



Bureau of Land Management

Twin Falls District
Burley Field Office
15 East 200 South
Burley, Idaho 83318
<http://www.id.blm.gov>

Determination of NEPA Adequacy (DNA)

A. BLM Office: Burley Field Office

NEPA Number: DOI-BLM-ID-T020-2014-0024-DNA

Lease/Serial Case File No.: IDI-37087

Proposed Action Title/Type: Walker Ranch Geothermal Drilling Permit (GDP) Well Number 27A- 14

Location/Legal of Proposed Action: T. 15 S., R. 26 E., Boise Meridian
Sec. 14 – SESW;

Refer to Attachments 1 and 2, Project Location and Topographic Maps.

Description of the Proposed Action: The BLM Burley Field Office is proposing to approve one geothermal drilling permit application that would authorize Walker Ranch LLC to initiate the exploration of geothermal resources under public lands covered by Federal geothermal lease IDI-37087. The well is an exploratory slim-hole to function as an observation/monitoring well as part of the Walker Ranch Geothermal Project development. The project area is approximately 13.5 miles south of Malta, ID and is shown in Map 1, the project location map. A new 1,600 foot access road would be constructed to access the site; it is located entirely on-lease and no right-of-way would be required. The road is shown in Map 2, the topographic map. The pad would be roughly 100 feet long by 100 feet wide and is shown in figure 1 below. The total amount of disturbance would be one acre. It would take approximately 40 days from beginning of construction to completion of the well.

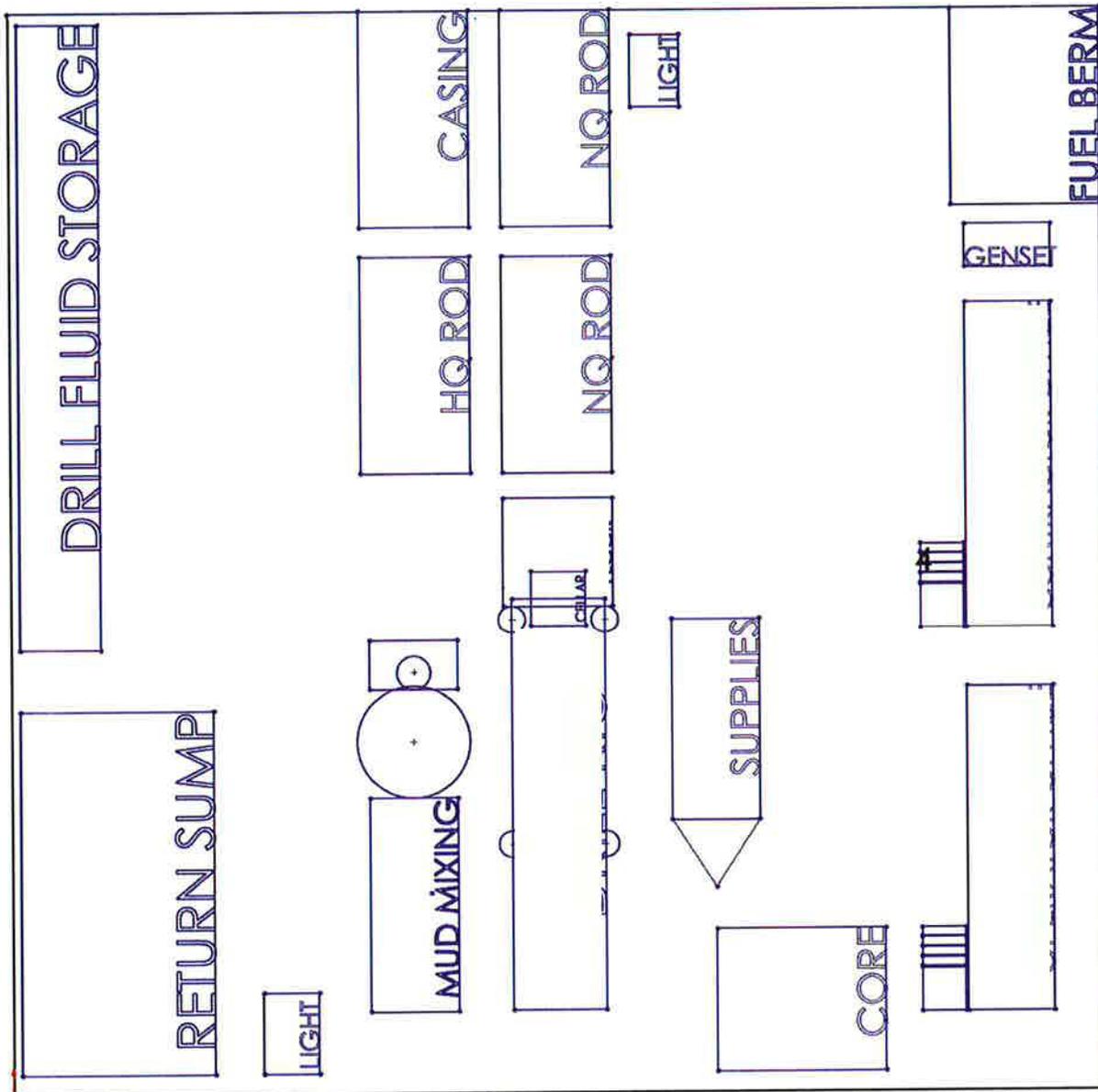


Figure 1 Well Pad Layout

Background:

