sucker bars

4 scraper pony

on/off tool

1.5" insert pump

4.5" liner

4.5" 1305# P-110 liner from 9921-19713'

and section pre drilled 0.23" holes/ft 19,485-19,709'

23 TAM free Cap 1 water swelling packers evenly spaced

Liner hanger and PRR 3" ID A 15' at 9921'

fix water packer at 9960'

23 total well packers evenly spaced

KUP at 9925' MD

Top 14,764' MD A 15' TVD 10,393'
Perforations from 10,831'-19,713'

Current Wellbore Diagram

Panasuk 34X-12

Section 12 of T23N-R58E

Richland County, Montana



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Panasuk 34X12

Richland County MT

Proposed Wellbore Schedule

Last update: 9/1/2026

API# 25-083-2288Z

SW 3/4 Section 12 T23N R58E
275' FSL 1350' FEL

Surface casing:
9 5/8" 360 K-55 at 1737'
470 sacks cement

Production Casing
7" 29# and 32# HCP-110 at 10,774'
cmt with 1040 lbs

29# from surface to 6654'
32# from 6654-7337'
29# from 7337-8123'
32# from 8123-9089'
29# from 9089-10,774'

4.5" liner
4.5" 13,500 P-110 liner from 9921-19713'
and section pre drilled 0.25" holes ft: 19,483-19,709'
23 TAM free Cap 1 water swelling packers evenly spaced

KUP at 9925' MD

GL elev: 2143'
KB elev: 2165'
KB: 22'

conductor 16" set at 82'

TOC at 3000' CBL 1/19/2012

Proposed Tubing install
4 5/8" 12.75# L50 ERW TDC RD. Packerline lined wbg
on-off tool w/ 3 profile nipple
Injection Packer at 5303' with washline entry guide

Perforate Dakota/Lakota and acidize. Proposed depths (112' total)
5350-5389' 5411-5420' 5564-5566
5572-5631' 5673-5673' 5677-5682'
5685-5688' 5704-5721' 5727-5729'

Set CIBP at 5680' w/ 50' cement on top. (9 sacks cement 1.13 yield)

Pump Balanced cement plug from 8130' to 8410' to cover base of Chamber Sali (53 sacks 1.13 yield cement)

Set CIBP at 9920'
Squeeze Dakota/Lakota and acidize 98' to 100' from 9920' to 10,000'
Pump 50' cement top 15 CIBP 1.13 yield

Liner hanger and PRR 8" 10 X 15' at 9921'
First water packer at 9940'
23 total water packers evenly spaced

TVD 19,760' MD Avg TVD 10,993'
Perforations from 10,851'-19,713'

Proposed Wellbore Diagram

Panasuk 34X-12

Section 12 of T23N-R58E

Richland County, Montana



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Bakken Water Analysis
Panasuk 34X-12

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JACAM LABORATORIES

DownHole R_x
WATER CHEMISTRY

ENERPLUS RESOURCES
KARSON KOSTELECKY
RICHLAND MT

PEABODY-BANHS 2-16H
TREATER

Report Date: 01-14-2015 Sampled: 12-31-2014
Sample #: 2548 at 0000
Sample ID: 88871

CATIONS

Calcium (as Ca)	13340
Magnesium (as Mg)	1235
Barium (as Ba)	12.79
Strontium (as Sr)	839.30
Sodium (as Na)	68441
Potassium (as K)	5068
Lithium (as Li)	50.41
Ammonia (as NH ₃)	0.00
Aluminum (as Al)	2.14
Iron (as Fe)	262.50
Manganese (as Mn)	7.98
Zinc (as Zn)	3.14
Lead (as Pb)	0.00

ANIONS

Chloride (as Cl)	156800
Sulfate (as SO ₄)	75.00
Bromine (as Br)	0.00
Dissolved CO ₂ (as CO ₂)	100.00
Bicarbonate (as HCO ₃)	73.20
Carbonate (as CO ₃)	0.00
Oxalic acid (as C ₂ O ₄)	0.00
Silica (as SiO ₂)	0.00
Phosphate (as PO ₄)	0.00
H ₂ S (as H ₂ S)	0.00
Fluoride (as F)	0.00
Nitrate (as NO ₃)	0.00
Boron (as B)	404.70

PARAMETERS

Calculated T.D.S.	236875
Molar Conductivity	408969
Resistivity	2.45
Sp.Gr.(g/mL)	1.16
Pressure(atm)	1.00
pCO ₂ (atm)	0.0220
pH ₂ S(atm)	0.00
Temperature (°F)	82.90
pH	5.94

COMMENTS

RICHLAND MT

JACAM LABORATORIES

205 S. Broadway • P.O. Box 96 • Sterling, KS 67579-0096



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Surface and Mineral Owner List
Panasuk 34X-12
Richland County, MT

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Surface Owners within AOR

Gartner-Denowh Angus Ranch
34750 County Road 127
Sidney MT, 59270

Michael Dehowh
34750 County Road 127
Sidney MT, 59270

Estate of Joseph Gartner
12791 County Road 352
Sidney MT, 59270

J.K. Petersen, Inc.
34959 County Road
Sidney MT, 59270

Mineral Interest Owners within AOR

Darcy Lynne Bock
19614 N. Ponderosa Circle
Sun City, AZ 85373

Roni L. Hanifen
299 Mazinke Rd
Fredericksburg, TX 78624

Darrell Lane Bock
Dallas Theological Seminary,
3909 Swiss Ave
Dallas, TX 75204

Purified Resource Partners, LLC
310 2nd Ave NE
Sidney, MT 59270

Carla Berg
2500 Red River Dr.
Sidney, MT 59270

Michael G. Denowh
34750 CR 127
Sidney, MT 59270

Paul J. Denowh
12637 Hwy 16
Sidney, MT 59270

Phoenix Energy One, LLC
18575 Jamboree Road, Suite 830
Irvine, CA 92612

Richard J. Olesky
733 Gladiola Dr.
Auburndale, FL 33823

Margaret A. Bock
526 N. Post Oak Lane
Houston, TX 77024

Gary Malsam
P.O. Box 393
Fairview, MT 59221

Diane Murray
22855 E. Country Vista Dr.,
Unit 467
Liberty Lake, WA 99019

Laura C. Gutierrez
P.O. Box 113
Byron, WY 82412

Rogers Family Properties, LLC
4539 Audubon Way
Billings, MT 59106

Loretta K. Vitt
14043 CR 340
Fairview, MT 59221

Cassandra Wright
41 N. 2nd Street
Greybull, MT 82426

Curtis Prchal
3746 Heritage Drive
Billings, MT 59102

Robin O. Gartner and Setana F.
Gartner
700 Parkhill Drive
Billings, MT 59101

John Gordon Bock
526 N. Post Oak Lane
Houston, TX 77024

JoAnne Bock Rubin
2314 Masters Ln
Missouri City, TX 77459

Shirley E. LaMotte
4215 Montana Sapphire Dr.,
Apt 113
Billings, MT 59106

Paula McLain
1215 12th Street
Havre, MT 59501

Gail D. Lehman
1075 Washington Grn
New Windsor, NY 12553

Pamela J. Wyman
4996 Lake View Loop
Williston, ND 58801

Ronada Gilman
2239 Avenue B
Billings, MT 59102

Climax Molybdenum Company
4340 E. Cotton Center Blvd.,
Suite 110
Phoenix, AZ 85040



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Surface and Mineral Owner List
Panasuk 34X-12
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Christine N. Hystad and Roger D. Hystad,
Trustees of the Christine N. Hystad Living Trust,
dated March 3, 2015
641 4th St. North
Glasgow, MT 59230

Barbara Sheryl Turk and
Christopher Alan Turk,
Co-Trustee of the Turk Family Revocable
Trust
202 Greyhound Circle
Boerne, TX 78006

Margaret G. Bradley
Trustee of the Gordon and
Margaret Bradley Family Trust
12791 County Road 352
Sidney, MT 59270

Donald L. Krahmer, Jr. and Suzanne M.
Blanchard Krahmer,
Trustees of the Don and Suzanne Krahmer
Family Trust
12891 NW Majestic Sequoia Way
Portland, OR 97229

Steven G. Hildebrand and Debra A. Hildebrand,
Trustees of the Hildebrand Living Trust dated
June 27, 2003
12550 Lieutenant Nichols Rd
Fairfax, VA 22033

David Alan Hano and Sherryl Ann Hanto,
Trustees of the Hanto Family Trust dated
June 4, 2004
8555 O'Donovan Rd
Creston, CA 93432

Linda M. Duggar,
Trustee of the Linda M. Duggar Family Trust
dated March 3, 2016
14840 El Camino Real
Atascadero, CA 93422



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Affidavit of Notification to Surface and Mineral Owners

Panasuk 34X-12
Richland County, MT

BEFORE THE BOARD OF OIL AND GAS CONSERVATION OF THE STATE OF MONTANA
IN THE MATTER OF THE APPLICATION FOR
MORNINGSTAR OPERATING LLC FOR THE HEARING
OF ITS REQUEST FOR A UIC PERMIT FOR THE
PANASUK 34X-12 WELL, 275' FSL 1350' FEL, SWSE,
SECTION 12, T23N, R58E, P.M.M., RICHLAND COUNTY,
MONTANA, FOR THE PURPOSE OF WATER INJECTION

AFFIDAVIT OF NOTIFICATION

Date: September 8, 2026

State of Utah
County of Uintah

Amy Doebele, being first duly sworn, deposes and says:

That Notice of advising of MorningStar Operating LLC' application for UIC permit in the captioned matter, in the form attached as "Exhibit A", was mailed to each current operator, surface owner and lease owner within the area of review at the addresses shown in the exhibit attached to the Notice, by mailing a true copy thereof this 10th day of September, 2026, postage prepaid, First Class USPS Mail. This affidavit is given as evidence of compliance with A.R.M. 36.22.1410.



