WEST RIDGE MINE
007/041

AMENDMENT
TO
THE MINING AND RECLAMATION PLAN

TO ALLOW INSTALLATION OF
TWO NEW GOB GAS VENT HOLES
(GVH 4 and GVH 5)

LOCATED AT THE EXISTING GVH LOCATION
RIGHT FORK OF BEAR CANYON

ON
SITLA COAL LEASE ML 49287

NOTE: THESE HOLES WOULD BE WITHIN THE EXISTING PERMIT AREA, AND WOULD INVOLVE LESS THAN 0.02 ACRES OF NEW DISTURBANCE

SUBMITTED: APRIL 12, 2011

COVER LETTER.....C1/C2 FORMS

C/007/041 Incoming
#3809
a

WEST RIDGE
RESOURCES, INC.

P.O. Box 910, East Carbon, Utah 84520
Telephone (435) 888-4000 Fax (435) 888-4002

Utah Division of Oil, Gas & Mining
Utah Coal Program
1594 West North Temple, Suite 1210
P.O.Box 145801
Salt Lake City, UT 84114-5801

April 12, 2011

Attn: Daron Haddock
Permit Supervisor

Re: West Ridge Mine C/007/041
Change to Allow Bear Canyon GVH 4 and GVH 5
Appendix 5-14A

Dear Mr. Haddock:

Enclosed are five copies of a minor amendment to the West Ridge MRP to allow the drilling of two new gob gas vent holes (GVH) at the existing Bear Canyon GVH installation. These new holes are needed to liberate excessive quantities of underground methane for the safety of the mine workforce, and to maintain production for existing coal-supply contracts. As you review this submittal, please keep the following in mind:

1) All drilling and surface disturbance would be within the existing permit area.
2) Right-of-entry (surface and mineral) is under existing SITLA lease ML-49297.
3) All necessary approvals/concurrence from Carbon County regarding the road are in place.
3) GVH 4 can be drilled from the existing GVH pad with no new surface disturbance.
4) GVH 5 would be drilled in a widened "pullout" next to the county road, and would involve less than 0.02 acres of new disturbance.
5) Soils protection has been previously discussed and agreed upon with Division staff.
6) Cultural clearance has been recommended, with a finding of no adverse affect.
7) There are no conflicts with raptors, according to the 2010 raptor survey.
8) There is sufficient bonding currently in place to cover final reclamation costs.

We ask for an expedited review of this amendment, not only to stay ahead of the safety issue, but also to allow the company to schedule the drilling within the next several weeks to coincide with the on-going longwall move. As you know, we will have to evacuate all workers from the mine when drilling the last part of the holes prior to penetrating the active mine works. This is an

File in:
☐ Confidential
☒ Shelf
☐ Expandable
Date Folder 04122011 C/ 0070041
Confidential
See: 04122011 For additional information

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APR 12 2011
DIV. OF OIL, GAS & MINING

MSHA safety requirement, in case the mine explodes as a result of the drilling. This will result in production loss from at least three shifts unless we can do the drilling during the longwall move. It also coincides with the earliest time of rig availability from the drilling company. With proper permission, we should be able to move in, complete the drilling, and finish up in just over one week. Therefore, we ask for your understanding of the importance of timing on this issue.

A map showing the new GVH site in Bear Canyon is attached to this letter for you review. If you have questions or comments please contact me at (435) 888-4017.

Sincerely,

David Shaver
Resident Agent

Form DOGM - C1 (Last Revised April 11, 2011)

File Folder # 3

APPLICATION FOR PERMIT PROCESSING

Permit Change ☐	New Permit ☐	Renewal ☐	Transfer ☐	Exploration ☐	Bond Release ☐	Permit Number: C/007/041
of Proposal: Change to allow drilling of GVH 4 and GVH 5 in Bear Canyon						Mine: WEST RIDGE MINE
						Permittee: **WEST RIDGE Resources, Inc.**

Description, include reason for application and timing required to implement:.

Instructions: *If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation specialist.*

☑ Yes	☐ No	1. Change in the size of the Permit Area? NO acres Disturbed Area? 0.02 acres ☑ increase ☐ decrease.
☐ Yes	☑ No	2. Is the application submitted as a result of a Division Order?
☐ Yes	☑ No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
☐ Yes	☑ No	4. Does application include operations in hydrologic basins other than as currently approved?
☐ Yes	☑ No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes	☑ No	6. Does the application require or include public notice/publication?
☑ Yes	☐ No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
☑ Yes	☐ No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
☐ Yes	☑ No	9. Is the application submitted as a result of a Violation?
☐ Yes	☑ No	10. Is the application submitted as a result of other laws or regulations or policies? Explain:
☐ Yes	☑ No	11. Does the application affect the surface landowner or change the post mining land use?
☐ Yes	☑ No	12. Does the application require or include underground design or mine sequence and timing?
☐ Yes	☑ No	13. Does the application require or include collection and reporting of any baseline information?
☐ Yes	☑ No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
☑ Yes	☐ No	15. Does application require or include soil removal, storage or placement?
☐ Yes	☑ No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
☑ Yes	☐ No	17. Does the application require or include construction, modification, or removal of surface facilities?
☑ Yes	☐ No	18. Does the application require or include water monitoring, sediment or drainage control measures?
☑ Yes	☐ No	19. Does the application require or include certified designs, maps, or calculations?
☐ Yes	☑ No	20. Does the application require or include subsidence control or monitoring?
☑ Yes	☐ No	21. Have reclamation costs for bonding been provided for?
☐ Yes	☑ No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
☐ Yes	☑ No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

☐ **Attach _3_ complete copies of the application.**

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein. (R645-301-123)

Signed / Name / Position - Date 4/11/2011

Subscribed and sworn to before me this 11 day of April, 2011

Notary Public

My Commission Expires: March 27, 2013

Attest: STATE OF Utah
COUNTY OF Carbon

Notary Public
LINDA KERNS
Commission #578211
My Commission Expires
March 27, 2013
State of Utah

Received by Oil, Gas & Mining

ASSIGNED TRACKING NUMBER

Application for Permit Processing
Detailed Schedule of Changes to the MRP

Title of Application: Change to allow drilling of GVH 4 and GVH 5 in Bear Canyon

Permit Number: C/007/041

Mine: WEST RIDGE MINE

Permittee: WEST RIDGE RESOURCES

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit application. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the existing mining and reclamation plan. Include page, section and drawing numbers as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
☐ ADD	☑ REPLACE	☐ REMOVE	Chapter 1: pgs 1-7, 1-17, 1-18
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☑ REPLACE	☐ REMOVE	Chapter 5: pgs 5-1c, 5-12
☐ ADD	☐ REPLACE	☐ REMOVE	
☑ ADD	☐ REPLACE	☐ REMOVE	Appendix 5-14A
☐ ADD	☐ REPLACE	☐ REMOVE	Addendum to Bear Canyon GVH for
☐ ADD	☐ REPLACE	☐ REMOVE	GVH 4 and GVH 5
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☑ REPLACE	☐ REMOVE	Maps: 1-0/1-1, 2-1, 3-1, 3-4A, 3-4B,
☐ ADD	☐ REPLACE	☐ REMOVE	3-4C, 3-4D, 4-1, 4-2, 5-2,
☐ ADD	☐ REPLACE	☐ REMOVE	5-3, 5-4A, 5-4B, 5-7, 6-1, 6-2
☐ ADD	☐ REPLACE	☐ REMOVE	6-3, 7-3, 7-5, 7-6, 7-7
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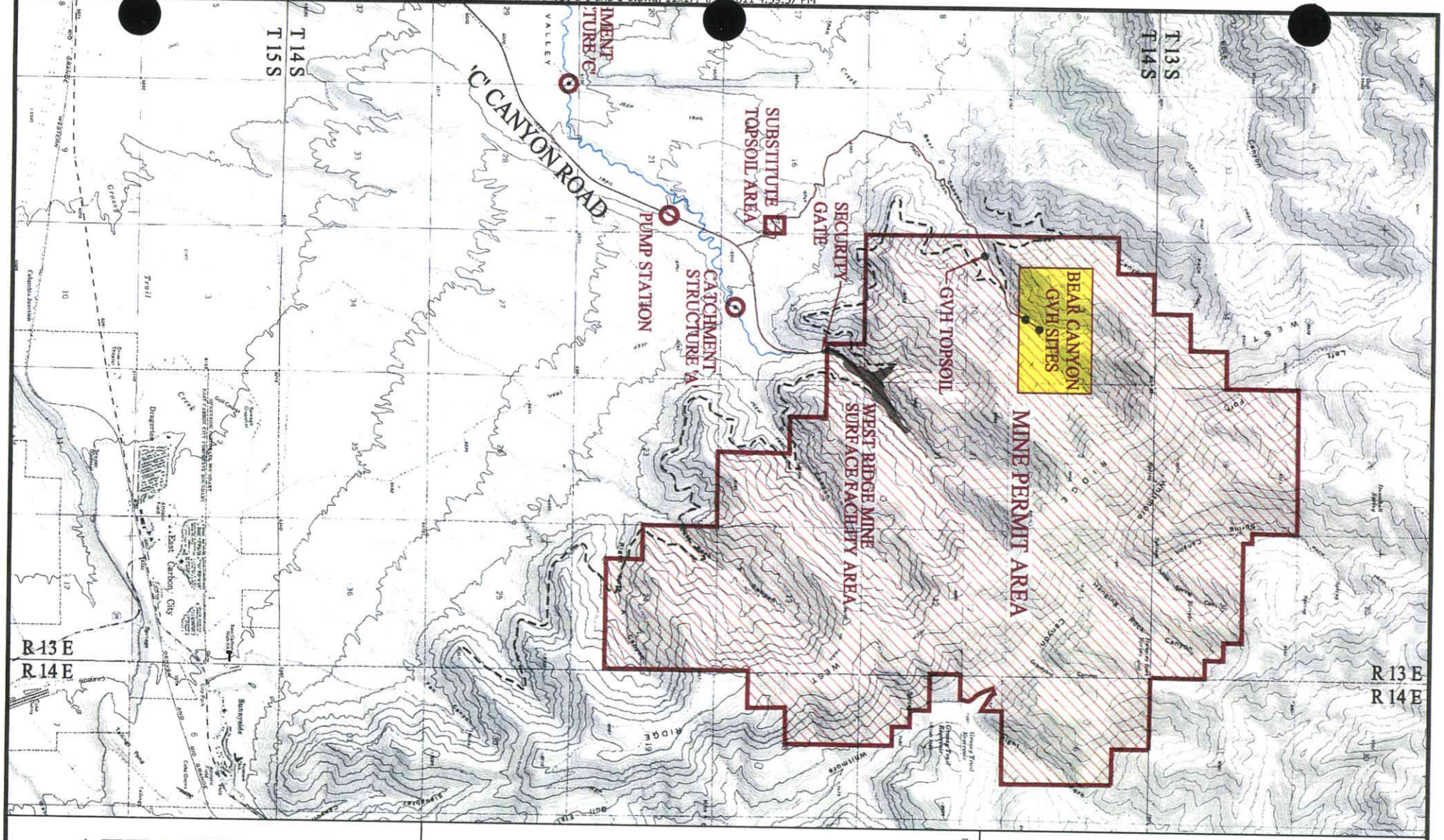
Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

G:\Current Drawings\Buildings & Construction\West Ridge Mine\Bear Canyon GVH\New Site 3-25-11\Maps 1-0 and 1-1.dwg, 11x17, 4/11/2011 4:59:57 PM



ATTACHMENT 1
WEST RIDGE MINE
BEAR CANYON
GVH LOCATION MAP

DATE: 4-11-11 REV: 1

LEGEND:

Lease Areas
Surface Facility Area
GVH Site
Outcrop

N

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs

I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE

WEST RIDGE
RESOURCES, INC.

SCALE: 1"=5000'

CHAPTER 1.....REPLACEMENT PAGES

The total permit area is 7316.62 acres. Refer to Map 1-1 for the permit area location. Refer to Table 1-4 for the legal description of the permit area by composite leasehold, and Table1-5 for the legal description of the permit area in total area. Table 1-6 describes the surface ownership of the permit area.

Disturbed area within the permit area consists of the following:

1)	Minesite surface facilities	29.82 acres
2)	Pumping station	0.23 acres
3)	GVH installation (main pad)	0.24 acres
4)	GVH installation (GVH 5 "pullout")	0.02 acres
5)	GVH topsoil storage	0.1 acres
6)	Catchment structures A	0.12 acres
7)	Catchment structures C	0.23 acres
8)	Catchment structures E	0.23 acres
	TOTAL	30.99 acres

See Table 1-7 for complete legal description of disturbed areas.

114.200 Not applicable, the fee lease mineral estate is not severed from the surface estate.

TABLE 1-7
DISTURBED AREA WITHIN PERMIT AREA

1) Minesite surface facilities: portions of the following, totaling 29.82 acres (all BLM)

T14S, R13E	Section 10:	SESESE NESESE
T14S, R13E	Section 11:	SWNESW NWSESW NESWSW NWSWSW SWSWSW SESWSW
T14S, R13E	Section 15:	NENENE NWNENE SWNENE SENENE NWSENE

2) Pumphouse: portion thereof of the following, containing 0.23 acres (all BLM)

T14S, R13E	Section 21:	NESENE

3) Gob gas vent hole (GVH) installation (main pad): portion thereof of the following, containing 0.24 acres (all SITLA)

T14S, R13E	Section 3:	NESWSE

4) Gob gas vent hole (GVH) installation (GVH 5 "pullout"): portion thereof of the following, containing 0.02 acres (all SITLA)

T14S, R13E	Section 3:	NESWSE

5) Gob gas vent hole (GVH) topsoil pile: portion thereof of the following, containing 0.1 acres (all SITLA)

T14S, R13E	Section 10:	SENWNW

6) Catchment Structure A: portion thereof of the following, containing 0.12 acres (all BLM)

T 14 S, R 13 E Section 15: SESW

7) Catchment Structure C: portion thereof of the following, containing 0.23 acres (all BLM)

T 14 S, R 13 E Section 28: NWNW

8) Catchment Structure E: portion thereof of the following, containing 0.23 acres (all BLM)

T 14 S, R 12 E Section 25: SESE

TOTAL DISTURBED AREA = 30.99 acres

CHAPTER 5.....REPLACEMENT PAGES

about 20' maximum high, all work, both backfilling and topsoil replacement, can easily be done from the existing adjacent road-pad surface, using trackhoes with sufficient boom reach. After the reclaimed slopes have been topsoiled and reseeded, a row of excelsior logs will be installed along the full length of the toe of the slope between the slope and the remaining road. The purpose of this row of excelsior logs is to control sediment of the site until the revegetation has become established.

Bonding and reclamation costs for the Bear Canyon GVH installation can be found in Appendix 5-14 in the Chapter 8, Bonding discussion.

HISTORICAL NOTE: The preceeding discussion of the Bear Canyon GVH was approved by the Division on May 25, 2010, as was Appendix 5-14 which described the GVH installation in detail. In April, 2011 the company applied for an amendment of the MRP to add two additional GVH holes (GVH 4 and GVH 5) to the Bear Canyon GVH installation. Complete details of the GVH 4 and 5 amendment can be found in Appendix 5-14A, which is an addendum to the approved GVH Appendix 5-14.

R645-301-512 CERTIFICATION

512.100 Cross Sections And Maps

Maps, cross sections, figures and tables which require certification will be certified by a qualified, registered, professional engineer or land surveyor.

Cross sections, maps and drawings will be certified prior to determination of completeness for the permit application.

512.200 Plans And Engineering Designs

A qualified registered professional engineer will certify plans and designs for impoundments and primary roads. No excess spoil or durable rock fill designs are proposed.

R645-301-513 COMPLIANCE WITH MSHA REGULATIONS AND APPROVALS

513.100 MSHA regulations 30 CFR 77.216-1 & 30 CFR 77.216-2 do not apply as no coal processing dams or embankments are being proposed.

513.200 MSHA regulation 30 CFR 77.216 (a) does not apply because of the restricted size of the sediment ponds and low hazard potential.

513.300 No coal processing waste is proposed to be disposed of in underground workings. Refer to R645-301-528.321.

513.400 No refuse piles are being proposed.

513.500 Upon completion of final mining activities, any shafts, drifts, exploratory holes or entryways from the surface will be capped, sealed, backfilled or otherwise properly managed consistent with MSHA, 30 CFR 75.1771. All exploration holes will be filled with concrete.

Mine portals will be sealed by constructing a concrete block stopping at least 25 feet in from the surface opening and backfilling the 25 feet of the entry from the surface opening to the stopping with incombustible earth materials. The area in front of the portal will be backfilled and graded to approximate original contour using materials stored in the mine pad fill. Topsoil will be applied on the regraded fill. The surface will then be seeded and mulched.

513.600 No discharge into an underground mine is proposed, therefore MSHA approval is not required.

513.700 No surface mining is proposed in the permit area. No surface mining is proposed for areas within 500 feet of an active underground mine.