The BLM Burley Field Office received five GDP applications from Agua Caliente LLC (applicant and lease holder) in February 2009. The GDP's were to explore geothermal resources on public lands within the Raft River Valley. BLM completed an Environmental Assessment (EA) in 2009, and reached a Finding of No Significant Impact (FONSI). The decision record for the project was signed January 1, 2010. This decision authorized Agua Caliente to drill five geothermal exploratory wells and build associated infrastructure to complete the project. Agua Caliente later transferred lease number IDI-35786 and the five

GDP's to Walker Ranch LLC; the lease was assigned number IDI-37087. These wells were not drilled in the two year life of the permits; the permits were extended for an additional two years in 2012, and expired in January 2014. The current application, for well 27A-14 is in the exact location as previous well number RRDP-17.

The current application is for a slim hole, which would be drilled with a smaller drill rig than was to be used for RRDP-17. The BLM has also received five GDP applications for wells that correspond to the original five GDP's. Agua Caliente LLC has asked BLM to process this well first, and proceed later with the processing of the remaining five GDP's. The slim hole will fit on the same pad as one of the five other wells.

B. Conformance with the Land Use Plan (LUP)

Cassia Resource Management Plan (Cassia RMP)

Date Approved: January 24, 1985

The Proposed Action is in conformance with the Cassia RMP because it is specifically provided for in the following decisions:

“BLM will manage geological, energy and minerals resources on public lands. Geological resources will be managed so that significant scientific, recreational and educational values will be maintained or enhanced. Generally, the public lands are available for exploration and development subject to applicable regulations and Federal and State Law.” (Cassia RMP, p. 6.)

C. Identify applicable NEPA documents and other related documents that cover the Proposed Action. List by name and date other documentation relevant to the Proposed Action (e.g., biological assessment, biological opinion, watershed assessment, allotment evaluation, and monitoring report).

Cassia Resource Management Plan Environmental Impact Statement

Date Approved: May 1984.

The Cassia RMP identified lands available for exploration and development.

LUP Amendment: Record of Decision and Resource Management Plan Amendments for Geothermal Leasing in the Western United States and associated Programmatic Environmental Impact Statement (Geothermal PEIS).

Date Approved: December 17, 2008.

The PEIS Record of Decision (ROD) amended the Geology, Energy, and Minerals Management portion of the Cassia RMP (BLM 1985) to identify lands, including those in the project area, as being available for geothermal leasing. The EA tiers to the PEIS, which analyzed the impacts of the drilling phase of development. These documents are kept on file at the BLM Burley Field Office, 15 East 200 South, Burley, ID 83318.

The decision record for this environmental assessment approved the issuance of 5 geothermal drilling permits (GDP's) and allowed the construction of roads, pads, and the drilling of 5 geothermal exploratory wells on leased public lands in the Raft River Valley. The Proposed Action is to authorize Walker Ranch LLC to drill a slim hole in the same location as one of these original GDP's.

Relationship to Statutes, Regulations, or Other Plans

The Federal Land Policy and Management Act Policy Statements 8 and 12 state that public lands shall be managed “in a manner that will protect the quality of scientific... environmental... values” and “which recognizes the Nation’s need for domestic sources of minerals...”, respectively. Geothermal resources development is guided by the Geothermal Steam Act, as amended and supplemented by the Energy Policy Act of 2005. These and other applicable federal, state, and local laws, regulations, policies, and plans are described below.

Geothermal Steam Act and Implementing Regulations

The Geothermal Steam Act of 1970 (30 US Code 1001-1025) gives the Secretary of the Interior the responsibility and authority to manage geothermal operations on lands leased for geothermal resource development by the US. The Secretary of the Interior has delegated this authority to the BLM. Pursuant to the regulations adopted to implement applicable portions of the Geothermal Steam Act (43 CFR 3261.20), the BLM will review the drilling and completion programs submitted by a federal geothermal lessee and will approve the programs if they comply with the Act, the regulations adopted pursuant to the Act (43 CFR 3200 et seq.), other directives issued by the BLM (e.g., Geothermal Resource Operational Orders, Notices to Lessees), any special stipulations applicable to the federal geothermal leases, and any other applicable laws and regulations. All operations conducted on the geothermal lease by the geothermal lessee are subject to the approval of the BLM under the Geothermal Steam Act. The BLM must also comply with the requirements of NEPA prior to approving the exploration permit, OP, and geothermal drilling permits.

Energy Policy Act of 2005

The Energy Policy Act of 2005 encourages the leasing and development of geothermal resources on federal lands. Section 211 of the Act provides a 10-year goal for the Secretary of the Interior to seek approval of non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts (MW) of electricity, including electricity from geothermal resources.

Secretarial Order 3283

This Order facilitates the Department's efforts to achieve the goal Congress established in Section 211 of the Energy Policy Act of 2005 to approve non-hydropower renewable energy projects on the public lands with a generation capacity of at least 10,000 MW of electricity by 2015.