Amy Doebele
Authorized Agent

Subscribed and sworn before me on this 10th day of September, 2026.




Notary Public of the State of Utah
My Commission Expires: May 19, 2030



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Affidavit of Publication – Helena Independent Record

Panasuk 34X-12

Richland County, MT

INTERIM AD DRAFT

This is the proof of your ad scheduled to run in Helena Independent Record on the dates indicated below. If changes are needed, please contact us prior to deadline at (423) 456-7830.

Notice ID: HXWVGVoKaTiffZc69BUy ; Proof Updated: Sep. 03, 2026 at 08:12am MDT
Notice Name: Panasuk 34X-12

See Proof on Next Page

This is not an invoice. Below is an estimated price, and it is subject to change. You will receive an invoice with the final price upon invoice creation by the publisher.

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Ang Dosbela	Helena Independent Record
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Columns Wide: 2	Ad Class: Legals
Total Column Inches: 11.18	
Number of Lines: 40	
09/02/2026 General Legal	170.35
Affidavit Fee	10.00
Subtotal	\$180.35
Tax	\$0.00
Processing Fee	\$0.00
Total	\$180.35

Panasuk 34X-12 BEFORE THE BOARD OF OIL AND GAS CONSERVATION OF THE STATE OF MONTANA

In the Matter of the application of
MorningStar Operating LLC
for a Class II Injection well permit.

NOTICE OF INTENTION TO APPLY FOR A CLASS II INJECTION WELL PERMIT

1. Name and address of Applicant:
MorningStar Operating LLC
400 W 7th Street
Fort Worth, TX 76102

2. Legal Description including County and Approximate Footages of Surface Location of Proposed Oil and Gas Well; (and projected bottom-hole location, if a directional or horizontal well)
Panasuk 34X-12
Surface Hole: 275' FSL 1,350' FEL
SWSE, Section 12, Township 23 North, Range 58 East
Richland County, MT

3. Source of fluids to be injected
Produced water from Three Forks (Bakken) wells

4. Zone or formation into which injection will occur, including depth
Dakota/Lakota from 5,224' – 5,738' MD/TVD
Plugback depth – 5,780' MD/TVD

5. An aquifer exemption will be requested as part of the application since the proposed injection zone contains water with less than 10,000 ppm total dissolved solids. Pursuant to Rules 36.22.1409, Administrative Rules of Montana, the Montana Board of Oil and Gas Conservation will hold a public meeting upon the application of MorningStar Operating LLC for a Class II underground injection permit for the well or project set forth above. Said hearing will be held at the Montana Board of Oil & Gas Hearing Room at 2535 St. John's Ave. Billings, Montana, beginning at 9:00 am on Thursday, October 15, 2026.
September 8, 2026 COL-MT-203221 MNAXLP



MORNINGSTAR
OPERATING

Affidavit of Publication – Sidney Herald
Panasuk 34X-12
Richland County, MT

**SIDNEY
HERALD**

AFFIDAVIT OF PUBLICATION

Sidney Herald
310 2nd Ave NE
(406) 433-2403

I, Anjana Bhadoriya, of lawful age, being duly sworn upon oath depose and say that I am an agent of Column Software, PBC, duly appointed and authorized agent of the Publisher of Sidney Herald, a publication that is a "legal newspaper" as that phrase is defined for the city of Sidney, for the County of Richland, in the state of Montana, that this affidavit is Page 1 of 1 with the full text of the sworn-to notice set forth on the pages that follow, and that the attachment hereto contains the correct copy of what was published in said legal newspaper in consecutive issues on the following dates:

PUBLICATION DATES:
Sep. 5, 2026

Notice ID: 4RCrq4qilyShGJesAhVI
Publisher ID: SHM000963
Notice Name: MorningStar Operating LLC

PUBLICATION FEE: \$102.17

Request of
Amy Doebele

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

Anjana Bhadoriya

Agent

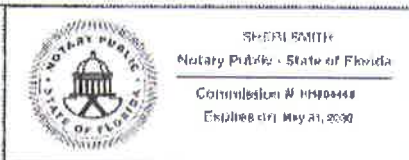
VERIFICATION

State of Florida
County of Broward

Signed or attested before me on this: 09/10/2026

S. Smith

Notary Public
Notarized remotely online using communication technology via Proof.



BEFORE THE BOARD OF OIL
AND GAS CONSERVATION
OF THE STATE OF MONTANA

In the Matter of the application
of MorningStar Operating LLC
for a Class II Injection well permit.

**NOTICE OF INTENTION TO
APPLY FOR A CLASS II
INJECTION WELL PERMIT**

1. Name and address of
Applicant:
MorningStar Operating LLC
400 W 7th Street
Fort Worth, TX 76102

2. Legal Description including
County and Approximate Bound-
aries of Surface Location of Pro-
posed Oil and Gas Well:
Well proposed bottom-hole loca-
tion: P 2 (direction of hole
200ft with
Panasuk 34X-12
Surface Hole: 275' FGL 1350'
FEL
SWSE, Section 12, Township-
28 North, Range 58 East
Richland County, MT

3. Source of fluids to be injected:
Produced water from Three
Forks (Dakota/Lakota) wells

4. Zone or formation into which
injection will occur, including
depth:
Dakota/Lakota from 5,321' –
5,788' MDVD
Plugback depth – 5,780' MDV
TVD

5. An outline summary will be
submitted as part of the applica-
tion when the proposed Injection
Zone contains water with less
than 10,000 ppm total dissolved
solids.
Pursuant to Rules 06.22 & 09.1,
Administrative Rules of Mon-
tana, the Montana Board of Oil
and Gas Conservation will hold
a public hearing upon the appli-
cation of MorningStar Operating
LLC for a Class II underground
injection permit for the well or
project set forth above. Such
hearing will be held at the Mon-
tana Board of Oil & Gas Hearing
Room at 2535 R. J. Irvine Ave.,
Billings, Montana, beginning at
9:00 am on Thursday, October
15, 2026.
Date: September 8, 2026
SHM000963

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September 10, 2026

Mr. John Gizicki
Underground Injection Control (UIC) Program Director
Montana Board of Oil and Gas Conservation
2535 St. Johns Avenue
Billings, MT 59102

RE: Request for Aquifer Exemption
Panasuk 34X-12 located in Section 12 of T23N R58E
Richland County, Montana

Dear Mr. John Gizicki,

Please accept the Aquifer Exemption request to supplement the MorningStar Operating, LLC. Panasuk 34X-12 Disposal Application for the October 15th, 2026, Montana Board of Oil and Gas hearing.

The Dakota/Lakota are being evaluated for injection. There is water data available on the Dakota/Lakota. The assumption is that an aquifer exemption will be required unless water quality data from the Panasuk 34X-12 indicates water from the injection zone is not acceptable as USDW. An aquifer exemption is required if the proposed injection zone contains water that is less than 10,000 ppm of total dissolved solids (TDS), and therefore defined as an Underground Source of Drinking Water (USDW).

Swab analysis from the Lakota Formation (noted as Lower Dakota in the water analysis report in Exhibit 5A) outside the area of review indicates the TDS is greater than 10,000 ppm. There is swab analysis from the Dakota Formation (noted as Upper Dakota in the water analysis report in Exhibit 5B) outside the area of review that indicates the TDS is less than 10,000 ppm but greater than 3,000 ppm. The TDS of the Dakota and Lakota will be confirmed with swab results upon completion. In addition to swab results, cost analysis data indicates that a Dakota/Lakota freshwater supply well in this area is unlikely. The basis of the exemption is that the Dakota/Lakota does not currently serve as a source of drinking water because the Dakota/Lakota is situated at a depth which makes recovery of water for drinking water purposes economically or technologically impractical.

Based on data from numerous published sources, two aquifers in the area meet the criteria of a USDW. These are shallow alluvium within the Tertiary Fort Union sandstone aquifer and the Cretaceous Fox Hills Hell Creek sandstone aquifer. Neither of these would be affected by injection into the proposed location. There is 1 water well producing located within the ¼ mile area of review (AOR). There are 4 water wells and 2 water well permits, not within the ¼ mile AOR, but within ½ mile expanded view of the Panasuk 34X-12. There are no water supply wells penetrating the Dakota/Lakota formation within ½ mile of the Panasuk 34X-12, which is specifically requested information per 36.22.1418(1)(a).

