Eck 12-90-1 Natural Gas Well Project
SG Interests I Ltd.
Application for an Oil and Gas Permit under the
Gunnison County Temporary Oil and Gas Regulations

1) Applicant:

SG Interests I Ltd.
Catherine Dickert
Environmental and Permitting Manager
1544 Oxbow Drive, Suite 202
PO Box 26
Montrose, Colorado 81402
Phone: 970-209-6464
Fax: 970-252-0636
Email: cdickert@sginterests.com

2) Surface Ownership:

Landowner Name	Landowner Contact	Project Component
Gunnison Hunting Properties, LLC	100 Waugh Drive, Suite 400, Houston, TX 77007 Phone: 713-951-0100	Well pad, pipeline route, and access road

Gunnison Hunting Properties, LLC is an entity owned by SG Interests I, Ltd (Appendix A).

3) Mineral Owner

The minerals are owned by Gunnison Hunting Properties LLC and leased to SG Interests (see attached lease documents, Appendix B). The remainder of the parcel (outside of the lease boundary) is underlain by federal minerals. See the Site Plan Map for the boundary of the mineral ownership (section 9 below).

4) Parcel Location:

Parcel Number	Landowner	Legal Description	Common Address
298700000001	Gunnison Hunting Properties LLC	Lots 1, 2, 3, 4, (N2N2), S2NE4, S2NW4, tract in N2N2S2 (being 247' on east and 240' on west 28.75 +/- acres) in section 1 T12S R90W. Total 296.43 acres.	None

5) Identification of Previously Approved Uses:

There are no other previously approved uses for this parcel.

6) Characteristics and Current Condition of the Operation Location:

The project will be constructed in dry rangeland. There is little evidence of man-made or weather-related changes to the landscape with the exception of some two track and bladed roads on and through the parcel. There are stock ponds scattered around the landscape. The project will be located on soils mapped as Fughes loam, 15-25% slopes (USDA soil data). Vegetation in the area is composed of big sagebrush and Gambel oak shrubs with grasses and native forbs in the understory.

SCANNED

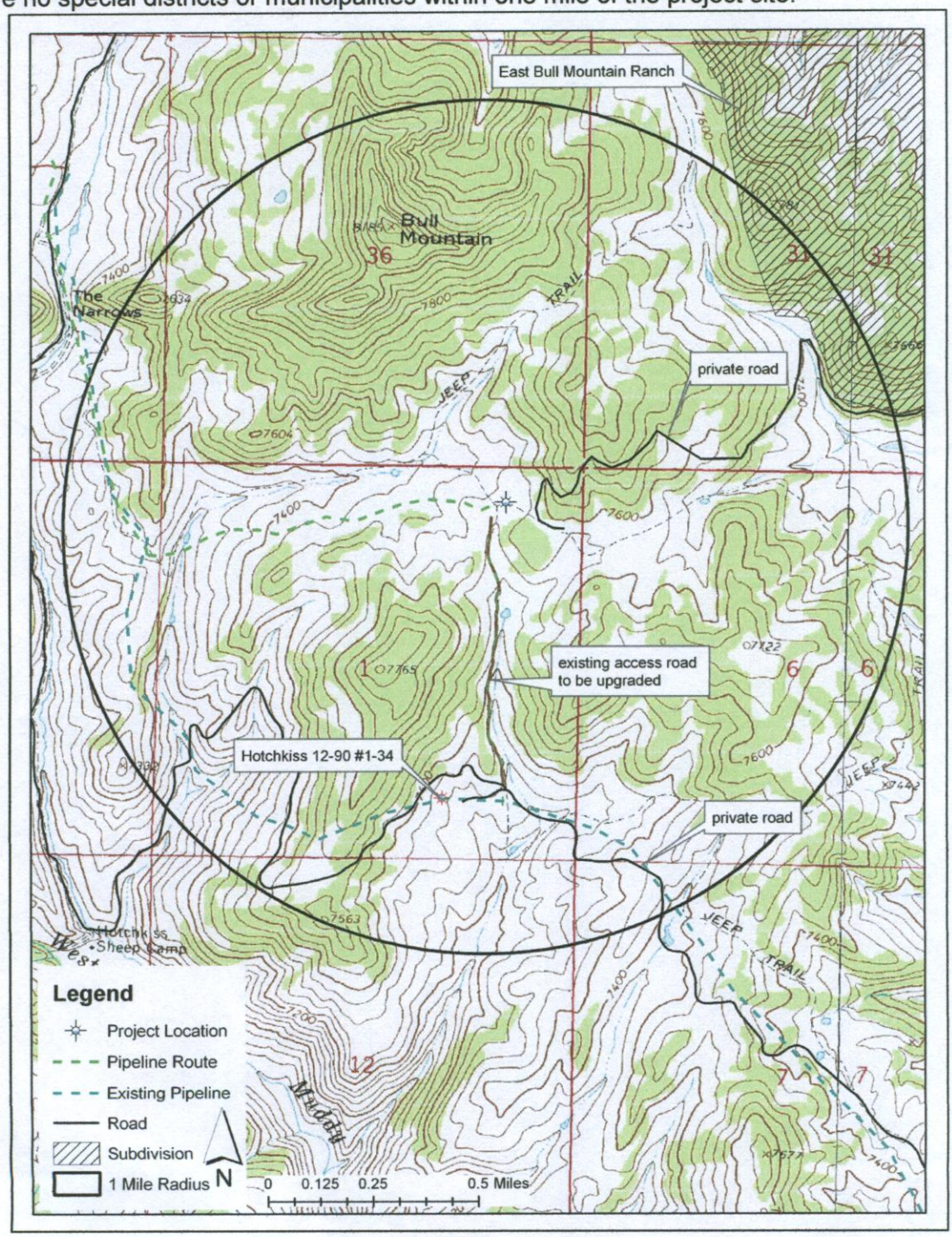
received
1-30-12

7) List of Adjacent Landowners

Parcel Number	Landowner	Contact Information
2919-000-00-091	THEODORE R ECK TRUSTEE, THEODORE R ECK TRUST	PO BOX 8, ORFORD, NH, 03777
2989-000-00-010 2921-000-00-027	HOTCHKISS RANCHES INC	PO BOX 479, HOTCHKISS, CO 81419
2987-000-00-002 2987-000-00-004	HUGHES NICK R	708 1250 RD, DELTA, CO, 81416

8) Vicinity Map:

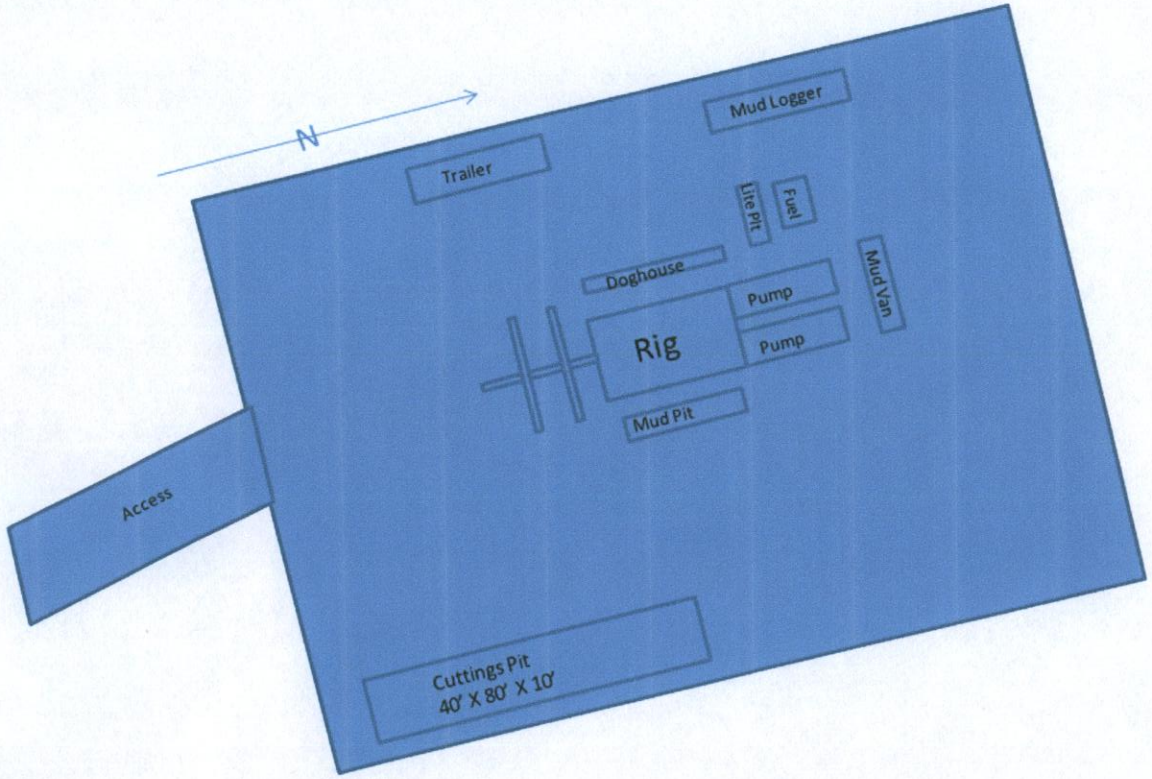
There are no special districts or municipalities within one mile of the project site.