Climate Change Policy

In 2002, the federal government released the Global Climate Change Initiative and Policy Book that outlines a comprehensive plan to address climate change. The plan includes a goal to reduce the greenhouse gas intensity of the US economy by 18 percent over the 10-year period from 2002 to 2012 and to provide initiatives to reduce greenhouse gas emissions, including encouraging renewable energy resources development (US Global Change Research Program 2002).

Section 7 of the Endangered Species Act

The Endangered Species Act of 1973 was signed on December 28, 1973, and provides for the conservation of species that are endangered or threatened throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend.

A species is considered endangered if it is in danger of extinction throughout all or a significant portion of its range. A species is considered threatened if it is likely to become an endangered species within the foreseeable future. There are approximately 1,930 species listed under the Endangered Species Act. Of these species, approximately 1,355 are found in part or entirely in the US and its waters; the remainder are foreign species. Under Section 7(a)(1) of the Endangered Species Act, federal agencies are directed to utilize their authorities to carry out programs for the conservation of threatened and endangered species.

Under Section 7(a)(2) of the Endangered Species Act, federal agencies must consult with US Fish and Wildlife Service (USFWS) on activities that may affect a listed species.

Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by the Advisory Council on Historic Preservation. Revised regulations, "Protection of Historic Properties" (36 CFR Part 800), became effective January 11, 2001.

State Requirements

Walker Ranch LLC will need to obtain the necessary permits from the State of Idaho, including from the Idaho Department of Water Resources and Idaho Department of Environmental

Quality, for drilling on the public and private lands. IDFG has statutory responsibility to manage wildlife in Idaho. The IDWR will consider Idaho Fish and Game concerns regarding wildlife and habitat when issuing permits for these geothermal wells. Walker Ranch LLC will also adhere to all requirements/stipulations outlined in all state permits.

Walker Ranch LLC owns in-fee lands in the Raft River Valley that would be drilled for additional production wells under Walker Ranch LLC's Operating Plan for the site. The BLM has no permitting authority for these wells.

D. NEPA Adequacy Criteria

- 1. Is the new Proposed Action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?**

Yes. The Proposed Action is the same as alternatives analyzed in existing NEPA documents. The proposed well pad is in the exact same location as was analyzed in the previous EA. There have been minor modifications to the road, and based on observations made on site visits, the soils, vegetation, and habitat type, and other resource conditions are sufficiently similar to those analyzed in the EA.

- 2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new Proposed Action, given current environmental concerns, interests, resource values, and circumstances?**

Yes, the range of alternatives considered in the existing NEPA documents is appropriate. The EA analyzed two action alternatives and a no action alternative.

- 3. Is the existing analysis adequate and are the conclusions adequate in light of any new information or circumstances (e.g., riparian proper functioning condition reports; rangeland health standards assessments; inventory and monitoring data; most recent USFWS lists of threatened, endangered, proposed, and candidate species; most recent BLM lists of sensitive species)? Can you reasonably conclude that all new information and all new circumstances would not substantially change the analysis of the new Proposed Action?**

Yes, the existing analysis is adequate. The resources and uses of the lands considered in this proposal have not substantially changed since the EA was approved in 2010. Although the Raft River area, including the Proposed Action area, provides habitat for an assortment of wildlife including greater sage-grouse (*Centrocercus urophasianus* (a Candidate Species)). The EA did not identify any significant impacts. The subject action is consistent with this analysis. New information on sage-grouse use has become available since the ROD; however, the effects of the proposed action do not differ from what is analyzed in the

environmental assessment. The proposed activities are expected to only result in minor adverse impacts to Greater sage-grouse and other sagebrush obligates. Stipulations identified in Appendix B and C of the EA are considered adequate to protect sensitive wildlife resources.), the Cassia RMP, and the EA recognized and provided for maintaining or improving wildlife habitat by inclusion of stipulations for Proposed Actions (Cassia RMP, p. 5 and Appendix B, EA, p. 2-10 and Appendix C). The seasonal timing limitations are listed in paragraph F below.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new Proposed Action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

Yes. The direct, indirect, and cumulative effects of authorizing this slim-hole to be drilled are similar to those analyzed. The total disturbance area for this GDP (1 acre) is smaller than the disturbance analyzed in the EA (14 acres). New projects that have been implemented since the EA include the Agua Caliente Seismic Survey, completed in 2013, a 3D seismic survey which surveyed 1,107 acres of public lands. The Burley Field Office received an application for another 3D seismic survey proposed by Agua Caliente LLC for surrounding lands including 3,953 acres of public lands that is currently being processed by the Burley Field Office.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current Proposed Action?

Yes. A project scoping packet was mailed to 36 recipients (including state agencies and local tribes) on June 26, 2009, announcing the project and seeking public comment through July 30, 2009. The scope of the EA was based upon specific issues and concerns identified by BLM, other federal agencies, state agencies, local agencies, and members of the public.

Federal, State, County, City governmental agencies, privately held companies, and the general public were all invited to provide input to the Geothermal PEIS.