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To protect freshwater zones, drilling practices include drilling through these possible freshwater zones and setting surface casing. Surface casing is cemented to surface. There are only gamma ray logs that run through the Fox Hills formations due to this formation being isolated behind casing and cement. To supplement information on the depth of possible freshwater zones, MorningStar references Montana Bureau of Mines and Geology reports on groundwater for the area, namely, the mapping work by Larry Smith entitled "Depth to the Fox Hills-Lower Hell Creek Aquifer, Lower Yellowstone River Area" published in MBMG's GWAA- Montana Ground-Water Assessment Atlas (1-B-03), 1998, which estimates the base of the Fox Hills at approximately 1650 feet of depth in the Panasuk 34X-12 area. Underground sources of drinking water (USDW) TDS reports to the base of the Fox Hills are available in the area and show values less than 1200 mg/L.

The Dakota/Lakota are not used for USDW in this area due to the existence of shallower freshwater aquifers. Based on recent drilling estimates using a water well rig, the cost to drill a 1,500-foot water well with rathole through the Fox Hills including the pump is approximately \$569,000. The cost to drill and complete a 5900-foot Dakota/Lakota water well would require a full drilling rig and cost approximately \$1,499,000. There would also be additional costs to treat the Dakota/Lakota water, greatly exceeding the costs to treat the Fox Hills water. See Exhibits 6A and 6B.

The Environmental Protection Agency (EPA), in UIC guidance 34, states that the minimum data set needed for aquifer exemptions will include at least:

1. *All oil and gas boreholes within the area, all public and private water wells within the area and at least ¼ mile beyond the boundary of any existing wellhead protection areas, and the locations of all relevant water samples.*
 - a. There is 1 water wells within ¼ mile of the proposed Panasuk 34X-12 injection location. Water wells located within ½ mile of the proposed location are also listed below:

Well Name	GWIC ID	Location	Use	Distance from Proposed SWD (ft)	Total Depth (ft)
RASMUSSEN, C.W.	36450	Sec 12, 23N, 58E 47.762528, -104.219115	Unused	1918	90
TYLER, JACK	36451	Sec 12, 23N, 58E 47.762528, -104.219115	Domestic	1918	70
PEIRCE DAVID	222419	Sec 12, 23N, 58E 47.762072, -104.218425	Domestic	1753	50
GARTNER 21-13	903418	Sec 13, 23N, 58E 47.760463, -104.218456	Not available	1898	NA
GARTNER 21-13	916414	Sec 13, 23N, 58E 47.759997, -104.220486	Not available	2424	NA
M K WEEDEN CONSTRUCTION INC.	271397	Sec 12, 23N, 58E 47.764167, -104.214722	Commercial	1050	300
MK WEEDEN CONSTRUCTION INC.	272231	Sec 12, 23N, 58E 47.763056, -104.2175	Industrial	1538	210

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- b. Water samples for the Dakota/Lakota formations are shown in Exhibit 5A and 5B.
 - c. There are no Dakota/Lakota oil producing wells within the ¼ mile or ½ mile area. See Exhibit 1A.
 - d. All water wells and producing wells within a ¼ mile and ½ mile area are shown on Exhibit 2A.
2. *Narrative description of the proposed exempted aquifer listing formation name, approximate depth or elevation, confining zone, as well as geological definition of the exempted area. Include adequate wireline logs to demonstrate vertical confinement from sources of drinking water.*
- a. The Panasuk 34X-12 may be completed into the Dakota and Lakota. See Exhibit 3A for a cross section of wireline logs showing the vertical confinement of the Dakota/Lakota formation and Exhibit 4A for available wireline logs of the injection interval.
 - b. Water quality information for the proposed disposal zone in the immediate area of the Panasuk 34X-12 is not available. However, a water sample from the Dakota/Lakota in the RR Lonetree Edna 1-13 SWD located 6 miles west of the proposed disposal site had total dissolved solids between 5,173 to 10,352 mg/L, and water in the Panasuk 34X-12 is expected to be similar. The samples from the Lonetree Edna 1-13 were acquired by swab testing the interval and measuring the TDS for the interval. See Exhibit 5A and 5B. The Dakota (identified as Upper Dakota on the report) TDS lies between the 3,000 ppm and 10,000 ppm cutoff and will require an aquifer exemption.
 - c. Proposed injection zones for the Panasuk 34X-12 SWD are as follows and can be viewed in the wellbore diagram in Exhibit 7B. Depths are shown below:

Formation	Lithology	TVD Top (ft)	TVD Base (ft)	Net pay (ft)	Pressure (PSI)	Porosity
Dakota	Sandstone	5224	5671	71	2272	15%
Lakota	Sandstone	5671	5738	32	2467	15%

Depth and net pay for each of the proposed injection zones are estimated from the Cement Bond Log with Gamma Ray ran April 1, 2026, on the Panasuk 34X-12. The porosity is based on sonic and density log estimates from the following wellbores: Gartner 21-13 (1/2 miles SW) and Rasmussen 1 (1.5 miles NW). The porosity was derived from log curves calculated using a consolidated sandstone matrix. Formation pressure was estimated using a water gradient of 0.435 psi/ft.

- d. The upper confining formation for the proposed injection zone is the Cretaceous Skull Creek formation. It is comprised of clastic, shallow marine deposits composed of medium-dark gray shales, calcareous, micaceous, and glauconitic in part, interbedded with siltstones. The Skull Creek is 145 feet thick in this area.

The lower confining formation for the proposed injection zone is the Jurassic Morrison, Swift, and Rierdon formations. The Swift lies immediately below the Lakota and is primarily made up of transgressive-regressive, clastic, shallow marine deposits composed of dark gray-green shales, slightly calcareous, dark

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gray-green, waxy shales, and is commonly interbedded with glauconitic siltstones and sandstones with occasional carbonate packstones and grainstones. The lower confining interval is approximately 771 feet of impermeable rock facies.

The actual fracture gradients for these confining zones are unknown, but fracture gradients for the confining shale layers are known to be higher than those for the underlying sandstone injection zone.

Formation	Lithology	TVD Top (ft)	TVD Base (ft)	Thickness (ft)
Skull Creek	Shale	5079	5224	145
Mrsn/Swft/Rrdn	Shale	5738	6509	771

Considering the vertical distance to any USDW and the maximum feasible injection rate that could occur, the likelihood of a fracture extending from the proposed disposal zone to any USDW under any reasonable disposal conditions is considered low.

3. *Thickness, area, and average porosity of the reservoir to be exempted. If the proposed UIC well within the exempted area is an SWD, calculate the volume of connate water that will be displaced by the injectate using the following formula (this pore volume figure is made part of the MBOGC permit for the included SWD well. For example, if the pore volume calculation shows the exempted aquifer to contain 5.0 million barrels within the exempted area, the UIC permit will terminate when the cumulative injected volume reaches 5.0 million barrels of saltwater).*

$$\text{Pore Volume (barrels)} = (\pi * r^2 * h * f) / 5.63$$

Where:

r = radius of the exempted area, in feet (usually 1320')

h = average thickness, in feet, of the proposed exempted aquifer

f = average porosity, in decimal, of the proposed exempted aquifer

The computed pore volume would be:

$$\text{Dakota: } (\pi * 1320^2 * 71 * 0.15) / 5.63 = 10,354,734 \text{ barrels}$$

$$\text{Lakota: } (\pi * 1320^2 * 32 * 0.15) / 5.63 = 4,666,922 \text{ barrels}$$

$$\text{Radius of Emplacement Fluid} = (Q * t / (\pi * h * \text{porosity}))^{0.5}$$

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Where: t = time, in days

Q = injection rate, cubic feet per day

Assuming:	Minimum Water Injection Rate	0	BWPD	or	0	FT ³ /DAY
	Median Water Injection Rate	2000	BWPD	or	11229	FT ³ /DAY
	Maximum Water Injection Rate	6000	BPWD	or	33687	FT ³ /DAY
	Injection Period	18	YEARS	or	6570	DAYS
	Net Thickness	103	FEET			
	Average Porosity	15%				

The computed radius of emplacement would be:

$$(11229 \times 6570 / (\pi \times 103 \times 0.15))^{0.5} = 1233 \text{ FT} = 0.23 \text{ miles}$$

4. *Water quality analysis of the aquifer for exemption. How was water quality determined?*
- a. Water samples from the RR Lonetree Edna 1-13, located 12.5 miles west of the Panasuk 34X-12 were used. See Exhibit 5A and 5B for swab results of the water samples.

In addition to the technical data, the affidavits of notification to all concerned parties are attached as Exhibit 8A and 9A. Please contact us if there are any questions regarding this submission.

Sincerely,

A handwritten signature in blue ink, appearing to read 'B. Savage'.

Brodie Savage

Vice President- Operations
Engineering
817-334-7745

bsavage@txopartners.com

A handwritten signature in blue ink, appearing to read 'E. Donovan'.

