SENATE NATURAL RESOURCES
EXHIBIT NO. 11
DATE 2-14-07
BILL NO. SB407

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History

My Sister and I own the family ranch in Powder River County, some of which was originally homesteaded by our grandparents in about 1910. The ranch is located on the head of the Otter Creek drainage of the Tongue River Watershed, about 45 miles SE of Ashland. There is no Coal Bed Methane (CBM) development in our area. We have the ranch leased for grazing and signed an Oil and Gas (including CBM) lease last month on about half of our deeded acres.

Our Grandfather hand dug and rocked up 10 to 15 foot wells for livestock water in the corrals. I remember these being used in the 1940's and 1950's. Our parents drilled a 50-foot well for livestock and domestic water that lasted from the 1950's to 2003, when we drilled to 500 feet, finding water (about 4 gal/min) in a coal seam at 180 feet.

Our surface springs originally provided water in our creeks from as early as I can remember from the 1940's to the 1960's, then we had to develop some of them as wells in the early 1980's in order to pump water into pipelines and stock tanks. There were Cottonwood trees at these spring sites, which have now all died. I have attached the water analysis from one of our developed springs. This is the quality of water our livestock and wildlife was drinking before and at the time of the analysis.

Current situation

All of our shallow **wells and springs have gone dry** and are not related to CBM development. Our **10 reservoirs are dry** and most have been for 8 to 10 years. Ranchers in our area are either hauling water or installing pipelines and tanks, and pumping water from deep wells for livestock and wildlife. We currently have about 10 miles of water pipelines feeding 15 water tanks. We also have to use storage tanks, that fill at night, in order to provide sufficient livestock water at the pipeline tanks during the hot weather.

Immediate needs

We have a desperate need for additional water for livestock and wildlife. We would like to be able to develop a water management plan that would allow us to utilize CBM water in our existing reservoirs, which are strategically located throughout the ranch.

I, therefore, strongly support Senate Bill No. 407 that will authorize discharge of CBM water into existing reservoirs/impoundments for livestock and wildlife.

Thank you,

Gordon L. Decker

2/14/07

Gordon Decker
406 586 3428

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is complied electronically from the contents of the Ground-Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Plot this site on a topographic map
View water quality for this site

Site Name: DECKER AUGUST * NO. 02
GWIC Id: 8235

Section 1: Well Owner

Owner Name
DECKER AUGUST
Mailing Address
RT 1 BOX 16

City	State	Zip Code
OTTER	MT	59062

Section 2: Location

Township	Range	Section	Quarter Sections
08S	46E	34	SW¼ SW¼ NW¼ SE¼

County	Geocode
POWDER RIVER	

Latitude	Longitude	Geomethod	Datum
45.0916	106.0691	MAP	NAD27

Altitude	Method	Datum	Date
3815			

Addition	Block	Lot

Section 3: Proposed Use of Water
STOCKWATER (1)

Section 4: Type of Work
Drilling Method: BACK HOE

Section 5: Well Completion Date
Date well completed: Monday, September 14, 1981

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	12	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
0	12	4				

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
1	5	4		1/8X6	SLOTS

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	4	DIRT	

Section 7: Well Test Data

Total Depth: 12
Static Water Level: 6.5
Water Temperature:

Pump Test *

Depth pump set for test _ feet.
_40_ gpm pump rate with _ feet of drawdown after _4_ hours of pumping.
Time of recovery _ hours.
Recovery water level _ feet.
Pumping water level _6.5_ feet.

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

Section 8: Remarks

Section 9: Well Log

Geologic Source
Unassigned

From	To	Description
0	9	SANDY CLAY
9	12	COAL

Driller Certification

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

Name:
Company: OWNER
License No: -
Date Completed: 9/14/1981

Ground-Water Information Center Water Quality Report
Report Date: 2/13/2007

Site Name: DECKER AUGUST * NO. 02
Compare to Water Quality Standards

Location Information

Sample Id/Site Id:	1984Q0573 / 8235	Sample Date:	6/29/1984 11:00:00 AM
Location (TRS):	08S 46E 34 DBCC	Agency/Sampler:	USGS / NEM
Latitude/Longitude:	45° 5' 29" N 106° 4' 8" W	Field Number:	DECKER2
Datum:	NAD27	Lab Date:	8/2/1984
Altitude:	3815	Lab/Analyst:	MBMG / GAL
County/State:	POWDER RIVER / MT	Sample Method/Handling:	PUMPED / 3120
Site Type:	SPRING	Procedure Type:	DISSOLVED
Geology:		Total Depth (ft):	NR
USGS 7.5' Quad:	SAYLE HALL 7 1/2'	SWL-MP (ft):	NR
PWS Id:		Depth Water Enters (ft):	NR
Project:			

