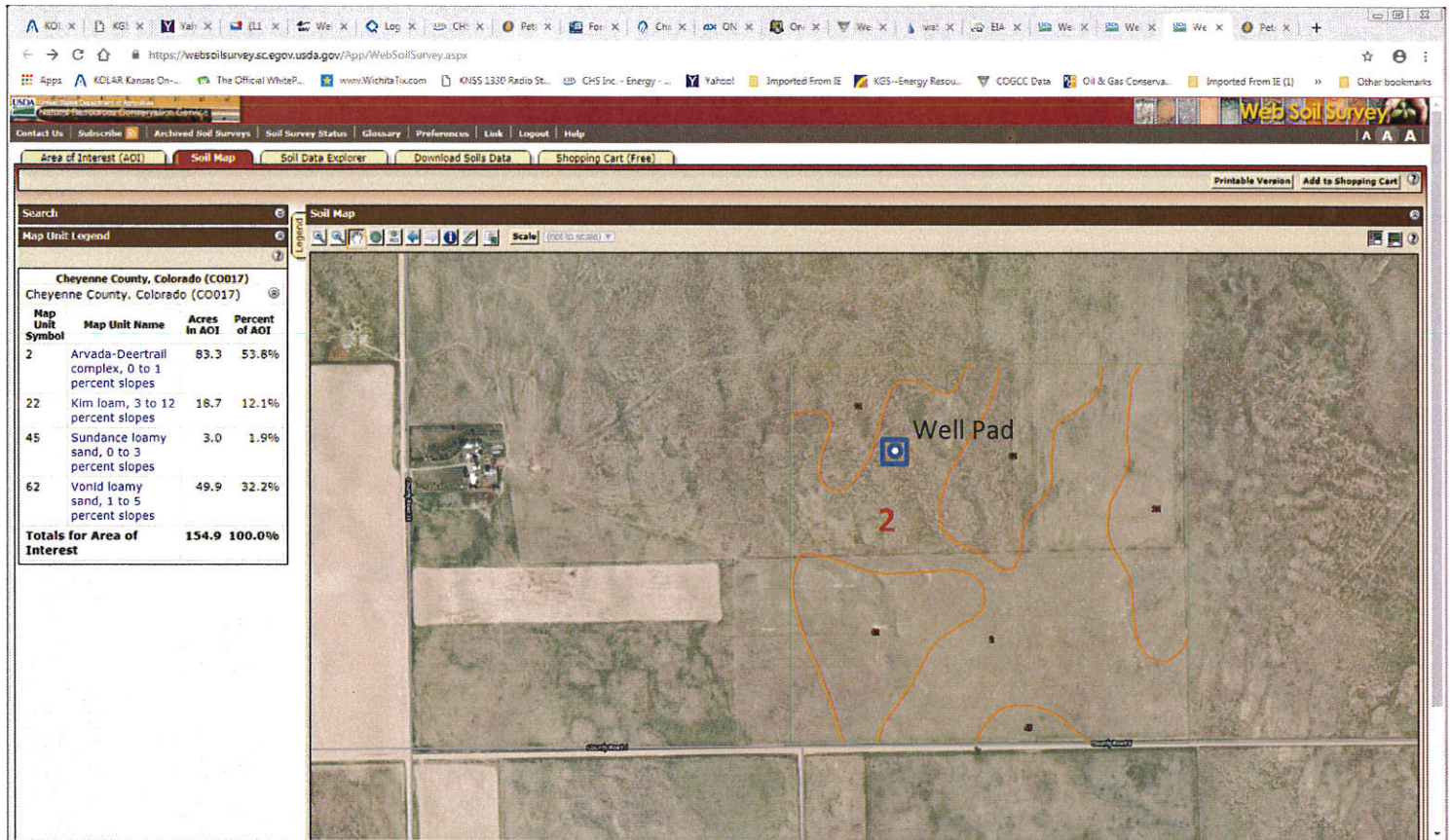


7.