Erin Donovan

Manager- Geology
817-334-7871

edonovan@txopartners.com

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MONTANA BOARD OF OIL &
GAS CONSERVATION • BILLINGS**List of Exhibits**

Exhibit 1A	Map of General Area
Exhibit 2A	Map of Freshwater Wells within Area of Review (AOR)
Exhibit 3A	Geologic Cross Section of the Dakota/Lakota
Exhibit 4A	Log of Injection Interval
Exhibit 5A	Water Analysis of Injection Interval- Lower Dakota
Exhibit 5B	Water Analysis of Injection Interval- Upper Dakota
Exhibit 6A	Estimated Cost of Drilling 1,500-foot water well – Fox Hills
Exhibit 6B	Estimated Cost of Drilling 5,900-foot water well – Dakota/Lakota
Exhibit 7A	Current Wellbore Diagram
Exhibit 7B	Proposed Wellbore Diagram
Exhibit 8A	Surface and Mineral Owner List
Exhibit 9A	Affidavit of Notification to Surface and Mineral Owners

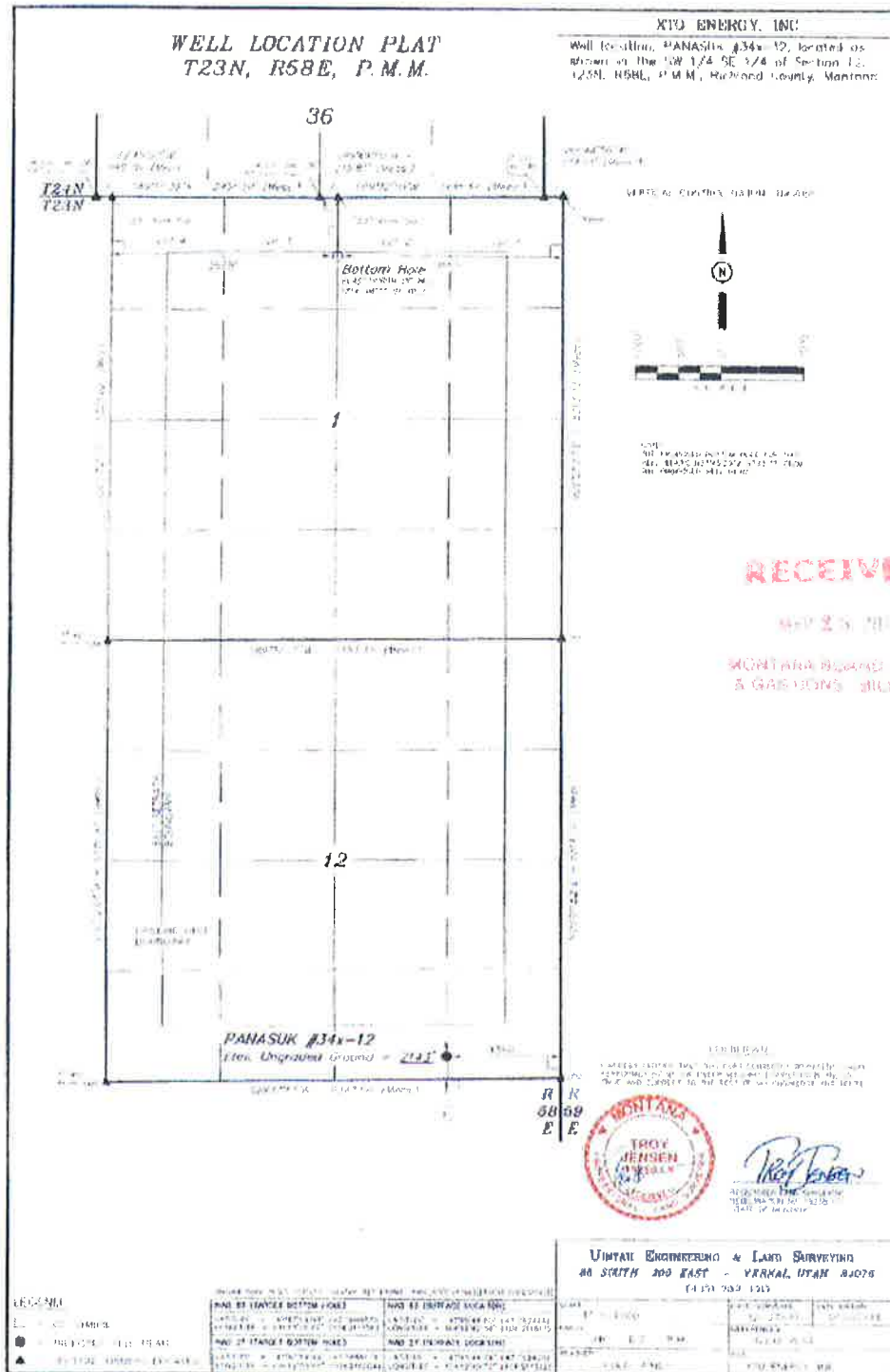


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Map of General Area
Panasuk 34x-12
Section 12 of T23N-58E
Richland County, Montana

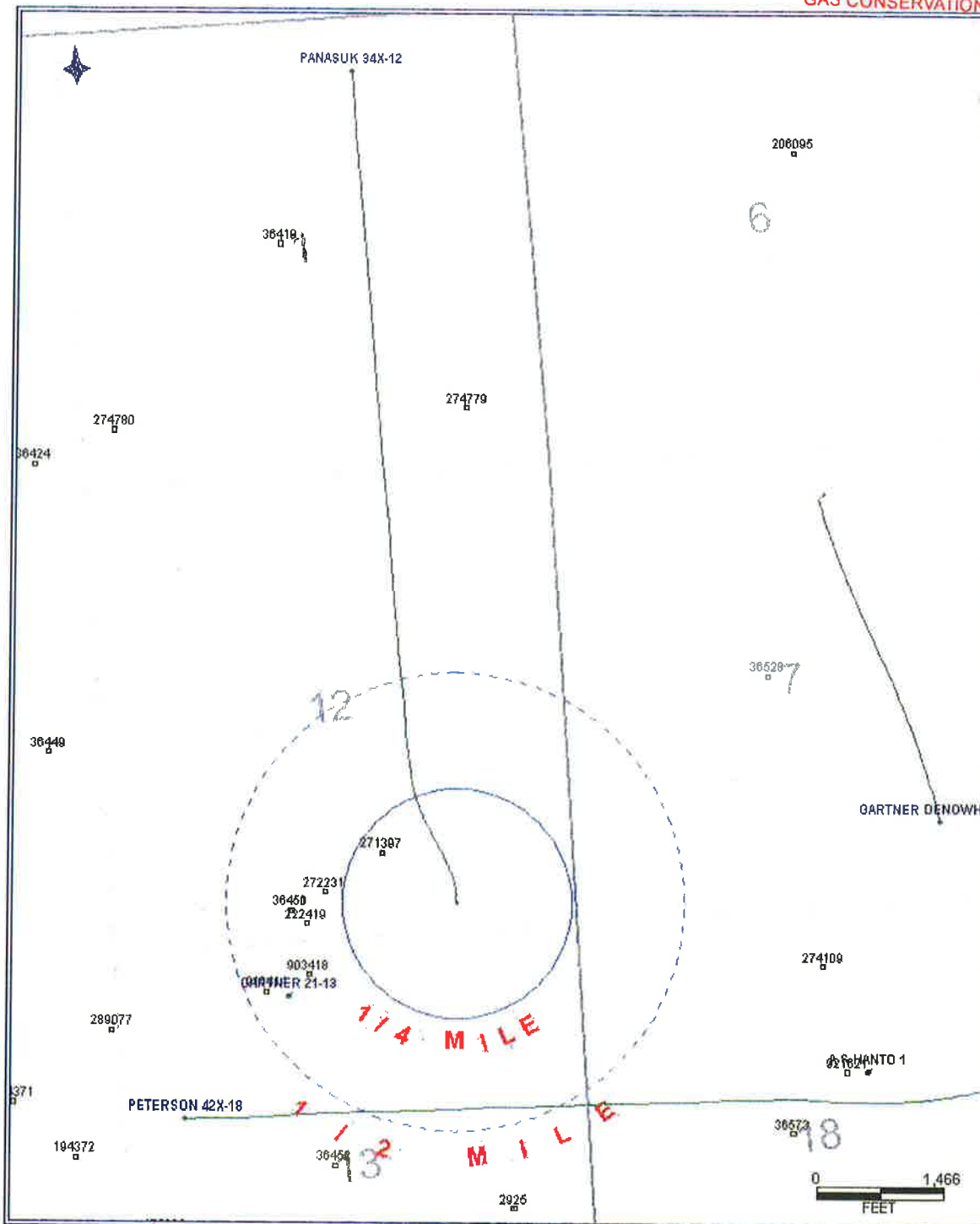


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Map of Freshwater Wells
Panasuk 34x-12
Section 12 of T23N-58E
Richland County, Montana