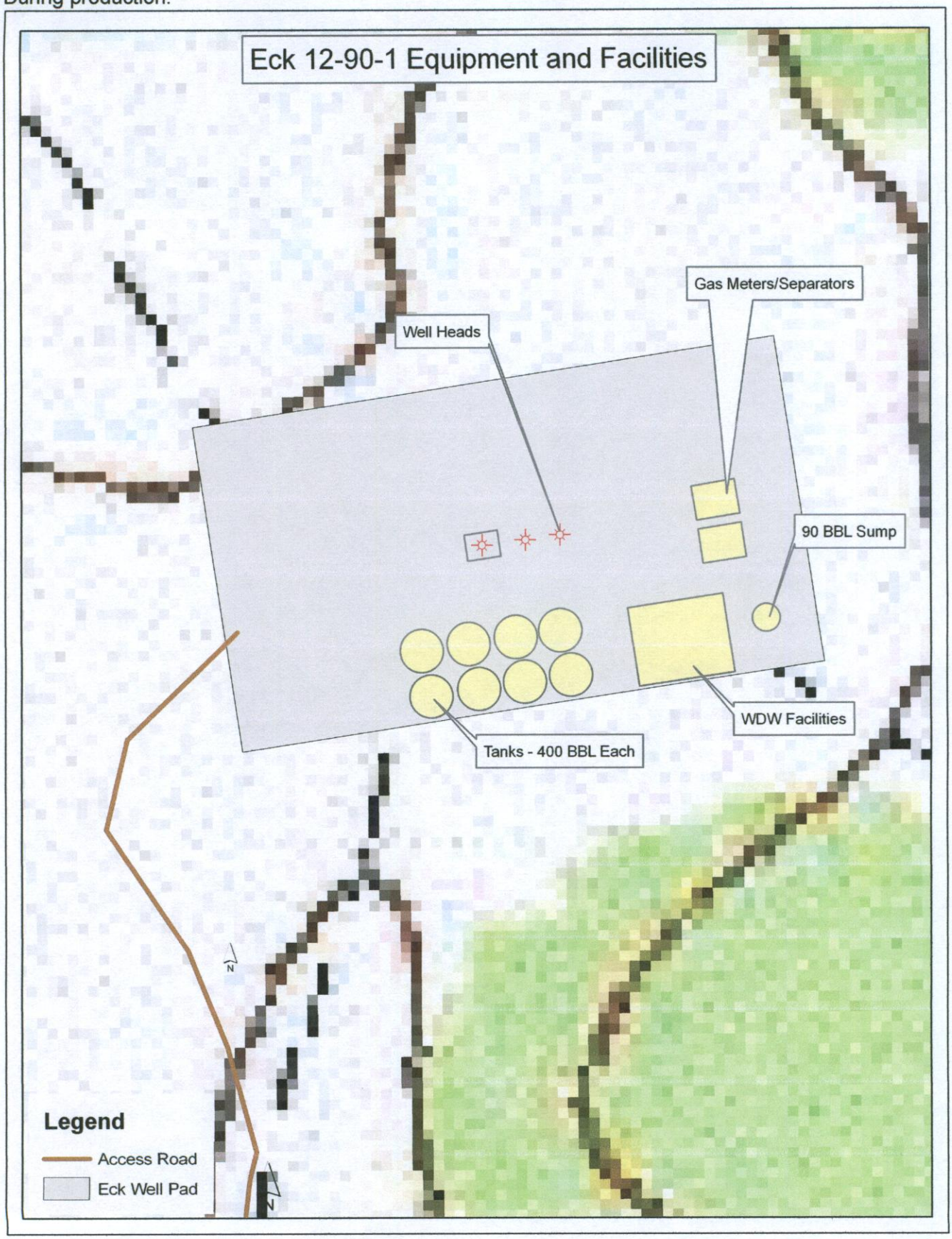
9) Site Plan Map:

Proposed facilities for the Eck 12-90-1 well project are shown on the following diagrams. The size and shape of the cuttings pit are variable and depend on site conditions. For each well drilled on this pad, the drilling rig would move approximately 15' further toward the road entrance end of the pad. Two gas wells and one water disposal well are planned to be located on the well pad. Below is a drawing of the facilities on site during the drilling of the first well.

Drilling Site Layout
Eck 12-90-1 #1

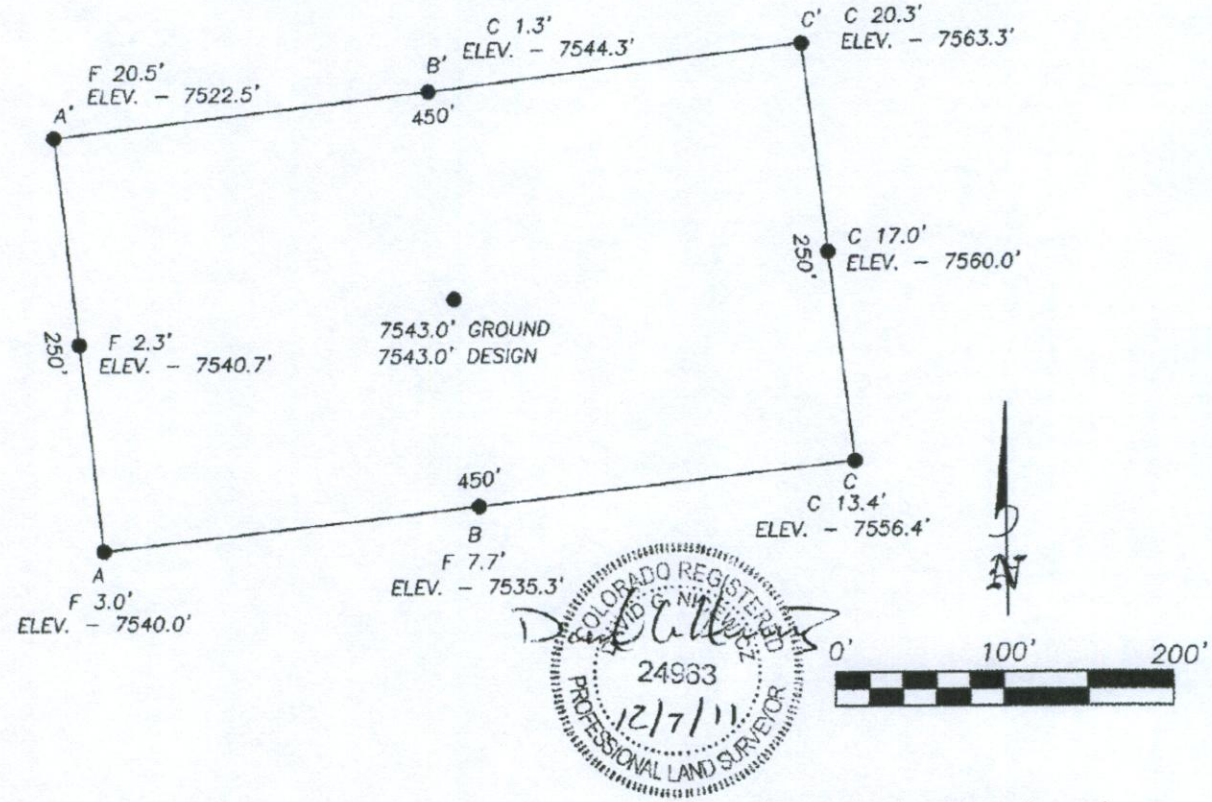


During production:

