

Kubeczko, Dave

From: Kubeczko, Dave
Sent: Thursday, September 01, 2011 3:29 PM
To: Kubeczko, Dave
Subject: FW: Quicksilver K-Diamond 44-20
Attachments: HabitatImpactReportK-D44-20.txt; K-Diamond44-20.doc

Categories: Orange - Operator Correspondence

Scan No 2033983

CDOW CORRESPONDENCE and PROPOSED BMPs

2A#400190981

From: Cindy Keister [mailto:ckeister@qrinc.com]
Sent: Thursday, September 01, 2011 2:59 PM
To: Warren, Michael
Cc: Kubeczko, Dave; Lisa Smith (lspermitco@aol.com)
Subject: FW: Quicksilver K-Diamond 44-20

Quicksilver agrees to the attached wildlife BMP's.

From CDPW Attachment: K-Diamond44-20.doc:

Wildlife concern – Mapped greater sage-grouse lek, (RSO) elk winter concentration area, mule deer critical winter range and pronghorn winter concentration area (sensitive wildlife habitats).

Greater Sage-grouse

CP&W recommendations and concerns

- 1) Quicksilver will construct the pad and drill the well outside of the period between March 1 and May 15 – lekking season.
- 2) Restrict well site visitations to portions of the day between 9:00 a.m. and 4:00 p.m. during the lekking season (March 1 to May 15).
- 3) Quicksilver will construct and or drill any subsequent wells outside the period between March 1 and May 15.
- 4) Quicksilver will conduct post-development well site visitations to between the hours of 9:00 a.m. and 4:00 p.m. and reduce well site visitations between March 1 and July 30 - brood rearing period. Emergencies exempted.
- 5) Quicksilver will use hospital grade mufflers for compressors, pump jacks or other motors necessary to run operations at the site. Mufflers will be pointed upward to dissipate potential vibration.
- 6) Interim and final reclamation will match existing vegetation.
- 7) Quicksilver will include a weed management plan and implement the plan as part of reclamation.

Mule Deer, Elk, & Pronghorn

- 1) Where oil and gas activities must occur in mule deer critical winter range or elk winter concentration areas, conduct these activities outside the time period from December 1 through April 15.
- 2) Restrict post-development well site visitations to between the hours of 9:00 a.m. and 3:00 p.m. and reduce well site visitations between December 1 and April 15 in mule deer and elk winter range.
- 3) Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads.
- 4) Gate single-purpose roads and restrict general public access to reduce traffic disruptions to wildlife.
- 5) Close and immediately reclaim all roads that are redundant, not used regularly, or have been abandoned to the maximum extent possible to minimize disturbance and habitat fragmentation.
- 6) Avoid aggressive non-native grasses and shrubs in mule deer, elk, and pronghorn habitat restoration.

- 7) Reclaim mule deer, elk, and pronghorn habitats with native shrubs, grasses, and forbs appropriate to the ecological site disturbed.
- 8) Restore appropriate sagebrush species or subspecies on disturbed sagebrush sites. Use locally collected seed for reseeding where possible.

From CDPW Attachment: HabitatImpactReportK-D44-20.txt:

Habitat Impact ReportHouse Bill 1298 CDOW Species Impact Summary 8/31/2011

Well Number: K-D44-20

X/Y Location:-107.74, 40.45 Decimal Degrees, WGS84

Latitude: 40.451244 Longitude: -107.736178

Township:T6N

Range:R92W

Section:Unknown

Official House Bill 1298 species data:

Number of COGCC Restricted Surface

Occupancy (RSO) features:1

Number of COGCC Sensitive Wildlife

Habitat (SWH) features:3

Supporting (non-HB1298) species data:

Number of Important

CDOW features:8

COGCC - Habitat Types with Restricted Surface Occupancy

SpeciesActivityDescriptionTotal Factor (4-10)BMP

Greater Sage GrouseLek AreasAreas known to be used by Greater Sage-Grouse within the last 10 years from the date of mapping. 'Use' is defined as 1) radio telemetry locations, 2) confirmed observations of birds or sign by reliable sources, 3) documented use reported in unpublished reports or publications (mapped by field biologists). Mapped as a buffer zone of 0.6 miles around all lek points and clipped to Greater Sage-Grouse Overall Range.8View PDF file