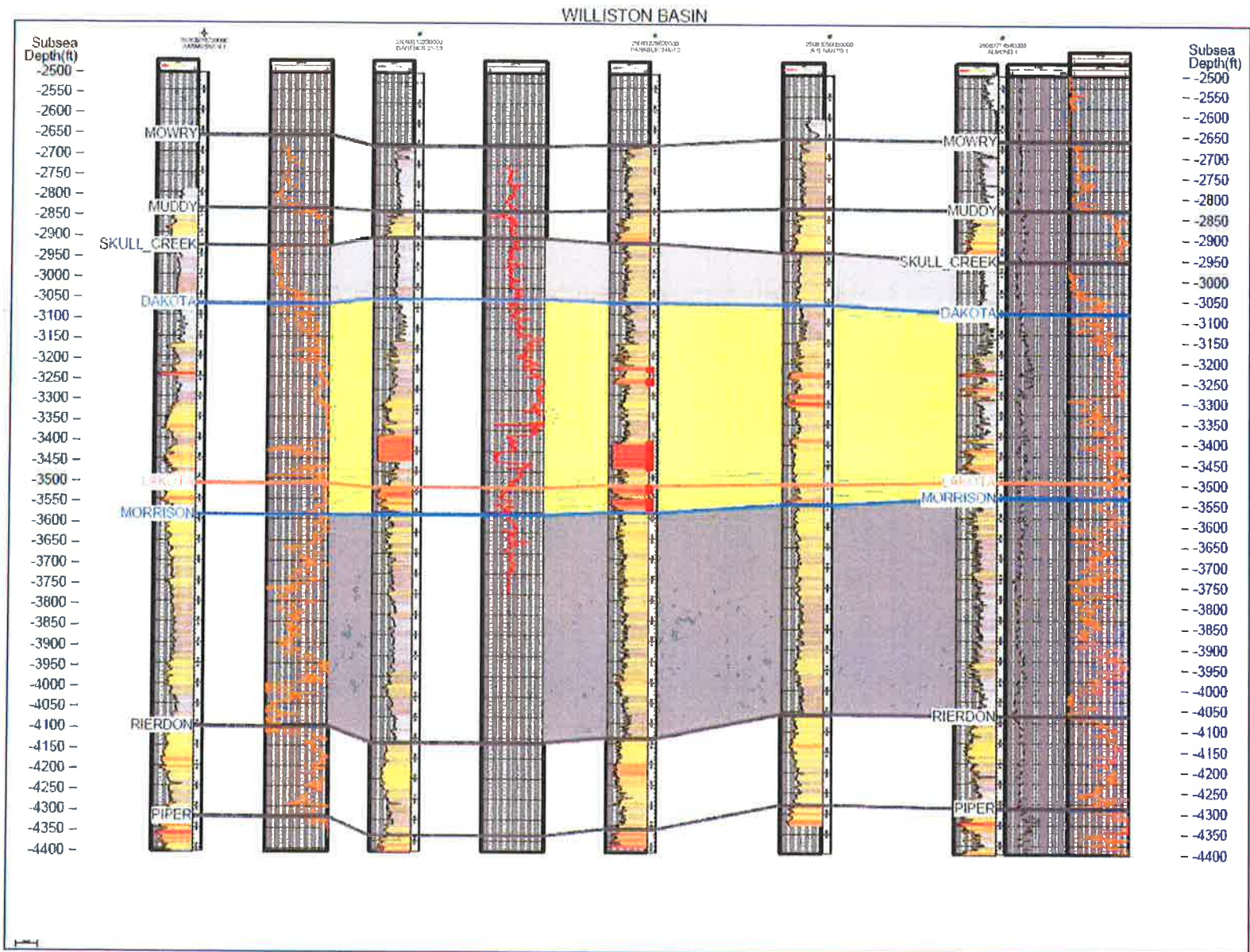


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Cross Section
Panasuk 34x-12
Section 12 of T23N-58E
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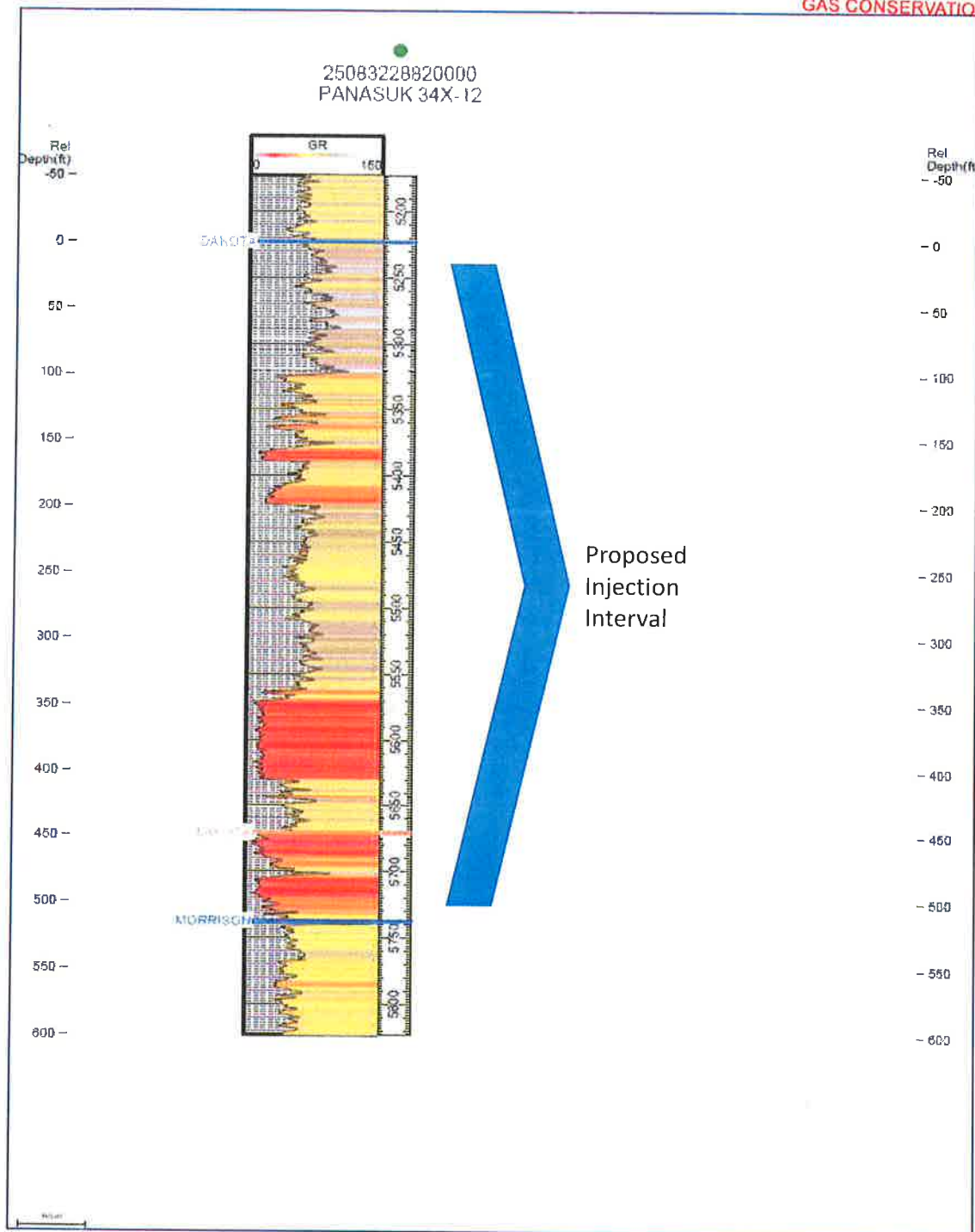


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Log of Injection Interval
Panasuk 34x-12
Section 12 of T23N-58E
Richland County, Montana



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Water Analysis of Injection Interval- Lower Dakota

Panasuk 34x-12

Richland County, MT

SATHE ANALYTICAL LABORATORY, INC.

301 W. 2ND STREET

PO BOX 1507
WILLISTON, ND. 58801

701 572-3670

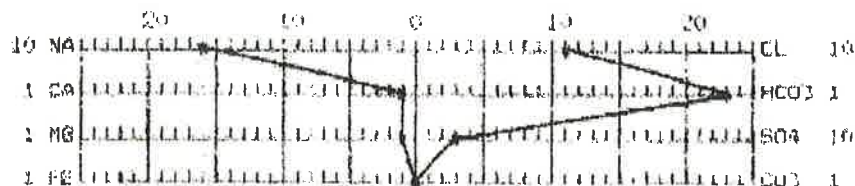
WATER ANALYSIS REPORT

OPERATOR: ENERPLUS RESOURCES L.P. DATE: 4/7/09
WELL NO. LONE TREE EDNA 1-12 LAB NO.: W-09-1694
FIELD: not listed FORMATION: Lower Dakota
COUNTY: Richland INTERVAL: 3844 -3864'
STATE: MT DST #:
LOC: not listed SAMPLE 11TH SWAB RUN-TOTAL 105 RBLS

CATIONS	MG/L	MEQ/L	ANIONS	MG/L	MEQ/L
SODIUM	3580.0	155.7	CHLORIDE	2766.1	106.2
CALCIUM	29.8	1.3	CARBONATE	0.0	0.0
MAGNESIUM	11.4	0.9	BICARBONATE	1415.7	20.2
IRON	0.3	0.0	SULFATE	1532.2	31.9
POTASSIUM	17.4	0.4	NITRATE	0.0	0.0
BARIUM	0.0	0.0			
CHROMIUM	0.0	0.0			

SPECIFIC GRAVITY @ 77°F 1.000 PH 7.55
RESISTIVITY @ 77°F ohm-meters 0.912 NaCl (Calc.) 6210.7
TOTAL DISSOLVED SOLIDS (CALC.) MG/L 10520.5 HYDROGEN SULFIDE NEG

WATER ANALYSIS PATTERN - MEQ/L



REMARKS - 11th RUN SWAB -- TOTAL 105 DBL 4/6/09.
Received 4/7/09.

DISTRIBUTION OF RESULTS
Rocky Border -- Sidney MT,
Lynn Sandby -- Halliburton -- Williston ND.