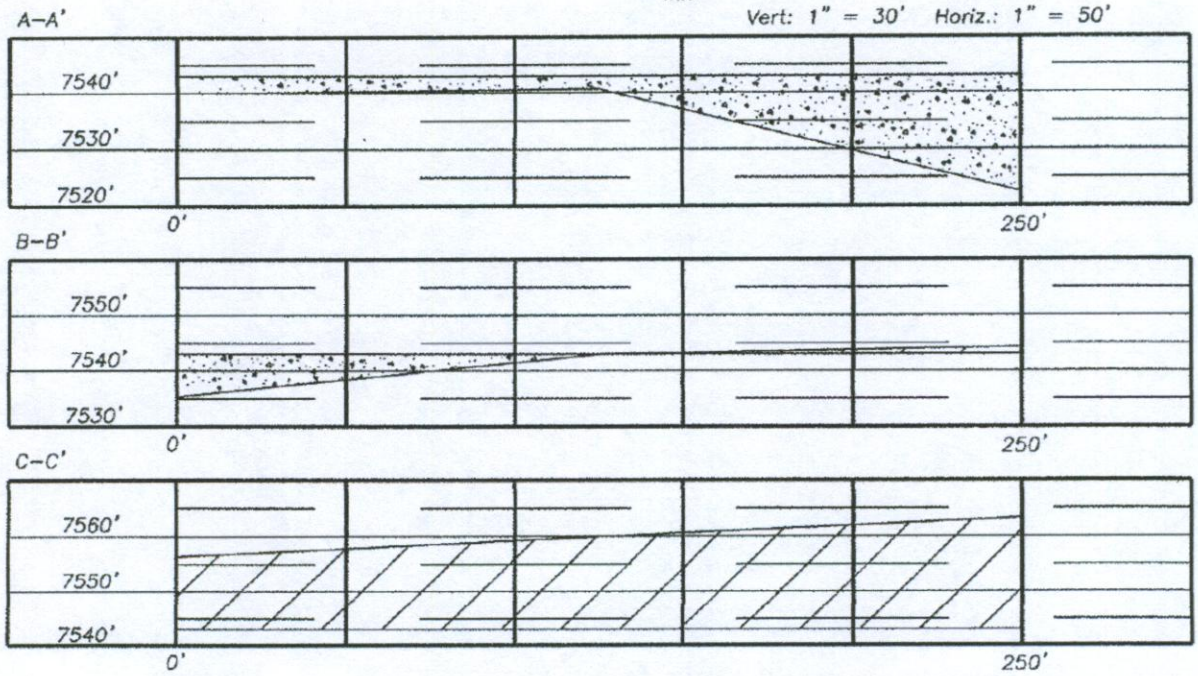


GAS WELL LOCATION

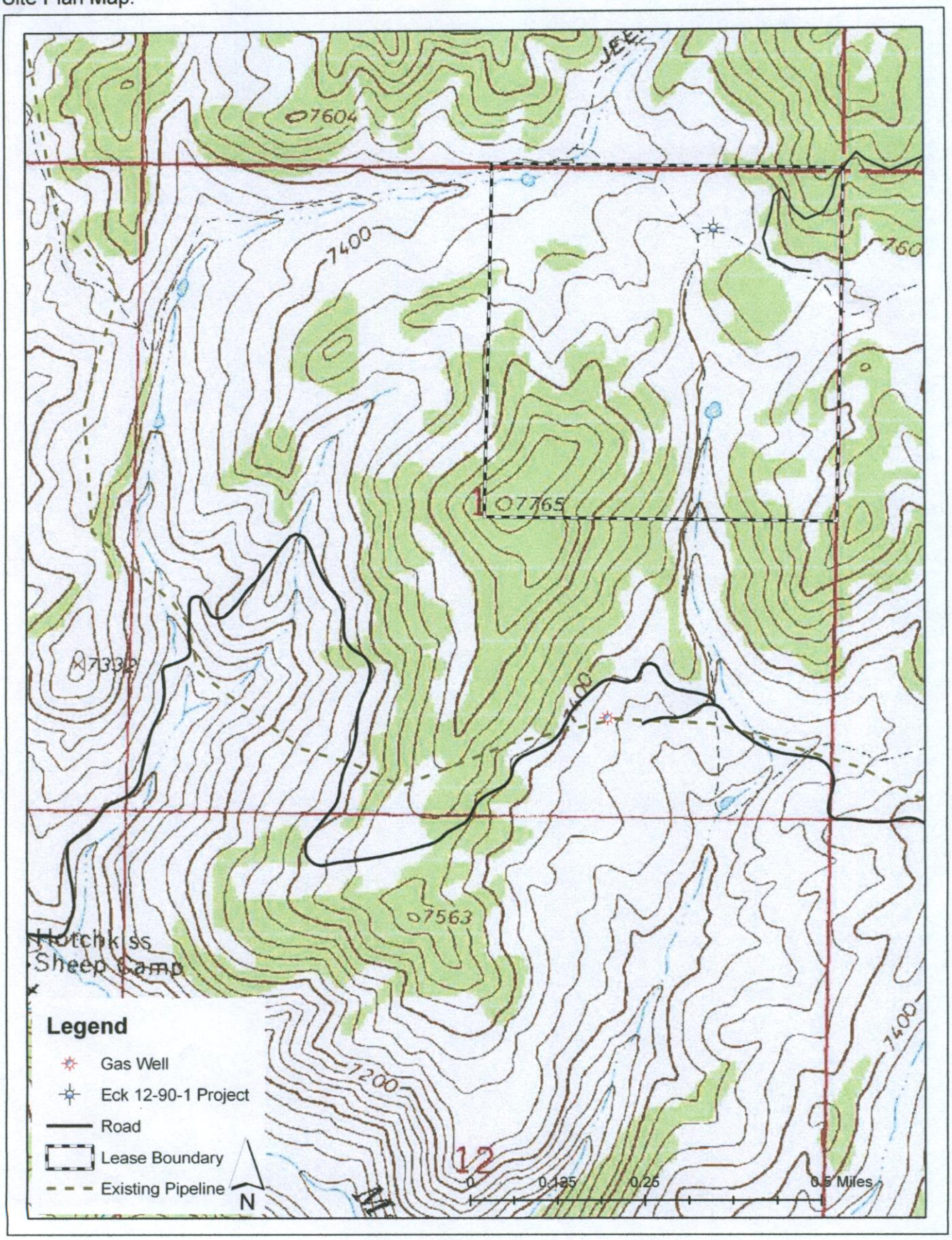
SG INTERESTS 1, LTD.
ECK 12-90-01 #1
435' FNL & 982' FEL
LOCATED IN S. 1, T. 12 S., R. 90 W., 6th P.M.
GUNNISON COUNTY, COLORADO



COLORADO REGISTERED
DAVID C. NIEMEYER
24963
12/7/11
PROFESSIONAL LAND SURVEYOR



Site Plan Map:



10) Applications and Permits:

This project will be permitted through the Colorado Oil and Gas Conservation Commission. Approved permits will be provided to Gunnison County.

11) Operation Plan:

METHOD FOR DRILLING: The well will be drilled using a conventional rotary drilling rig operating 24 hours/day. Water, drilling mud and/or air may be used as drilling fluids. Cuttings and drilling fluids will be kept in a plastic-lined reserve pit.

