



Residential Water Well Field Data Form

Project Name: COGCC - Environmental Support
Project Number: 25087038

Permit No: Unknown
Owner: Lloyd Lambertson

Well Owner Survey

Is there a holding tank for the well? Yes X No
Do you have a water softener/treatment system? Yes No X
Do you have an in-line filter? Yes No X
Sampling point upstream of pressure tank and treatment system? Yes X No

Address: 35481 CR 124
Weld County, CO

Location: T11N R63W Sec 24

Date: 4/8/2010

Weather: Sunny, Breezy

Location of well: Windmill 1 North of main house

Type of pump (jet, submersible, suction): suction

Casing material and diameter: unknown

Depth to Static Water Table (fluctuations): unknown

Description of area around well: scrub grass/prairie grass

Location and description of sample point: Outlet pipe from windmill pump

Pump start time: pump operates when wind blows

Time	Volume Purged (gal.)	PH (SI Units)	Spec Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)	Temperature (°C)	Clarity	Other *
12:00 AM	580	8.08	0.287	6.02		12.72	Clr.	

* odors (if any); effervescence (if any); produced sediment (if any); evidence of bacterial fouling (bioslimes or biofilms).

Field Sample ID: Windmill 1 Collection Time: 12:00 AM Number of Containers: 11

Analyte	# of Containers	Container Size	Type	Analytical Method	Preservative
Dissolved Methane	3	40 ml	vial	RSK175	4°C
Diss. Metals (Ca, Na, Fe, As, Cr, Cd, Pb, Mn, Mg, K, Se)	1	500 ml	HDPE	6020	4°C
Major cations and anions, Br, Cl, F, SO ₄	1	250 ml	HDPE	300	4°C
BTEX, MTBE	2	40 ml	vial	8021	HCl, 4°C
Total Dissolved Solids	1	500 ml	poly	TDS_W	4°C
Specific Conductance at 25°C	1	125 ml	poly	COND_W	4°C
NO ₃ , NO ₂	1	250 ml	HDPE	353.2	H ₂ SO ₄ , 4°C
pH	1	125 ml	HDPE	150.1	4°C
Isotopic Analysis	1	1 L	Plastic	NG-2	biocide
Alkalinity (Carbonate/Bicarbonate)	1	250 ml	poly	CARB/BICAR	4°C
Duplicate Sample Collected?	Yes:		No:	X	

Sampler: J. Geissler

Duplicate ID: NONE

GPS Coordinates

Latitude: N 40°54'18.4" Longitude: W 104°22'39.4"

Comments: Two 10-foot diameter holding tanks at windmill site. One tank was filled with approximately 1' of water.

Approximately 580 gallons pumped at time of sampling.



Windmill 1 Sample Point

**Terracon****Residential Water Well Field Data Form**Project Name: COGCC - Environmental Support
Project Number: 25087038Permit No: NA
Owner: Lloyd Lambertson**Well Owner Survey**Is there a holding tank for the well? Yes No x
Do you have a water softener/treatment system? Yes No x
Do you have an in-line filter? Yes No x
Sampling point upstream of pressure tank and treatment system? Yes No NAAddress: 35481 CR 124
Weld County, CO
Location: T11N R63W Sec 25
Date: 4/8/2010
Weather: Sunny, BreezyLocation of well: Seep area north east of main house
Type of pump (jet, submersible, suction): None
Casing material and diameter: None
Depth to Static Water Table (fluctuations): NA
Description of area around well: marshy area with prairie grass
Location and description of sample point: Pond Seep
Pump start time: NA

Time	Volume Purged (gal.)	PH (SI Units)	Spec Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)	Temperature (°C)	Clarity	Other *
12:45 PM		8.23	0.301	9.89		14.9	clr.	

* odors (if any); effervescence (if any); produced sediment (if any); evidence of bacterial fouling (bioslimes or biofilms).

Field Sample ID: Seep 1 Collection Time: 12:45 PM Number of Containers: 11

Analyte	# of Container	Container Size	Type	Analytical Method	Preservative
Dissolved Methane	3	40 ml	vial	RSK175	4°C
Diss. Metals (Ca, Na, Fe, As, Cr, Cd, Pb, Mn, Mg, K, Se)	1	500 ml	HDPE	6020	4°C
Major cations and anions, Br, Cl, F, SO ₄	1	250 ml	HDPE	300	4°C
BTEX, MTBE	2	40 ml	vial	8021	HCl, 4°C
Total Dissolved Solids	1	500 ml	poly	TDS_W	4°C
Specific Conductance at 25°C	1	125 ml	poly	COND_W	4°C
NO ₃ , NO ₂	1	250 ml	HDPE	353.2	H ₂ SO ₄ , 4°C
pH	1	125 ml	HDPE	150.1	4°C
Isotopic Analysis	1	1 L	Plastic	NG-2	biocide
Alkalinity (Carbonate/Bicarbonate)	1	250 ml	poly	CARB/BICAR	4°C
Duplicate Sample Collected?	Yes:		No:	X	

Sampler: J. GeisslerDuplicate ID: none**GPS Coordinates**Latitude: N 40°53'28.4" Longitude: W 104°22'41.6"Comments: Area had visible flowing water algae and clover present in marshy area.