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Water Analysis of Injection Interval- Upper Dakota

Panasuk 34x-12

Richland County, MT

SATHE ANALYTICAL LABORATORY, INC.

701 W. 2ND STREET

P.O. BOX 1507
WILLISTON, ND. 58854

701-572-3630

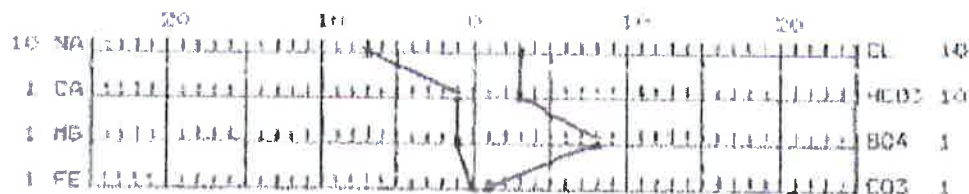
WATER ANALYSIS REPORT

OPERATOR: ENERPLUS L.P. DATE: 4/8/09
WELL NO.: LONE TREE EDNA 1-12 LAB NO.: W-09-1705
FIELD: not listed FORMATION: Upper Dakota
COUNTY: Richland INTERVAL: 5588-5608
STATE: MT DST 0r
LOG: not listed SAMPLE RUN #16-SAMPLE 130 DBLS BACK

CATIONS	MG/L	MEQ/L	ANIONS	MG/L	MEQ/L
SODIUM	1680.0	73.1	CHLORIDE	1114.7	31.4
CALCIUM	14.0	0.7	CARBONATE	31.5	1.1
MAGNESIUM	7.6	0.7	BICARBONATE	1929.1	31.8
IRON	1.2	0.1	SULFATE	391.2	6.1
POTASSIUM	2.9	0.2	NITRATE	0.0	0.0
BARIUM	0.0	0.0			
CHROMIUM	0.0	0.0			

SPECIFIC GRAVITY @ 77°F 1.000 PH 7.85
RESISTIVITY @ 77°F, ohm-centimeters 1.569 NOCL (Calc.) 1838.1
TOTAL DISSOLVED SOLIDS (Calc.) MG/L 3173.0 HYDROGEN SULFIDE NEG

WATER ANALYSIS PATTERN MG/L



REMARKS - Run #16 Sample 130 DBLS Back.
Received 4/8/09.

DISTRIBUTION OF RESULTS
Rocky Gorder -- Sidney MT.
Lynn Sandby -- Halliburton -- Williston ND.



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GAS CONSERVATION • BILLINGS

AUTHORITY FOR EXPENDITURE - D&C

Company MorningStar Operating, LLC AFE # _____ CC# _____ Date 1/10/2025
Lease Name Elm Coulee Water Well Well # 1 API # _____
S-T-R _____ Surv/Abs _____ Field/Area Elm Coulee
County Richland State Montana
Project Drill and Complete a water well to 1,500'
Proj Form _____ Proj TD 1500

2250		INTANGIBLE		TOTAL
1000	LOCATION / ROADS / RIGHTS	\$150,000		\$150,000
1002	LAND DAMAGES / LEGAL WORK / SURVEYING	\$25,000		\$25,000
1100	DRILLING - FISHING TOOLS & SERVICE			\$0
1301	DRILLING - RENTAL TOOLS & EQUIPMENT - SURFACE	\$20,000		\$20,000
1302	DRILLING - RENTAL TOOLS & EQUIPMENT - SUBSURFACE	\$4,000		\$4,000
1500	MUD / CHEMICALS	\$15,000		\$15,000
1600	DRILLING - ENGINEERING / SUPERVISION	\$15,000		\$15,000
1601	DRILLING - CONTRACT LABOR			\$0
2000	DRILLING RIG	\$125,000		\$125,000
2003	DRILLING - TRUCKING / HOT SHOT (TANGIBLES ONLY)			\$0
2004	DIRECTIONAL TOOLS & SERVICE			\$0
2007	RIG MOB / DEMOB			\$0
2102	DRILLING - FLUID DISPOSAL / SOLIDS CONTROL			\$0
2201	OPEN HOLE LOGS / CORES / FORMATION EVALUATION			\$0
3000	DRILL BITS			\$0
3100	OVERHEAD			\$0
3900	DRILLING - WATER & WATERLINES	\$15,000		\$15,000
3901	DRILLING - POWER & PUL	\$10,000		\$10,000
4001	SURFACE / INTERMEDIATE - CASING CREWS, TOOLS & TONGS			\$0
4002	SURFACE / INTERMEDIATE - CEMENT & CEMENTING SERVICES			\$0
8000	MUD LOGGING UNIT			\$0
2260			TANGIBLE	TOTAL
1201	CONDUCTOR PIPE			\$0
1101	SURFACE CASING			\$0
1102	INTERMEDIATE CASING			\$0
1300	CASING HEAD		\$7,500	\$7,500
TOTAL COST IF DRY HOLE		\$379,000	\$7,500	\$386,500
2250		INTANGIBLE		TOTAL
1101	COMPLETION - FISHING TOOLS & SERVICES			\$0
1303	COMPLETION - RENTAL TOOLS & EQUIPMENT - SUBSURFACE			\$0
1304	COMPLETION - RENTAL TOOLS & EQUIPMENT - SURFACE			\$0
1501	COMPLETION - WATER / COMPLETION FLUIDS / CHEMICALS / TRACERS			\$0
1602	COMPLETION - ENGINEERING / SUPERVISION			\$0
1603	COMPLETION - CONTRACT LABOR			\$0
2100	COMPLETION UNIT			\$0
2101	COMPLETION - TRUCKING / HOT SHOT			\$0
2200	CASED HOLE WIRELINE SERVICES			\$0
2400	STIMULATION SERVICES			\$0
2401	COMPLETION - FLUID DISPOSAL			\$0
2402	COMPLETION - FRAC TANK RENTALS			\$0
2403	FLOWBACK			\$0
3301	PUMP TRUCKS & SERVICES			\$0
4003	PRODUCTION - CEMENT & CEMENTING SERVICES	\$30,000		\$30,000
4004	PRODUCTION - CASING CREWS, TOOLS & TONGS	\$7,500		\$7,500
4200	WELL TESTING			\$0
9000	FILL PITS & DRESS LOCATION			\$0
2260			TANGIBLE	TOTAL
1103	PRODUCTION CASING / LINER		\$50,000	\$50,000
1200	TUBING		\$10,000	\$10,000
1301	TUBING HEAD / X-MAS TREE		\$10,000	\$10,000
1401	SUBSURFACE EQUIPMENT / PACKER			\$0
1501	ARTIFICIAL LIFT EQUIPMENT / SUBPUMP / PUMPING UNIT		\$50,000	\$50,000
1502	TANKS / WALKS / STAIRWAYS			\$0
1503	SEPARATION EQUIPMENT / GAUGES - PROD FACILITY			\$0
1601	ELECTRICAL		\$25,000	\$25,000
1700	MEASUREMENT EQUIPMENT			\$0
1701	AUTOMATION EQUIPMENT			\$0
8000	FLOWLINES & FITTINGS			\$0
TOTAL COST TO COMPLETE & EQUIP		\$37,500	\$145,000	\$182,500
TOTAL WELL COST		\$416,500	\$152,500	\$569,000

Aquifer Exemption- Dakota/Lakota

Exhibit 6A



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GAS CONSERVATION • BILLINGS

AUTHORITY FOR EXPENDITURE - D&C

Company MorningStar Operating, LLC AFE # _____ CC# _____ Date 1/10/2025
Lease Name Elm Coulee Water Well Well # 1 API # _____
S-T-R _____ Surv/Abs _____ Field/Area Elm Coulee
County Richland State Montana
Project Drill and Complete a water well to 5,900'
Proj Form _____ Proj TD 5,900'