METHOD FOR COMPLETION: The well will be completed using a conventional daylight rig. Hydraulic fracturing is the planned stimulation technique for this well.

METHOD FOR TRANSPORTING: If productive, gas will be transported by buried pipeline. Produced water will be trucked or transported by buried pipeline.

METHOD OF PRODUCTION: Production will be by conventional means. If artificial lift is needed, a pumping unit will likely be used.

METHOD OF POST–OPERATION: If production is non-commercial, the well will be plugged and abandoned according to COGCC regulations. The location will be reclaimed according to COGCC regulations and surface owner agreement.

PROPOSED SCHEDULE:
Below is our proposed schedule for beginning the project. The first well drilled on this pad will be a gas well.

Activity	**Approximate Start Date**	**Estimated Time to Complete**
Clear Vegetation	Assuming migratory bird nest surveys are negative – 07/01/2012 If nests or nestlings are found, vegetation clearing will occur after 07/15/2012 or later when nestlings have left the area	2 days
Construct well pad	07/16/2012 (assuming no nests or nestlings)	1 month
Drilling Operations (first well)	08/15/2012	10 days
Completion Operations	08/27/2012	10-14 days
Transporting Operations	08/28/2012	07/07/2012
Testing Operations	9/12/2012	90 days
Production Operations	10/31/2012 (or when facilities are ready for use)	
Drilling of Subsequent Wells	Unknown at this time	10-35 days depending on conditions and well type
Post-Operation	Unknown	

12) Weed Management Plan:

Please see attached management plan (Appendix C).

13) Access and Transportation Routes:

The number and types of vehicles expected to travel to the project site during drilling and completion activities for each well are listed in the tables below:

Vehicles for pad, access road, and pipeline construction:

Type of Vehicle	Weight in Pounds	Estimated Round Trips
Gravel trucks	110,000	160
Semi trucks	37,000	4 (1 round trip loaded and 1 round trip unloaded)
Pick-up trucks	6,000	40
Motor grader	40,000	1 (on semi trailer)
Dozer (2)	19,000	2 (on semi trailer)
Trackhoe	43,000	1 (on semi trailer)

Vehicles associated with drilling first well on pad:

Type of Vehicle	Weight in Pounds	Estimated Round Trips
Drilling/Completion Rig	120,000	2
Rig-Up Trucks Loaded	120,000	45 (incl. cement, frac, etc)
Rig-Up Trucks Empty	36,500	45
80 bbl water trucks loaded	54,000	40
80 bbl water trucks empty	25,000	40
Crew-cab pick ups	6,000	65

Vehicles associated with drilling each subsequent well on that pad:

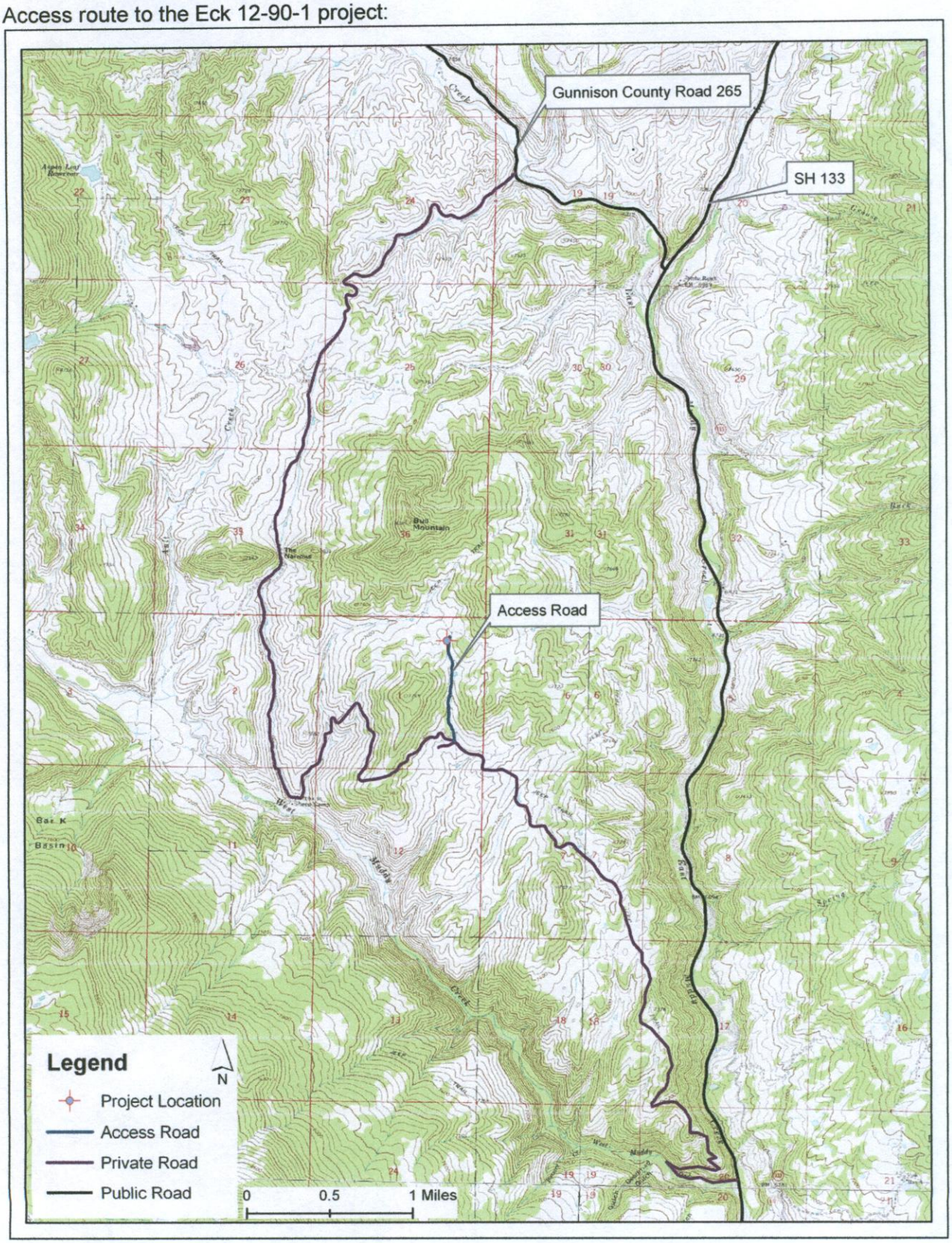
Type of Vehicle	Weight in Pounds	Estimated Round Trips
Motor Grader	50,000	2
Drilling/Completion Rig	120,000	2
Rig-Up Trucks Loaded	120,000	45 (incl. cement, frac, etc)
Rig-Up Trucks Empty	36,500	45
80 bbl water trucks loaded	54,000	45
80 bbl water trucks empty	25,000	45
Crew Cab Pick-Ups	6,000	65

Vehicles associated with well production:

Type of Vehicle	Weight in Pounds	Estimated Round Trips
Workover rig	120,000	1 round trip every two years
Haul trucks	120,000	6
Pick-up trucks	6,000-10,000	Daily throughout production period

County Road 265 is the only Gunnison County Road used to access the project site.

Access route to the Eck 12-90-1 project:



14) Identification of Water Structures

There are no irrigation ditches or other water structures in the vicinity of the project that would be impacted by the proposed construction. The project would have no impact on water rights.

15) Roadway Impact Analysis

Please see section 13, Access and Transportation Routes, above for a list of vehicles and equipment associated with this project and the predicted number of round trips that these vehicles will make over the course of drilling and completing the wells. During production, it is expected that 1 pick-up truck will visit the well site daily. Oversize/overweight load permits will be acquired as necessary from Public Works prior to use of the County Road 265. County Road 265 is the only public road under the jurisdiction of Gunnison County. Colorado Department of Transportation will issue the permits for use of State Highway 133 as needed. SG Interests, Gunnison Energy Corporation, and Gunnison County have entered into an agreement to maintain CR 265 by grading and applying magnesium chloride (LI #10-241). Gunnison County Public Works will grade the road yearly and apply the magnesium chloride as needed with reimbursement by SG Interests and Gunnison Energy Corporation. By following the terms of the agreement with Gunnison County and the stipulations attached to road use permits, SG will mitigate any potential impacts to roadways in the county.