Seep 1 Sample Point

**Terracon****Residential Water Well Field Data Form**

Project Name: COGCC - Environmental Support
Project Number: 25087038

Permit No: unknown
Owner: Lloyd Lambertson
Address: 35481 CR 124
Weld County, CO

Well Owner Survey

Is there a holding tank for the well? Yes No X
Do you have a water softener/treatment system? Yes X No
Do you have an in-line filter? Yes X No
Sampling point upstream of pressure tank and treatment system? Yes X No

Location: T11N R63W Sec 25
Date: 4/8/2010
Weather: Sunny, Breezy

Location of well: South of main house
Type of pump (jet, submersible, suction): submersible
Casing material and diameter: unknown
Depth to Static Water Table (fluctuations): unknown
Description of area around well: Mowed scrub grass
Location and description of sample point: Handle spigot. (Clayton Mark)
Pump start time: 1:25 PM

Time	Volume Purged (gal.)	PH (SI Units)	Spec Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)	Temperature (°C)	Clarity	Other *
1:26 PM	5							
1:28 PM	10							
1:30 PM	20							
		7.88	0.277	16.63		10.81	clr	
		7.84	0.273	11.56		10.41	clr	
1:35 PM	25	7.89	0.272	10.31		10.21	clr	
1:40 PM								

* odors (if any); effervescence (if any); produced sediment (if any); evidence of bacterial fouling (bioslimes or biofilms).

Field Sample ID: Domestic Well 1 Collection Time: 1:40 PM Number of Containers: 15

Analyte	# of Container	Container Size	Type	Analytical Method	Preservative
Dissolved Methane	3	40 ml	vial	RSK175	4°C
Diss. Metals (Ca, Na, Fe, As, Cr, Cd, Pb, Mn, Mg, K, Se)	1	500 ml	HDPE	6020	4° C
Major cations and anions, Br, Cl, F, SO ₄	1	250 ml	HDPE	300	4° C
BTEX, MTBE	2	40 ml	vial	8021	HCl, 4°C
Total Dissolved Solids	1	500 ml	poly	TDS_W	4° C
Specific Conductance at 25°C	1	125 ml	poly	COND_W	4°C
NO ₃ , NO ₂	1	250 ml	HDPE	353.2	H ₂ SO ₄ , 4° C
pH	1	125 ml	HDPE	150.1	4°C
Isotopic Analysis	1	1 L	Plastic	NG-2	biocide
Alkalinity (Carbonate/Bicarbonate)	1	250 ml	poly	CARB/BICAR	4°C
Duplicate Sample Collected?	Yes:		No:	X	

Sampler: J. Geissler

Duplicate ID: none

GPS Coordinates

Latitude: N 40°53'16.8" Longitude: W 104°22'56.4"

Comments: Sampled well for methane and isotopic analysis, also sampled BART kit.



Domestic Well 1 Sample Point

**BIOLOGICAL ACTIVITY REACTION TEST RESULTS
DOMESTIC WELL 1**



Results after 8 Days:

Green Capped Vial – Test for Slime Forming Bacteria – Present

Red Capped Vial – Test for Iron Related Bacteria – Present

Black Capped Vial – Test for Sulfate Reducing Bacteria – Present



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Pond 1 Sample Point

**Terracon****Residential Water Well Field Data Form**Project Name: COGCC - Environmental Support
Project Number: 25087038Permit No: unknownOwner: Lloyd LambertsonAddress: 35481 CR 124Weld County, COLocation: T11N R63W Sec 22Date: 4/8/2010Weather: Sunny, Breezy**Well Owner Survey**Is there a holding tank for the well? Yes X No Do you have a water softener/treatment system? Yes No XDo you have an in-line filter? Yes No XSampling point upstream of pressure tank and treatment system? Yes X No Location of well: Windmill 2 (400') deep according to Lloyd LambertsonType of pump (jet, submersible, suction): suctionCasing material and diameter: unknownDepth to Static Water Table (fluctuations): unknownDescription of area around well: prairie grass and cow droppingsLocation and description of sample point: pump outlet pipePump start time: water discharges when wind blows, water continually purging.

