



Western Water & Land, Inc.

July 29, 2013

Mr. Brandon Danforth
Environmental Specialist
WPX Energy
1058 County Road 215
Parachute, Colorado 81635

RE: RU 42-7 Drill Pad Baseline Water Quality Evaluation

Dear Mr. Danforth,

Western Water & Land, Inc. (WWL) has completed a hydrologic water source evaluation for the WPX Energy Rocky Mountain LLC (WPX) RU 42-7 Drill Pad in accordance with COGCC Rule 609. Drill Pad RU 42-7 is located in SE1/4, NE1/4, Section 7, Township 7 South, Range 93 West, 6 PM. The evaluation considered all water sources as defined in Rule 609 within a 0.5-mile radius of the referenced drill pad. Water sources located on the basis of section quarters were included in the evaluation if the any portion of the section quarter(s) lies within the 0.5-mile radius area. A preliminary screening of the water sources was completed to identify the sources considered to be potentially available for sampling pending results of the owner questionnaire and field inspections to verify sampling feasibility and the consent of the structure owners. Each potentially available water source was then evaluated to identify the preferred sources for the baseline program. If the resulting number of potentially available sources was four or less, all of the sources were included in the list of preferred sources. If more than four sources were potentially available, the sources were prioritized based on WWL's hydrologic knowledge of the region, general hydrologic rationale, and in accordance with the guidelines specified in Rule 609.

Water Sources

Water sources as defined in Rule 609 include water wells registered with the Colorado Division of Water Resources (DWR), permitted or adjudicated springs, and monitoring wells installed for baseline sampling and monitoring under COGCC Rules 318A.e(4), 608, or 609. Water sources located within a 0.5-mile radius of the RU 42-7 Drill Pad are shown in Figure 1. Well permit files and/or water right files are included for all wells located within the 0.5-mile radius evaluation area in Attachment A. Structure owners are identified as reported in DWR databases. Property owners are identified as reported in county property records. The water sources within a 0.5-mile radius of the drill pad are summarized as follows:

- Yellow Jacket Spring
 - Structure Owner: United States of America, Bureau of Land Management
 - Property Owner: United States of America; Bureau of Land Management
 - Structure ID: 5595
 - Case No.: 04CW0218
 - Decree Rate: 0.01 cfs (absolute)
 - Decreed Use(s): Livestock and wildlife watering
 - Location: Section lines

Potentially Available Water Sources

Each water source identified within the 0.5-mile radius area is considered to be a potentially available water source unless existing information suggests that the water source would not be suitable for the baseline water quality program. The following water source is considered potentially available for inclusion in the program:

- Yellow Jacket Spring

WWL will mail water source questionnaires and acceptance letters to all potentially available water source land owners, well owners, and holders of water right decrees to addresses as indicated in state databases.

Preferred Water Sources

In accordance with Rule 609, all available water sources within a 0.5-mile radius of the drill pad, up to a maximum of four sources, must be included in the baseline and subsequent monitoring program. Because only one potentially available water source was identified it is considered to be a preferred water source. Groundwater from this spring is expected to be produced from a shallow aquifer source. The preferred potentially available water source is as follows:

- Yellow Jacket Spring

The preferred water source will be incorporated into the baseline water quality monitoring program provided the structure owner, or land owner if the structure owner is not known, grants approval to sample the source and inspection of the structure confirms that a reasonably representative sample can be obtained from the structure.

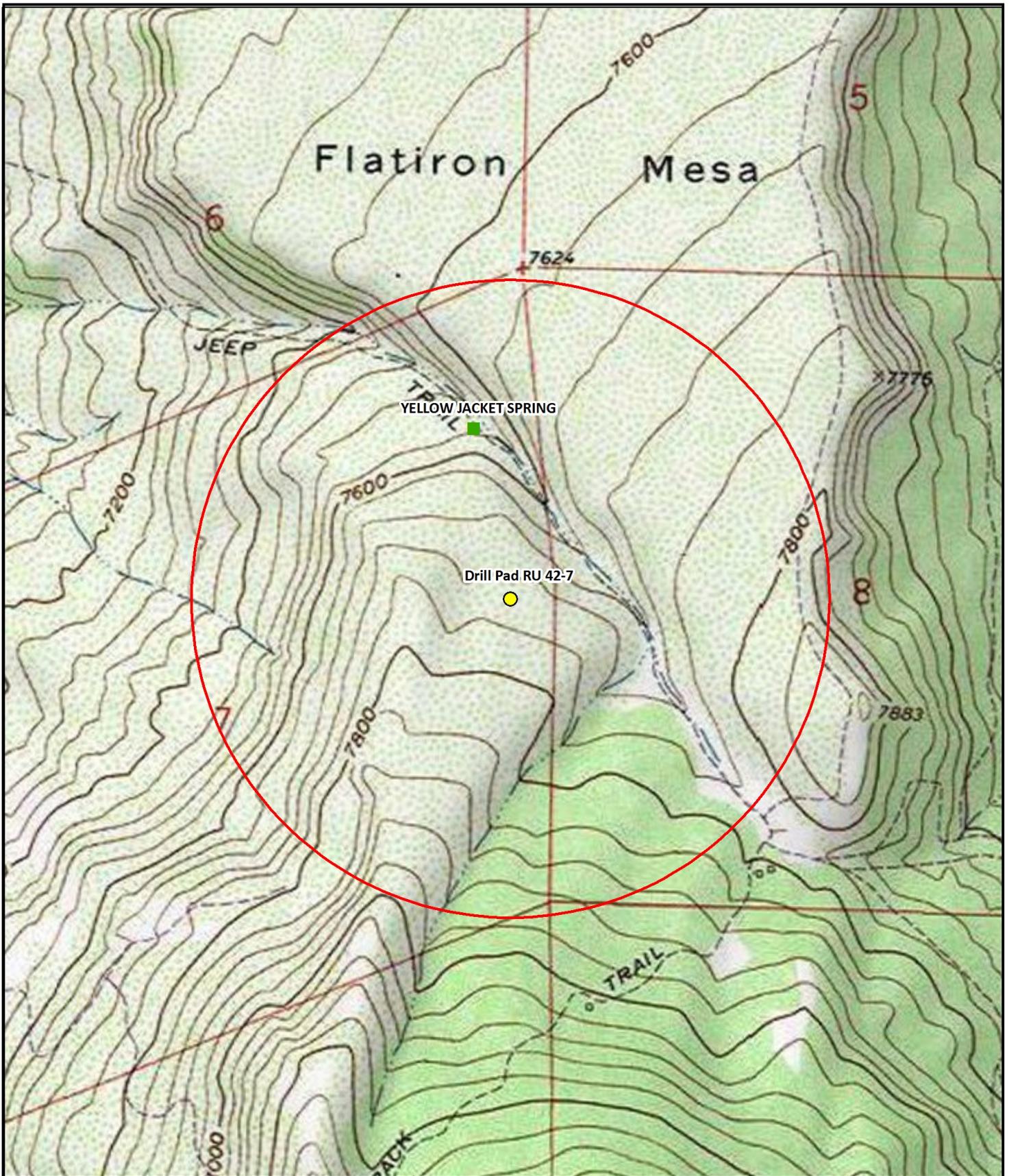
If you have any questions or concerns, please contact me at (970) 242-0170.