16) Wildlife and Wildlife Habitat Analysis:

The US Fish and Wildlife Service has advised that they do not need to be involved in this process on private lands where there are no threatened or endangered species. A letter has been sent to the Colorado Division of Wildlife District Wildlife Manager, Kirk Madariaga requesting feedback on this proposal.

SG presents in this application a report written by Rocky Mountain Ecological Services that describes the types of wildlife and habitat that can be found in the project area (Appendix D).

17) Vegetation

The well pad (approximately 2 acres) will be within sagebrush vegetation. The sagebrush type is the most common vegetation type in the Bull Mountain Unit (38.7% of the mapped vegetation). The impacts to vegetation would be mitigated by seeding the areas not needed for long term operations and by controlling noxious weeds at the project site.

18) Emergency Response Plan:

Well Name Eck 12-90-1 #1 Gas Well
(Revised 11/04/2011)
NENE Section 1 T12S R90W
435' FNL and 982' FEL
Gunnison County, CO

Latitude/Longitude: 39.04817° N
-107.39072° W

Directions: From Paonia, CO, travel approximately 15 miles NE on State Hwy 133. Turn left (NW) on CR 265 (Muddy Creek Road) and travel approximately 1.0 miles to a ranch road going west (left), through gate and follow road to the well site approximately 7 miles to the well access road. Turn north (left) and travel approximately ½ mile to the well location. A vicinity map is attached.

Operator:
SG Interests I. Ltd.
P.O. Box 26
Montrose, CO 81402
Office: (970) 252-0696
Cell: (970) 259-2759

Engineer:
Dennis Romero,
Office: (713) 333-6545
Cell: (713) 301-3011

Site Supervisor:
Dennis Beasley
Cell: (505) 947-3564
Office: (970) 929-5313

Company man:
Floyd Traux
Cell: (337) 458-0535

Surface Owner:

Gunnison Hunting Properties, LLC
100 Waugh Drive, Suite 400
Houston, Texas 77007
Phone: 713-951-0100

Safety standards and practices consistent within the oil and gas industry shall be used at all times during drilling, completion, testing, and production operations. Third party contractors and companies (collectively referred to as contractors) providing services and materials in support of SG Interests I, Ltd. (SG) drilling, completion, testing, and production operations are required to have insurance coverage and a safety program in place. Contractors shall comply with and be responsible for the training and enforcement of its own safety procedures and practices which will comply with all applicable federal, state and local health, environmental and safety statutes and regulations, including, where applicable, but not limited to, those of the Department of Transportation (DOT), the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration

(OSHA). All safety apparel and equipment for contractor's personnel shall be furnished by the contractor and shall meet the standards of applicable regulatory agencies.

Communications and Emergency Reporting: A "land line" telephone generally is not available at the well site. However, it is our intent to establish a land line in the vicinity of our operations. Site communications will be provided via trucked radio service and/or a satellite telephone. Phone numbers will be provided when available. Satellite telephone communications are generally not compatible with the nationwide 911 reporting system and can result in mis-routing of emergency service requests that are initiated by a 911 call. Therefore, all requests for emergency services from satellite telephones must be dialed to the appropriate Emergency Dispatch number. Requests for emergency services from land lines or cell phones can be initiated by dialing 911. Gunnison County has "mutual aid agreements" in place with Delta County. Agencies responding to emergencies in this area will be from Delta County.

Delta County Emergency Dispatch Phone Number: 970-874-2015 or 911

Emergency and other contact phone numbers will be made available and will be posted as appropriate, depending on operations i.e. drilling, completion, testing, etc. In addition, an Emergency Preparedness form (copy attached) will be completed and sent to Rob Fiedler, Delta County Emergency Preparedness Coordinator, prior to commencement of operations. This form provides information regarding well location, directions, contact names and contact information as well as anticipated activity dates.

Emergency Reporting: Emergency phone numbers plus other contact phone numbers, location information, and directions will be made available to SG's contractors. Depending on the phase of activity, emergency response calls could be initiated by contract or SG personnel. Spills, fires, accidents, etc. will be reported to emergency agencies and regulatory authorities. All valves, tanks, lines, etc. will be secured any time facilities are unattended. Pits will be fenced.

Reference Colorado Oil and Gas Conservation Commission (COGCC) web site at http://oil-gas.state.co.us for Rules and Regulations. 600 Series Safety Regulations (606A Fire Prevention and Protection). These Rules and Regulations will be strictly followed and enforced on all SG Interests I, Ltd operations. BLM fire restrictions can be viewed online at: www.co.blm.gov/fire (Fire Bans/ Restrictions & Closures). This site also provides links to

1) The Colorado Office of Emergency Management and lists counties with fire restrictions and
2) The Colorado State Forest Service which supplies large fire status and other information.

Fire Prevention and Protection: COGCC Rules and Regulations as detailed in 606A will be strictly followed and enforced. Typically, 4-6 50# fire extinguishers will be suitably located, readily accessible, and plainly labeled as to their type and method of operation. Additional fire extinguishers will be made available if circumstances dictate. The rig fresh water system, pumps and hoses are also available for fire fighting in the rig area. If required, or deemed necessary, additional fire-fighting equipment will be kept on location during operations. This equipment may consist of a 400 bbl tank filled with fresh water, a pump and 300' of hose. Personnel on location will be indoctrinated as to proper use and safety. In the event that extreme fire danger exits due to drought or other reasons, SG will curtail or suspend operations as directed by authorities.

In the unlikely event that gas is escaping from the well during drill operations, it will be conducted a safe distance from the well and burned. Delta County Emergency Dispatch will be notified of any such flaring. Such notice shall be given prior to the flaring if the flaring can be reasonably anticipated, and in all other cases as soon as possible but in no event more than two (2) hours after the flaring occurs. (COGCC Rules and Regulations 317 (l)).

In the extremely unlikely event of a well fire (a fire that includes a discharge of flammable gas and/or liquid from the wellbore) or explosion, all personnel will gather at a predetermined safe briefing area. A head count will be taken and all personnel will be accounted for. The situation will be accessed with

immediate response and emergency calls as needed. An employee or other representative will be sent to the nearest county road access to keep unauthorized persons from entering the location and to direct emergency response personnel to the site. Emergency response personnel should not attempt to extinguish the fire since special resources may be required to completely contain the fire and discharge and to prevent re-ignition. In these circumstances, SG's site supervisor will determine if any fire containment or flow cooling efforts might be appropriate in the interim.

The location and operation of block valves and shut-in procedures will be made available to appropriate personnel prior to any pipeline tie-in installation. If warranted, existing pipelines will be shut-in and depressurized prior to and during operations.

Hydrogen Sulfide gas (H2S), also known as "sour gas", is not known to exist in this geographic area nor in any of the formations that will be encountered in this wellbore. Contingency planning for drilling in sour gas areas and formations is very specific and requires specialized training, certification, equipment and programs and does not apply to operations in this area. However, should H2S be encountered, trained and certified personnel, equipment and procedures would immediately be put in place to insure that all personnel and property would be protected.

SG Interests I, Ltd. will maintain first aid kits in its vehicles and site offices. Contractors maintain first aid kits in their vehicles and site facilities appropriate to their operations and in conformance with their internal policies. Site personnel with current training in first aid will be identified as such by hard hat markings or other means.