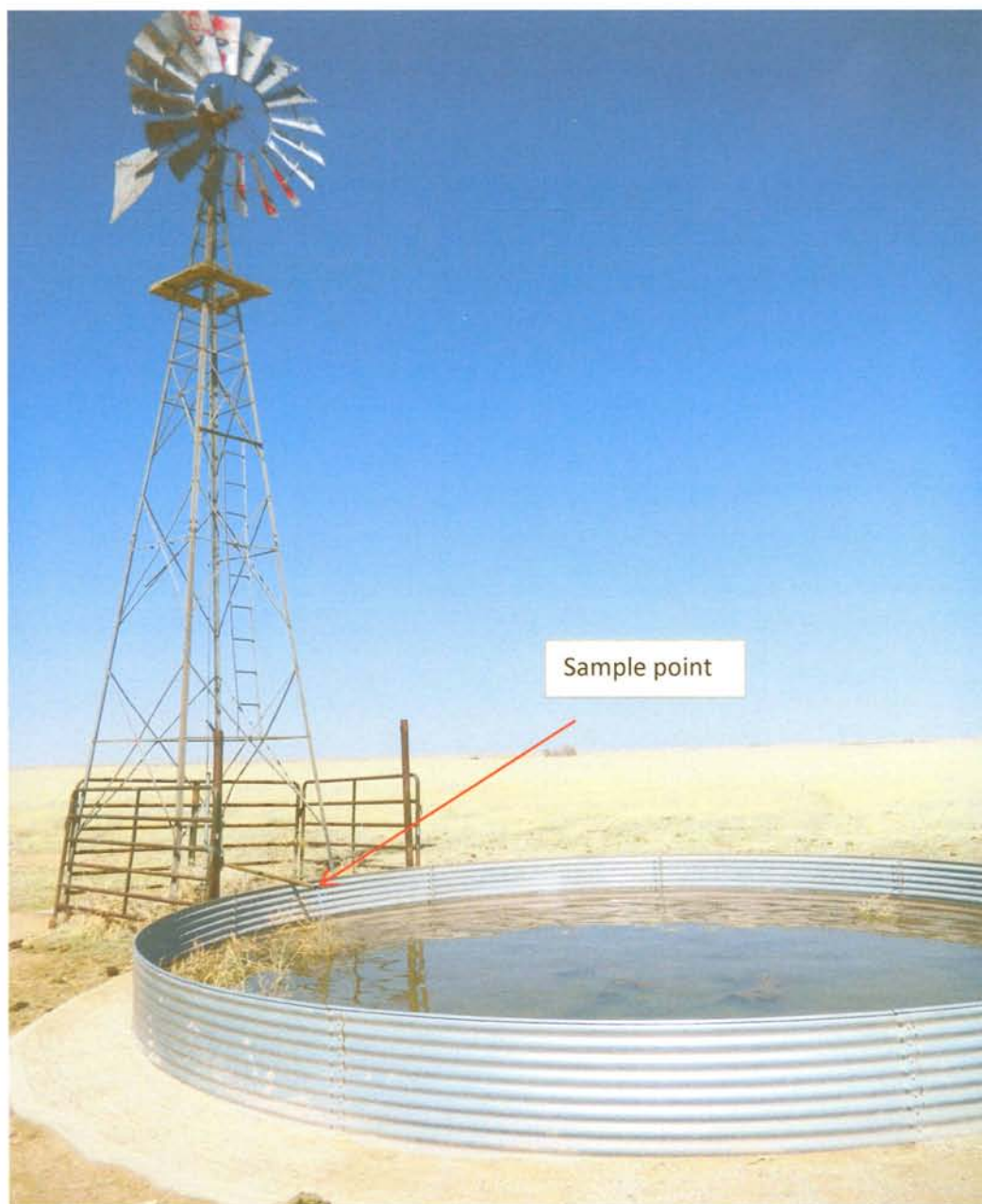
Time	Volume Purged (gal.)	PH (SI Units)	Spec Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)	Temperature (°C)	Clarity	Other *
2:30 PM		8.33	0.295	3.25		13.66	clr.	

* odors (if any); effervescence (if any); produced sediment (if any); evidence of bacterial fouling (bioslimes or biofilms).