COGCC - Sensitive Wildlife Habitat

SpeciesActivityDescriptionTotal Factor (4-10)BMP

ElkWinter Concentration AreaThat part of the winter range of elk in Colorado excluding areas East of Interstate 25 and areas in Las Animas County where densities are at least 200% greater than the surrounding winter range density during the average five winters out of ten from the first heavy snowfall to spring green-up, or during a site specific period of winter as defined for each Data Analysis Unit.7View PDF file

Mule DeerCritical Winter RangeThose parts of Mule Deer Winter Range considered to be of highest priority for protection from disturbance from development. Protection of these parts of Mule Deer Winter Range is considered critical to sustain mule deer populations across Colorado. This currently excludes areas East of Interstate 25 and areas in Las Animas County. Mule Deer Critical Winter Range was created by combining Mule Deer Winter Concentration Areas with subsets of Mule Deer Severe Winter Range in high-density Deer Data Analysis Units (DAUs). The high density severe

winter range was created by dividing the 2006 post-hunt population estimate by the total winter range for each DAU. This was used to define a 'higher' and 'lower' density threshold. A logical breakpoint was 7 deer per square km because a natural break occurred at this point and it was near the mean density. Severe Winter Range in DAUs with population densities above this breakpoint are considered part of Critical Winter Range.9View PDF file

Pronghorn AntelopeWinter Concentration AreaThat part of the winter range where densities are at least 200% greater than the surrounding winter range density during the same period used to define winter range in the average five winters out of ten.7View PDF file

CDOW Important Wildlife Habitat (non-HB1298)

SpeciesActivityDescriptionTotal Factor (4-10)BMP

ElkSevere Winter RangeThat part of the range of a species where 90 percent of the individuals are located when the annual snow-pack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten.

The winter of 1983-84 is a good example of a severe winter6View PDF file

ElkWinter RangeThat part of the overall range of a species where 90 percent of the individuals are located during the average five winters out of ten from the first heavy snowfall to spring green-up, or during a site specific period of winter as defined for each DAU.4View PDF file

Greater Sage GrouseWinter RangeObserved winter range.5View PDF file

Mule DeerSevere Winter RangeThat part of the overall range where 90% of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten.6View PDF file

Mule DeerWinter Concentration AreaThat part of the winter range where densities are at least 200% greater than the surrounding winter range density during the same period used to define winter range in the average five winters out of ten.7View PDF file

Mule DeerWinter RangeThat part of the overall range where 90 percent of the individuals are located during the average five winters out of ten from the first heavy snowfall to spring green-up, or during a site specific period of winter as defined for each DAU.4View PDF file

Pronghorn AntelopeSevere Winter RangeThat part of the overall range where 90% of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten.6View PDF file

Pronghorn AntelopeWinter RangeThat part of the overall range where 90 percent of the individuals are located during the average five winters out of ten from the first heavy snowfall to spring green-up, or during a site specific period of winter as defined for each DAU.4View PDF file

CDOW Contacts

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Wildlife Con. BiologistBRIAN HOLMES

Area Wildlife ManagerBILL deVERGIE
District Wildlife ManagerGARETT WATSON

This report was generated using COGCC and Colorado Division of Wildlife species data, and NDIS mapping technology.

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From: LSPermitco@aol.com [mailto:LSPermitco@aol.com]
Sent: Thursday, September 01, 2011 9:35 AM
To: Cindy Keister
Cc: LSPermitco@aol.com
Subject: Fwd: Quicksilver K-Diamond 44-20

Cindy - please review the attached BMPs's and forward your acceptance to Dave Kubeczko, Michael Warren and me. Thanks.

*Lisa Smith - President
PermitCo Inc. - PO Box 99 - Eastlake, CO 80614
303-857-9999 (office) - 303-324-9350 (cell) - 303-450-9200 (fax)*

*From: Michael.Warren@state.co.us
To: LSPermitco@aol.com
CC: Michael.Warren@state.co.us
Sent: 8/31/2011 4:31:25 P.M. Mountain Daylight Time
Subj: Quicksilver K-Diamond 44-20*

Lisa,

Attached is a list of BMPs for the Quicksilver K-Diamond 44-20 well pad location.

Please let me know if they are acceptable to you.

I have also attached a screen shot map of the site and wildlife habitat impact report – from the website - for you review and records.

The information is available on the COGCC website in the map section.

Please let me know if you have any questions.

Michael Warren

Land Use Specialist

Colorado Parks & Wildlife

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Grand Junction, CO 81505

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Oil & Gas Base Map.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help



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