

PRIVATE MINERAL
NEGOTIATED AGREEMENT

BETWEEN

BAY HORSE PETROLEUM

AND

U.S. FOREST SERVICE
COMANCHE NATIONAL GRASSLAND

NEGOTIATED OPERATING CONDITIONS
Surface Protection, Rehabilitation and Operation

Arthur Canyon # 1-17
NWNE of SECTION 17, T 35S, R47W
660' FNL & 1980' FEL
Baca County, Colorado 6th P.M.

CONSTRUCTION AND OPERATION

1. **Performance Bond** Bay Horse Petroleum agrees to deliver and maintain a bond in the amount of fifteen thousand dollars (\$15,000.00) for referenced well. The bond must identify well site location and Comanche National Grassland. The bond will be maintained throughout the production phase and released at final abandonment/restoration of the well. The bond may not be cancelled without providing written notice to the Principal and the Forest Service.

2. **Seasonal Restrictions** Mountain plover (prohibits activities from March 1–July 1) and Raptors (prohibits activities from March 1 –July 31). If nesting activities for these species are occurring at the time of construction, timing stipulations will delay the project. The district wildlife biologist will conduct a field determination before February 15, 2013.

3. All gasoline and deisel powered equipment must be **equipped with spark arresters** or mufflers approved by the Forest Service.

4. **Topsoil material** (minimum six inches) will be **removed from entire pad area**. This soil material will be stockpiled and saved for later distribution over recontoured site. **Caliche/gravel can be utilized to stabilize the pad area**. The cut and fillslopes will be constructed at 3:1 grade.

5. During the drilling phase the new access road will not be crowned and ditched. The road will be delineated with flagging/fencing to keep traffic to a single lane. **Maximum width of road surface will be 14 feet.**

6. The **reserve pit** will have a minimum of one-half the total depth below the original ground surface at the lowest point within the pit and will be designed to prevent the collection of surface runoff. **A forest representative will determine if a pit liner is required based on soil type/compaction.** If it is determined a liner is required; the liner's minimum specification: tensile grab strength (warp) of 150 lbs., mullen burst strength of 300 lbs., with seams heat treated.

7. **Fencing:** Fence the reserve pit with four strand fencing on three sides during the drilling phase and the fourth side immediately after the rig is removed (Refer to Exhibit B). Wooden H bracing must be constructed at all corners, utilizing five (5) inch diameter wooden posts. **Companies may choose to utilize steel panels or piping for fencing, these designs must be approved by the Forest Service.**

8. **Cattle guards** must be installed with side wings. The fence on both sides of the cattle guard must be reinforced with wooden H bracing, utilizing five (5) inch diameter wooden posts.

9. **All equipment and vehicles** must be confined to the access road and pad.

10. **Sewage** will be confined to a chemically-treated portable unit on location. Burying of sewage will not be allowed.

11. A **trash cage** must be on location throughout all drilling, testing and completion activities. Burying trash or trash within the reserve pit will not be allowed.

12. **The operator must provide a manifest of all drilling compounds/additives utilized and copies of mud analysis from the drilling program.**

13. **Any hydrocarbons within the reserve pit must be removed immediately.** The pit must have overhead flagging or netting installed for wildlife protection, until all oil is removed. The U.S. Fish & Wildlife Service may assess a penalty for any migratory bird found within a pit. If oil is spotted (example stuck pipe) the oil must be recovered in frac tanks, not allowed in reserve pit.

14. **During the completion phase, all treatment fluids will be contained in steel frac tanks and hauled to a State approved disposal site. No completion fluids will be allowed in the reserve pit.**

15. **All hydrocarbons** produced during the completion testing will be contained in steel frac tanks and will be accountable to appropriate agencies.

16. **All drilling fluids** within the reserve pit will be pumped immediately after the drilling phase is completed and disposed in a State approved disposal well. With the drilling fluids being removed, the Forest Service will not require testing of fluids for chloride concentrations. Spill, Prevention Control, and Countermeasure (SPCC) Plans are regulated and approved by the Environmental Protection Agency (EPA). If EPA requires a SPCC plan, the company must provide a copy to the Forest Service.

17. **The operator must inform the Forest Service immediately in the event of any oil or hazardous spill, including salt water.**

18. For safety purposes, the **rat/mouse hole must be filled and compacted immediately after the rig is removed.**

19. Drilling **company signs** will be allowed on National Grassland system lands during the construction and drilling phase.

20. If subsurface **cultural/historic materials and/or paleontological resources** (fossils) are found during construction, the District Ranger must be notified immediately. **Construction must cease until** the impact has been properly mitigated.

21. **Notify the Forest Service (719)-940-0004** forty eight hours in advance of any pad/road construction.

B. PRODUCING WELL

1. **Production facilities (including containment structures)** will be placed on cut and located a minimum of twenty feet from the toe of the backcut to allow adequate space between facilities and the restoration of the backslope to a 3:1 grade.

2. **Spill containment structures** must be installed around the oil tank battery, produced water tanks, and heater treaters. The spill containment must be constructed of steel construction, be impervious, hold one hundred and twenty (120) percent (%) of the capacity of the largest tank within the battery and be independent of the backcut. The steel containment walls must be buried a minimum of 6-8 inches below ground surface. The loadout line must remain inside the containment to alleviate spill contamination, unless the loadout line is installed on top of the containment and an inclosed spill containment structure is installed on end of loadout line. To preserve integrity of the containment the loadout line cannot go through the containment wall.