513.800 Not applicable.

APPENDIX 5-14A
ADDENDUM TO BEAR CANYON GVH
FOR GVH 4 AND GVH 5

NOTE TO REVIEWERS
THIS IS A NEW STAND-ALONE APPENDIX, BUT IS SUBMITTED AS AN ADDENDUM TO EXISTING APPENDIX 5-14

APPENDIX 5-14A

ADDENDUM TO BEAR CANYON GVH
for
GVH 4 and GVH 5

APPENDIX 5-14A

ADDENDUM TO BEAR CANYON GVH
for
GVH 4 and GVH 5

APPENDIX 5-14A
ADDENDUM TO BEAR CANYON GVH for GVH 4 and GVH 5
APRIL, 2011

ATTACHMENTS:

ATTACHMENT 1	BEAR CANYON GVH LOCATION MAP
ATTACHMENT 2	BEAR CANYON GVH SITE
ATTACHMENT 3	GVH 5 SITE PLAN DRAWINGS
	3A... PRE-CONSTRUCTION
	3B....DURING DRILLING
	3C....AS-CONSTRUCTED
ATTACHMENT 4	GVH 5 CROSS SECTION DRAWING
ATTACHMENT 5	GVH4-GVH5 DRILL HOLE DETAILS
ATTACHMENT 6	SITLA LETTER OF CONCURRENCE
ATTACHMENT 7	GEOTEXTILE DATA
ATTACHMENT 8	2010 RAPTOR SURVEY INFORMATION
ATTACHMENT 9	ARCHEOLOGY CORRESPONDENCE
ATTACHMENT 10	CARBON COUNTY ROAD CONCURRENCE
ATTACHMENT 11	BEAR CANYON GVH TOPSOIL PILE , AS-BUILT DRAWING
ATTACHMENT 12	PRE-CONSTRUCTION PHOTOS OF GVH 5 SITE
ATTACHMENT 13	EXISTING GVH BONDING INFORMATION (APRIL,2011)

INTRODUCTION:

On November 12, 2008, the Division approved the installation of three gob gas vent holes (GVH holes) in Bear Canyon as described in Appendix 5-14. Since that time, the company has mined four complete longwall panels, opening up much more gob area, and significantly increasing the volume of methane gas liberated from the gob. In order to ensure the safety of the underground workforce and to continue to meet existing coal-supply contract, the company now needs to enhance the capacity of the Bear Canyon GVH operation, and proposes to install two additional GVH wells at the site. GVH 4 would be located within the existing GVH pad which is located at the end of the Bear Canyon Road. This road is part of the Carbon County road system. The second well, GVH 5, would be located about 400' down-canyon from the existing pad, in a small area adjacent to and on the down-hill side of the existing roadway. Refer to Attachment 1 of this appendix for the location of the GVH 5 site. In reviewing the following proposal for GVH holes 4 and 5, please note that all applicable provisions of the currently approved Appendix 5-14 relating to the existing GVH installation will apply also to the new ones as well.

CHAPTER 1, LEGAL:

GVH 4 is located in Section 3, T14S, R13E, NE1/4SW1/4SE1/4. GVH 5 is located nearby in Section 3, T14S, R13E, SW1/4SW1/4SE1/4. Both sites are located on SITLA coal lease ML49287. All affected surface is owned by SITLA. Other than increasing the total disturbed area by 0.02 acres from 30.97 acres to 30.99 acres there are no changes in Chapter 1. Both sites are located on SITLA coal lease ML49287, as shown on Map 1-0/1-1.

Right-of-entry for the GVH facilities is granted under the terms of SITLA coal lease ML49287. Initial concurrence for the specific surface use of the area for the existing GVH installation and the topsoil storage area has been provided by SITLA (see Attachment 9 of Appendix 5-14). SITLA has also provided subsequent concurrence for the new GVH wells (refer to Attachment 6 of this appendix). The correspondence states, *"The Trust Lands Administration approves West Ridge Mine's request to drill two additional GVH in the areas described below, upon lands leased under coal lease ML-49287, but subject to lessee compliance with all applicable state laws and regulations."*

Refer to Attachment 2 of this appendix for a more detailed location map of the proposed GVH installation.

CHAPTER 2, SOIL:

Prior to installation of the existing GVH pad, the area was subject to an Order 1 soils survey completed by Bob Long, CPSS, of Long Resource Consultants, Inc. (Refer to Attachment 2 of Appendix 5-14 for details). Due to proximity, the soils in the pullout area of proposed GVH 5 are similar. Much of the pull-out area has been previously disturbed as a result of the recent updrade of the adjacent roadway. Even the small remaining undisturbed area is overlain by large boulder which would make topsoil salvage problematic. Based upon on-site inspection of the topsoil resources at the site (see photos in Attachment 12 of this appendix), along with Division specialist, it has been determined that the best means of protecting the existing topsoil is to leave it in place and cover it with a geotextile fabric prior to backfilling. Then, upon final reclamation, the backfill material will be removed, the geotextile material will be pealed off to expose the in-place topsoil in its present condition. In essence, the topsoil is stored in-situ. This same method of topsoil protection has been approved and implemented in much of the area of the main mine-site surface facility in nearby C Canyon. This practice is described in detail in Chapters 2 and 5 of this MRP. The company proposes to use the same (or equivalent) type of geotextile material, which is fully described in Appendix 5-5 of the approved reclamation plan for the West Ridge Mine. For ease of reference the pertinent page of Appendix 5-5 which describes this geotextile material is included in Attachment 7 of this appendix.

It should be noted that even with the in-place topsoil protected with the geo-textile material, if at the time of final reclamation addition topsoil is needed, there is a sufficient amount of topsoil already salvaged and stockpiled to accommodate this possibility. At the time of construction of the existing pad (autumn, 2008) there was 19,000 cu. ft. of topsoil salvaged and stockpiled. This compares to the original estimate of 14,000 cu. ft. estimated in the Order 1 survey. Therefore, the additional 5000 cu. ft. will provide plenty to augment any possible future topsoiling situation at the reclamation site of GVH 5. The as-built drawing of the existing topsoil pile in included in Attachment 11 of this appendix.

CHAPTER 3, BIOLOGY:

Due to the proximity of the GVH site to the minesite within the permit area, all threatened and endangered (T&E) species information applicable to the existing permit area in the MRP (Permit renewal, April 1, 2009) is current and therefore applicable to the GVH 5 site as well. Refer to Appendix 3-4 and 3-4A for current T&E information. There are no threatened or endangered species in the Bear Canyon GVH area (refer to Attachment 16 of Appendix 5-14 for current T&E information, provided by Mt. Nebo Scientific). Various species of concern during previous amendments, such as the Mexican Spotted Owl and the Yellow-Billed Cuckoo have been adequately addressed in the presently approved MRP and are not a factor. Dr. Collins has addressed the current status of T & E species in his report (see Attachment 4 of Appendix 5-14).

In 2010, the annual raptor survey was completed which included the Bear Canyon area. The survey shows no raptor concerns in the GVH area. Refer to Attachment 8 of this appendix for the 2010 survey.

Prior to installation of the existing GVH pad, the area was subject to an on-site vegetation survey completed by Dr. Patrick Collins of Mt. Nebo Scientific. (Refer to Attachment 4 of Appendix 5-14 for details). Due to proximity, the vegetation in the pullout area of proposed GVH 5 is similar. As noted earlier, much of the pullout area has already been disturbed from the previous road construction. Based on the current proposed plan, construction of the pullout area can be done with little if any disturbance to the existing vegetation below or on either side of the site (see photos in Attachment 12 of this appendix).

CHAPTER 4, LAND USE:

There will be no changes in the current land use of the Bear Canyon area as a result of the construction and operation of the GVH units. The site is located in the Bear Canyon grazing allotment, and no change in grazing activity will result from the GVH installation. (Refer to Map 4-1)

Prior to installation of the existing GVH pad, the area was subject to an on-site cultural resource survey completed by Senco Phenix Archeological Consultants. (Refer to Attachment 6 of Appendix 5-14 for details). Based on this survey, archeological clearance has been recommended (refer to Attachment 9 of this appendix).

GVH 4 will be located within the existing GVH pad which was approved by the Division on November 12, 2008. This pad is located at the end of the Bear Canyon Road which is part of the Carbon County D Road System. GVH 5 will be located about 400' south (down-canyon) of the existing GVH pad in a narrow widened area (pullout) immediately adjacent to the county road (see photos in Attachment 12 of this appendix). Permission has been granted by Carbon County to:

a) allow possible blockage of the road for several days during the period of drilling of the lower well (GVH 5).
b) allow the pipeline segment to be laid along the outside of the the road, and
c) allow the installation of the GVH wells within 100' of the road.

Correspondence regarding these matters can be found in Attachment 10 of this appendix.

CHAPTER 5, ENGINEERING:

Before any construction starts an identification sign will be posted at the site. This sign will list the company name as permit holder, the permit number, address and phone number. Disturbed area perimeter markers and stream buffer zone signs will also be established around the construction site prior to any construction.

The site of GVH 5 is a small linear area located between the road and the main drainage of Bear Canyon. As shown in the photos (see Attachment 12 of this appendix), the drill site is basically what is now the berm and outer slope-bank of the existing access road. The downslope extent of the site is defined by a ring of naturally occurring boulders, along with several other boulders located there as a result of subsequent improvement of the Bear Canyon Road during the initial GVH construction. This area will be backfilled to form essentially an extension of the out-slope shoulder of the road, or what could be referred to as a widened pull-out (see Drawing 3A of Attachment 3 and Attachment 4 of this appendix). The existing boulder ring will be augmented with additional boulders placed to form an armored outslope. The interior of the pull-out will then be backfilled with a compacted (approx. 90%) granular borrow material. The average depth of fill, as depicted on Attachment 4 of this appendix, is shallow, only about 4' thick, so stability is not an issue, especially since the outslope is constructed of large boulders

interlocked during placement. When completed, the pull-out surface will occupy a small lenticular area measuring about 15' wide by 70' long, involving less than 0.02 acres of new disturbance, off the side of the existing road. Much of this area has already been disturbed as a result of upgrading the adjacent roadway. A layer of drainrock gravel will be placed on the surface of the pullout pad for additional structural integrity and for erosion control. The total volumeof imported material (boulders, granular borrow and drain-rock gravel) is less than 60 cubic yards.

The additional boulders used in constructing the boulder ring outslope will be obtained locally from a commercial borrow site located near the mouth of the canyon. Likewise, the granular borrow used to construct the interior of the pullout will come from the same source. Therefore, there will be no additional disturbance within the permit area associated with acquisition of construction materials.

During the drilling of GVH 5 a pre-fabricated metal mud-pit will be used. This pit will consist of a baffled steel trough measuring 4' wide x 12' long x 4' deep, installed adjacent to the drill hole collar (see Drawing 3B in Attachment 3 of this appendix). This steel trough will prevent any leakage of the drilling mud (foaming agent) during the drilling process, and will be removed from the site immediately after completion of the hole.

After the hole is completed, a flame arrester will be installed at the well collar. This arrester will be identical to the ones being used in the existing GVH installation, as shown in the photos in Attachment 12 of this appendix. However, unlike the upper installation, the roadside installation (GVH 5) will not include any additional blower (exhauster) apparatus. Instead, a 12' low-pressure pipeline will connect the well to one of the existing blower (extractor) units located above. This pipeline will be about 400' long and will be laid on the surface along the outside slope (bank) of the road up to the existing blower units. A set of concrete barricades (jersey barriers) will then be installed along the side of the road in the vicinity of the GVH 5 wellsite pullout area to provide protection to the exposed drill collar/flame arrester (see Drawing 3C of Attachment 3 of this appendix).

GVH 4 will be drilled from the existing GVH pad, and will be plumbed directly into one of the existing blower units. There will be no new surface disturbance associated with this hole.

GVH 4 will be drilled 584' on a 45 degree angle to the entry below. GVH 5 will be a vertical hole drilled 274' deep to intersect the bleeder entry below. Both holes will be drilled at 12.75" diameter, with a 9.63" inner casing. The space between the outside of the hole and the casing will be grouted with concrete. The well collars will consist of a 20' casing, installed down to a depth sufficient to penetrate the unconsolidated material at the surface. For the purpose of backfilling the holes with concrete during final reclamation, the volume of the GVH 4 hole is 4.4 cubic yards, and the volume of the GVH 5 hole is 6.6 cubic yards. See Attachment 5 of this appendix for additional drilling details.

RECLAMATION: Prior to final reclamation, all surface apparatus will be disassembled and removed. The drillholes will then be plugged and sealed in accordance with State and

Federal regulations. An expandable plug will be installed at the bottom of the hole, (above the mine working or at the intersection of the inner slotted casing and the outer casing), and the entire length of drillhole will then be filled with concrete to the surface. The pullout area associated with GVH 5 will be reclaimed to approximate original contour by removing the imported backfill material and boulders. Refer to Attachment 3A and Attachment 4 of this appendix for the approximate original contour of site GVH 5. The backfill material will be removed down to the geotextile underlayment, which will the be carefully removed to re-expose the in-situ topsoil underneath. This native topsoil will be scarified and re-seeded with the same seed mix as approved for the upper GVH site. All backfill material removed from the pullout area during final reclamation will be hauled off-site and disposed of at an approved facility. All elements of the approved reclamation plan for the GVH site will be as specified in detail in Appendix 5-14

CHAPTER 6, GEOLOGY:

The geology of the Bear Canyon GVH area is addressed in Appendix 5-14

CHAPTER 7, HYDROLOGY:

The GVH 5 pullout area (adjacent to the road) will be located next to the main drainage of Bear canyon, which is an ephemeral drainage. As with the existing GVH pad area, construction of the GVH 5 pullout area will be done as an Alternate Sediment Control Area (ASCA). Prior to any construction, a stream buffer sign will be placed at a suitable location between the drainage channel and the edge of the construction zone (i.e., below the existing boulder ring, described previously).

Prior to construction of the pull-out, a double row of excelsior logs will be installed below the existing boulder ring and the bottom of the adjacent drainage. These logs will serve as the primary sediment control structure during construction, and will be placed around the entire toe of the boulder outslope. After the excelsior logs have been installed the boulder outslope will be constructed to the full height of the pull-out. Before the interior of the pull-out is backfilled, the remaining area will be covered with a goetextile material to protect the in-place topsoil. This fabric will extend up the inner face of the boulder outslope prior to backfilling. The boulder outslope will provide significant sediment control to the adjacent drainage. The geotextile underlayment will also provide additional sediment control by preventing any of the backfill material from getting through the boulders to the exterior of the outslope.

After the interior of the pullout has be backfilled, and prior to the drilling operation, the surface area will be covered with a layer of drain-rock gravel to provide additional erosion protection. A ring of excelsior logs then be will be placed around the outside perimeter of the pullout. The pullout will be graded away from the road so that all surface drainage will be directed to the sediment control logs for treatment. These sediment logs will remain in place after the drilling is completed to provided permanent sediment control for the pullout. It should

be noted that the pullout area will be graded away from the road such that no surface drainage from the pad will run onto the adjacent roadway.

During the drilling operation, the drilling mud will be contained and re-circulated from within a pre-fabricated steel mud-pit. This will be a box made of steel plate measuring about 4' wide x 12' long x 4' deep. There will be no discharge of drilling fluid or drilling cuttings to the surroundings. If the mud-pit fills up during the drilling operations, the cuttings will be clreaned from the box and disposed of at an approved facility off-site. Upon completion of drilling operations, the steel mud-pit and its contents will be removed from the site and disposed of in an approved manner. The depression left from removal of the pit will then be backfilled and graveled.

In summary, surface ASCA sediment control will be accomplished by the following methods:

1) Installation of a double row of excelsior log sediment fence between the pullout and the Bear Canyon drainage channel prior to construction.
2) Installation of a boulder outslope (i.e., rip-rap) to form the outer bank of the pullout area.
3) Use of a geotextile material between the boulder outslope and the inner granular fill material to prevent transmigration of the finer material through the outslope.
4) Placing a layer of drainrock gravel over the entire surface of the completed pullout pad.
5) Installation of a double row of excelsior logs around the outer perimeter of the pullout area upon final construction.
6) Sloping of the pullout pad area away from the roadway and toward the perimeter sediment control device (excelsior log).
7) Separating the roadway from the pullout pad with a continuous row of concrete jersey barriers to prevent road runoff from entering the pullout area. (The roadway is already graded toward the inslope ditch in this area.)

The drilling fluids (drilling mud/foaming agent) used in drilling GVH 4 and 5 will be the same as used previously during the drilling of GVH holes 1, 2 and 3. The MSDS sheets for these fluids can be found in Attachment 15 of Appendix 5-14. During drilling operations, as well as during the remainder of the operational life of the GVH installation, noncoal mine waste will be stored in suitable containers, and then disposed of off-site at an approved waste disposal facility. Hydrocarbons, including Diesel fuel, gasoline, oil and grease, will be stored in the factory supplied containment mounted within the machinery. If any stand-alone storage tanks are used they will be equipped with built-in containment capable of holding the entire contents of the tank. Absorbent pads and bags of absorbent granules will be kept on hand during the drilling operation, and later during the GVH operation, to be used in case of a spill of oil, fuel or grease. Used absorbent material will be disposed of at an approved disposal facility. All operations will be subject to the current Spill Prevention Control and Countermeasure Plan (SPCC) for the West Ridge Mine currently on file with the Division, and included in Attachment 14 of Appendix 5-14.

As mention previously, the space between the outside of the drillhole and the inner casing

will be grouted with concrete. This will prevent the interception or re-routing of any surface or ground-water through the well into the mine workings below.

CHAPTER 8, BONDING:

There are no new surface facilities associated with GVH 4, since it is built on the pre-existing pad and will tie into the existing blower units. Therefore, final reclamation for GVH 4 should consist of removing the flame arrester and 20' of connecting piping, and backfilling the drillhole with concrete. All earthwork and revegetation costs are already included in the existing bond calculations. Reclamation of GVH 5 will consist of removing the flame arrester and 400' of unburied pipeline, backfilling of the drillhole with concrete, regrading of the pullout area to approximate original contour, and revegetation. The following calculations are based on currently approved bonding amounts taken from the existing Bear Canyon GVH installation.