E. Persons/Agencies /BLM Staff Consulted

<u>Name</u>	<u>Title</u>	<u>Resource Represented</u>
Jeremy Bisson	Wildlife Biologist	Wildlife
Suzann Henrikson	Archeologist	Cultural
Jason Theodozio	Rangeland Management Specialist	Range/Botany
Steve Lubinski	Geologist, Team Lead	Geologist
Brian Thrift	Planning and Environmental Coordinator	
James Tharp	Field Office Manager (Acting)	

F. Conditions of Approval (COA):

A. Drilling Plan - The drilling plan of the Geothermal Drilling Permit will be supplemented as follows:

1. All operations shall be conducted in accordance with Geothermal Resources Order No. 2: Drilling, Completion and Spacing of Geothermal Wells.
2. A Hydrogen Sulfide (H₂S) indicator and alarm shall be installed and operational. If H₂S concentrations reach 20 ppm operations will cease until safe drilling conditions can be established and the operator has submitted a H₂S contingency plan to this office for approval.
3. Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Authorized Officer (AO). All conditions of this approval shall be applicable during any operations conducted with a replacement or completion rig.
4. Daily drilling and completion progress reports shall be submitted to the Utah State Office on a weekly basis, and shall include daily mud reports and well inclinations.
5. Submit the completion report within 30 days of completion of the well. Two copies of all logs, and a single copy of core descriptions, core analyses, drill stem tests, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling and/or completion operations shall be submitted to the BLM, Utah State Office, Branch of Fluid Minerals, at P.O. Box 45155, Salt Lake City, Utah, 84145-0155.

B. Surface Use Plan of Operations - The surface use plan of operations for the Application for Permit to Drill will be supplemented as follows:

1. This operation shall comply with applicable provisions contained in the previously approved Operations Plan, dated February 2009. Any revisions require prior approval from the BLM.
2. The following Conditions of Approval (COAs) were developed by BLM as a result of the environmental analysis (ID-220-2009-EA-3709) [identified as (BLM) at end of COA] or were environmental protection measures committed to by Agua Caliente, LLC in Chapter 2 of the EA that have been adopted by BLM as COAs [identified as (WRLLC) at end of COA]. Collectively, these COAs supplement the Surface Use Plan of Operations for the Applications for Permit to Drill.

I. Pre-Construction

1. Upon approval of this permit, and prior to any construction, a pre-work conference will be conducted. Attendance shall be: the operator, BLM, dirt contractor, and any other contractors which may be involved with surface disturbance portion of this project. (BLM)
2. Upon approval of this permit, and prior to any construction or drilling, Walker Ranch, LLC must have on file with the Idaho State BLM office a BLM- approved personal or surety bond in the amount of \$10,000 for operations on a single lease (IDI-37087 in accordance with 43 CFR 3261.18. Your bond must cover all record title owners, operating rights owners, operators, and any person who conducts operations on your lease (43 CFR 3214.11). Your bond must cover (43 CFR 3214.12) (BLM):
 - a. Any activities related to exploration, drilling, utilization, or associated operations on a Federal lease;
 - b. Reclamation of the surface and other resources;
 - c. Rental and royalty payments; and
 - d. Compliance with the requirements of §3200.4.
3. Proposed surface disturbance and vehicular traffic will be limited to the approved well location and access route. (BLM)
4. Any changes in well location, facility location, access, or site expansion must be approved by the BLM Authorized Officer (AO) in advance. (BLM)
5. Develop and implement a project health and safety plan (including but not limited to personnel responsibilities, hazardous material handling and disposal procedures, and accidental spill response procedures). (WRLLC)
6. Upon approval of this permit and prior to any operation, a surety or personal bond must be filed with BLM as per 43 CFR 3214.10 and 3261.18. (BLM)

II. Construction/Operations/Reclamation

- a. Traffic Management
 1. Traffic will be restricted to the roads developed for the project. Use of other unimproved roads will be restricted to emergency situations. (BLM)
 2. Project personnel and contractors will be instructed and required to adhere to speed limits commensurate with road types, traffic volumes, vehicle types, and site-specific conditions, (e.g., 25 mph) to ensure safe and efficient traffic flow and to reduce wildlife collisions and disturbance and fugitive dust. (BLM)

- b. Roads and Pads
 - 1. The operator will obtain agency authorization prior to borrowing soil or rock material from agency lands. (BLM)
 - 2. Road use will be restricted during the wet season if road surfacing is not adequate to prevent soil displacement, rutting, etc., and resultant stream sedimentation. (BLM)
 - 3. If culverts are used, culvert outlets will be rip-rapped to dissipate water energy at the outlet and reduce erosion. If used, catch basins, roadway ditches, and culverts will be cleaned and maintained regularly. (BLM)
 - 4. The reserve pit shall be located in cut material, with at least 50% of the pit constructed below original ground level to prevent failure of the pit dike. Any fill dikes shall be compacted in lifts. If it is necessary to construct the reserve pit by fill embankment, a keyway or core trench 10 to 12 feet wide shall be excavated to a minimum depth of 2 to 3 feet below the original ground level. The core of the embankment must be constructed with water-impervious material. (BLM)
- c. Climate and Air Quality
 - 1. Water would be applied to the ground during the construction and operation phases of the project as necessary to control dust. (WRLLC)
- d. Fire Prevention/Health and Safety
 - 1. All vehicles entering the project site will be equipped with fire extinguishers and shovels. (WRLLC)
 - 2. All brush build-up around mufflers, radiators, headers, and other engine parts would be avoided, and periodic checks would be conducted to prevent this build-up. (WRLLC)
 - 3. Smoking would only be allowed in company vehicles and /or designated smoking areas. (WRLLC)
 - 4. Portable generators used in the project area would be required to have spark arresters. (WRLLC)
 - 5. Employees and contractors would be educated on safe and environmentally responsible practices. (WRLLC)
 - 6. Employees and contractors would follow any special guidance or restrictions recommended by BLM officials. (WRLLC)
 - 7. The Operator shall be responsible for the prevention and suppression of fires on public lands caused by its employees, contractors or subcontractors. During conditions of extreme fire danger, surface use operations may be limited or suspended in specific areas. (BLM)