Hazardous Spills: All hazardous materials (reactive, flammable, corrosive and toxic) will be clearly labeled and stored in appropriate containers and within secondary containment. In the event fuel or lubricants are spilled, absorbent materials will be kept on location for immediate clean up. Service company vehicles carrying hazardous materials and performing work on the location, set secondary containment and provide absorbent materials for the immediate clean of such materials in the event of an accident or spill. Disposal of any such materials will be in compliance with COGCC Rules and Regulations as well as Federal and local requirements. In the event of an accident or spill off location, appropriate agencies would be notified including Emergency Dispatch, Colorado State Patrol, Fire Department, Hazardous Material Team (DERA), and any others deemed necessary (EPA, Division of Wildlife, USFS, etc.) by the circumstances of the accident/spill. Should spills or releases occur, they will be reported per COGCC Rules and Regulations 337 and 906 and as otherwise required. SG Interests I, Ltd has filed required SARA Title III reports with the Colorado Emergency Planning Commission, Colorado Department of Public Health & Environment, Denver, Colorado and with Region 10 Emergency Planning Committee, Gunnison, Colorado. MSDS (Material Safety Data Sheets) will be available on location as required.

Signage: A permanent sign will be posted at the well site. This sign will provide the name of the well, location, operator, and phone number on one side with driving directions on the other side. Signs will also be located as needed to provide direction to the well site during drilling and completion operations.

SG Interests I, Ltd. will reimburse emergency response service providers for costs incurred in connection with an emergency as required.

EMERGENCY PHONE NUMBERS

DELTA COUNTY EMERGENCY DISPATCH (970) 874-2015

Delta County Emergency Preparedness	(970) 874-2004 - office	Delta
Director & Coordinator, Rob Fiedler	(970) 255-7349	
Montrose Interagency Fire Dispatch	(970) 249-1010	Montrose
Gunnison County Emergency Dispatch	(970) 641-8000	Gunnison

FIRE

Cedaredge Fire Department	(970) 856-3717	Cedaredge
Hotchkiss Fire Department	(970) 872-3311	Hotchkiss
Paonia Fire Department	(970) 527-5775	Paonia
Ragged Mountain Fire Protection	(970) 929-5646	Somerset

AMBULANCE

North Fork Valley Ambulance Association	(970) 872-4303	Hotchkiss
Delta County Ambulance	(970) 874-9555	Delta
American Medical Response	(970) 242-2920	Grand Junction
Air Life @ St. Mary's Hospital	(970) 244-2551	Grand Junction
	(800) 332-4923	

HOSPITAL

Delta County Memorial Hospital	(970) 874-7681	Delta
Delta County Memorial Hospital - ER	(970) 874-2222	Delta
Grand Junction Community	(970) 242-0920	Grand Junction
Montrose Memorial	(970) 249-2211	Montrose
North Fork Medical Clinic	(970) 527-4103	Paonia
	(970) 872-3121	Hotchkiss
Gunnison Valley Hospital	(970) 641-2695	Gunnison
St. Mary's Hospital	(970) 244-2273	Grand Junction

POLICE

State Hwy Patrol	(970) 249-4392	Montrose
Delta Co. Sheriff	(970) 874-2000	Delta
Gunnison Co. Sheriff	(970) 641-1113	Gunnison

GOVERNING AGENCIES

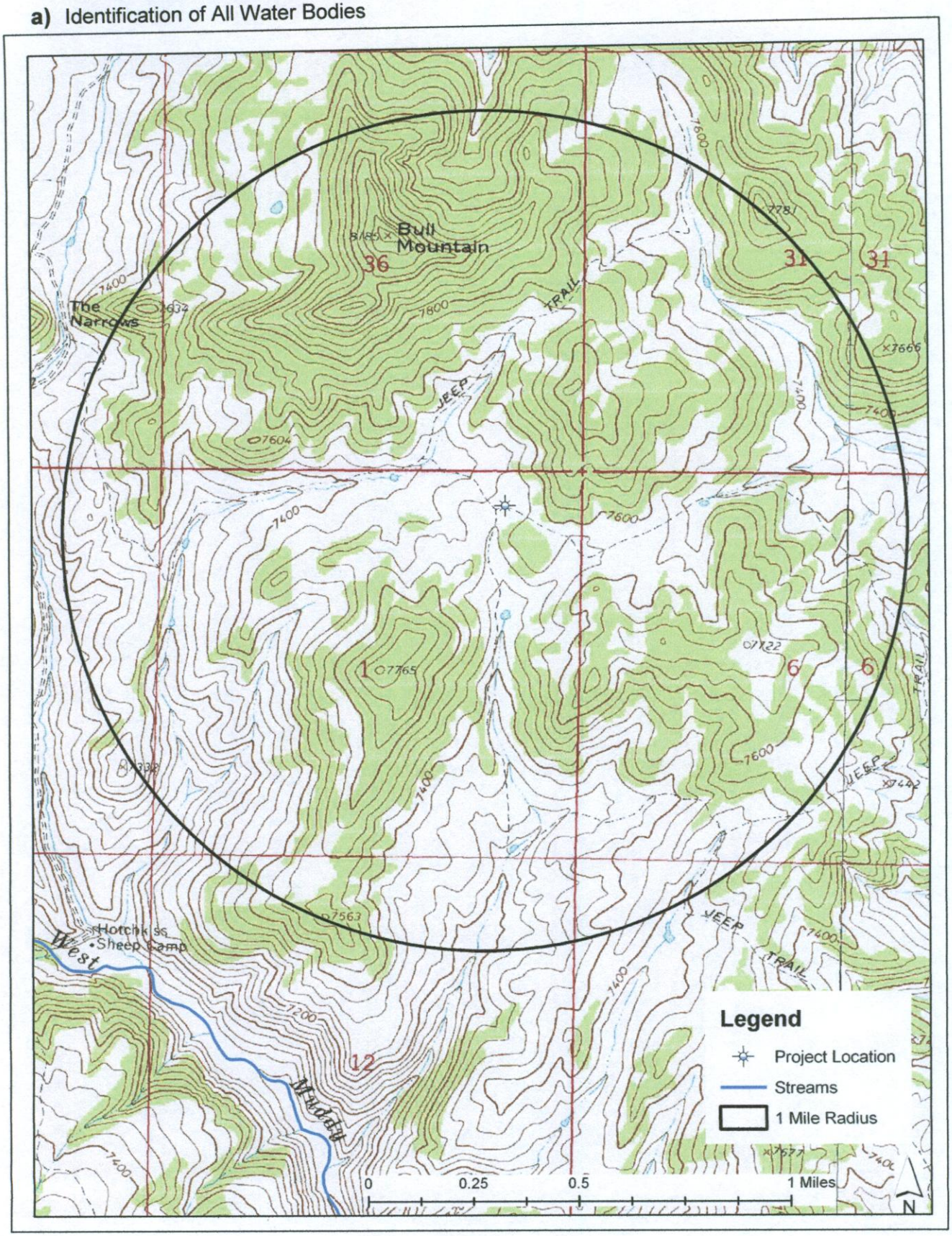
COGCC, David Neslin, Director	(303) 860-1435 (24 hour) (303) 894-2100 ext 5122	Denver
COGCC, Linda Spry O'Rourke, Environmental Protection Specialist	(970) 625-2497	Rifle
Bureau of Land Management, SW District Office	(970) 240-5300	Montrose
Forest Service, Levi Broyles, District Ranger	(970) 527-4131	Paonia
Pitt Construction, Spill Contractor	(970) 872-3536 (970) 260-2275	Hotchkiss

SG Interests

SG Interests Office	(970) 252-0696	Montrose
Dennis Beasley, Field Superintendant	(505) 947-3564	Cell
Eric Sanford	(970) 259-2759	Cell
24 Hour Emergency	(866) 261-9766	

