# EA Form R 1/2007

# Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

# ENVIRONMENTAL ASSESSMENT For Routine Actions with Limited Environmental Impact

# Part I. Proposed Action Description

1. Applicant/Contact name and address:

Kelly Witt, Marnie Witt 1760 N Lodge Pole RD Sand Springs MT 59077-9504 Troy A Witt 1712 N Lodge Pole RD Sand Springs MT 59077-9605

Walking J Ranch LLC 48 Canyon Creek RD Molt MT 59057-2234

Michelle Clearwater, Cristina Johnson PO Box 1302 South Bend WA 98586 USA Bureau of Land Management 111 Garryowen RD Miles City MT 59301-7000

- 2. Type of action: Application for Beneficial Water Use Permit No. 40C 30163283
- 3. Water source name: Groundwater
- 4. Location affected by project: The locations of the points of diversion (4 wells) are described in Table 1. The locations of the places of use (55 stock tanks) are listed in Table 2.

Table 1: Proposed use of the four-well manifold system							
	LLD (All in T18N, R32E)	Flow Rate (GPM)	Volume (AF)	Period of Diversion and Use	Depth (FT)	GWIC ID	Existing Water Right
POD #1	SENESE Sec. 35	10	3.8	1/1 - 12/31	300	290948	
POD #2	SWSWSW Sec. 25	10	3.8	1/1 - 12/31	390	145589	40C 91842 00
POD #3	SESWNE Sec.	9	6.8	1/1 - 12/31	433	248226	40C 30048243
POD #4	NWNWNE Sec. 21	10	6.1	1/1 - 12/31	435	294281	

POU#	Qtr	Sec	Twp/Rge	POU#	Qtr	Sec	Twp/Rge
1	NW NE SW	36	18 N 32 E	29	NWNW SW	4	18 N 32 E
2	SE SE SW	35	18 N 32 E	30	SW SE NW	14	18 N 32 E
3	NE NE NE	35	18 N 32 E	31	SWSW NW	15	18 N 32 E
4	NE NE NW	35	18 N 32 E	32	NW NW NE	10	18 N 32 E
5	SE SE NE	34	18 N 32 E	33	SW SE SW	3	18 N 32 E
6	NE SE SW	27	18 N 32 E	34	SW NE SE	4	18 N 32 E
7	NW NW NW	27	18 N 32 E	35	NE NW NE	4	18 N 32 E
8	SE NW NE	28	18 N 32 E	36	NE NE NW	33	19 N 32 E
9	NW NW SE	21	18 N 32 E	37	NE NW SE	28	19 N 32 E
10	NE NW SW	22	18 N 32 E	38	NW NW NE	28	19 N 32 E
11	NE SE SE	22	18 N 32 E	39	NW NW NE	29	19 N 32 E
12	NE NE NW	25	18 N 32 E	40	NE SW NE	21	19 N 32 E
13	SE NE NE	26	18 N 32 E	41	NW SE NE	20	19 N 32 E
14	NE NE SW	23	18 N 32 E	42	NW SW NW	20	19 N 32 E
15	NW SW NW	24	18 N 32 E	43	SE SW NE	17	19 N 32 E
16	NE NE NE	24	18 N 32 E	44	NE SE NW	17	19 N 32 E
17	NW SW NW	19	18 N 33 E	45	SW SE NE	18	19 N 32 E
18	SW NE SW	13	18 N 32 E	46	NW SE SW	18	19 N 32 E
19	NW NE NE	11	18 N 32 E	47	NW SE NE	35	19 N 32 E
20	SE NE SW	2	18 N 32 E	48	NE NW NW	35	19 N 32 E
21	SE NE NE	20	18 N 32 E	49	NE NW SW	31	19 N 33 E
22	NE NE NW	20	18 N 32 E	50	NE SE SE	26	19 N 32 E
23	NE NE SW	17	18 N 32 E	51	NW SE NW	26	19 N 32 E
24	SE NE SE	8	18 N 32 E	52	NE SE SE	27	19 N 32 E
25	NE NW NE	8	18 N 32 E	53	SW SW SE	27	19 N 32 E
26	NW NW SE	9	18 N 32 E	54	NE SW NW	27	19 N 32 E

27	SE SE NW	5	18 N 32 E	55	NW NW NE	27	19 N 32 E
28	NW NE NE	5	18 N 32 E				

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicants proposed to divert groundwater year-round with a four-well manifold system at a flow rate of up to 39 gallons per minute (GPM) and an annual volume of up to 26.5 acre-feet (AF). The beneficial use is year-round livestock watering for 800 animal units (AU). Water will be supplied to 55 stock tanks across five landownerships consisted of private land and Bureau of Land Management (BLM) land.