Field Sample ID: Windmill 2Collection Time: 2:30 PMNumber of Containers: 11+BART

Analyte	# of Containers	Container Size	Type	Analytical Method	Preservative
Dissolved Methane	3	40 ml	vial	RSK175	4°C
Diss. Metals (Ca, Na, Fe, As, Cr, Cd, Pb, Mn, Mg, K, Se)	1	500 ml	HDPE	6020	4° C
Major cations and anions, Br, Cl, F, SO ₄	1	250 ml	HDPE	300	4° C
BTEX, MTBE	2	40 ml	vial	8021	HCl, 4° C
Total Dissolved Solids	1	500 ml	poly	TDS_W	4° C
Specific Conductance at 25°C	1	125 ml	poly	COND_W	4° C
NO ₃ , NO ₂	1	250 ml	HDPE	353.2	H ₂ SO ₄ , 4° C
pH	1	125 ml	HDPE	150.1	4° C
Isotopic Analysis	1	1 L	Plastic	NG-2	biocide
Alkalinity (Carbonate/Bicarbonate)	1	250 ml	poly	CARB/BICAR	4° C
Duplicate Sample Collected?	Yes:		No:	X	

Sampler: J. GeisslerDuplicate ID: none**GPS Coordinates**Latitude: N 40°54'32.4"Longitude: W 104°25'08.6"Comments: One large holding tank present; 22.5' diameter, 21-inches tall approximately 6-inches of water present in it at time of sampleappx. 1,500 gallons pumped at time of sampling



Windmill 2 Sample Point

**BIOLOGICAL ACTIVITY REACTION TEST RESULTS
WINDMILL 2**



Results after 8 Days:

Green Capped Vial – Test for Slime Forming Bacteria – Present

Red Capped Vial – Test for Iron Related Bacteria – Present

Black Capped Vial – Test for Sulfate Reducing Bacteria – Absent

**Terracon****Residential Water Well Field Data Form**

Project Name: COGCC - Environmental Support
Project Number: 25087038

Permit No: unknown
Owner: Lloyd Lambertson (PARENTS)

Well Owner Survey

Is there a holding tank for the well?

Yes _____ No X

Do you have a water softener/treatment system?

Yes X No _____

Do you have an in-line filter?

Yes X No _____

Sampling point upstream of pressure tank and treatment system?

Yes X No _____

Address: 35481 CR 124
Weld County, CO

Location: T10N R62W Sec 8

Date: 4/8/2010

Weather: Sunny, Breezy

Location of well: South of main house

Type of pump (jet, submersible, suction): submersible

Casing material and diameter: unknown

Depth to Static Water Table (fluctuations): unknown

Description of area around well: various trees and native grass

Location and description of sample point: Domestic Well 2 (Lambertson's parents well)

Pump start time: 3:10 PM

Time	Volume Purged (gal.)	PH (SI Units)	Spec Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)	Temperature (°C)	Clarity	Other *
3:11 PM	5							
3:14 PM	20							
		8.16	0.331	3.02		11.4		
		8.15	0.327	1.86		10.73		
		8.12	0.3280	1.33		10.28	clr	
15:20	30							

* odors (if any); effervescence (if any); produced sediment (if any); evidence of bacterial fouling (bioslimes or biofilms).

Field Sample ID: Domestic Well 2

Collection Time: 3:20 PM

Number of Containers: 15

+ BART

Analyte	# of Containers	Container Size	Type	Analytical Method	Preservative
Dissolved Methane	3	40 ml	vial	RSK175	4°C
Diss. Metals (Ca, Na, Fe, As, Cr, Cd, Pb, Mn, Mg, K, Se)	1	500 ml	HDPE	6020	4° C
Major cations and anions, Br, Cl, F, SO ₄	1	250 ml	HDPE	300	4° C
BTEX, MTBE	2	40 ml	vial	8021	HCl, 4°C
Total Dissolved Solids	1	500 ml	poly	TDS_W	4° C
Specific Conductance at 25°C	1	125 ml	poly	COND_W	4°C
NO ₃ , NO ₂	1	250 ml	HDPE	353.2	H ₂ SO ₄ , 4° C
pH	1	125 ml	HDPE	150.1	4°C
Isotopic Analysis	1	1 L	Plastic	NG-2	biocide
Alkalinity (Carbonate/Bicarbonate)	1	250 ml	poly	CARB/BICAR	4°C
Duplicate Sample Collected?	Yes:		No:	X	

Sampler: J. Geissler

Duplicate ID: none

GPS Coordinates

Latitude: N 40°50'57.8"

Longitude: W 104°21'08.9"

Comments: Sampled methane with Isotopic analysis; plus BART kit.



Domestic Well 2 Sample Point

**BIOLOGICAL ACTIVITY REACTION TEST RESULTS
DOMESTIC WELL 2**



Results after 8 Days:

Green Capped Vial – Test for Slime Forming Bacteria – Present

Red Capped Vial – Test for Iron Related Bacteria – Present

Black Capped Vial – Test for Sulfate Reducing Bacteria – Absent