2250		INTANGIBLE		TOTAL
1000	LOCATION / ROADS / PITS	\$250,000		\$250,000
1002	LAND DAMAGES / LEGAL WORK / SURVEYING	\$25,000		\$25,000
1100	DRILLING - FISHING TOOLS & SERVICE			\$0
1301	DRILLING - RENTAL TOOLS & EQUIPMENT - SURFACE	\$50,000		\$50,000
1302	DRILLING - RENTAL TOOLS & EQUIPMENT - SUBSURFACE	\$20,000		\$20,000
1500	MUD / CHEMICALS			\$0
1600	DRILLING - ENGINEERING / SUPERVISION	\$30,000		\$30,000
1601	DRILLING - CONTRACT LABOR			\$0
2000	DRILLING RIG	\$300,000		\$300,000
2003	DRILLING - TRUCKING / HOT SHOT (TANGIBLES ONLY)			\$0
2004	DIRECTIONAL TOOLS & SERVICE			\$0
2007	RIG MOB / DEMOB			\$0
2102	DRILLING - FLUID DISPOSAL / SOLIDS CONTROL	\$40,000		\$40,000
2201	OPEN HOLE LOGS / CORES / FORMATION EVALUATION			\$0
3000	DRILL BITS			\$0
3100	OVERHEAD			\$0
3900	DRILLING - WATER & WATERLINES	\$25,000		\$25,000
3901	DRILLING - POWER & FUEL	\$25,000		\$25,000
4001	SURFACE / INTERMEDIATE - CASING CREWS, TOOLS & TONGS	\$7,500		\$7,500
4002	SURFACE / INTERMEDIATE - CEMENT & CEMENTING SERVICES	\$30,000		\$30,000
8000	MUD LOGGING UNIT			\$0
2260			TANGIBLE	TOTAL
1101	CONDUCTOR PIPE			\$0
1101	SURFACE CASING		\$83,000	\$83,000
1102	INTERMEDIATE CASING			\$0
1300	CASING HEAD		\$7,500	\$7,500
TOTAL COST IF DRY HOLE		\$802,500	\$90,500	\$893,000
2250		INTANGIBLE		TOTAL
1101	COMPLETION - FISHING TOOLS & SERVICES			\$0
1303	COMPLETION - RENTAL TOOLS & EQUIPMENT - SUBSURFACE			\$0
1304	COMPLETION - RENTAL TOOLS & EQUIPMENT - SURFACE			\$0
1501	COMPLETION - WATER / COMPLETION FLUIDS / CHEMICALS / TRACERS			\$0
1602	COMPLETION - ENGINEERING / SUPERVISION			\$0
1603	COMPLETION - CONTRACT LABOR			\$0
2100	COMPLETION UNIT			\$0
2101	COMPLETION - TRUCKING / HOT SHOT			\$0
2200	CASED HOLE WIRELINE SERVICES	\$20,000		\$20,000
2400	STIMULATION SERVICES			\$0
2401	COMPLETION - FLUID DISPOSAL			\$0
2402	COMPLETION - FRAC TANK RENTALS			\$0
2403	FLOWBACK			\$0
3301	PUMP TRUCKS & SERVICES			\$0
4003	PRODUCTION - CEMENT & CEMENTING SERVICES	\$40,000		\$40,000
4004	PRODUCTION - CASING CREWS, TOOLS & TONGS	\$12,500		\$12,500
4200	WELL TESTING			\$0
9000	TILL PITS & DRESS LOCATION			\$0
2260			TANGIBLE	TOTAL
1103	PRODUCTION CASING / LINER		\$304,000	\$304,000
1200	TUBING		\$42,000	\$42,000
1301	TUBING HEAD / X-MAS TREE		\$12,500	\$12,500
1401	SUBSURFACE EQUIPMENT / PACKER			\$0
1501	ARTIFICIAL LIFT EQUIPMENT / SUBPUMP / PUMPING UNIT		\$150,000	\$150,000
1502	TANKS / WALKS / STAIRWAYS			\$0
1503	SEPARATION EQUIPMENT / GAUGES - PROD FACILITY			\$0
1601	ELECTRICAL		\$25,000	\$25,000
1700	MEASUREMENT EQUIPMENT			\$0
1701	AUTOMATION EQUIPMENT			\$0
8000	FLOWLINES & FITTINGS			\$0
TOTAL COST TO COMPLETE & EQUIP		\$72,500	\$533,500	\$606,000
TOTAL WELL COST		\$875,000	\$624,000	\$1,499,000



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Panasuk 34x12

Richland County, MT
Wellbore: Schumann

Last updated: 8/6/2026

API# 25-083-22882

SW SE section 12 T23N 58E
275' FSL 1250' FEL

Surface casing:

9 5/8" 36# K-55 at 1737'
470 sacks cement

Production Casing

7" 29# and 32# HCP-110 at 10,774'
cmt with 1040 sacks

29# from surface to 6654'
32# from 6654-7357'
29# from 7357-8123'
32# from 8123-9089'
29# from 9089-10,774'

4.5" liner

4.5" 1305# P-110 liner from 9921-19713'
and section pre drilled 0.25" holes @ 19,485-19,709'
23 TAM free Cap 1 water swelling packers evenly spaced

GL elev: 2143'
KB elev: 2165'
KB: 12'

conductor 16" set at 82'

TOC at 3000' CBL 1/19/2012

Production Tbg: 10/19/2018

364 jts of 2 7/8" 6.5# L-80
16 jts 2 7/8" J-55 borealozed
SN at 9860'
7" IAC at 9862'
6" lb sub
4.5" GA
ball plug
EOT at 9899'

Rod Design: 10/22/2018

1.5" polish rod
6 1" pony rod
146 NP 7/8" rods
230 NP 3/4" rods
10 1.5" sinker bars
4 scraper pegs
on/off tool
1.5" insert pump

Liner hanger and PBR 5" ID X 15' at 9921'
first small packer at 9948'
23 total small packers evenly spaced

KHNP at 9915' MID

1D 19,710' MID Aug 1990 10,393'
Perforations from 10,861'-19,713'

Current Wellbore Diagram
Panasuk 34x-12
Section 12 of T23N-58E
Richland County, Montana



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Panasuk 34X12

Richland County MT

Proposed Wellbore Schematic

Last update: 9/1/2026

API# 25-083-12883

SW 1/4 section 12 T23N 58E
275' PSL 1350' FEL

Surface casing:

9 5/8" 36# K-13 at 1337'
470 sacks cement

Production Casing

7" 29# and 3 1/2" HCP-110 at 10,774'
cmt with 1040 lbs

29# from surface to 6614'
3 1/2" from 6654-7337'
29# from 7357-8123'
3 1/2" from 8123-9089'
29# from 9089-10,774'

4.5" liner

4.5" 13.30# P-110 liner from 9921-19713'
and section pre drilled 0.25" holes ft: 19,483- 19,709'
23 TAM free Cap & water swelling packers evenly spaced

KOP at 9925' SID

GL elev: 2143'
KB elev: 2165'
KB: 22'

conductor 16" set at 32'

TOC at 3000 CBL 1/19/2012

Proposed Tubing install

4 1/2" 12.75# L80 ERW/T&C RD Enamels lined 36g
on-off tool w/ 3/4" profile nipple
Injection Packer at 5307' with wireline entry guide

Perforate Dakota/Lakota and acidize. Proposed depths 122' total

5380-5989' 5411-5422' 5564-5566'
5572-5631' 5673-5673' 5677-5682'
5685-5689' 5704-5721' 5727-5729'

Set CIBP at 5830' w/ 50' cement on top. (2 sacks cement 1.15 yield)

Pump Balanced cement plug from 8110' to 8410' to cover base of Charles Salt (53 sacks 1.15 yield cement)

Set CIBP at 5989'

Squeeze Dakota Enamels with 90 sacks cement 1.15 yield
Pump 50' cement on top of CIBP (2 sacks)

Liner hanger and PRR 5" 8D X 15' at 9921'

First well packer at 9940'
23 total on off packers evenly spaced

TD 19,760' MD Avg TVD 10,993'
Perforations from 10,851'-19,713'

Proposed Wellbore Diagram

Panasuk 34x-12

Section 12 of T23N-58E

Richland County, Montana



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Surface and Mineral Owner List

Panasuk 34x-12

Richland County, MT

Surface Owners within AOR

Gartner-Denowh Angus Ranch
34750 County Road 127
Sidney MT, 59270

Michael Dehowh
34750 County Road 127
Sidney MT, 59270

Estate of Joseph Gartner
12791 County Road 352
Sidney MT, 59270

J.K. Petersen, Inc.
34959 County Road
Sidney MT, 59270

Mineral Interest Owners within AOR

Darcy Lynne Bock
19614 N. Ponderosa Circle
Sun City, AZ 85373

Roni L. Hanifen
299 Mazinke Rd
Fredericksburg, TX 78624

Darrell Lane Bock
Dallas Theological Seminary,
3909 Swiss Ave
Dallas, TX 75204

Purified Resource Partners, LLC
310 2nd Ave NE
Sidney, MT 59270

Carla Berg
2500 Red River Dr.
Sidney, MT 59270

Michael G. Denowh
34750 CR 127
Sidney, MT 59270

Paul J. Denowh
12637 Hwy 16
Sidney, MT 59270

Phoenix Energy One, LLC
18575 Jamboree Road, Suite 830
Irvine, CA 92612

Richard J. Olesky
733 Gladiola Dr.
Auburndale, FL 33823

Margaret A. Bock
526 N. Post Oak Lane
Houston, TX 77024

Gary Malsam
P.O. Box 393
Fairview, MT 59221

Diane Murray
22855 E. Country Vista Dr.,
Unit 467
Liberty Lake, WA 99019

Laura C. Gutierrez
P.O. Box 113
Byron, WY 82412

Rogers Family Properties, LLC
4539 Audubon Way
Billings, MT 59106

Loretta K. Vitt
14043 CR 340
Fairview, MT 59221

Cassandra Wright
41 N. 2nd Street
Greybull, MT 82426

Curtis Prchal
3746 Heritage Drive
Billings, MT 59102

Robin O. Gartner and Setana F.
Gartner
700 Parkhill Drive
Billings, MT 59101

John Gordon Bock
526 N. Post Oak Lane
Houston, TX 77024

JoAnne Bock Rubin
2314 Masters Ln
Missouri City, TX 77459

Shirley E. LaMotte
4215 Montana Sapphire Dr.,
Apt 113
Billings, MT 59106

Paula McLain
1215 12th Street
Havre, MT 59501

Gail D. Lehman
1075 Washington Grn
New Windsor, NY 12553

Pamela J. Wyman
4996 Lake View Loop
Williston, ND 58801

Ronada Gilman
2239 Avenue B
Billings, MT 59102

Climax Molybdenum Company
4340 E. Cotton Center Blvd.,
Suite 110
Phoenix, AZ 85040