The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

(include agencies with overlapping jurisdiction)

Montana Department of Environmental Quality – Website

Montana Department of Fish, Wildlife & Parks – Website

National Wetlands Inventory – Website

Montana Natural Heritage Program – Website

USDA Web Soil Survey - Website

## Part II. Environmental Review

1. Environmental Impact Checklist:

#### PHYSICAL ENVIRONMENT

# WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

The source of supply for this project is groundwater. The Department Technical Analysis shows that the zone of influence for these wells intersects the Musselshell River. The Department determined that this groundwater appropriation will deplete a reach of water from the confluence of Lodgepole Creek and the Musselshell River (near the western boundary of Section 18, T18N, R30E, Garfield County) to the confluence of the Musselshell and the Fort Peck Reservoir. The Technical Analysis identified a potential maximum depletion of 2.3 AF per month, at a constant rate of 16.5 GPM, in all months to the Musselshell. The MT FWP has a water reservation (water right 40C 30008850) on this portion of the Musselshell River for 70 CFS year-round to maintain instream flows. Water is both physically and legally available for the projected depletion in all months in the Musselshell River. After subtracting the projected

depletions from legal availability, the remaining available flow ranges from 15.37 CFS in December to 651.17 CFS in June.

Determination: No significant impact

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

The lower Musselshell River is listed on the 2020 Montana 303(d) list as not fully supporting aquatic life and primary contact recreation. It was not evaluated for agriculture and drinking water. Causes of impairment are alterations in stream-side or littoral vegetative covers, E. Coli, flow regime modification, habitat alterations, and iron level. Probable sources of the impairment are channelization, crop production, grazing in riparian zone, past mining activity, hydrostructure flow modification, municipal point source discharge, septic systems, streambank destabilization, and natural sources.

The proposed appropriation is livestock use of groundwater. The Applicants' livestock operation is approximately 16 miles east of the Musselshell River and is not expected to directly discharge pollutants into the Musselshell River.

Determination: No significant impact

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

The proposed appropriation would divert up to 26.5 AF of groundwater per year by a four-well manifold system. Three wells would pump at 10 GPM and one well at 9 GPM. Modeling analysis by the Department shows that there is groundwater physically and legally available for appropriation in the amount requested during the period of diversion requested. Modeling also predicts that drawdown in excess of 1 foot would occur within 179,760 feet of the proposed wells and affect 420 existing wells. The 139 wells for which the Department has well depth data are shown to have available water column after the proposed pumping. For 281 wells which the Department does not have well depth data, the predicted drawdown varies between 1 foot and 11 feet, with the average at 3 feet.

The Department has also determined that hydraulically connected surface water in the Musselshell River is physically and legally available in the amount and at the rate of the projected depletion. Based on these findings, there will be no significant impact to the groundwater aquifer or hydraulically connected surface waters.

Determination: No significant impact

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Water will be diverted via four wells located in Sections 35, 25, 23 and 21, T18N, R32E, Garfield County. The four wells are a manifold system with Grundhos pumps operating at 1.5 HP, 2 HP, 2 HP, and 3 HP, respectively, at POD #1, POD #2, POD #3 and POD #4. The system supplies to two underground cisterns and 55 stock tanks year-round. The connecting pipelines are 2-inch poly pipe buried 6 ft deep. The pipline is reduced to a 1-inch pipe 50 ft from each tank and a curb stop is installed so that each tank can be isolated if a repair is needed or if a tank needs to be shut off. There are valves near each of the wells which can completely turn off a well independently of others. The Applicants estimate that no more than two out of four wells run at the same time. Generally, the nearest well to the grazing pasture is the well that will be in operation. During peak consumption in the summer, the Applicants pump from two wells at the same time as necessary to satisfy demand and to avoid stressing a single well.

Each of the two cisterns has 20,000 gallon capacity. They are maintained at 75% capacity and can gravity-feed water to the tanks in case of a well or power failure. Each cistern and rubber tire tank has a float switch which prevents overflow. There is no conveyance loss in the closed manifold system.

Determination: No significant impact

#### UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

The Montana Natural Heritage Program website lists the following species of concern for T18N R32E, T19N R32E, and T19N R33E. Pallid Sturgeon is the only Endangered Species listed by U.S. Fish and Wildlife Service and BLM. Even though Pallid Sturgeon is listed as an Endangered Species in the project area, the project area contains predominantly ephemeral streams and does not contain any water body which would support habitat for Pallid Sturgeon or has any reported observation.

Mammals	Little Brown Myotis	Birds	Pinyon Jay
Mammals	Northern Hoary Bat	Reptiles	Spiny Softshell
Mammals	Silver-haired Bat	Fish	Blue Sucker
Birds	Golden Eagle	Fish	Pallid Sturgeon*
Birds	Great Blue Heron	Fish	Sauger
Birds	Greater Sage-Grouse	Birds	Brewer's Sparrow
Birds	Sage Thrasher	Birds	Bobolink

Reptiles	Greater Short-horned	Birds	Chestnut-collared
	Lizard		Longspur
Birds	Green-tailed Towhee	Birds	Ferruginous Hawk
Mammals	Long-eared Myotis	Birds	Loggerhead Shrike

<sup>\*</sup> Listed Endangered by U.S. Fish and Wildlife Service and BLM.