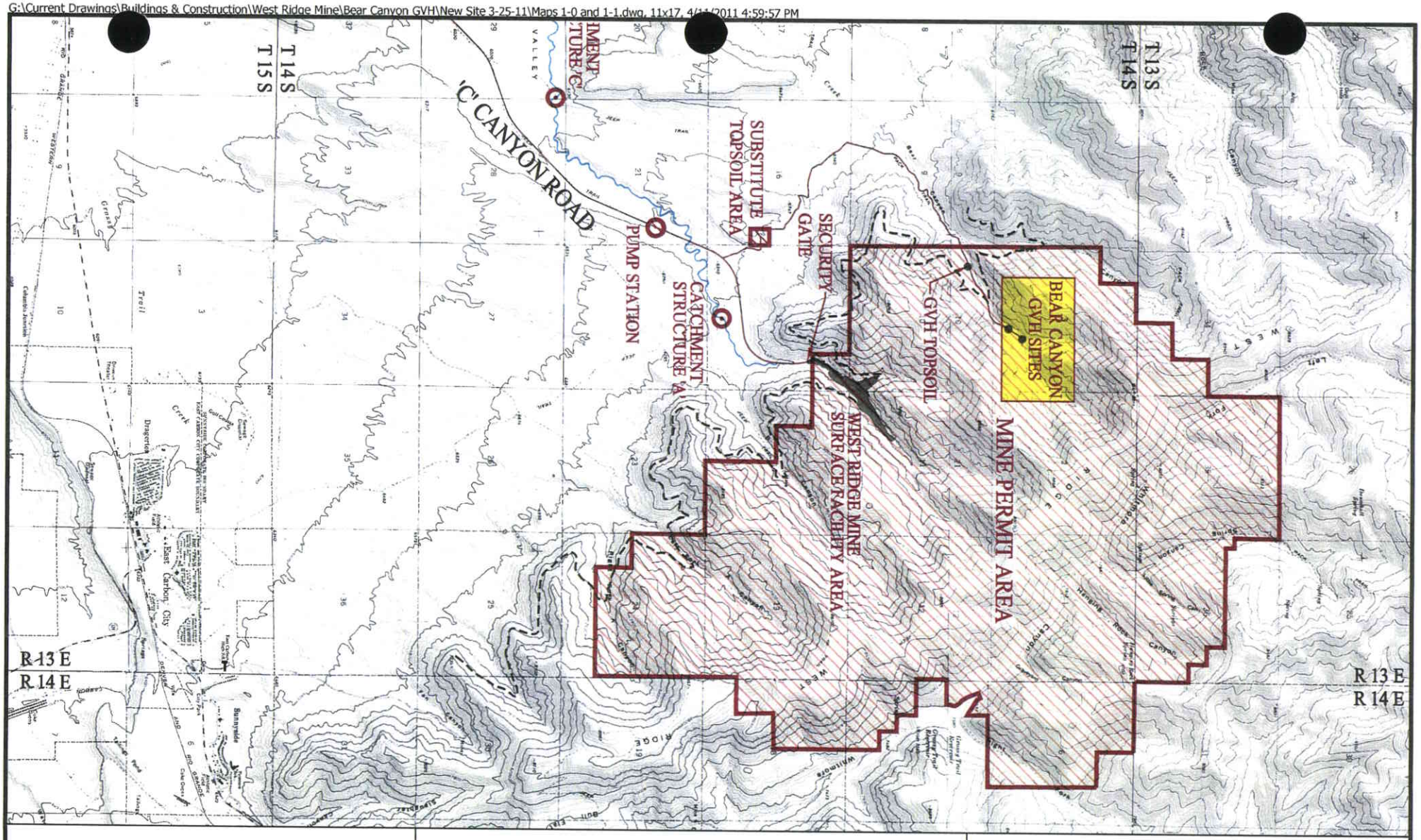
1) Mechanical equipment:	($805/ton) x(4 ton ea) x (two units) = $3,220	$3,220
2) Plug well:	($5000 each) x (two wells) = $10,000	$10,000
3) Earthwork:	half of existing GVH grading costs, for removal of 60 yds of backfill material = Estimated, ½ x $2143 = $1,072	$1,072
4) Revegetation	half of existing GVH revegetation costs = ½ x $2461 = $1,232	$1,232
Total Reclamation Cost		$15,524

At present (April 6, 2011), the posted bond amount for the West Ridge Mine is $2,184,000, and the reclamation cost (determined by the Division) is $1,998,000. This leaves a difference between the current reclamation cost estimate and the current bond of $218,000, or 9.98%. This excess bonding currently in place is therefore sufficient to cover the final reclamation costs of GVH 4 and GVH 5. For ease of reference, the currently approved (April, 2011) bonding information for the existing GVH installation is presented in Attachment 13 of this appendix.

ATTACHMENT 1

BEAR CANYON GVH LOCATION MAP

G:\Current Drawings\Buildings & Construction\West Ridge Mine\Bear Canyon GVH\New Site 3-25-11\Maps 1-0 and 1-1.dwg, 11x17, 4/11/2011 4:59:57 PM



ATTACHMENT 1
WEST RIDGE MINE
BEAR CANYON
GVH LOCATION MAP

DATE: 4-11-11 REV: 1

LEGEND:

Lease Areas
Surface Facility Area
GVH Site
Outcrop

RECEIVED
APR 12 2011
DIV. OF OIL, GAS & MINING

STATE OF UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs

I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

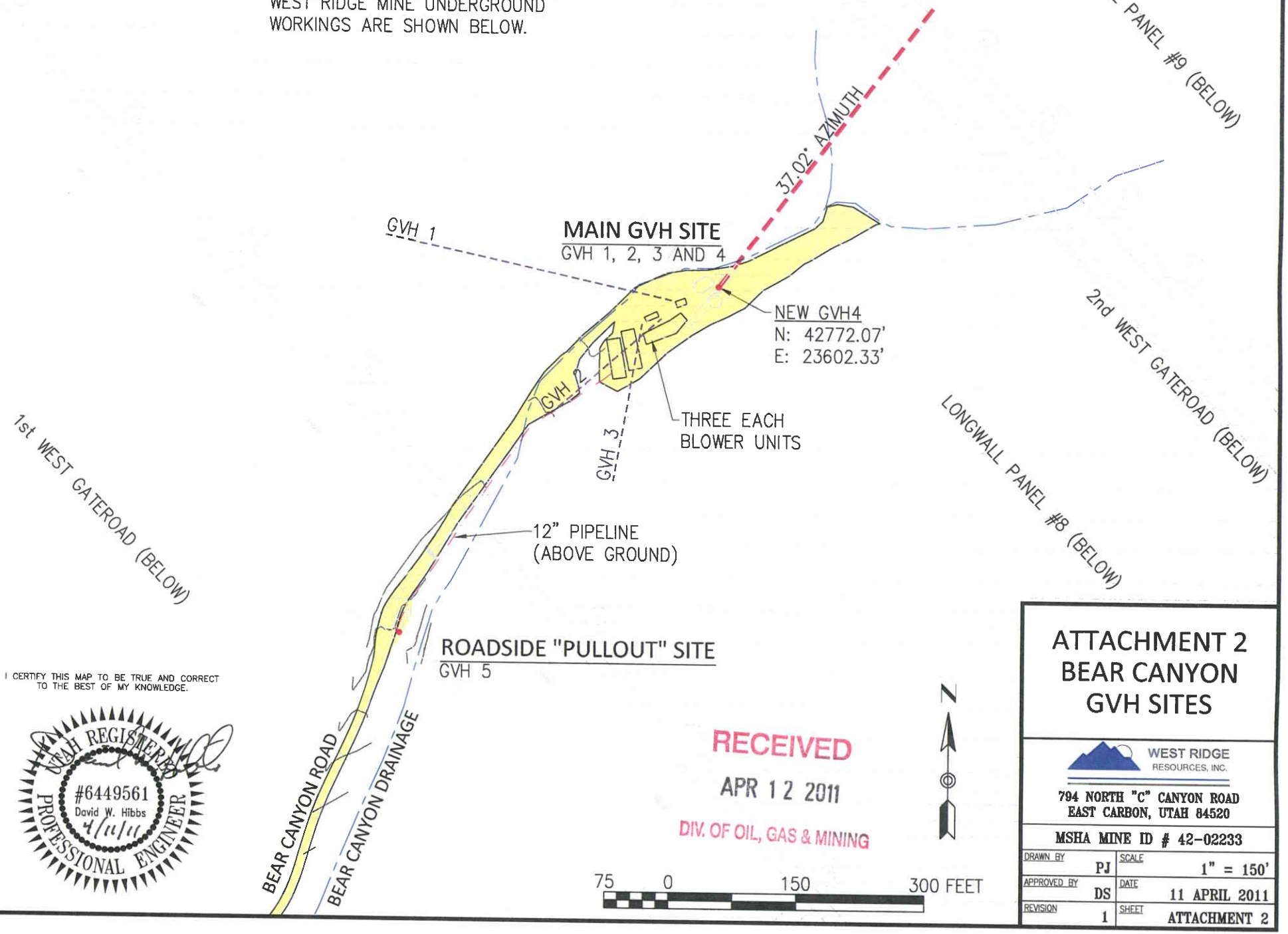
WEST RIDGE
RESOURCES, INC.

SCALE: 1"=5000'

ATTACHMENT 2

BEAR CANYON GVH SITE

NOTE:
WEST RIDGE MINE UNDERGROUND WORKINGS ARE SHOWN BELOW.



I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs 4/11/11

RECEIVED
APR 12 2011
DIV. OF OIL, GAS & MINING

ATTACHMENT 2 BEAR CANYON GVH SITES

WEST RIDGE RESOURCES, INC.
794 NORTH "C" CANYON ROAD
EAST CARBON, UTAH 84520

MSHA MINE ID # 42-02233

DRAWN BY	PJ	SCALE	1" = 150'
APPROVED BY	DS	DATE	11 APRIL 2011
REVISION	1	SHEET	ATTACHMENT 2

G:\Current Drawings\Buildings & Construction\West Ridge Mine\Bear Canyon GVH\New Site 3-25-11\Bear Canyon Site 2.dwg, Pad 1, 4/11/2011 4:31:47 PM

ATTACHMENT 3

GVH 5 SITE PLAN DRAWINGS

1st WEST ENTRY #2 (BELOW)

CROSSCUT #33 (BELOW)

BEAR CANYON DRAINAGE CHANNEL

TYPICAL EXISTING BOULDERS (SEE PHOTOS, ATTACHMENT 2)

A

A'

(SEE ATTACHMENT 4 FOR CROSS-SECTION)

7160

7150

7150

BEAR CANYON ROAD (CARBON COUNTY)

I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs 4/11/11

N

10 0 20 40 FEET

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APR 12 2011
DIV. OF OIL, GAS & MINING

ATTACHMENT 3 GVH 5 SITE PLAN DRAWING 3A, PRE-CONSTRUCTION

WEST RIDGE RESOURCES, INC.

794 NORTH "C" CANYON ROAD
EAST CARBON, UTAH 84520

MSHA MINE ID # 42-02233

DRAWN BY	PJ	SCALE	1" = 20'
APPROVED BY	DS	DATE	11 APRIL 2011
REVISION	1	SHEET	ATTACHMENT 3a

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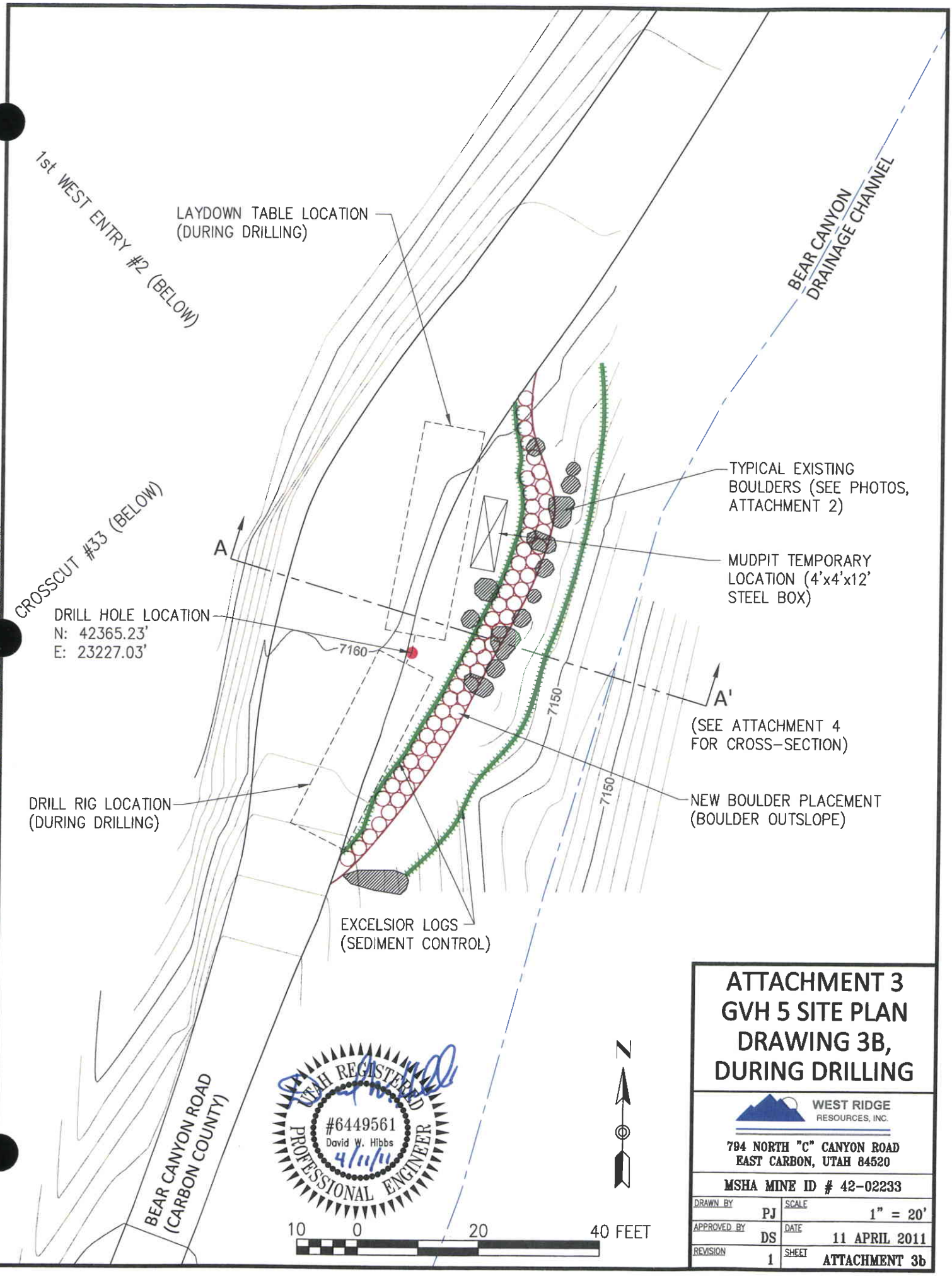

ATTACHMENT 3
GVH 5 SITE PLAN
DRAWING 3B, DURING DRILLING

WEST RIDGE RESOURCES, INC.

794 NORTH "C" CANYON ROAD
EAST CARBON, UTAH 84520

MSHA MINE ID # 42-02233

DRAWN BY	PJ	SCALE	1" = 20'
APPROVED BY	DS	DATE	11 APRIL 2011
REVISION	1	SHEET	ATTACHMENT 3b

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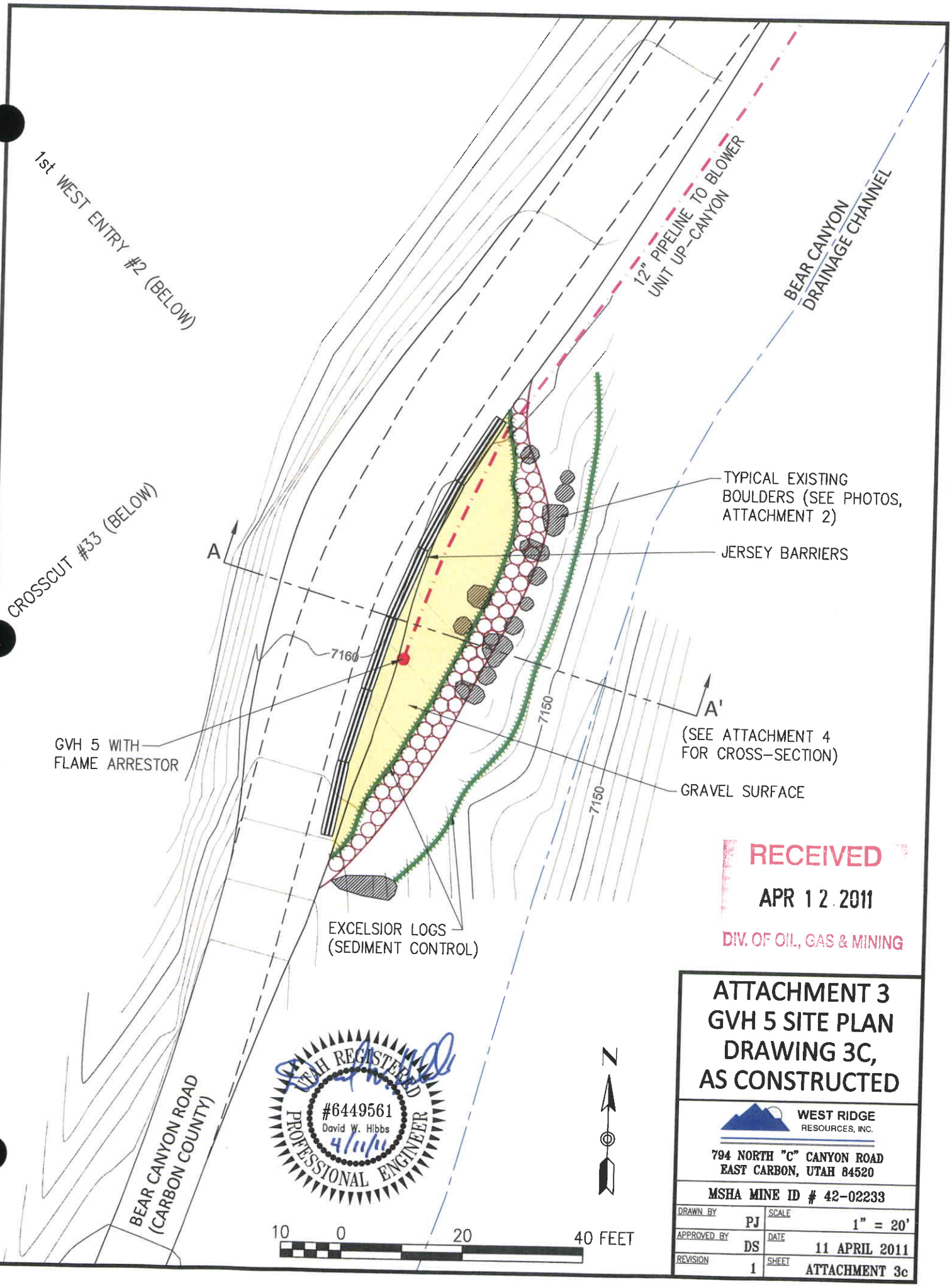


RECEIVED
APR 12 2011
DIV. OF OIL, GAS & MINING

ATTACHMENT 3
GVH 5 SITE PLAN DRAWING 3C, AS CONSTRUCTED

WEST RIDGE RESOURCES, INC.