Sincerely,



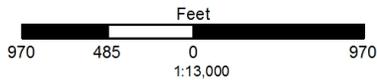
Bruce D. Smith
Principal Hydrogeologist
WESTERN WATER & LAND, INC.

Attachments



Legend

- Decree
- Constructed well
- Monitoring hole
- Drill Pad RU 42-7
- 0.5-Mile Radius Evaluation Area
- No permit or not completed



**Figure 1: Drill Pad Location RU 42-7
0.5 Mile Radius Water Source Evaluation
SE1/4, NE1/4, S7, T7S, R93W, 6 PM**

Garfield County, Colorado
WPX Energy Rocky Mountain LLC

Basemap Source: Esri ArcGIS Online



Western Water & Land, Inc.
Applications in Earth Science

Attachment A
Water Source Records

Structure Summary Report

HydroBase

State of Colorado

Structure Name: YELLOW JACKET SPRING **Water District:** 45 **Structure ID Number:** 5595

Source: BEAVER CREEK

Location: Q10 Q40 Q160 Section Twnshp Range PM
SE NE NE 7 7S 93W S

Distance From Section Lines: From N/S Line: 1100 N From E/W Line: 500 E

UTM Coordinates (NAD 83): Northing (UTM y): 4371980 Easting (UTM x): 258320.6 Spotted from PLSS distances from section lines

Latitude/Longitude (decimal degrees): 39.463490 -107.809224

Water Rights Summary: Total Decreed Rate(s) (CFS): Absolute: 0.0100 Conditional: 0.0000 AP/EX: 0.0000

Total Decreed Volume(s) (AF): Absolute: 0.0000 Conditional: 0.0000 AP/EX: 0.0000

Water Rights -- Transactions

Case Number	Adjudication Date	Appropriation Date	Administration Number	Order Number	Priority Number	Decreed Amount	Adjudication Type	Uses	Action Comment
04CW0218	2004-12-31	1956-03-12	56247.38787	0		0.0100	C S	9	BLM SPRING - BEAVER MAMM ALOTMENT 08104

Water Rights -- Net Amounts

Adjudication Date	Appropriation Date	Administration Number	Order Number	Priority/Case Number	Rate (CFS)			Volume (Acre-Feet)		
					Absolute	Conditional	AP/EX	Absolute	Conditional	AP/EX
2004-12-31	1956-03-12	56247.38787	0	04CW0218	0.0100	0	0			

Irrigated Acres Summary -- Totals From Various Sources

GIS Total (Acres): No data available for this report Reported:

Diversion Comments Total (Acres): Reported:

Structure Total (Acres): Reported:

Irrigated Acres From GIS Data

Year	Land Use	Acres Flood	Acres Furrow	Acres Sprinkler	Acres Drip	Acres Groundwater	Acres Total
No data available for this report							

Diversion Summary in Acre-Feet - Total Water Through Structure

Year	FDU	LDU	DWC	Maxq & Day	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Total
No data available for this report																	

Minimum:
Maximum:
Average:

Notes: The average considers all years with diversion records, even if no water is diverted.
The above summary lists total monthly diversions.
* = Infrequent Diversion Record. All other values are derived from daily records.
Average values include infrequent data if infrequent data are the only data for the year.

Diversion Comments

IYR	NUC Code	Acres Irrigated	Comment
No data available for this report			

Note: Diversion comments and reservoir comments may be shown for a structure, if both are available.