- e. Noise
 1. The operator will take measurements to assess the existing background noise levels at a given site and compare them with the anticipated noise levels associated with the proposed project. (BLM)
 2. Reclamation activities, road and well pad construction activities and large, non-personnel vehicle movements will be limited to the 7 AM to 10 PM timeframe to limit nighttime disturbance. This COA does not apply to drilling and well testing operations that will occur 24 hours per day, seven days per week. (BLM)
 3. The project proponent is required to ensure that mufflers are present on all diesel engines and any other components used during operations that can be muffled, such that noise emissions are reduced by at least 15 dBA from the original, non-muffled noise level for the equipment. (BLM)
- f. Noxious Weeds/Invasive Plants
 1. The drilling rig and any construction-related equipment would be required to be cleaned and washed prior to entering each site. (WRLLC)
 2. Fill materials and road surfacing materials that originate from areas with known noxious weeds or invasive plants will not be used. (WRLLC)
 3. Re-vegetation, habitat restoration and weed control activities will be initiated as soon as possible after construction activities are completed. (WRLLC)
 4. An intensive weed monitoring and control program will be implemented prior to site preparation for planting and will continue until interim or final reclamation is approved by the BLM AO. (WRLLC)
 5. Monitoring will be conducted at least annually during the growing season to determine the presence of any invasive plants or noxious weeds. Invasive plants and noxious weeds that have been identified during monitoring will be promptly treated and controlled. A Pesticide Use Proposal (PUP) will be submitted to the BLM prior to use of herbicides. (WRLLC)
 6. The use of certified, weed-free mulch will be required when stabilizing areas of disturbed soil. (WRLLC)
- g. Soils/Vegetation
 1. During initial well pad and road construction and prior to completion of the final well on the well pad, pre-interim reclamation stormwater management actions will be taken to ensure disturbed areas are quickly stabilized to control surface water flow and to protect both the

disturbed and adjacent areas from erosion and siltation. This may involve construction and maintenance of temporary silt ponds, silt fences, berms, ditches, and mulching. (WRLLC)

2. Prior to rigging up, a berm at least one-foot high will be constructed around the perimeter of the pad to prevent escape of spilled fluids or rainfall collected on the location. This berm will be maintained during the drilling phase of the well. The need for the berm will be reassessed upon completion of the well and production is established. (BLM)
3. Any water bars built during construction or reclamation to divert water from ditches or roads will be placed as follows (BLM):

<u>Grade</u>	<u>Spacing</u>
2%	Every 200 feet
2-4%	Every 100 feet
4-5%	Every 75 feet
5+%	Every 50 feet

4. Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips. (BLM)
5. All lead-off ditches (turnouts) shall be graded to drain water with a one percent minimum to three percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES

<u>Percent Slope</u>	<u>Spacing Interval</u>
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of one foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible. (BLM)

6. Road and well production equipment will be placed on location so as to permit maximum interim reclamation of disturbed areas. If equipment is found to interfere with the proper interim reclamation of disturbed areas, the equipment will be moved so proper recontouring and revegetation can occur. (WRLLC)
7. Topsoil will be evenly spread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including

road cuts and fills and to within a few feet of the wellhead/pump, unless an all-weather, surfaced, access route or small “teardrop” turnaround is needed on the well pad. (WRLLC)

8. In order to inspect and operate the well or complete workover operations, it may be necessary to drive, park and operate equipment on restored, interim vegetation within the previously disturbed area. Damage to soils and interim vegetation will be repaired and reclaimed following use. To prevent soil compaction, under some situations, such as the presence of moist clay soils, the vegetation and topsoil will be removed prior to workover operations and restored and reclaimed following workover operations. (WRLLC)
9. Vegetation removal and the degree of surface disturbance will be minimized wherever possible. (WRLLC)
10. Operations will disturb the minimum amount of surface area necessary to conduct safe and efficient operations. When possible, equipment will be stored and operated on top of vegetated ground to minimize surface disturbance. (WRLLC)
11. Excess soil will be stripped and stockpiled around the perimeter of the well location to control run-on and run-off, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil may include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. (WRLLC)
12. Earthwork for interim and final reclamation will be completed within 6 months of well completion or plugging unless a delay is approved in writing by the BLM Approving Official. (WRLLC)
13. If, upon completion of well drilling and well testing at a site, no geothermal resources have been found viable and no further exploration is to be pursued, roads and pads would be restored to their original condition by contouring and revegetating. (WRLLC and BLM)
14. If the use of topsoil for reclamation is delayed for more than 6 months from completion or plugging of the well, the stockpiles will be reseeded to retain soil quality and hinder erosion. Fall seeding is preferred and will be conducted after September 15 and prior to ground freezing. Spring seeding will be conducted after the frost leaves the ground and no later than April 30. The seed mix recommended by the BLM in this section (COA 19), less the Wyoming big sagebrush should be used for this purpose. (BLM)
15. Salvaging and spreading topsoil will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts in excess of

four (4) inches deep, the soil will be deemed too wet and activities will cease until the site dries out. (WRLLC)