794 NORTH "C" CANYON ROAD
EAST CARBON, UTAH 84520

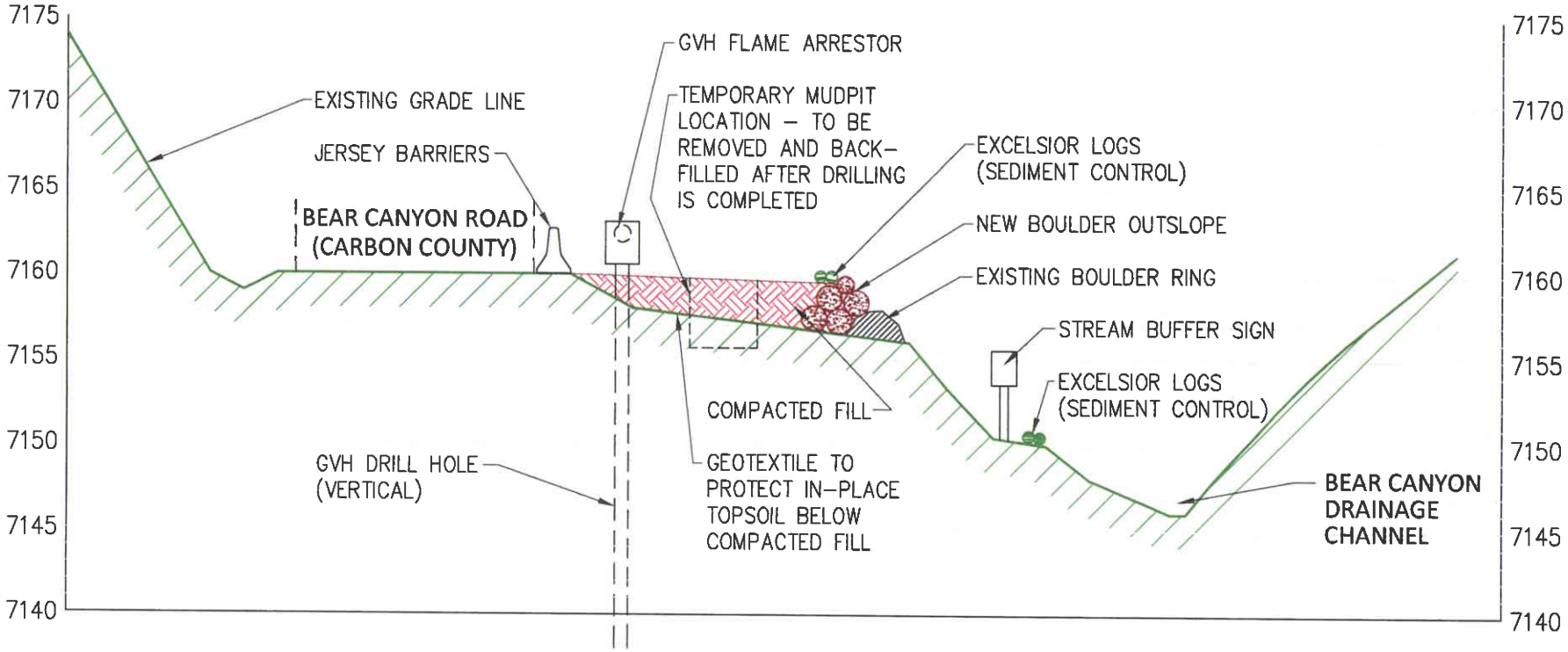
MSHA MINE ID # 42-02233

DRAWN BY	PJ	SCALE	1" = 20'
APPROVED BY	DS	DATE	11 APRIL 2011
REVISION	1	SHEET	ATTACHMENT 3c

G:\Current Drawings\Plans & Construction\West Ridge Mine\Bear Canyon GVH\New Site 3-25-11\Bear Canyon Site 2.dwg, As-cons Pad 2, 4/12/2011 8:35:05 AM

ATTACHMENT 4

GVH 5 CROSS-SECTION DRAWING



I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs 4/14/11

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APR 12 2011
DIV. OF OIL, GAS & MINING

5 0 10 20 FEET

ATTACHMENT 4 GVH 5 SITE CROSS-SECTION

WEST RIDGE RESOURCES, INC

794 NORTH "C" CANYON ROAD
EAST CARBON, UTAH 84520

MSHA MINE ID # 42-02233

DRAWN BY	PJ	SCALE	1" = 10'
APPROVED BY	DS	DATE	11 APRIL 2011
REVISION	1	SHEET	ATTACHMENT 4

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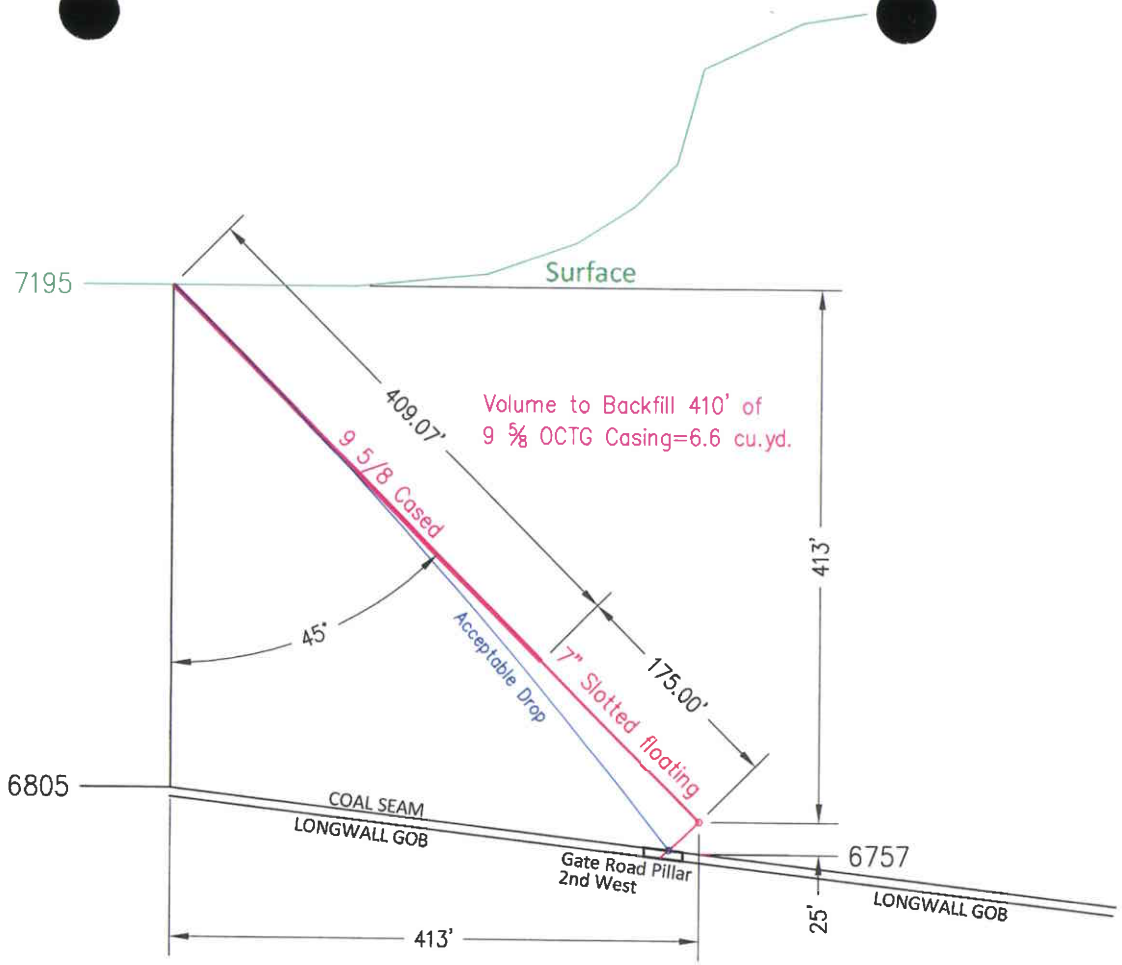
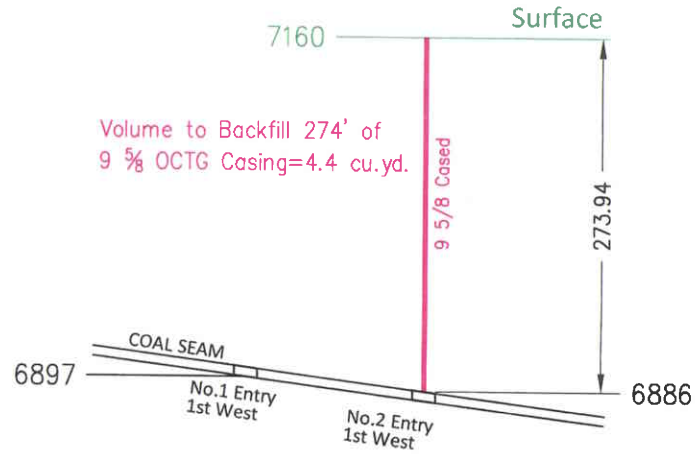
ATTACHMENT 5

GVH 4- GVH 5 DRILL HOLE DETAILS



MAIN GVH SITE
GVH 4



ROADSIDE "PULLOUT" SITE
GVH 5

I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs 4/11/11

RECEIVED
APR 12 2011
DIV. OF OIL, GAS & MINING

N

75 0 150 300 FEET

ATTACHMENT 5
GVH 4 AND GVH 5 DRILL HOLE DETAILS

WEST RIDGE RESOURCES, INC.
794 NORTH "C" CANYON ROAD
EAST CARBON, UTAH 84520

MSHA MINE ID # 42-02233

DRAWN BY	PJ	SCALE	1" = 150'
APPROVED BY	DS	DATE	11 APRIL 2011
REVISION	1	SHEET	ATTACHMENT 5

G:\Current Drawings\Buildings & Construction\West Ridge Mine\Bear Canyon GVH\New Site 3-25-11 \Bear Canyon Site 2.dwg, Drill Hole Details, 4/11/2011 2:32:22 PM

ATTACHMENT 6

SITLA LETTER OF CONCURRENCE

Shaver, Dave

From: John Blake [jblake@utah.gov]
Sent: Thursday, April 07, 2011 4:06 PM
To: Shaver, Dave
Subject: Re: Additional Bear Canyon GVH

Dear Mr. Shaver,

The Trust Lands Administration approves West Ridge Mine's request to drill two additional GVH in the areas described below, upon lands leased under coal lease ML 49287, but subject to lessees compliance with all applicable state laws and regulations. The terms and conditions of ML 49297 require the lessee to comply with DOGM regulations in all operations involving the leased lands. Please send me a map of the proposed GVH locations and designated drill hole numbers after the holes are completed. Thank you.

John T. Blake
Trust Land Specialist
SITLA

>>> "Shaver, Dave" <dshaver@coalsource.com> 4/7/2011 3:01 PM >>>
Dear Mr. Blake:

As you are aware, the West Ridge Mine is presently operating several gob gas vent holes (GVH) from a common site in Bear Canyon in the SE1/4 of Section 3, T14S, R13E. This site is located on SITLA lease ML-49287 (surface and mineral), held by West Ridge Resources, Inc. Due to increased methane levels in the underground mine workings, the company now needs to drill two additional GVH holes at the site. One hole would be located on the same pad as the existing holes. The second hole would be located about 400' down-canyon at a small area immediately adjacent to the existing access road. This second hole will be drilled from a pullout alongside the road and will involve less that 0.02 acres of new disturbance. We are presently preparing an amendment to the DOGM permit for approval of this site. The purpose of this email is to provide proper notification to SITLA for this proposal, and to obtain any requisite concurrence from your office. If DOGM permitting allows, we would hope to drill these GVH wells as soon as possible. Please note that SITLA provided similar concurrence for the initial GVH installation in an email from your office on October 15, 2008. We appreciate your consideration of this matter.

Dave Shaver
Project Manager
West Ridge Resources, Inc.

ATTACHMENT 7

GEOTEXTILE DATA

(During final reclamation the fill material and geotextile will be removed to re-expose the existing topsoil). By using the geotextile, the existing topsoil located along the channel and the side slopes can be left in place below the pad fills. Leaving the soil intact and in-place will maintain the soil cohesiveness. Roots will be left intact to help promote soil stability and minimize the potential for erosion. The soil horizons will remain intact to help promote faster revegetation of the slopes at the time of final reclamation.

The geotextile fabric will have the following minimum properties:

MECHANICAL PROPERTIES		UNITS
Grab Tensile Strength		
ASTM D 4632		
MD @ Ultimate	0.89 (200)	kN (lbs)
CMD @ Ultimate	0.89 (200)	kN (lbs)
MD/CMD Elongation @ Ultimate		15 %
Mullen Burst Strength		
ASTM D 3786	2756 (400)	kPa (psi)
Trapezoidal Tear Strength		
ASTM D 4533	0.33 (75)	kN (lbs)
Puncture Strength		
ASTM D 4833	0.40 (90)	kN (lbs)
UV Resistance after 500 hrs.		
ASTM D 4355	70	% Strength
HYDRAULIC PROPERTIES		
Apparent Opening Size		
ASTM D 4751	0.300 (50)	mm(US sieve)
Permittivity	0.05	sec-1

This type of geotextile was chosen because of its strength characteristics and its longevity. According to the manufacturer's representatives the strength of the geotextile is not affected by moisture, or contact with earthen materials. In a buried condition away from the harmful exposure to ultraviolet radiation, the geotextile is expected to retain essentially all of its original strength even after 20 years of service. In fact, the geotextile is manufactured specifically for such permanent, long life situations such as under highways, railroad grades, dams and other similar applications. Care will be taken to ensure that the geotextile is properly overlapped and secured at the edges to provide total areal coverage in accordance with manufacturers recommended installation instructions.

INCORPORATED
EFFECTIVE:
SEP 15 1999
UTAH DIVISION OIL, GAS AND MINING

ATTACHMENT 10

CARBON COUNTY ROAD CORRESPONDENCE

Carbon County

Utah's Castle Country

Encroachment Permit

By acceptance under the terms and conditions outlined in this Permit Application, accompanying signed Maintenance Agreement and any other terms or conditions hereby attached to this document, Carbon County does hereby allow:

Signature: [illegible] Effective Date: Apr 6, 2011
Representing: West Ridge Resources
Address: PO Box 910
East Carbon City UT 84520
Telephone # 435 888 4017 Email Address: dshaw@coalsource.com

The right to utilize the surface for commercial purposes, excavate in an or around or place structures into Carbon County system roads under the allowances granted in this ***Annual Blanket Permit*** under the authority of Ordnance #378, PASSED, ADOPTED, and ORDERED PUBLISHED the 16th day of November, 2005 by the CARBON COUNTY BOARD OF COMMISSIONERS.

Signed Brad M Coutt Date April, 06-2011

This permit expires on: One year from effective date.

Acceptance by the Supervisor means once signed, undertaking by the Permittee is guaranteeing the completion of any improvements or construction proposed therein, in conformance to the specifications and terms set forth by the Supervisor and or contained in the application or additional attached documents. This permit creates an agreement that upon failure to do so, the County or other competent contractor assigned to do so by the County may complete the same to its satisfaction and charge the costs thereof to the Applicant.

A Class 1 Encroachment means encroachments on County roadways by connections of residential driveways or private or other roadways, parking areas, or other structures affecting or altering the shoulder of the Existing County Roadway, or by installation of cattle guards.

A Class 2 Encroachment means grading, construction, reconstruction, surfacing or resurfacing, alignment or realignment, excavation, boring or jetting, obstruction, removal of materials, vibroseising, Heavy Haulage, as defined in the ordinance or disproportionate use exceeding the normal function or use of County roads for commercial purposes, including extraordinary use

A Class 3 Encroachment means excavating, boring, jetting, cutting of pavement or other disturbance by utilities within County road right-of-way for the purpose of installing, repairing or maintaining cables, pipelines, or other Utility structures buried within the roadway or right-of-way

An annual Blanket Permit means an Encroachment Permit issued for a period of one calendar year, *based upon a written plan*, to Applicant (s) who, of necessity, may make numerous Encroachment Permits. The Annual Blanket Permit is designed to alleviate the necessity of securing a performance and completion bond for each Encroachment Permit.

Applicant is required to supply Maps, plats or engineering drawings displaying the current locations in pertinent views of Utility lines within the County right-of-way to be affected by the proposed Encroachment and the proposed alignment of any new or replacement Lines or pipelines for which the Permit is requested. Applicant is also required to supply a waiver for all liability for damage to its Lines by the County or by other utilities whose existing Lines are located within the vicinity of the proposed new or replacement line

Each Applicant, as a condition of the release of the bond is required to notify blue stakes according to proper procedure, and provide acceptable g.p.s. location information to the Carbon County GIS department sufficient to maintain Utility and drainage mapping current.

Carbon County

Utah's Castle Country

Class 3 Encroachment Permit Application

*Encroachments by utilities for the installation repair and maintenance of cables, pipelines or other Utility structures located in the road right-of-way.

Application Approved :( ) No (✓) Yes By: [signature] **Application Fee:** ——————

All applications shall be accompanied by a non-refundable application fee in the amount set forth in the most current Fee Schedule.