Major Ion Results

	mg/L	meq/L		mg/L	meq/L
Calcium (Ca)	424.000	21.158	Bicarbonate (HCO3)	669.000	10.965
Magnesium (Mg)	444.000	36.537	Carbonate (CO3)	0.000	0.000
Sodium (Na)	1,010.000	43.935	Chloride (Cl)	32.700	0.922
Potassium (K)	10.200	0.261	Sulfate (SO4)	4,270.000	88.944
Iron (Fe)	5.040	0.271	Nitrate (as N)	0.040	0.003
Manganese (Mn)	1.900	0.069	Fluoride (F)	0.100	0.005
Silica (SiO2)	13.500		Orthophosphate (OPO4)	0.200	0.006
	Total Cations	102.230		**Total Anions**	100.846

Trace Element Results (µg/L)

Aluminum (Al):	NR	Cadmium (Cd):	NR	Mercury (Hg):	NR	Tin (Sn):	NR
Antimony (Sb):	NR	Chromium (Cr):	NR	Molybdenum (Mo):	NR	Titanium (Ti):	NR
Arsenic (As):	NR	Cobalt (Co):	NR	Nickel (Ni):	NR	Thallium (Tl):	NR
Barium (Ba):	NR	Copper (Cu):	NR	Silver (Ag):	NR	Uranium (U):	NR
Beryllium (Be):	NR	Lead (Pb):	NR	Selenium (Se):	NR	Vanadium (V):	NR
Boron (B):	NR	Lithium (Li):	NR	Strontium (Sr):	NR	Zinc (Zn):	NR
Bromide (Br):	300.000					Zirconium (Zr):	NR

Field Chemistry and Other Analytical Results

**Total Dissolved Solids (mg/L):	6,541.560	Field Hardness as CaCO3 (mg/L):	NR	Ammonia (mg/L):	NR
**Sum of Diss. Constituents (mg/L):	6,881.000	Hardness as CaCO3 (mg/L):	2,886.230	T.P. Hydrocarbons (µg/L):	NR
Field Conductivity (µmhos):	6700	Field Alkalinity as CaCO3:	NR	PCP (µg/L):	NR
Lab Conductivity (µmhos):	6661	Akalinity as CaCO3 (mg/L):	548.69	Phosphate, TD (mg/L as P):	NR
Field pH:	6.85	Ryznar Stability Index:	NR	Field Nitrate (mg/L):	NR
Lab pH:	7.35	Sodium Adsorption Ratio:	8.180	Field Dissolved O2 (mg/L):	NR
Water Temp (°C):	8.5	Langlier Saturation Index:	NR	Field Chloride (mg/L):	NR
Air Temp (°C):	28	Nitrite (mg/L as N):	NR	Field Redox (mV):	NR

Notes

Sample Condition: YELLOWISH BUT NO SEDIMENT * FILTER WITH YELLOWISH-WHITE MUD *
Field Remarks: SPRING/WELL PUMPED ON AND OFF ALL MORNING; DISCHARGE 10 GPM; DRAWDOWN GPM; DRAWDOWN UNKNOWN * =
Lab Remarks:

Explanation: **mg/L** = milligrams per Liter; **µg/L** = micrograms per Liter; **ft** = feet; **NR** = No Reading in GWIC

Qualifiers: **A** = Hydride atomic absorption; **E** = Estimated due to interference; **H** = Exceeded holding time; **K** = Na+K combined; **N** = Spiked sample recovery not within control limits; **P** = Preserved sample; **S** = Method of standard additions; ***** = Duplicate analysis not within control limits; ****** = Sum of Dissolved Constituents is the sum of major cations (Na, Ca, K, Mg, Mn, Fe) and anions (HCO3, CO3, SO4, Cl, SiO2, NO3, F) in mg/L. Total Dissolved Solids is reported as equivalent weight of evaporation residue.

Disclaimer
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