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Surface and Mineral Owner List

Panasuk 34x-12

Richland County, MT

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Christine N. Hystad and Roger D. Hystad,
Trustees of the Christine N. Hystad Living Trust,
dated March 3, 2015
641 4th St. North
Glasgow, MT 59230

Barbara Sheryl Turk and
Christopher Alan Turk,
Co-Trustee of the Turk Family Revocable
Trust
202 Greyhound Circle
Boerne, TX 78006

Margaret G. Bradley
Trustee of the Gordon and
Margaret Bradley Family Trust
12791 County Road 352
Sidney, MT 59270

Donald L. Krahmer, Jr. and Suzanne M.
Blanchard Krahmer,
Trustees of the Don and Suzanne Krahmer
Family Trust
12891 NW Majestic Sequoia Way
Portland, OR 97229

Steven G. Hildebrand and Debra A. Hildebrand,
Trustees of the Hildebrand Living Trust dated
June 27, 2003
12550 Lieutenant Nichols Rd
Fairfax, VA 22033

David Alan Hano and Sherryll Ann Hanto,
Trustees of the Hanto Family Trust dated
June 4, 2004
8555 O'Donovan Rd
Creston, CA 93432

Linda M. Duggar,
Trustee of the Linda M. Duggar Family Trust
dated March 3, 2016
14840 El Camino Real
Atascadero, CA 93422



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MONTANA BOARD OF OIL &
GAS CONSERVATION • BILLINGS

Affidavit of Notification to Surface and Mineral Owners

Panasuk 34x-12

Richland County, MT

BEFORE THE BOARD OF OIL AND GAS CONSERVATION OF THE STATE OF MONTANA

IN THE MATTER OF THE APPLICATION FOR
MORNINGSTAR OPERATING LLC FOR THE HEARING
OF ITS REQUEST FOR A UIC PERMIT FOR THE
PANASUK 34X-12 WELL, 275' FSL 1350' FEL, SWSE,
SECTION 12, T23N, R58E, P.M.M. RICHLAND COUNTY,
MONTANA, FOR THE PURPOSE OF WATER INJECTION

AFFIDAVIT OF NOTIFICATION

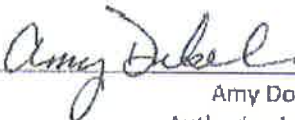
Date: September 8, 2026

State of Utah

County of Uintah

Amy Doebele, being first duly sworn, deposes and says:

That Notice of advising of MorningStar Operating LLC' application for UIC permit in the captioned matter, in the form attached as "Exhibit A", was mailed to each current operator, surface owner and lease owner within the area of review at the addresses shown in the exhibit attached to the Notice, by mailing a true copy thereof this 10th day of September, 2026, postage prepaid, First Class USPS Mail. This affidavit is given as evidence of compliance with A.R.M. 36.22.1410.


Amy Doebele
Authorized Agent

Subscribed and sworn before me on this 10th day of September, 2026.




Notary Public of the State of Utah
My Commission Expires: May 19, 2030



MORNINGSTAR
OPERATING

RECEIVED

SEP 11 2026

MONTANA BOARD OF OIL &
GAS CONSERVATION • BILLINGS

Affidavit of Publication – Helena Independent Record

Panasuk 34x-12

Richland County, MT

INTERIM AD DRAFT

This is the proof of your ad scheduled to run in Helena Independent Record on the dates indicated below. If changes are needed, please contact us prior to deadline at (406) 456-7890.

Notice ID: HxWVGvokoTIDZc69BUy | Proof Updated: Sep. 03, 2026 at 08:12am MDT
Notice Name: Panasuk 34X-12

See Proof on Next Page

This is not an invoice. Below is an estimated price, and it is subject to change. You will receive an invoice with the final price upon invoice creation by the publisher.

FILER **FILED FOR**
Amy Doebele Helena Independent Record
adoebele@vintagroup.com
(720) 326-3595

Column's Wide: 2 **Ad Class:** Legals
Total Column Inches: 11.18
Number of Lines: 40

09/03/2026 General Legal
Affidavit Fee

Subtotal
Tax
Processing Fee
Total

Panasuk 34X-12
BEFORE THE BOARD OF OIL AND GAS CONSERVATION
OF THE STATE OF MONTANA

In the Matter of the application of
MorningStar Operating LLC
for a Class II Injection well permit.

NOTICE OF INTENTION TO APPLY FOR A CLASS II
INJECTION WELL PERMIT

1. Name and address of Applicant:

MorningStar Operating LLC
400 W 7th Street
Fort Worth, TX 76102

2. Legal Description including County and Approximate
Footages of Surface Location of Proposed Oil and Gas Well:
(and projected bottom-hole location, if a directional or horizontal
well)

Panasuk 34X-12
Surface Hole: 275' FSL 1,350' FEL
SWSE, Section 12, Township 23 North, Range 58 East
Richland County, MT

3. Source of fluids to be injected

Produced water from Three Forks (Bakken) wells

4. Zone or formation into which injection will occur, including
depth

Dakota/Lakota from 5,224' – 5,738' MD/TVD
Plugback depth – 5,780' MD/TVD

5. An aquifer exemption will be requested as part of the
application since the proposed injection zone contains water
with less than 10,000 ppm total dissolved solids.

Pursuant to Rules 36.22,1409, Administrative Rules of Montana, the Montana Board of Oil and Gas Conservation will hold a public meeting upon the application of MorningStar Operating LLC for a Class II underground injection permit for the well or project set forth above. Said hearing will be held at the Montana Board of Oil & gas Hearing Room at 2535 St. John's Ave. Billings, Montana, beginning at 9:00 am on Thursday, October 15, 2026.
September 8, 2026 COL-MT-203221 MNAXLP



MORNINGSTAR
OPERATING

Affidavit of Publication – Sidney Herald
Panasuk 34x-12
Richland County, MT

RECEIVED

SEP 11 2026

MONTANA BOARD OF OIL &
GAS CONSERVATION • BILLINGS

**SIDNEY
HERALD**

AFFIDAVIT OF PUBLICATION

Sidney Herald
310 2nd Ave NE
(406) 433-2403

I, Anjana Bhadoriya, of lawful age, being duly sworn upon oath depose and say that I am an agent of Column Software, PBC, duly appointed and authorized agent of the Publisher of Sidney Herald, a publication that is a "legal newspaper" as that phrase is defined for the city of Sidney, for the County of Richland, in the state of Montana, that this affidavit is Page 1 of 1 with the full text of the sworn-to notice set forth on the pages that follow, and that the attachment hereto contains the correct copy of what was published in said legal newspaper in consecutive issues on the following dates:

PUBLICATION DATES:
Sep. 5, 2026

Notice ID: 4RCrQ4qilyShGJesAhVI
Publisher ID: SHM000963
Notice Name: MorningStar Operating LLC

PUBLICATION FEE: \$102.17

Request of
Amy Doebele

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

Anjana Bhadoriya

Agent

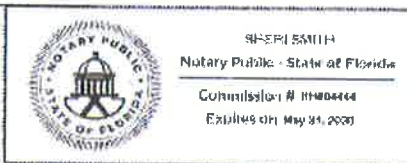
VERIFICATION

State of Florida
County of Broward

Signed or attested before me on this: 09/10/2026

S. Smith

Notary Public
Notarized remotely online using communication technology via Proof.



BEFORE THE BOARD OF OIL
AND GAS CONSERVATION
OF THE STATE OF MONTANA

In the Matter of the application
of MorningStar Operating LLC
for a Class II Injection Well Permit.

NOTICE OF INTENTION TO
APPLY FOR A CLASS II
INJECTION WELL PERMIT

1. Name and address of
Applicant
MorningStar Operating LLC
400 W 7th Street
Fort Worth, TX 76102

2. Legal Description Including
County and Approximate Foot-
cage of Surface Location of Pro-
posed Oil and Gas Well:
Land proposed to be used for in-
jection of a directional or multi-
zoned well
Panasuk 34X-12
Surface Hole: 276' FSL 1,350'
FEL
SWSE, Section 12, Township-
23 North, Range 58 East
Richland County, MT

3. Source of fluids to be injected
Produced water from Three
Farms (Bokkers) wells

4. Zone or formation into which
injection will occur, including
depth
Dakota/Lakota from 5,224' –
6,788' MD/TVD
Plugback depth – 6,786' MD/
TVD

5. An another compliance will be
requested as part of the applica-
tion since the proposed injection
zone contains water with less
than 10,000 ppm total dissolved
solids.
Pursuant to Rules 20.02, 20.03,
Administrative Rules of Mon-
tana, the Montana Board of Oil
and Gas Conservation will hold
a public meeting upon the applica-
tion of MorningStar Operating
LLC for a Class II underground
injection permit for the well to
project set forth above. Legal
notice will be filed at the Mon-
tana Board of Oil & Gas Hearing
Room at 2533 St. John's Ave.,
Billings, Montana, beginning at
4:00 am on Thursday, October
15, 2026.
Date: September 5, 2026
SH/4000963