****If Refused, Reason for refusal:**

*****Annual Blanket Permit: ( ) No; ( ) Yes;** ***Attach Written Plan and Conditions***

Name: West Ridge Resources, Inc **Telephone #** 435 888 4017

Address: PO Box 910
East Carbon City UT 84520

Business Representing: **Telephone #**

Address

Location of the proposed Encroachment. (Please give address if possible GIS Coordinates are also acceptable for open lands locations) See attached documents

******Supply Maps, plats or engineering drawings:**

Describe the proposed Encroachment:
Refer to attached letter

Purpose and Scope:

Dimensions of materials to be used:

Will Begin: Spring 2011 **Expect to be completed:** Spring 2011

Does Applicant propose to use fungicide, pesticide, herbicide or any chemical or other road surface treatment? (✓) No ( ) Yes: ***(Applicant will supply MSDS sheet with application and comply with manufacturer application requirements.)***

Type of treatment:

Application Rate and Method of application:

Supervisor remarks or additional information: (Attach additional information if needed.)

Bond Requirement amount and copy:
*******Released Date:**

Liability Insurance Company:
Policy #
(Attach copy of the policy)

Signed: _____ **Title:** Project Manager

Representing: West Ridge Resources **Date:** 4/6/2011

PLEASE READ:

Acceptance of this application by the Supervisor means once signed, undertaking by the Applicant, now Permittee is guaranteeing the completion of any improvements or construction proposed therein, in conformance to the specifications set forth by the Supervisor and or contained in this application. This application creates an agreement that upon failure to do so, the County or other competent contractor assigned to do so by the County may complete the same to its satisfaction and charge the costs thereof to the Applicant.

*A Class 3 Encroachment means excavating, boring, jetting, cutting of pavement or other disturbance by utilities within County road right-of-way for the purpose of installing, repairing or maintaining cables, pipelines, or other Utility structures buried within the roadway or right-of-way

**The Supervisor shall within five (5) to ten (10) working days either grant the application or deny it. The Supervisor shall, when needed confer with Planning and Zoning and any other affected agencies during preliminary phases of the review of this application. If he denies the application, he shall return it to the Applicant and set forth in writing attached thereto his reasons for doing so. The Applicant may submit an amended application at any time thereafter

***An annual Blanket Permit means an Encroachment Permit issued for a period of one calendar year, *based upon a written plan*, to Applicants who, of necessity, may make numerous Encroachment Permits. The Annual Blanket Permit is designed to alleviate the necessity of securing a performance and completion bond for each Encroachment Permit.

****Applicant is required to supply Maps, plats or engineering drawings displaying the current locations in pertinent views of Utility lines within the County right-of-way to be affected by the proposed Encroachment and the proposed alignment of any new or replacement Lines or pipelines for which the Permit is requested. Applicant is also required to supply a waiver for all liability for damage to its Lines by the County or by other utilities whose existing Lines are located within the vicinity of the proposed new or replacement line

*****Each Applicant, as a condition of the release of the bond is required to notify blue stakes according to proper procedure, and provide acceptable g.p.s. location information to the Carbon County GIS department sufficient to maintain Utility and drainage mapping current.

WEST RIDGE
RESOURCES, INC.

P.O. Box 910, East Carbon, Utah 84520
Telephone (435) 888-4000 Fax (435) 888-4002

Rex Sacco, Director
Carbon County Public Lands Department
120 East Main Street
Price, Utah 84501

April 4, 2011

Re: West Ridge Mine
Bear Canyon GVH Well

Dear Mr. Sacco:

The West Ridge Mine currently operates a set of three gob gas vent holes (GVH wells) located on a common pad in Bear Canyon, situated in the SE1/4 of Section 3, T14S, R13E. This GVH site is located at the end of the Bear Canyon Road, which is part of the Carbon County road system. The purpose of these GVH wells is to vent methane gas from the underground mine workings. This venting is necessary for the safety of the miners and to allow the company to continue to meet contractual production requirements. .

Due to increasing levels of methane encountered in the mine we now need to install two more GVH wells in Bear Canyon as soon as possible. One of these wells would be located adjacent to the existing wells on the pad at the end of the road. A second hole needs to be drilled approximately 400' down canyon from the existing pad in order to intersect one of the underground mine bleeder entries. This well would be drilled within a small leveled-off area measuring about 10'-15' wide by 60' long, located immediately adjacent to the road. Once the well has been drilled, a flame arrester would be installed at the collar, and a 12" low-pressure pipeline would then need to be extended from the well, running along the outer bank of the road, approximately 400' up to the blower units located at the existing pad site. A row of jersey barriers would be placed along the side of the road in the vicinity of the well collar for protection. If permitting conditions allow, we would like to begin drilling operations within the next several weeks to coincide with the up-coming longwall move.

may RLS

Because of the narrowness of this well site in the bottom of then canyon, the hole will have to be drilled from the roadway. This ~~would~~ involve blocking the road with the drill rig for a period of about two or three days. However, the only users of the road above the site is the aforementioned West Ridge mine GVH pad, which could be accessed by company maintenance personnel on foot during the short drilling period. Also, there is a suitable turn-around facility immediately below the site for the public to turn around during the blockage. At this time of year the amount of public usage of the road is minimal.

RLS
possible to

The purpose of this letter is to request the following permission from Carbon County:

1) to allow blockage of this road for several days during the period of drilling of the lower well,
2) to allow the pipeline segment to be laid along the outside edge of the road, and
3) to allow the installation of the GVH wells within 100' of the road.

Please note that right-of-entry for the installation of the GVH well and the connecting pipeline is provided under the authority of the our existing state (SITLA) coal lease (surface and mineral), ML-49287. Also please note that final installation of the GVH and the connecting pipeline would not be within the roadway, but would be located adjacent to it on the downhill side..

Attached is a map of the existing and proposed GVH facility, and several photos depicting the area of interest. If Carbon County is in agreement with this request please indicate so by signing in the space provided below. We appreciate your consideration of this matter. If you have questions or comments please contact me at (435) 888-4017.

Sincerely,

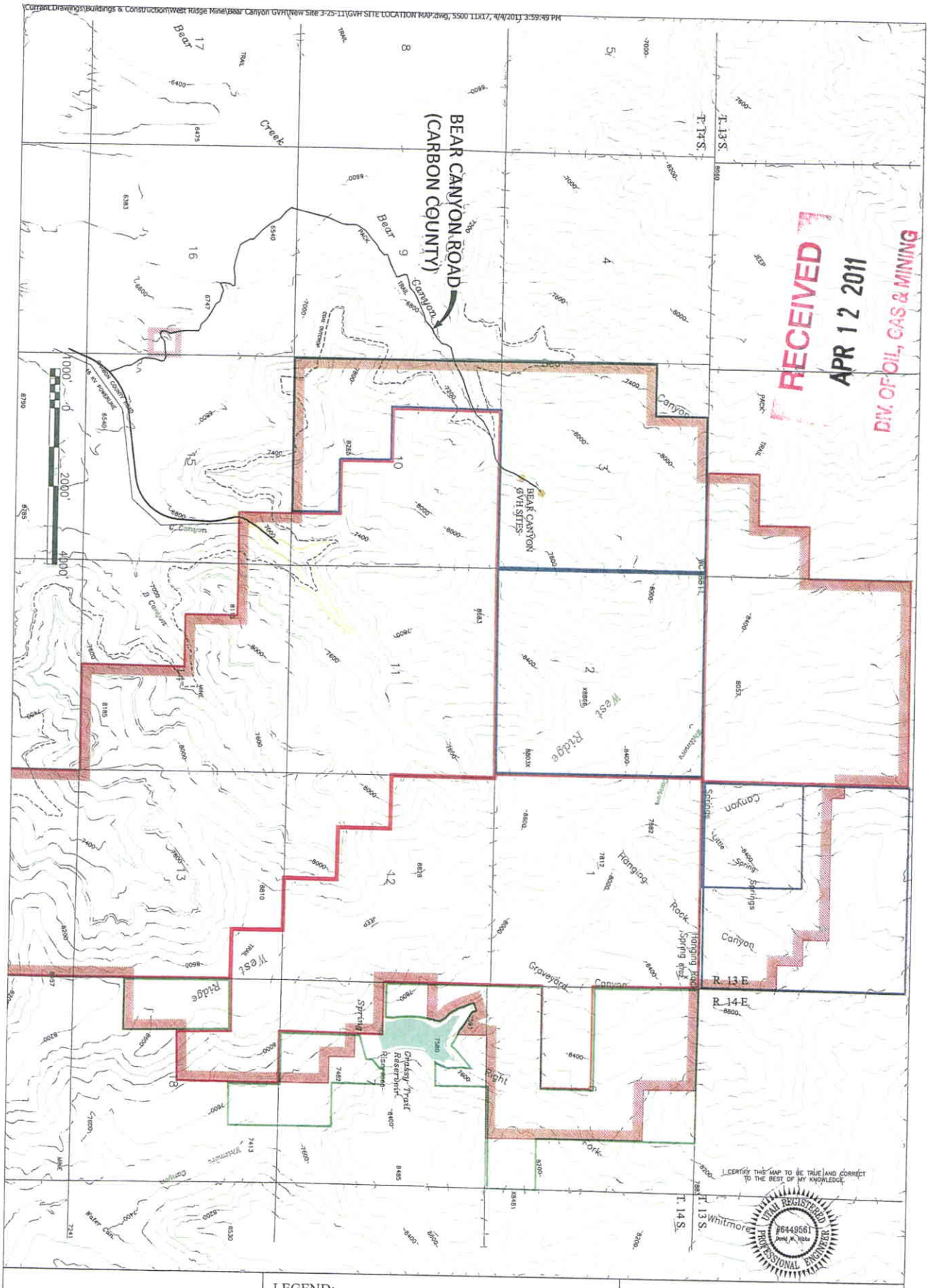
David Shaver
Project Manager

Agreed to by Carbon County:

name: Rex L Sacco

title: Roads Admin

date: 4-6-2011



WEST RIDGE MINE
BEAR CANYON
GVH SITE

DATE: 4-04-11 REV: 1 ACAD REF: GVH SITE LOCATION MAP

LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site

WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'

ATTACHMENT 11

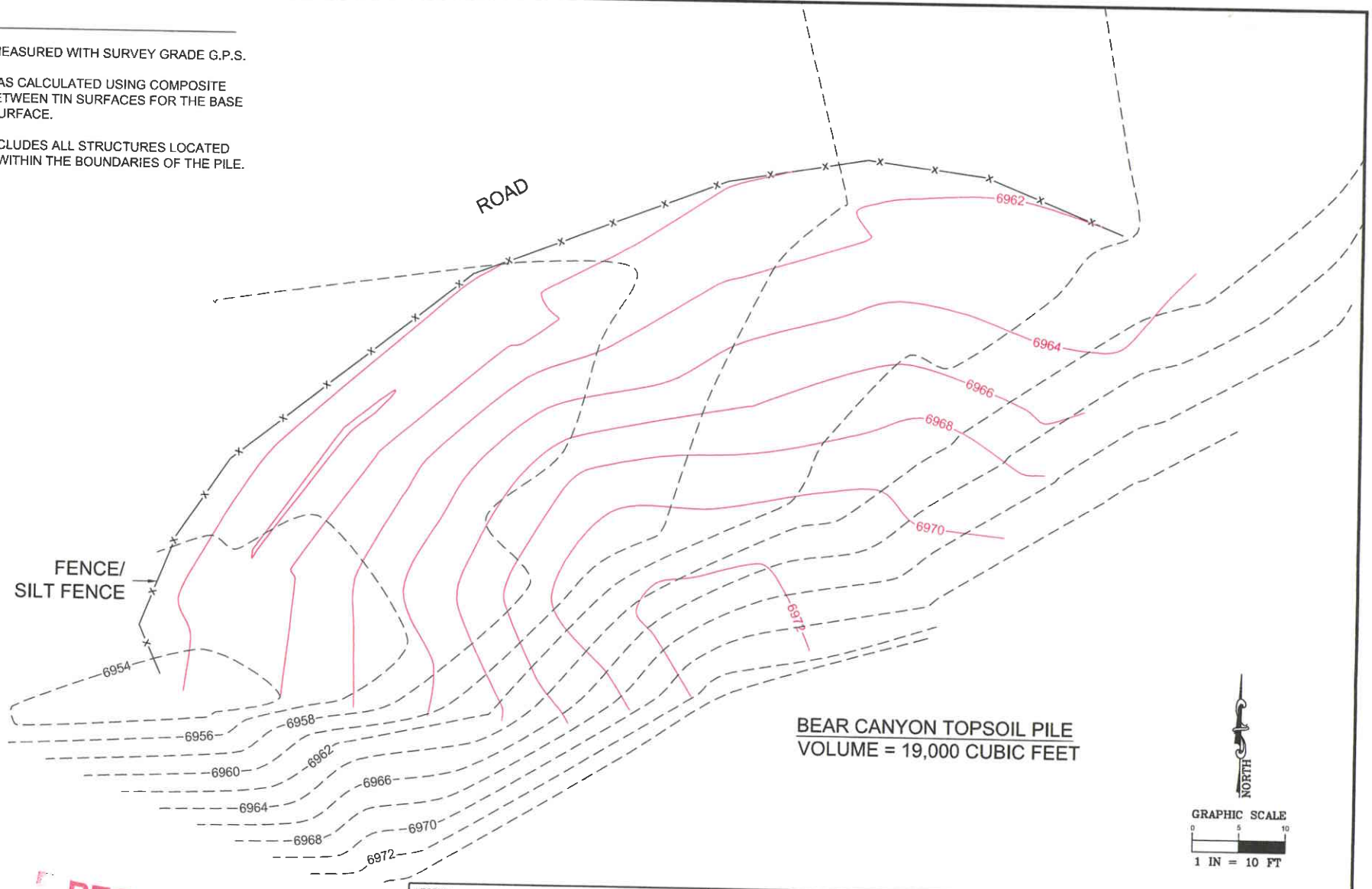
BEAR CANYON GVH TOPSOIL PILE AS-BUILT DRAWING

NOTES:

PILE WAS MEASURED WITH SURVEY GRADE G.P.S.

VOLUME WAS CALCULATED USING COMPOSITE METHOD BETWEEN TIN SURFACES FOR THE BASE AND PILE SURFACE.

VOLUME INCLUDES ALL STRUCTURES LOCATED UNDER OR WITHIN THE BOUNDARIES OF THE PILE.



LEGEND

- BASE SURFACE 2' CONTOUR
- TOPSOIL PILE 2' CONTOUR
- FENCE

DRAWING RECORD:

NO.	DATE	DESCRIPTION	BY
1	01-17-09	PLOTTED FOR REVIEW	M.C.W.

WARE SURVEYING, L.L.C.