16. No major depressions will be left that would trap water and cause ponding. (WRLLC)
17. Initial seedbed preparation would consist of recontouring the well pads to the appropriate interim or final reclamation standard. All compacted areas to be seeded will be ripped to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the topsoil. Prior to seeding, the seedbed will be scarified and left with a rough surface. (WRLLC)
18. If broadcast seeding is to be used, final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding and dozer tracking or another imprinting method will be used in order to loosen up the soil and create seed germination micro-sites. (WRLLC)
19. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation. A certified weed-free seed mix designed by BLM, as identified below, to meet reclamation standards will be used to revegetate all disturbed areas. (WRLLC)

<u>Species</u>	<u>Pounds/Acre – Pure Live Seed</u>
Siberian Wheatgrass (P27)	5.00
Russian Wildrye (Bozoisky)	5.00
Sandberg bluegrass	2.00
Wyoming big sagebrush	0.50
<i>Total</i>	<i>12.50</i>

20. No seeding will occur from May 15 to September 15. Fall seeding is preferred and will be conducted after September 15 and prior to ground freezing [Shrub species will be seeded separately and will be seeded during the winter]. Spring seeding will be conducted after the frost leaves the ground and no later than April 30. (WRLLC)
21. Weed-free mulch, silt fencing, waddles, hay bales, and other erosion control devices will be used on areas at risk of soil movement from wind and water erosion. (WRLLC)
22. Mulch will be used, if necessary, to control erosion, create vegetation micro-sites, and retain soil moisture and may include hay, small-grain straw, wood fiber, live mulch, cotton, jute, or synthetic netting. Mulch will be free from mold, fungi, and will be certified free of noxious or invasive weed seeds. (WRLLC)
23. If straw mulch is used, it will contain fibers long enough to facilitate crimping and provide the greatest cover. (WRLLC)

24. All site grading will balance cut and fill to the extent practicable to minimize potential effects from erosion. (BLM)
 25. Seeded areas will be fenced to exclude livestock until interim or final reclamation is approved by the authorized officer. (WRLLC)
 26. The reserve pit shall be located in cut material, with at least 50% of the pit constructed below original ground level to prevent failure of the pit dike. Any fill dikes shall be compacted in lifts. (BLM)
- h. Waste Management
1. All solid wastes (paper trash and garbage) must be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations. The Operator will, on a daily basis, police the access routes and adjacent areas of the well pad to ensure that all solid wastes are deposited in the approved manner. (BLM and WRLLC)
 2. Immediately upon completion of drilling operations, the well location and surrounding area shall be cleared of all remaining debris, trash, junk and materials not required for production. (BLM and WRLLC)
 3. The reserve pits shall be completely dry and all junk and debris removed before initiating any dirt work to restore the location. After drilling operations are completed, the dried liquids and solids from the reserve pits would be buried on site as part of the site reclamation. (BLM and WRLLC)
 4. Portable chemical sanitary facilities would be available and used by all personnel during periods of construction, well drilling and/or flow testing. These facilities would be maintained by a local contractor. (WRLLC)
- i. Water Resources
1. The operator will use engineering controls and monitoring to protect the ditch that supplies hot water to the local resident southwest of the site. (BLM) (This COA only applies to RRDP-6 in the Proposed Action but does not apply if Alternative 1 is selected).
 2. Walker Ranch will develop and implement a storm water pollution prevention plan during construction and operation of the project. (WRLLC)
- j. Visual Resources
1. All permanent [Onsite for six (6) months or longer] structures constructed or installed (including pumping facilities) shall be painted a flat, non-reflective earth tone color. All facilities shall be painted within six months of installation. Facilities which are required to be in compliance with Occupational Safety and Health Act (OSHA) shall be

excluded. The required paint color is “Carlsbad Canyon” from the Standard Environmental Colors Chart CC-001: June 2008. (BLM)

2. All drill rig and well test facility lights shall be limited to those required to safely conduct the operations, and shall be shielded and/or redirected in a manner which focuses direct light to the immediate work area. (BLM)

k. Wildlife

1. No surface occupancy within 1/2 mile of active ferruginous hawk nest sites (BLM 1985).

Stipulation applies if an active ferruginous hawk nest is identified within 1/2 mile of any one proposed site. A nest will be considered active if nest initiation is observed and, will be considered active until otherwise unoccupied (i.e. successfully fledged or failed/abandoned). (BLM)