No plant species were identified as species of concern within three township/ranges.

The proposed beneficial use of water is livestock water. The Applicants operate a cattle ranch with 800 AU. All portions of the proposed places of use lie within the area designated as General Habitat for Sage Grouse. The Applicants obtained a consultation review letter for Project No. 3647, dated July 24, 2019, from the Montana Sage Grouse Habitat Conservation Program. The review confirmed that the Applicants' livestock grazing is consistent with the Montana Sage Grouse Conservation Strategy.

Determination: No significant impact

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

According to the national Wetlands Inventory website there are no wetlands in or near the proposed place of use or point of diversion.

Determination: No significant impact

<u>**Ponds**</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

There is limited surface water in the project area. Surface water is found in ephemeral streams and stock dams appropriated for livestock use.

Determination: No significant impact

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

The project area covers a variety of terrains, from rocky ridges, steep slopes down to coulee bottoms of ephemeral streams. According to USDA Web Soil Survey, many soil units occur over the project area. Lonna-Cambeth-Cabbart silt loams, on 4 to 12 percent slopes, cover 15 percent of the soil types. Cambeth-Cabbart-Rock outcrop Complex, with 8 to 45 percent slopes, cover 10 percent of the soil types. Cabbart-Rock outcrop-Yawdim Complex, on 15 to 70 percent slopes, cover 9 percent of the soils. The rest of the soils are various units with silt loam to silt clay loam to loam, calcareous or non-calcareous, on hills, terrace, or alluvial fan position, including farmland.

The proposed beneficial use of the project is livestock water. The Applicants operate a cattle ranch with 800 AU. With the cattle on wide ranges and in grazing rotation, the impact to soil would be compaction concentrated near water sources and stock tanks, and erosion on hill slopes.

Determination: No significant impact

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

The proposed project site has been utilized for cattle grazing for decades. The proposed water appropriation and watering system is not expected to cause significant impact on the vegetative cover. The Applicants' operation practices grazing rotation as a range improvement method. No plant species were identified as species of concern within three township/ranges. The control of noxious weeds is the responsibility of the property owner.

Determination: No significant impact

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

There will be no deterioration of air quality as a result of this water appropriation.

Determination: No significant impact

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

Determination: Twenty three stock tanks are located on BLM lands. BLM is a co-applicant for this application and holds possessory interest on the places of use owned by BLM. The project site encompasses both public and private rangeland which has long been used for cattle grazing. The water right appropriation under this project is not expected to cause additional degradation of unique archeological or historical sites.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: No additional impacts on other environmental resources were identified

## **HUMAN ENVIRONMENT**

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: There are no known local environmental plans or goals in this area.

<u>Access to and Quality of Recreational and Wilderness activities</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: The project is located in a rural area that has historically been used for agricultural purposes and will not have an impact on recreation or wilderness activities.

**Human HEALTH** - Assess whether the proposed project impacts on human health.

Determination: This project will have no impact on human health.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes\_\_\_ No\_**X**\_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

*Determination*: There are no additional government regulatory impacts on private property rights associated with this application.

<u>Other Human environmental issues</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

#### Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>?
- (b) Local and state tax base and tax revenues?
- (c) Existing land uses?
- (d) Quantity and distribution of employment?
- (e) Distribution and density of population and housing?
- (f) Demands for government services?

	(g)	Industrial and commercial activity?
	(h)	<u>Utilities</u> ?
	(i)	<u>Transportation</u> ?
	(j)	Safety?
	(k)	Other appropriate social and economic circumstances?
2.		Secondary and cumulative impacts on the physical environment and human population:
		<u>Secondary Impacts:</u> This assessment does not indicate possible secondary impacts on the physical environment and/or the local human population.
		<u>Cumulative Impacts:</u> This assessment does not indicate possible cumulative impacts on the physical environment and/or the local human population.
3.		Describe any mitigation/stipulation measures: N/A
4.		Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: An alternative analysis of the project identified a no action alternative to the proposed water appropriation. This alternative would not have any direct impacts that are typically associated with livestock watering. The no-action alternative would not allow the Applicant to obtain water right for the proposed livestock water use.
PA	RT II	II. Conclusion
1.		<b>Preferred Alternative:</b> Issue a water use permit if the applicant proves the criteria in 85-2-311, MCA are met.
2		Comments and Responses: N/A
3.		Finding:  Yes No_X_ Based on the significance criteria evaluated in this EA, is an EIS required?
		If an EIS is not required, explain $\underline{why}$ the EA is the appropriate level of analysis for this proposed action: None of the identified impacts for any of the alternatives or for physical or human environment are significant.

Name of person(s) responsible for preparation of EA:

Name: Lih-An Yang
Title: Regional Manager
Date: November 13, 2025