Phone: 435-613-1266
Email: waresurveying@emerytelcom.net

1344 North 1000 West
Price, Utah 84501

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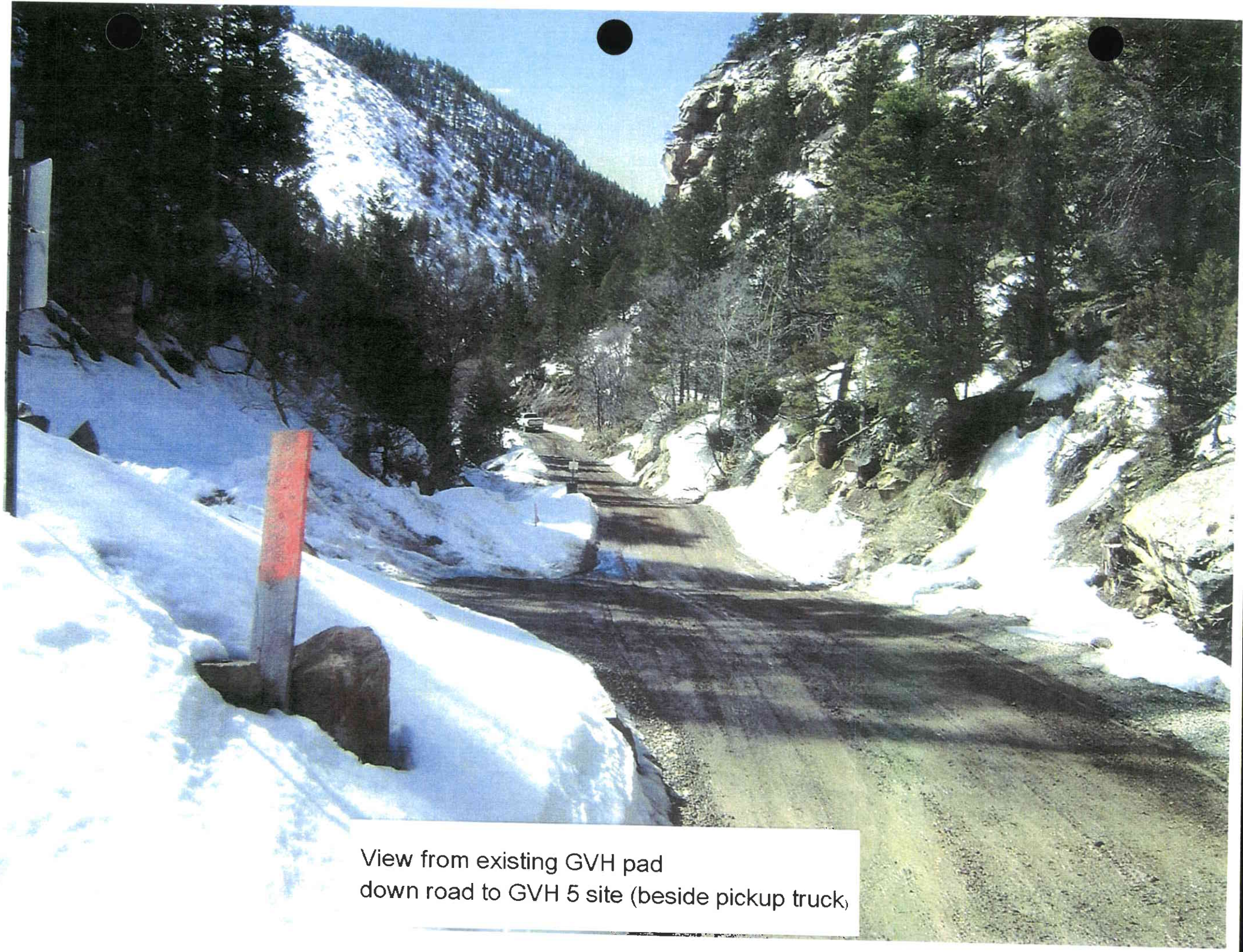
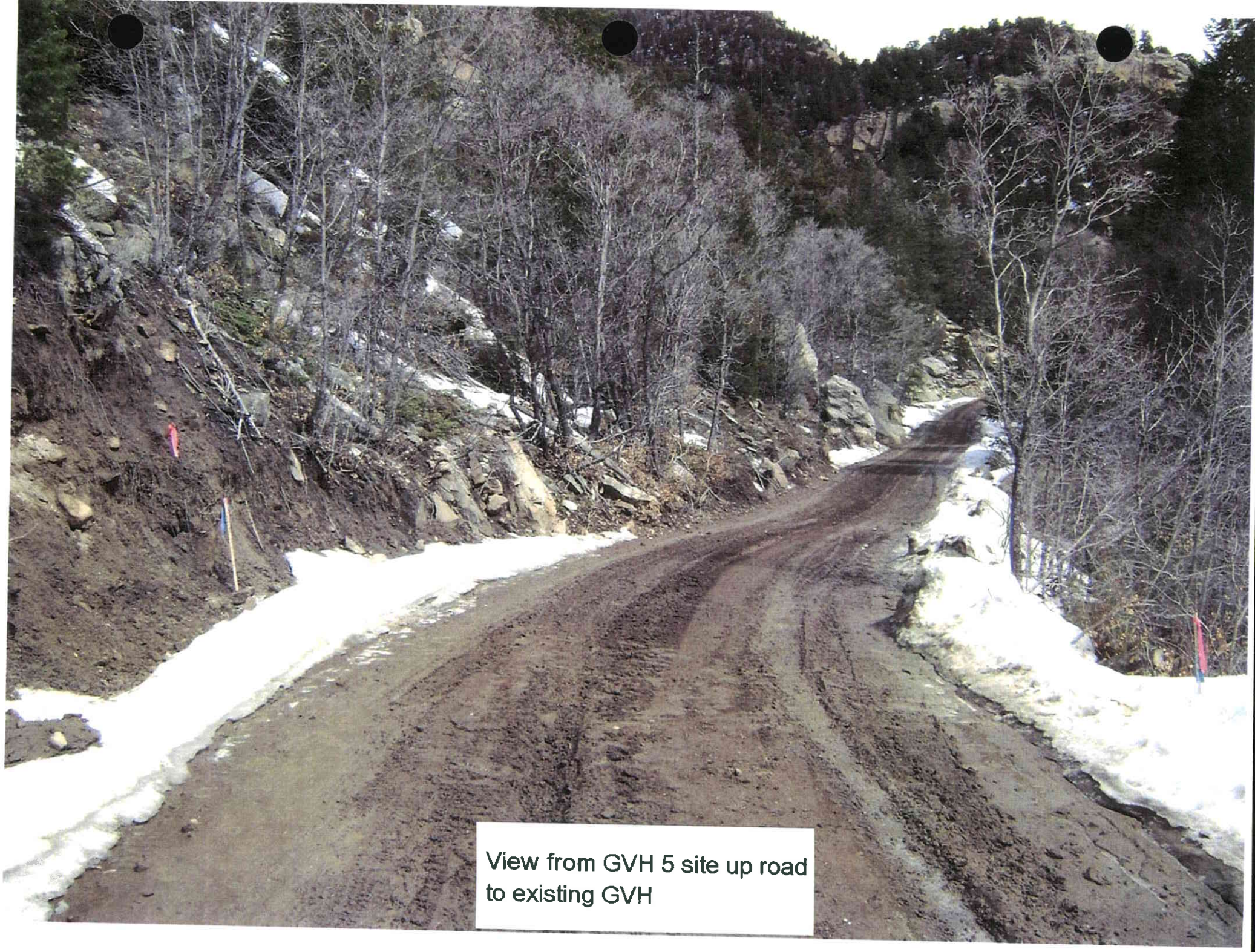
ATTACHMENT 12

PRE-CONSTRUCTION PHOTOS OF GVH 5 SITE

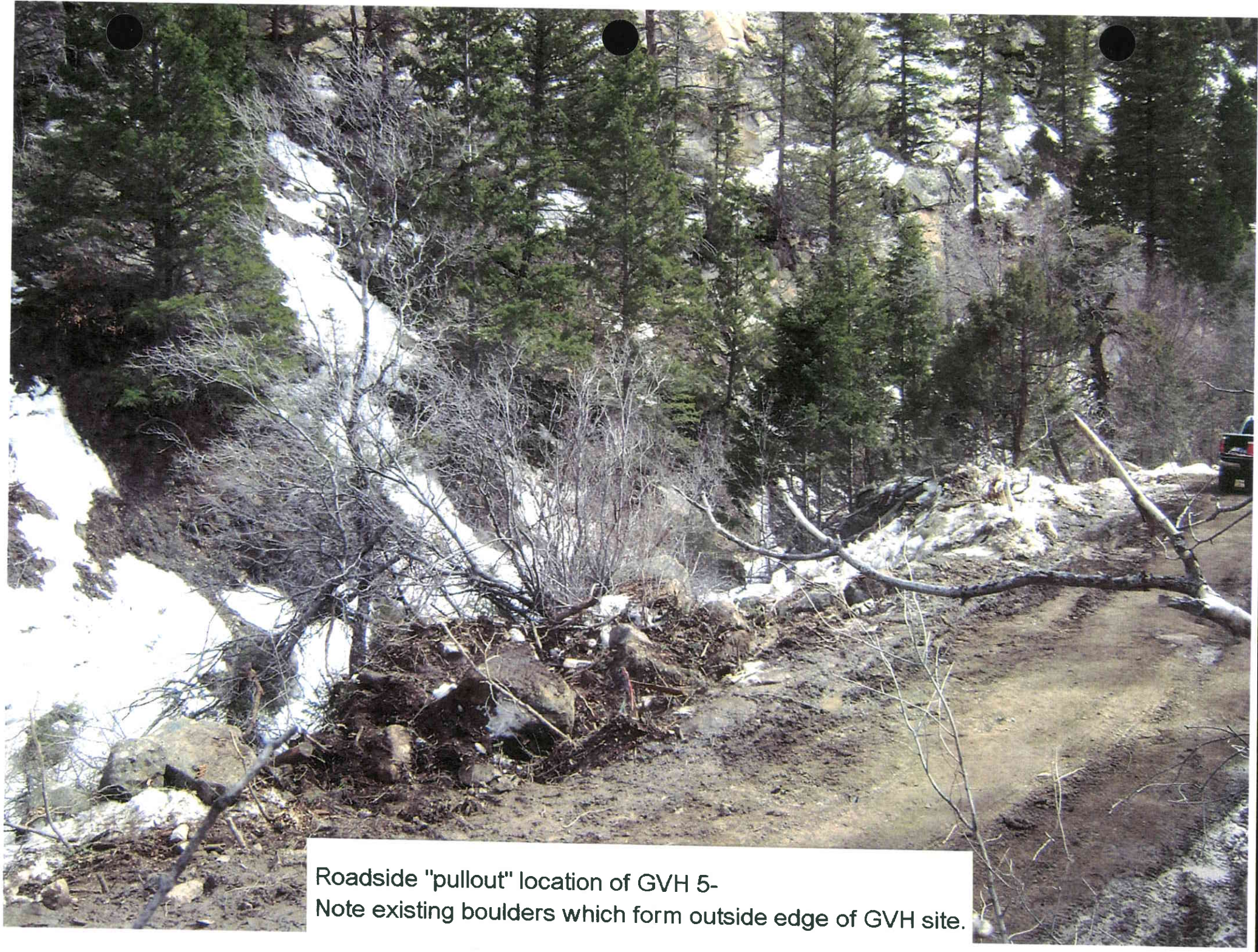
Existing GVH pad and facilites -
Note red flame arrester connecting pipeline



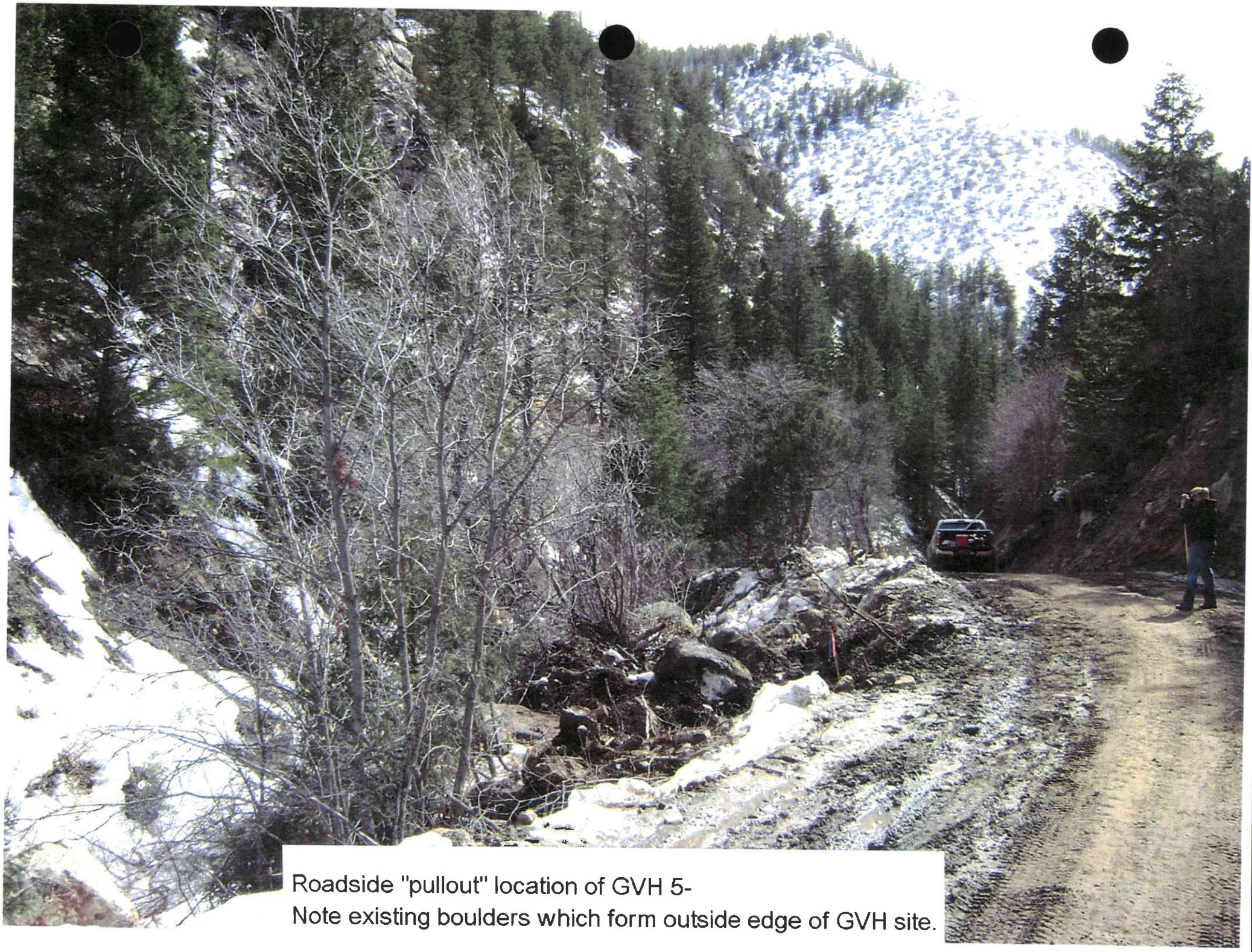
View from existing GVH pad
down road to GVH 5 site (beside pickup truck)



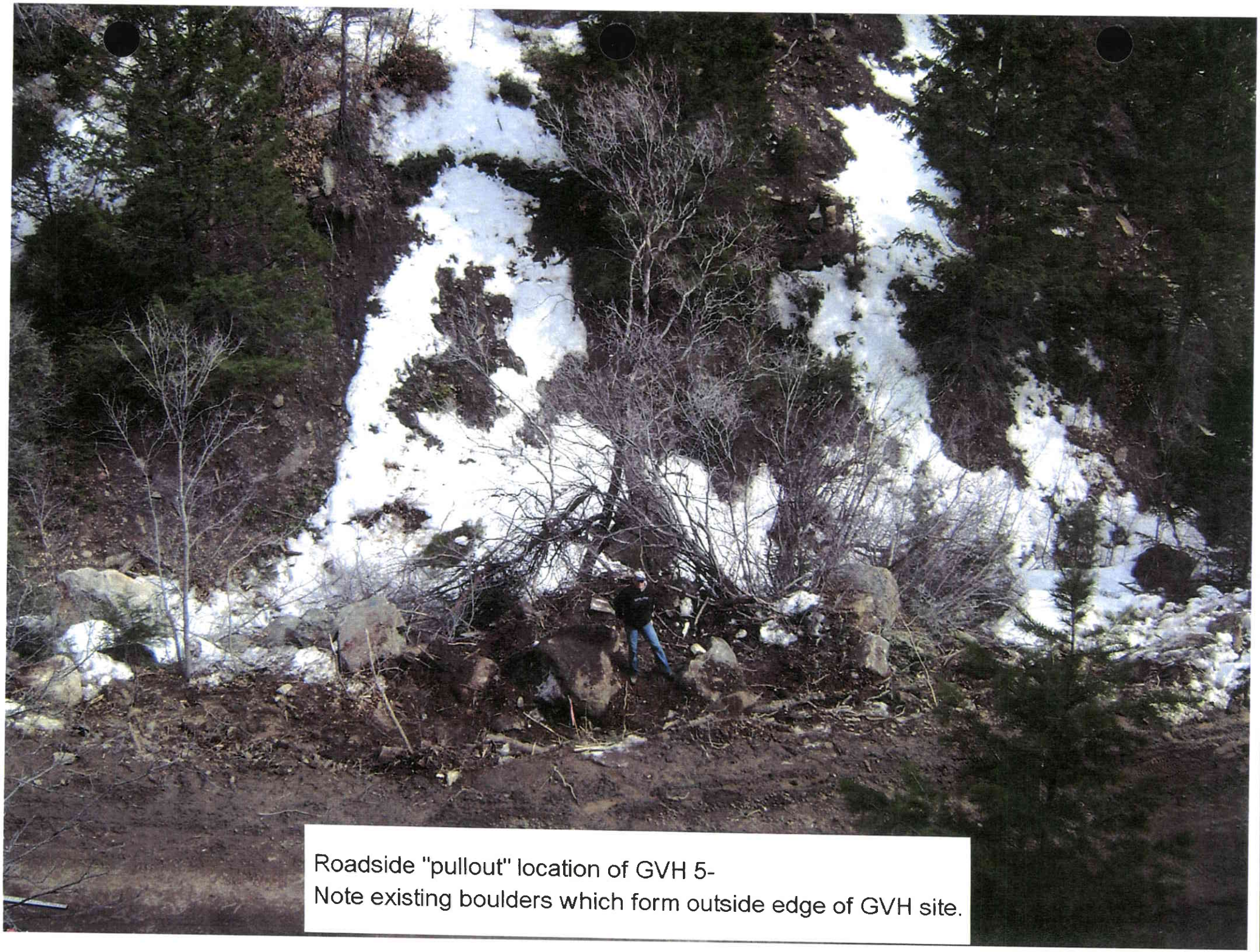
View from GVH 5 site up road to existing GVH



Roadside "pullout" location of GVH 5-
Note existing boulders which form outside edge of GVH site.

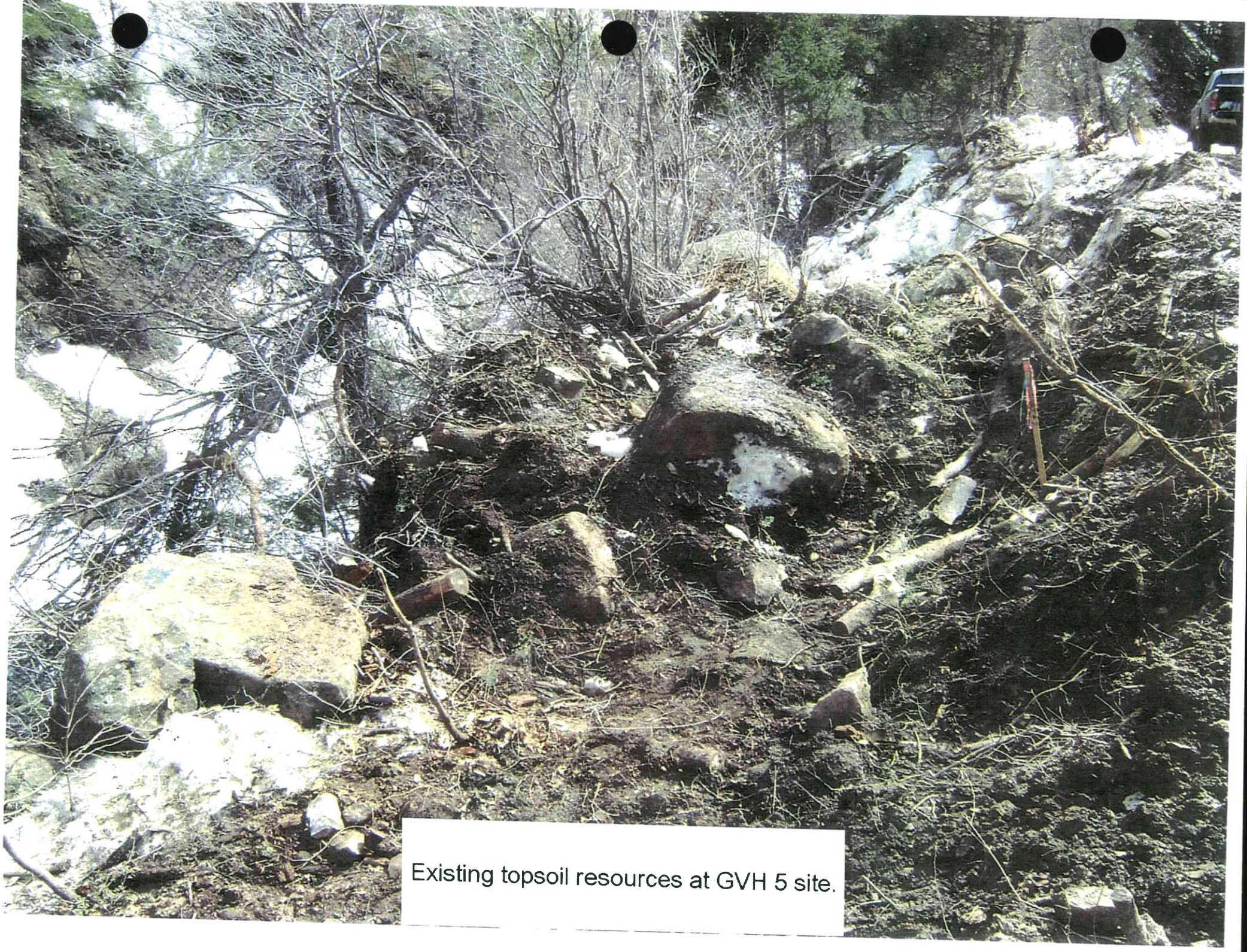


Roadside "pullout" location of GVH 5-
Note existing boulders which form outside edge of GVH site.