19) Water Quality Non-point Source Impacts

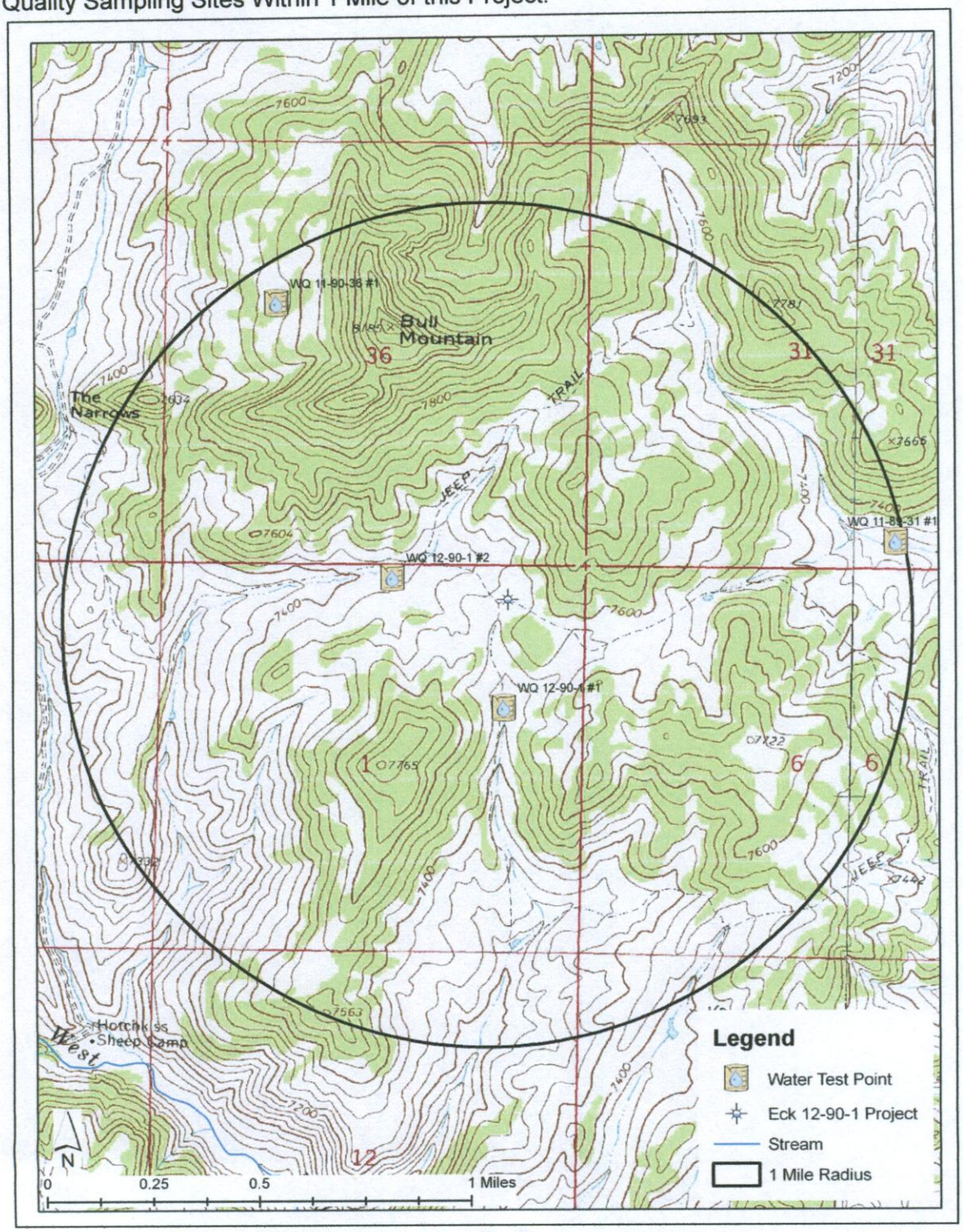
a) Identification of All Water Bodies



b) Description of Existing Water Quality

Four surface waters within the 1-mile radius were sampled for baseline water quality. These results indicate the water is alkaline (at the WQ 11-89-31 #1 site) with higher than standard pH (at WQ 12-90-1 #1 and WQ 12-90-1 #2). High pH is found in water samples taken throughout the Muddy Creek Basin. The values found in this baseline assessment are in line with previous findings. No other water quality standards were exceeded. The next water sampling date for this area is scheduled for fall 2012. Summary tables that contain these water quality test results are contained in Appendix E.

Water Quality Sampling Sites Within 1 Mile of this Project:



c) Non-Point Source Impacts to Water Quality

Non-point source pollution could result from construction of the well pad, use of the access road, and use of other existing roads. This pollution would be the result of erosion of disturbed soils and sedimentation of area water bodies.

d) Mitigation and Avoidance.

When practicable, SG Interests will try to avoid drilling under wet winter and early spring conditions in order to avoid erosion and sedimentation concerns. This will minimize the risk of muddy roads and transportation of mud on vehicles, disturbance to vegetation root systems due to saturated soils, soil compaction, homogenization of soil pedons and soil profiles etc.

SG has and will continue to improve, armor, and maintain roads to withstand heavy truck traffic in order to protect water quality. Use of roadbase (as opposed to silty native soils), soil tackifiers, and wetting agents combined with compaction produce a durable roadbase which will produce much less fine sediment when compared to existing unimproved roads.

SG Interests will conduct stormwater management activities according to their field-wide stormwater management plan and permit from Colorado Department of Public Health and Environment. SG Interests' stormwater inspector inspects BMPs and waterways following storms to improve and mitigate possible failure of BMPs. SG routinely "cleans up" mobilized sediments after intense storm events until revegetation is successful.

20) Cultural Survey

No cultural resource survey was conducted for this project (Appendix F).