2. If construction is to take place from March 1 – July 15, a BLM-approved biologist must survey and clear the proposed construction sites for nesting migratory birds prior to project construction. If nesting migratory birds are found within the construction footprint the project will be delayed until the nest(s) is no longer active, or construction will be altered to avoid harming nesting migratory birds. A nest will be considered active if nest initiation is observed and will be considered active until otherwise unoccupied (i.e. successfully fledged or failed/abandoned). (BLM)
3. Access roads not needed for maintenance would be removed following exploration; and public use of remaining access roads would be restricted. (BLM)
4. Three sides of the reserve pit will be fenced with materials suitable to prevent access by wildlife and livestock before drilling starts. The fourth side of the pit shall be fenced as soon as drilling is completed. The corners must be braced to keep the fence tight. The fence shall be maintained in good repair while the pit is drying and must remain in place until the pit is dry and/or site restoration begins. Refer to Figure 1. “Recommended construction standards for enclosure fences in livestock areas”, in the Gold Book: Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. (BLM)
5. All necessary steps will be taken to safeguard migratory birds from hazards associated with pits and treatment facilities. Prevention methods include, but are not limited to, pit screening or netting and protective cones on vent stacks of dehydrators, separators and heater-treaters. The death of any migratory bird found in a pit or treating equipment is a violation of the Migratory Bird Treaty Act. Any deaths of migratory birds attributed to pits or equipment associated with

drilling or production operations must be reported to this office and the U. S. Fish and Wildlife Service within 24 hours. (BLM)

6. Appendix B of the EA (Lease Stipulations) requires “No exploration/development work in sage grouse strutting/brood rearing habitat from April 1st through June 15th.”

III. Exceptions, Waivers, and Modifications

The Authorized Officer will consider requests to modify, waive, or grant exceptions to lease stipulations and Conditions of Approval consistent with Instruction Memorandum No. 2008-032. (BLM)

G. Conclusion

Based on the review documented above, I conclude that this proposal conforms to the Cassia RMP as amended and that the NEPA documentation fully covers the Proposed Action and constitutes BLM's compliance with the requirements of NEPA.

/s/Steve Lubinski
Preparer
Steve Lubinski

8/01/2014
Date

/s/Scott Sayer
Scott Sayer
Field Manager (Acting)

8/01/2014
Date

Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM’s internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.

Attachments:

- Attachment 1 – Project Location Map
- Attachment 2 – Topographic Map
- Attachment 3 – Geothermal Resources Order No. 2: Drilling, Completion and Spacing of Geothermal Wells

References

USDOI BLM. 2010. Information Bulletin ID 2010-039, July 26, 2010.

USDOI BLM. 2010. Instruction Memorandum No. 2010-156, July 9, 2010.

USDOJ BLM. 2008. Record of Decision and Resource Management Plan Amendments for Geothermal Leasing in the Western United States and Associated Programmatic Environmental Impact Statement.

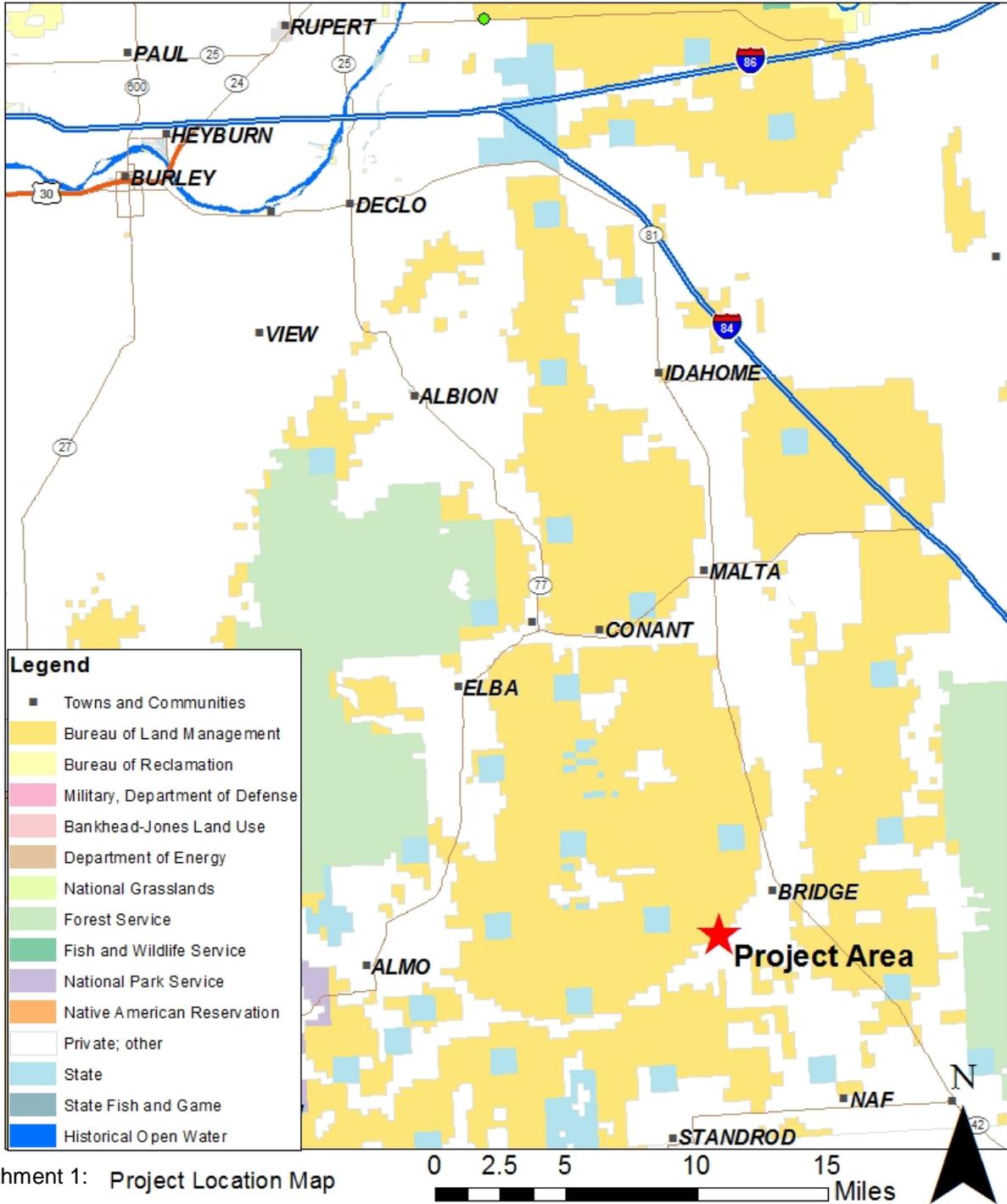
USDOJ BLM. 2005. Instruction Memorandum No. 2005-003.