3. The **reserve pit** will be backfilled and reclaimed when dry. In addition; stockpiled material will be evenly distributed and landscaped to the surrounding topography over all areas on the pad which are not needed for production. Any **caliche/gravel** which was placed on areas to be reclaimed **will be removed prior to the reclamation process**. (The caliche can be placed on roads designated by the Forest Service).

4. **Refer to conditions C-2, C-3, and C-4 for reclamation requirements.**

5. All areas on the **pad** which are not to be revegetated or which are not needed for facilities need to maintain a rut-free surface. Excessive rutting would precipitate the need to surface the pad area with gravel or caliche.

6. All **production facilities**, i.e. pump, pump house, storage tanks, treater, etc. **will be painted** with a semi-gloss paint. All facilities must be painted with Carlsbad Canyon color (refer to the attached **Exhibit C "Standard Environmental Color Sheet"**). The exception being that Occupation Health and Safety Act Rules and Regulations are to be complied with where special safety colors are required. **All facilities must be painted within six months of installation.**

7. The **heater treater** vent stack must be equipped with a triangle (pointed) mesh/wire screen to discourage the perching of birds on top of the vent stack; causing bird mortality from vented heat.

8. All engines (including compressors) must be equipped with adequate mufflers. In areas where there are no noise sensitive areas (NSA's), decibel levels must not exceed 70 decibels (dB(A) at a distance of 100 feet from the mufflers exhaust. Noise levels near noise sensitive area (NSA's) such as a farm residence, school, campground must not exceed 55 decibels dB(A). The nearest NSA is a ranch residence approximately one mile from project area. EPA guidelines suggest noise levels above 55 dB(A) are potentially significant with exposure to sensitive human populations.

9. Fencing

a. Fence individual facilities, the pump jack (including well head), treater, tank battery with cattle tight fencing. The fence around tank battery must be constructed on the outside perimeter of the berms. See diagram B for Forest Service fencing specifications. Wooden H baces must bde constructed at all corners and a gate for access must be provided at each facility. Companies may choose to utilize steel panels or pipeing for fencing , these designs must be approved by the Forest Service.

10. **Control of noxious weeds** that invade the well pad and access road is required. Treatment by the operator will meet Forest Service requirements and specifications for herbicide application. **Prior to application a pesticide use plan must be submitted to the Forest Service for approval.**

11. **Crowning and ditching the new access road will be required if maintenanc becomes inadequate.** Excessive rutting, drive arounds would precipitate this action (see attached diagram A) of a tipical road cross section for specifications.

12. **Facility identification:** Individual well facilities (oil, gas,injection,saltwater) shall have a sign in legible condition until final abandonment. The sign will show the operator's name, well name and location (quarter section, township,range and footages from Section lines).

C. ABANDONED WELL

1. Colorado Oil and Gas Conservation Commission subsurface plugging/casing requirements will be implemented. A **permanent abandonment marker** inscribed with operator, well number, and location (quarter section, township, range) is required. This marker will be a minimum of 36 inches **below the surface level** so that it has 36 inches of soil cover after final reclamation. **Leave a small weep hole in welded top of casing. The hole serves as a seepage indicator.**

2. All disturbed areas will be **scarified and all caliche/gravel will be removed** from the location. The cut and fill slopes will be **recontoured to original contours**. The entire disturbed area will then be **backfilled with topsoil, landscaped, seeded, mulched, and fenced** to exclude livestock. On slopes greater than 4% waterbars (**contour ditches**) will be constructed on the contour at seventy-five (75) foot intervals beginning at the top of the disturbed slope. They should be at least on (1) foot deep, with approximately two (2) feet of drop per one hundred (100) feet and with the berm on the downhill side. The fence will remain in place until vegetation has been established. It will be removed prior to approval of final abandonment.

3. The following **seed mixture** is required for reclamation. **The seed must be certified. Proof of certification must be provided the Forest Service prior to seeding.**

<u>Species</u>	<u>lbs/acre PLS</u>	<u>% of Mix</u>
western wheatgrass	4.5	47.9%
Sideoats grama	3.8	40.4%
blue grama	1.1	11.7%

TOTALS	9.4#	100%
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Compacted areas must be ripped or disced prior to seeding.
Seeding conducted during **time period** of January 15 through April 15.

Drill seed on the contour at a **depth of one-half (1/2) inch**.

All disturbed areas will be **mulched at the rate of 20 tons of manure/acre or 2 tons/acre of native grass hay/straw**. The mulch must be crimped into the surface.

4. The operator may have to mow weeds the first year after vegetation is established. An alternative is to control weeds by chemical means. All herbicides are to be approved for use by the Forcast Service and be applied by a certified applicator.

5. **Reclamation will be approved** (minimum timeframe of two growing seasons) when the established vegetative **cover is equal to 80% of the adjacent areas**. The operator's bond will not be released until the area has been successfully reclaimed.

BAY HORSE PETROLEUM

By: 

(NAME)

(TITLE) President

DATE: Nov. 28, 2012

USDA FOREST SERVICE

BY: 

DALE L. FIFE

Acting District Ranger
Comanche National Grassland

DATE: Nov. 28, 2012