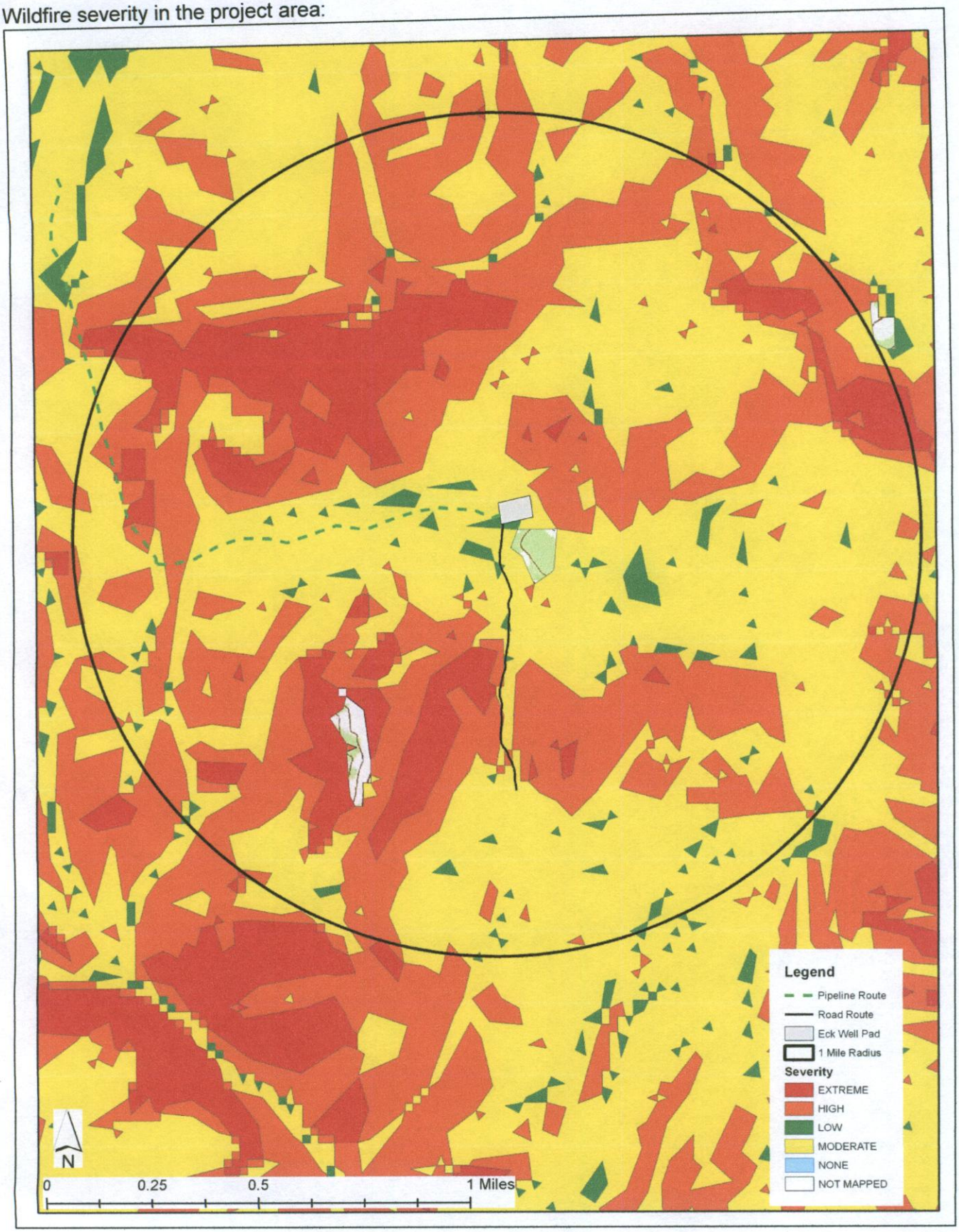
21) Drainage and Erosion Control Plan

SG Interests has in place a stormwater discharge permit from Colorado Department of Public Health and Environment (#COR-039711, provided previously). A Stormwater Management Plan has been written for this permit and site specific drainage and erosion control measures will be added into the master plan for the Eck 12-90-1 #1 well. The drainage and erosion control measures put in place to stabilize the well pad and access road will be maintained.

22) Wildfire Hazards

The planned gas well project is located in an area mapped as "low" and "moderate" severity for wildfire. The existing access road and pipeline route passes through areas mapped as "low", "moderate", "high" and "severe". If flaring is required for this well, areas around the flare will be cleared of all vegetation to reduce fire danger. If required or deemed necessary due to dry conditions, separate firefighting equipment consisting of 400 bbls of fresh water, a high pressure pump, and 300' of fire hose will be kept in the immediate vicinity. See the Fire Prevention and Protection section in the Emergency Response Plan above for more detail (Item 18). See the map below for location of the project relative to mapped wild fire hazards in the area.

Wildfire severity in the project area:



23) Geologic Hazards

The subject area has not been mapped for geologic hazards by either Gunnison County or the USDA Forest Service. No geologic hazards are known from this project area.

24) Existing and Future Land Use

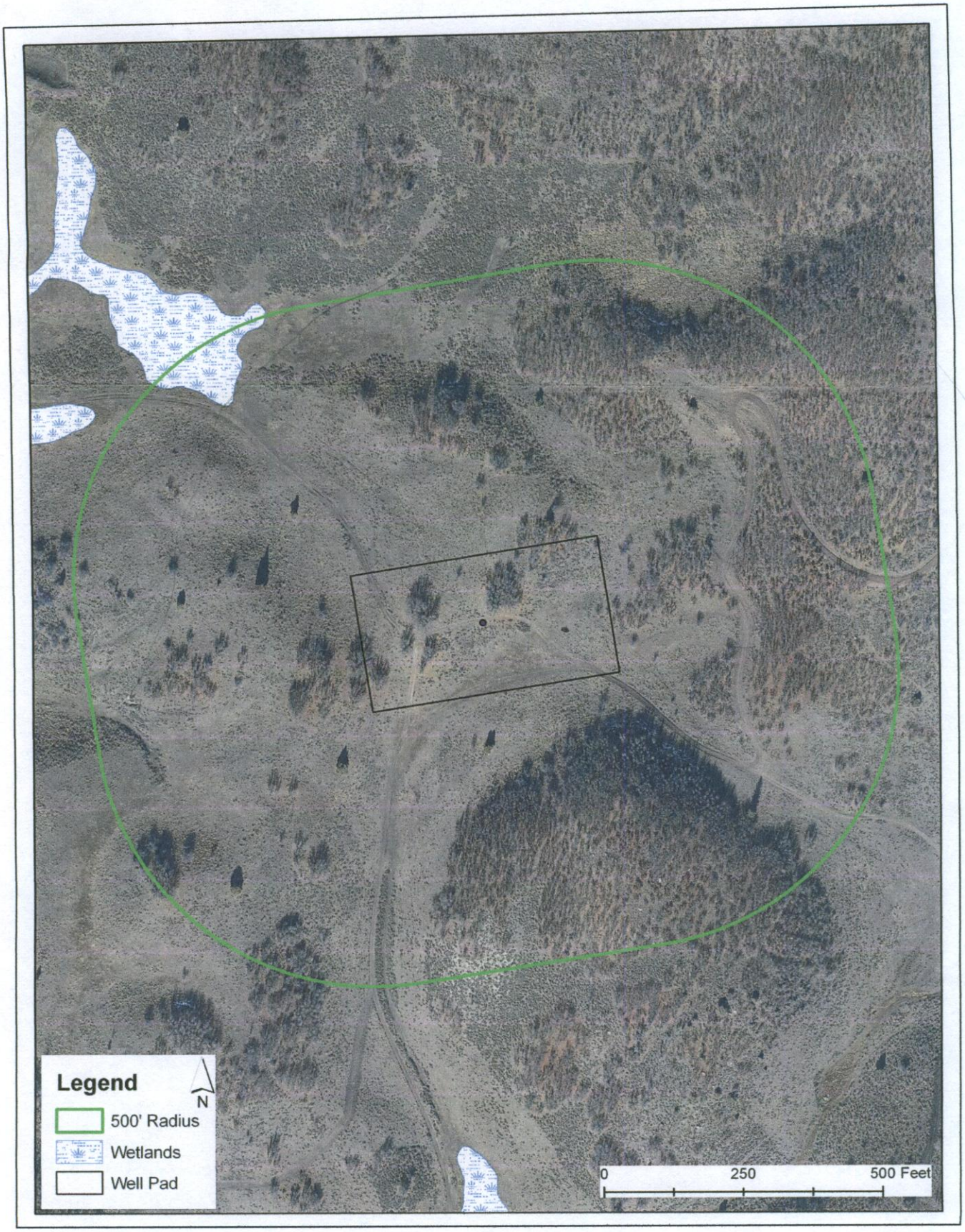
The parcel is currently used for livestock grazing and for natural gas development. The future use of this parcel, as far as can be determined, is as a working livestock ranch. At the conclusion of the well pad's use, all areas disturbed for use in gas production will be recontoured and reclaimed as per the requirements of the Surface Use Agreement and/or landowner direction.

25) Technical Infeasibility Waiver

The existing two-track access road will be upgraded in order to support the required traffic. The access road does not cross wetlands or directly impact them, but approximately 2,000' of the access road does pass within 500' of mapped wetlands. The pipeline route will cross wetland areas that exist between the well and the gathering system pipeline. The well pad will be located approximately 390' from a wetland to the northwest of the pad. SG found it necessary to locate the pad within 500' of this wetland in order to construct a pad where the center was on cut soils. For safety reasons, the drill rig must be located on cut soil rather than fill soil.

Waterbody setbacks are regulated by the Colorado Oil and Gas Conservation Commission, and thus Gunnison County is preempted from regulating setbacks of oil and gas locations from waterbodies in a manner more restrictive than the state. Without waiver of any legal right or acknowledgment of Gunnison County's authority to regulate waterbody setbacks for oil and gas operations in a manner more restrictive than the state, SG submits a request for a Technical Infeasibility Waiver under Gunnison County Temporary Regulations for Oil and Gas Operations, Section 1-107 (P)(2).

Thus, in the alternative and without waiver of legal rights, SG Interests requests a waiver from Gunnison County Temporary Regulations for Oil and Gas Operations 1-107 H Waterbody Setbacks under Section 1-107 (P)(2), No Technology Available. There is no economical technology commercially available to deliver the natural gas or the produced water to the gathering system pipelines other than through the use of the planned pipelines and access road and local topography prevents SG from locating the well pad further from wetlands and simultaneously protecting the safety of drilling employees while the rig is operating. A waiver under Gunnison County Temporary Regulations for Oil and Gas Operations, Section 1-107 (P)(2), will not cause injury or damage to the owner or occupant of adjacent land(s) or to the environment.


Legend
N
500' Radius
Wetlands
Well Pad
0
250
500 Feet