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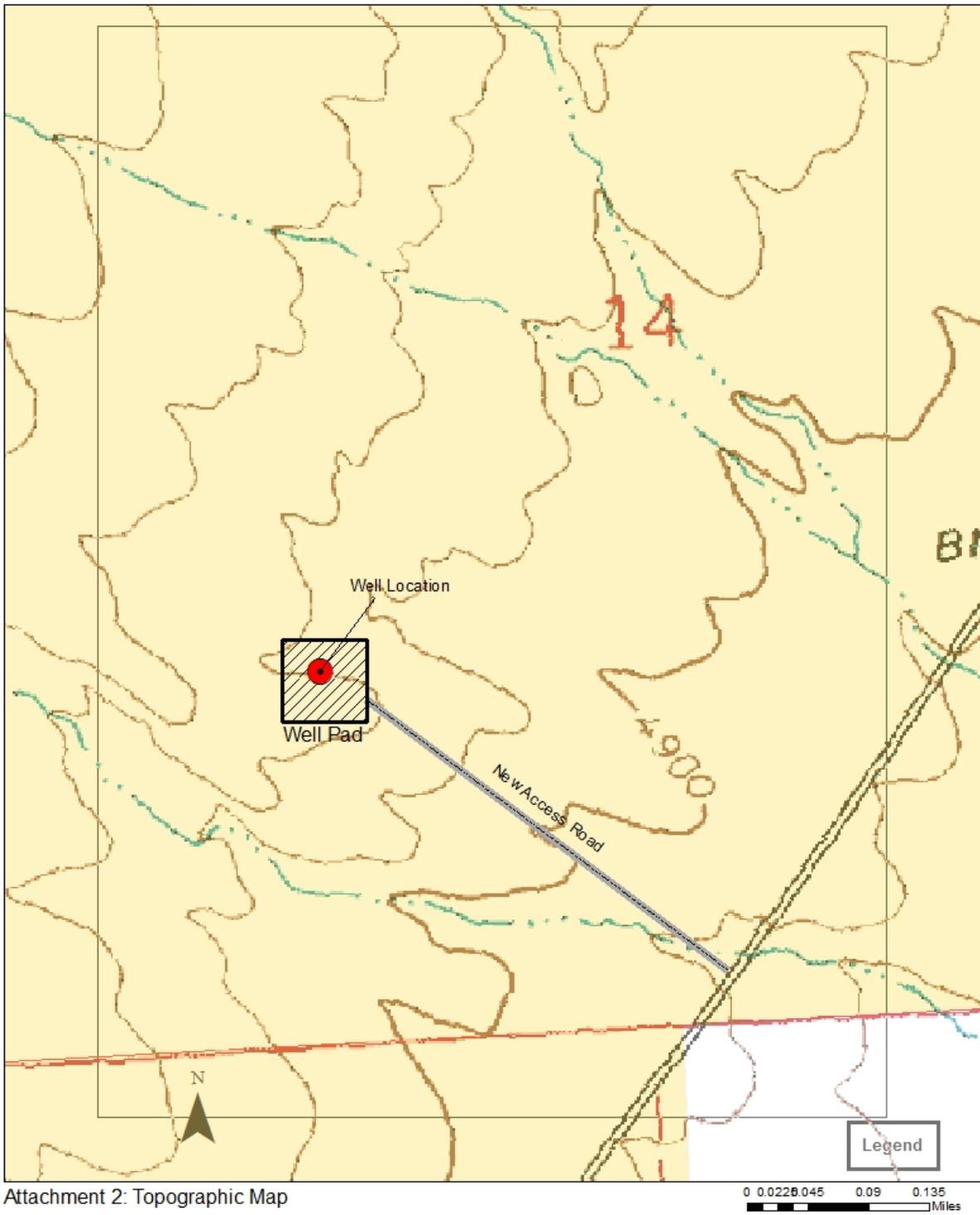
USDOJ. 2010. Secretarial Order 3310. December 2010.

Walker Ranch LLC Geothermal Drilling Permit Well # 27A-14



Attachment 1: Project Location Map

Walker Ranch Proposed Well 27A-14



Attachment 2: Topographic Map