Roadside "pullout" location of GVH 5-
Note existing boulders which form outside edge of GVH site.

Roadside location of GVH 5 -
site showing 15' measuring rod for scale



Existing topsoil resources at GVH 5 site.

APPENDIX 13

EXISTING GVH BONDING INFORMATION
(APRIL, 2011)

West Ridge Mine
Task ID # 3309

Bond Amount

Revised October 2008

6/29/2009

Bonding Calculations

Direct Costs		
Subtotal Demolition and Removal	$3,830.00	
Subtotal Backfilling and Grading	$16,608.00	
Subtotal Revegetation	$4,506.00	
Direct Costs	$24,944.00	
Indirect Costs		
Mob/Demob	$2,494.00	10.0%
Contingency	$1,247.00	5.0%
Engineering Redesign	$623.00	2.5%
Main Office Expense	$1,696.00	6.8%
Project Mainagement Fee	$623.00	2.5%
Subtotal Indirect Costs	$6,685.00	26.8%
Total Cost 2009	$31,628.00	
Number of years		5
Escalation factor		0.013
Escalation		
Total Mine	$ 1,997,628.00 including TID # 3309	
Reclamation Cost (rounded to nearest $ 1,000) 2013 Dollars	$1,998,000.00	
Posted Bond Amount 3/31/2009	$2,184,000.00	
Difference Between Cost Estimate and Bond	$218,000.00	
Percent Difference	9.98%	

Task ID	Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Gob Gas Vent Hole																			
		Structure's Demolition Cost	Mechanical equipment heavy	15055 300 3600	805	/ton							4			8	tons		32	tons	25760
		Structure's Vol. Demolished	Plug Well	AML3	5000	EA.										3	EA		3	EA	15000
		Rubble's Weight (exclude steel)																			
		Truck's Capacity																			
		Haulage																			
		Transportation Cost Non Steel Truck																			
		Transportation Cost Non Steel Drive																			
		Disposal Cost Non Steel																			
		Steel's Weight																			
		Truck's Capacity																			
		Haulage																			
		Transportation Cost Steel Truck																			
		Transportation Cost Steel Truck Drive																			
		Disposal Cost Steel																			
		Subtotal																			
		Equipment 's Disposal Cost																			
		Dismantling Cost																			40760
		Equipment 's Vol. Demolished																			
		Loading Costs																			
		Transport Costs																			
		Disposal Costs																			
		Subtotal																			
		Concrete Demolition																			
		Demolition Cost																			
		Concrete's Vol. Demolished																			
		Loading Cost																			
		Transportation Cost																			
		Disposal Costs																			
		Subtotal																			
		Concrete Demolition																			
		Demolition Cost																			
		Concrete's Vol. Demolished																			
		Loading Cost																			
		Transportation Cost																			
		Disposal Costs																			
		Subtotal																			
		Concrete Demolition																			
		Demolition Cost																			
		Concrete's Vol. Demolished																			
		Loading Cost																			
		Transportation Cost																			
		Disposal Costs																			
		Subtotal																			
		Total																			40760

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Div. of Oil, Gas & Mining

Demolition

Gob Hole	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Grading															
Backfill and rough grade															
D7N DS Series II (9-51) (2nd 2007)	11530	55.05	0.1	60.1	192.72	1	192.72	$/HR	842	CY	250	CY/HR	3.4	HR	655
Topsoil															
988G EROPS (9-34) (2nd2006) 2005	15505	77.35	0.1	57.85	239.84	1	239.84	$/HR	515	CY	220	CY/HR	2.3	HR	552
6X4 70,000lbs 12-18 CY (20-15) (2nd2006)	3795	41.9	0.1	45.65	115.46	2	230.92	$/HR					2.3	HR	531
D7N DS Series II (9-51) (2nd 2007)	11530	55.05	0.1	60.1	192.72	1	192.72	$/HR	515	CY	250	CY/HR	2.1	HR	405
Subtotal															2143

Earthwork

INCORPORATED

Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Main Site																			
	Pumphouse																			
	Gob Hole Vent																			
																				188315
																				5633
																				2461
	Pocking																			
		Excavation Bulk Bank 2 CY (322BL)	31 23 16 42 0260	1.54	/CY															
											340					CY		340	CY	
	Total																			196409

Reveg

RECEIVED
Div. of Oil, Gas & Mining

REPLACEMENT MAPS

MAP 1-0
PERMIT MAP

MAP 1-1
LOCATION MAP

MAP 2-1

REGIONAL SOIL MAP

MAP 3-1

VEGETATION MAP

MAP 3-4B

WILDLIFE MAP
DEER RANGE

MAP 3-4C

WILDLIFE MAP
ELK RANGE

MAP 3-4D

WILDLIFE MAP
ANTELOPE RANGE

MAP 4-1

LAND USE

MAP 5-2

SURFACE OWNERSHIP MAP

MAP 5-3

SUB-SURFACE OWNERSHIP MAP

MAP 5-4A

MINING PROJECTIONS

MAP 5-4B

MINING PROJECTIONS
EXTENDED RESERVES

MAP 5-7

SUBSIDENCE MAP

MAP 6-1

GEOLOGY MAP

MAP 6-2

STRUCTURE MAP

MAP 6-3

ISOPACH MAP

MAP 7-3

WATER RIGHTS

MAP 7-5

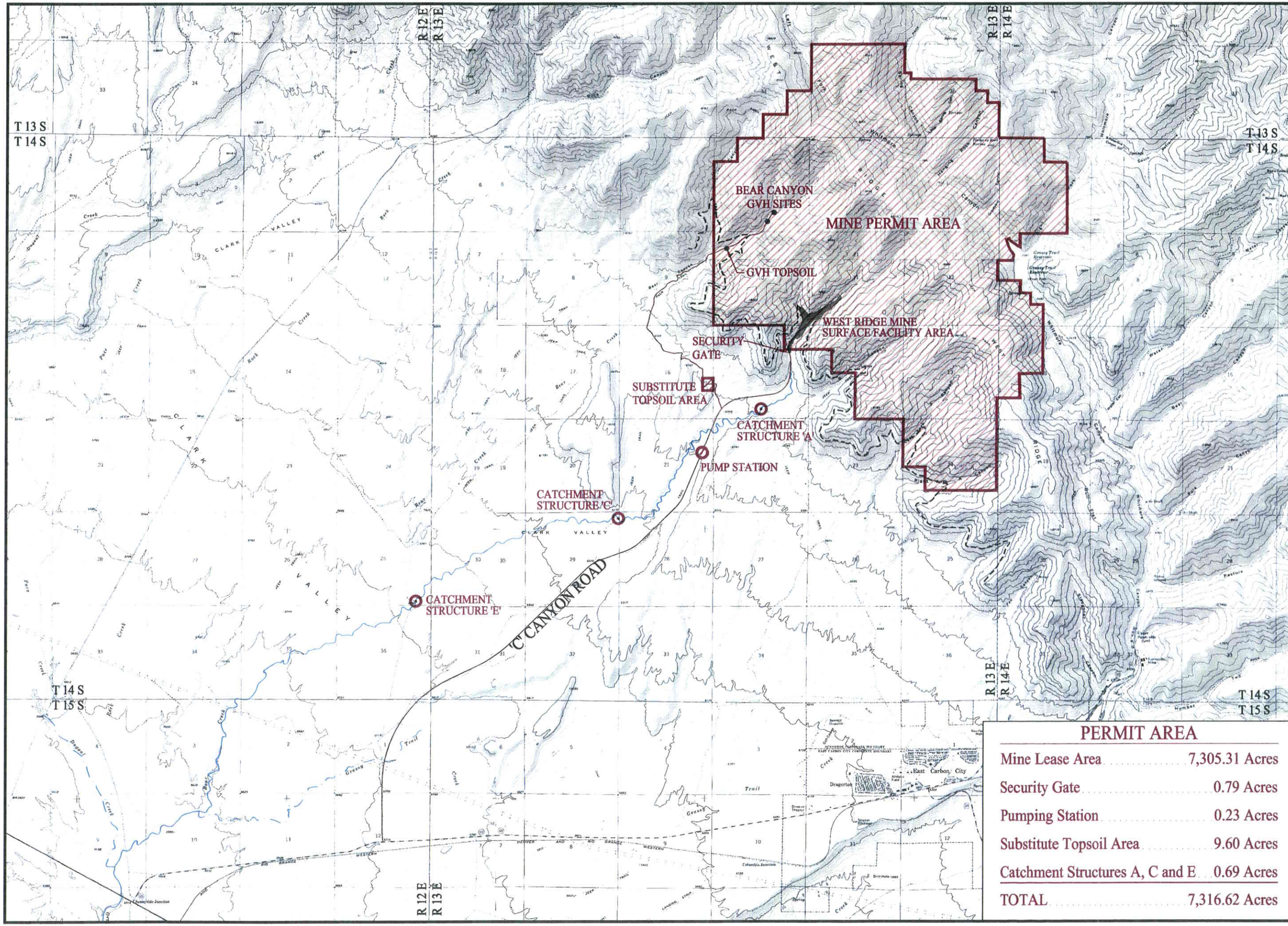
SEEP/SPRING MAP

MAP 7-6

HYDROLOGIC MONITORING MAP

MAP 7-7

OPERATIONAL MONITORING MAP



PERMIT AREA

Mine Lease Area	7,305.31 Acres
Security Gate	0.79 Acres
Pumping Station	0.23 Acres
Substitute Topsoil Area	9.60 Acres
Catchment Structures A, C and E	0.69 Acres
TOTAL	7,316.62 Acres

WEST RIDGE
RESOURCES, INC.

SCALE: 1"=5000'

I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs 4/1/11

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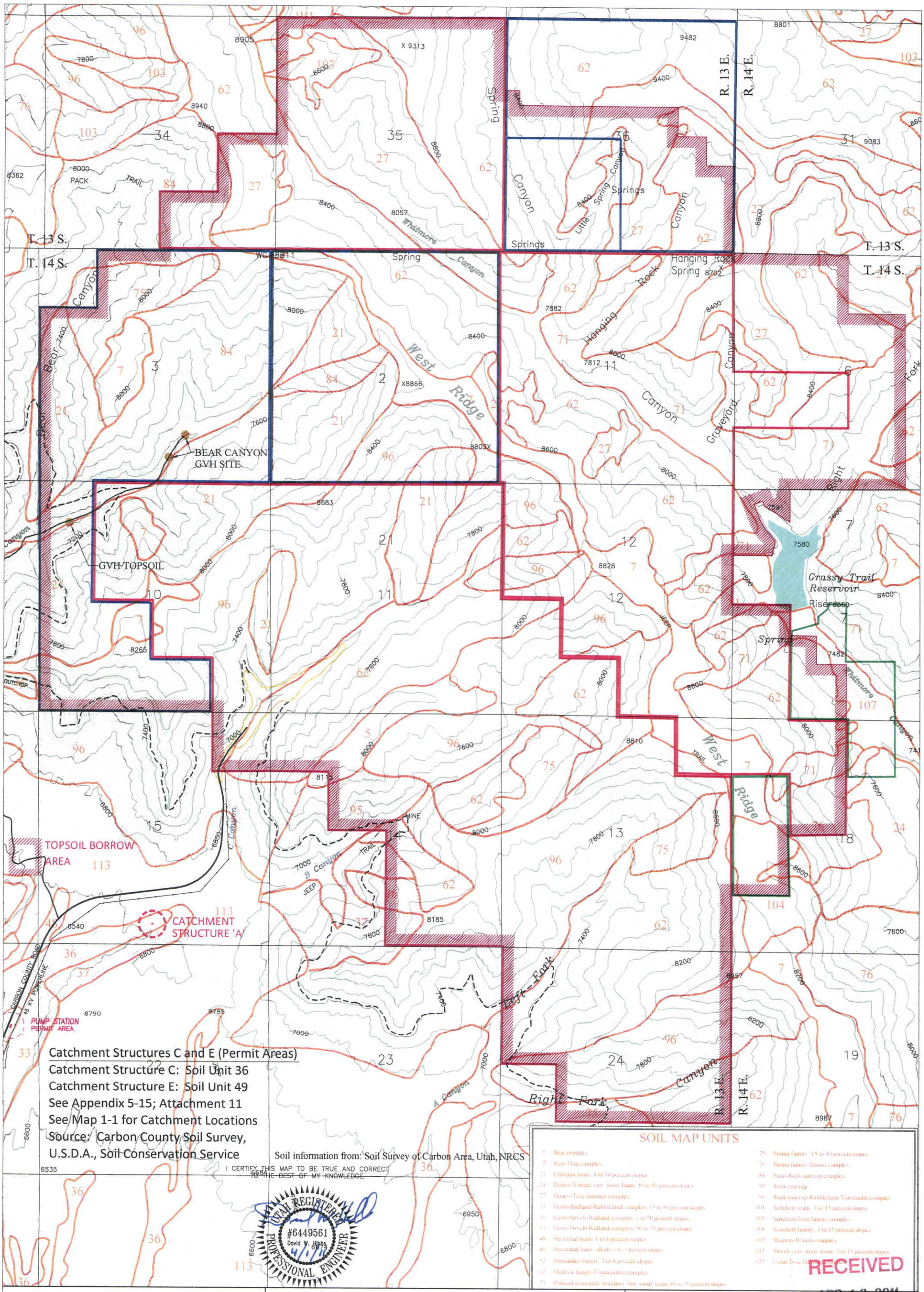
LEGEND:
Lease Areas
Surface Facility Area
GVH Site
Outcrop

N

WEST RIDGE MINE
Map 1-0, Permit Map
Map 1-1, Location Map

DATE: 4-01-11 REV: 11 ACAD REF: Maps 1-0 and 1-1 Rev 11



WEST RIDGE MINE
Map 2-1
Regional Soil Map

LEGEND:

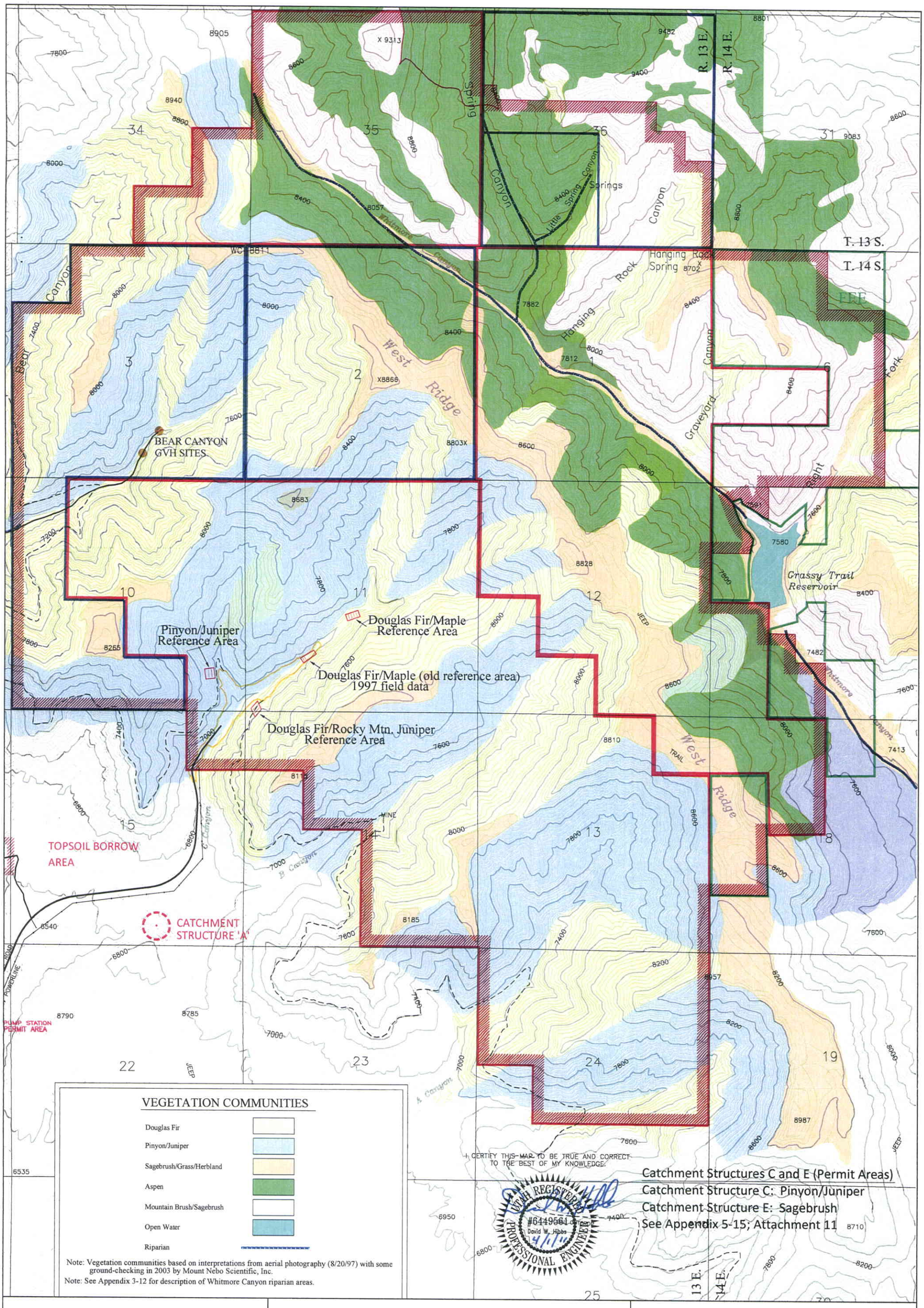
- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- Soil Mapping Boundary
- Soil Map Number (113)

N

WEST RIDGE RESOURCES, INC.