McCoy Petroleum Corporation
ALC 1548 #1-23
NW SE, Sec 23-15s-48w
Cheyenne County, CO
(CO-017)

NRCS Soils in SE/4:
Map Symbols: #2



Cheyenne County, Colorado

2—Arvada-Deertrail complex, 0 to 1 percent slopes

Plant Species: Western wheatgrass (15%), Nuttall's alkaligrass (10%), Fourwing saltbrush (5%), Blue grama (-%), Alkali sacaton (-%)

Map Unit Setting

- National map unit symbol: 3545
- Elevation: 3,900 to 5,500 feet
- Mean annual precipitation: 12 to 17 inches
- Mean annual air temperature: 48 to 54 degrees F
- Frost-free period: 100 to 160 days

- Farmland classification: Not prime farmland

Map Unit Composition

- Arvada and similar soils: 40 percent
- Deertrail and similar soils: 35 percent
- Minor components: 25 percent

• Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arvada Setting

- Landform: Stream terraces, flood plains, alluvial fans
- Down-slope shape: Linear
- Across-slope shape: Linear
- Parent material: Saline clayey alluvium derived from shale

Typical profile

- A - 0 to 2 inches: clay loam
- Btkn - 2 to 15 inches: clay, clay loam, silty clay loam

- *Btkn - 2 to 15 inches:* clay, clay loam, silty clay
- *Btkn - 2 to 15 inches:*
- *Ckny - 15 to 60 inches:*
- *Ckny - 15 to 60 inches:*
- *Ckny - 15 to 60 inches:*

Properties and qualities

- *Slope:* 0 to 1 percent
- *Depth to restrictive feature:* More than 80 inches
- *Natural drainage class:* Well drained
- *Runoff class:* Medium
- *Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)
- *Depth to water table:* More than 80 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Calcium carbonate, maximum in profile:* 10 percent
- *Gypsum, maximum in profile:* 2 percent
- *Salinity, maximum in profile:* Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)
- *Sodium adsorption ratio, maximum in profile:* 35.0
- *Available water storage in profile:* Very high (about 17.7 inches)

Interpretive groups

- *Land capability classification (irrigated):* None specified
- *Land capability classification (nonirrigated):* 7s
- *Hydrologic Soil Group:* D
- *Ecological site:* Salt Flat (R067XY033CO)
- *Hydric soil rating:* No

Description of Deertrail

Setting

- *Landform:* Alluvial fans, flood plains, stream terraces
- *Down-slope shape:* Linear
- *Across-slope shape:* Linear
- *Parent material:* Clayey alluvium derived from shale

Typical profile

- *A - 0 to 2 inches:* loam
- *Bt - 2 to 7 inches:* clay, clay loam, silty clay loam
- *Bt - 2 to 7 inches:* clay, clay loam, silty clay loam
- *Bt - 2 to 7 inches:* silt loam, silty clay loam, loam
- *Btkn - 7 to 25 inches:*
- *Btkn - 7 to 25 inches:*
- *Btkn - 7 to 25 inches:*
- *Cnyz - 25 to 60 inches:*
- *Cnyz - 25 to 60 inches:*
- *Cnyz - 25 to 60 inches:*

Properties and qualities

- *Slope:* 0 to 1 percent
- *Depth to restrictive feature:* More than 80 inches
- *Natural drainage class:* Well drained
- *Runoff class:* Low
- *Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)
- *Depth to water table:* More than 80 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Calcium carbonate, maximum in profile:* 15 percent
- *Gypsum, maximum in profile:* 2 percent
- *Salinity, maximum in profile:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
- *Sodium adsorption ratio, maximum in profile:* 18.0
- *Available water storage in profile:* Very high (about 26.4 inches)

Interpretive groups

- *Land capability classification (irrigated):* 4s
- *Land capability classification (nonirrigated):* 6s
- *Hydrologic Soil Group:* C
- *Ecological site:* Alkaline Plains (R067BY047CO)
- *Hydric soil rating:* No

Minor Components

Manzanola

- *Percent of map unit:* 10 percent

Nunn

- *Percent of map unit:* 8 percent

Firstview

- *Percent of map unit:* 7 percent