SCALE: 1"=2000'

DATE: 4-01-11 REV: 19 ACAD REF: MAP2-1 REGSOIL REV19



WEST RIDGE MINE
Map 3-1
General Vegetation Communities

LEGEND:
- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- Outcrop

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WEST RIDGE RESOURCES, INC.

SCALE: 1"=2000'

.TE: 4-01-11 REV: 23 ACAD REF: MAP3-1 GENVEG REV23

DS-C
(DEER, SUMMER
CRITICAL)

DS-C
(DEER, SUMMER
CRITICAL)

DS-C
(DEER, SUMMER
CRITICAL)

DW-H
(DEER, WINTER
HIGH PRIORITY)

DW-H
(DEER, WINTER
HIGH PRIORITY)

DW-C
(DEER, WINTER
CRITICAL)

TOPSOIL BORROW
AREA

CATCHMENT
STRUCTURE 'A'

PUMP STATION
PERMIT AREA

BEAR CANYON
GVH SITES

Crassy Trail
Reservoir

FEE

T. 13 S.
T. 14 S.
R. 13 E.
R. 14 E.

I CERTIFY THIS MAP TO BE TRUE AND CORRECT
TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED
#6449561
David W. Hibbs
PROFESSIONAL ENGINEER

Catchment Structures C and E (Permit Areas)
Catchment Structure C: Winter Range
Catchment Structure E: Unclassified
See Appendix 5-15, Attachment 11

Source: Utah Division of Wildlife Resources

WEST RIDGE MINE

Map 3-4B

Wildlife Map - Deer Range

LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- DW-C
- DW-H
- DS-C

RECEIVED
APR 12 2011
DIV. OF OIL, GAS & MINING

WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'

DATE: 4-01-11 REV: 19 ACAD REF: MAP3-4B DEER REV19

EY-H
(ELK, YEAR LONG
HIGH VALUE)

EW-H
(ELK, WINTER
HIGH VALUE)

EY-H
(ELK, YEAR LONG
HIGH VALUE)

EW-H
(ELK, WINTER
HIGH VALUE)

EY-H
(ELK, YEAR LONG
HIGH VALUE)

EW-H
(ELK, WINTER
HIGH VALUE)

EW-S
(ELK, WINTER
SUBSTANTIAL)

T. 13 S.
T. 14 S.
R. 13 E.
R. 14 E.

BEAR CANYON
GVH SITES

TOPSOIL BORROW
AREA

CATCHMENT
STRUCTURE 'A'

PUMP STATION
PERMIT AREA

FEE

Grassy Trail
Reservoir

West Ridge

Whitmore Canyon

Bear Canyon

B Canyon

C Canyon

A Canyon

PACK TRAIL

JEEP TRAIL

COAL OUTCROP

CARBON COUNTY ROAD

46 KV POWERLINE

Catchment Structures C and E (Permit Areas)
Catchment Structure C: Winter Range
Catchment Structure E: Winter Range
See Appendix 5-15, Attachment 11

Source: Utah Division of Wildlife Resources

I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs 4/1/11

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DIV. OF OIL, GAS & MINING

WEST RIDGE RESOURCES, INC.

WEST RIDGE MINE

Map 3-4C

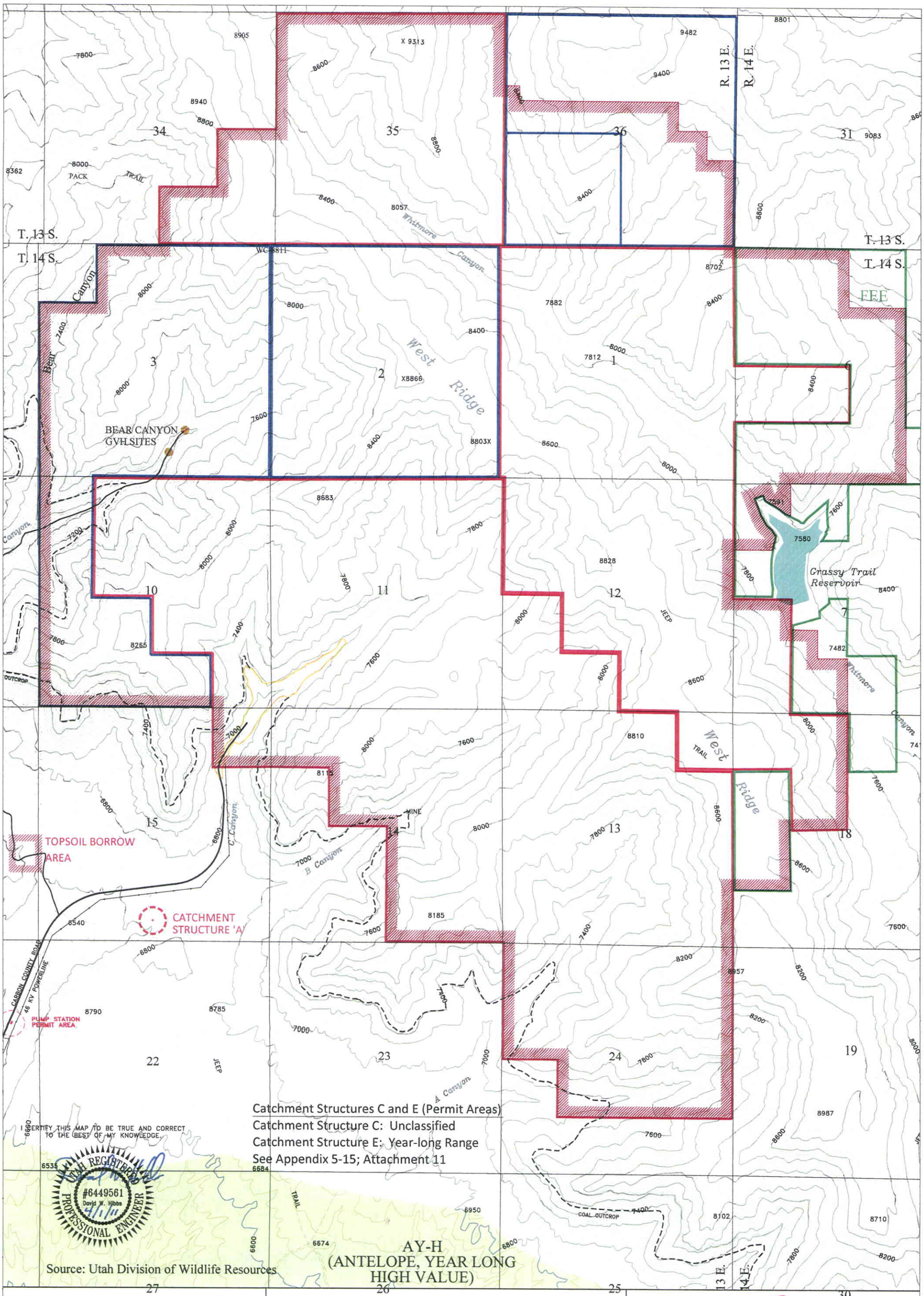
Wildlife Map - Elk Range

Permit Boundary
Federal Lease
State Lease
Penta Creek Fee
Surface Facility Area
GVH Site
EW-S
EY-H
EW-H

N

SCALE: 1"=2000'

DATE: 4-01-11 REV: 19 ACAD REF: MAP 3-4C ELK REV19



WEST RIDGE MINE

Map 3-4D

Wildlife Map - Antelope Range

LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- AY-H

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WEST RIDGE RESOURCES, INC.

SCALE: 1"=2000'

DATE: 4-01-11 REV: 19 ACAD REF: MAP3-4D ANTELOPE REV19

COW CANYON ALLOTMENT

ROCK CANYON ALLOTMENT

SHEEP CANYON ALLOTMENT

PRIVATE CABIN

NON-ALLOTTED

SHEEP CANYON ALTMT

BEAR CANYON GVH SITES

GVH TOPSOIL

BEAR CANYON ALLOTMENT

Grassy Trail Reservoir

TOPSOIL BORROW AREA

CATCHMENT STRUCTURE 'A'

PUMP STATION PERMIT AREA

Catchment Structures C and E (Permit Areas)
Catchment Structure C: Mud Springs Allotment
Catchment Structure E: Mud Springs Allotment
See Appendix 5-15; Attachment 11

MUD SPRINGS ALLOTMENT

GRASSY TRAIL ALLOTMENT

I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs 4/11/11

SYMBOL LEGEND

Extent of Water Right	•	Fence	
Impoundment	△	Spring	
		Locked Gate	

Refer to Map 7-3 for State Appropriated Water Rights

WEST RIDGE MINE

Map 4-1

Existing Land Use

LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- Grazing Allotment Boundary

WEST RIDGE RESOURCES, INC.

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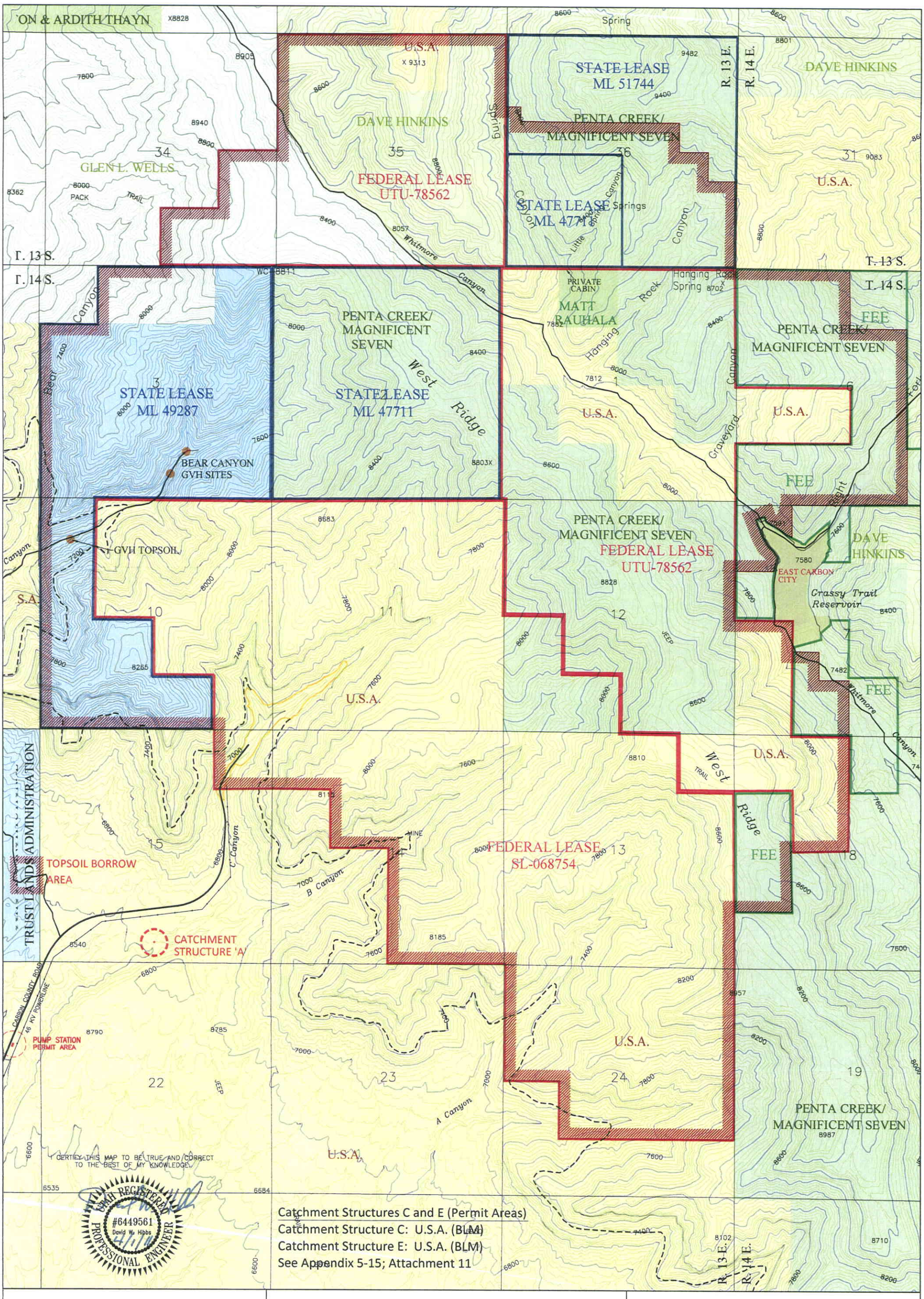
SCALE: 1"=2000'

DATE: 4-01-11 REV: 20 ACAD REF: MAP4-1 LANDUSE REV20



WEST RIDGE MINE

Map 5-2

Surface Ownership Map

LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- Outcrop
- School Trust Land (SITLA)
- Penta Creek/ Magnificent Seven
- U.S.A. (BLM)
- Dave Hinkins
- Glen L. Wells
- Matt Rauhala
- Milton & Ardith Thayn
- East Carbon City

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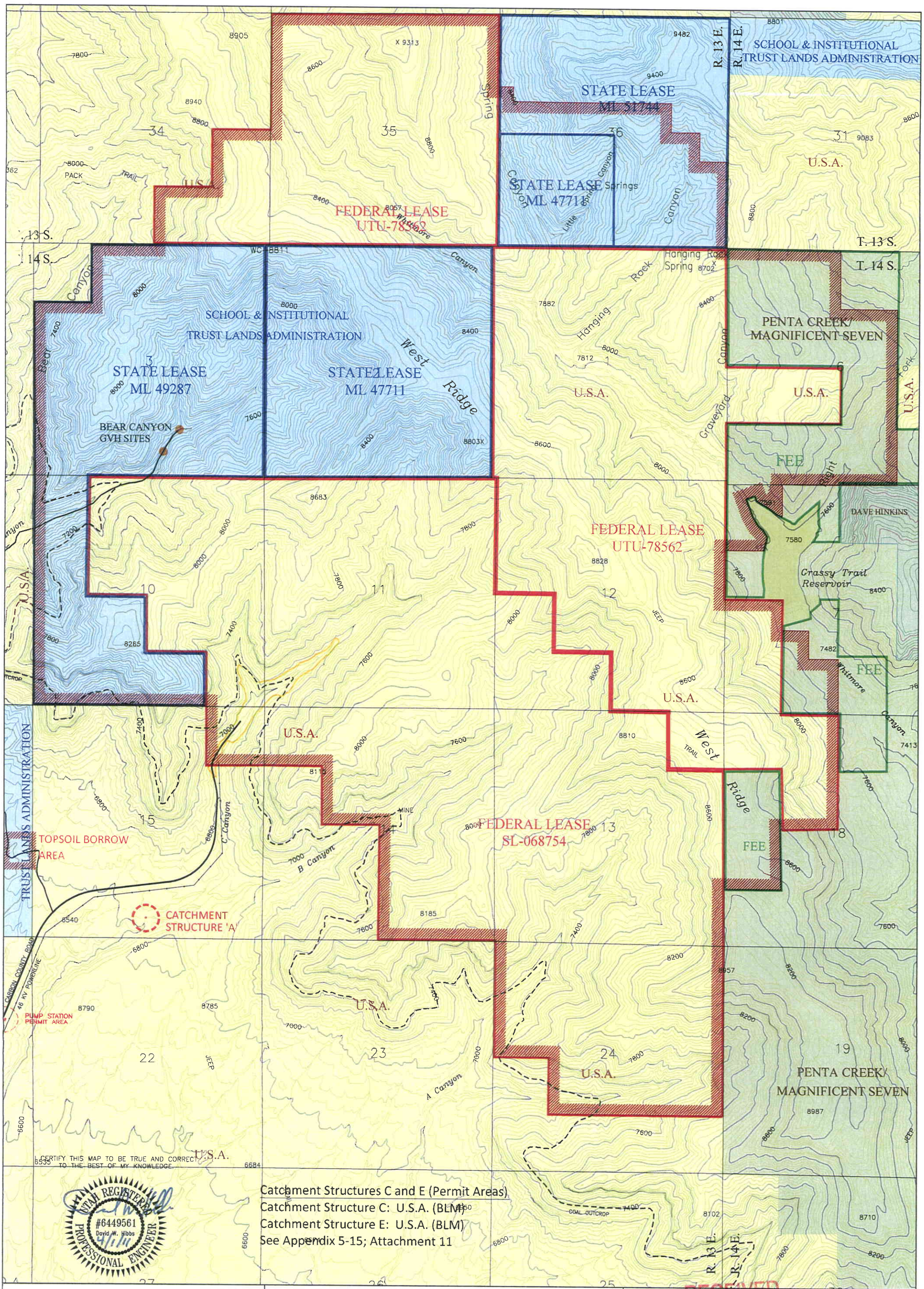
WEST RIDGE RESOURCES, INC.

SCALE: 1"=2000'

DATE: 4-01-11 REV: 20 ACAD REF: MAP5-2 SURFOWN REV20



WEST RIDGE MINE

Map 5-3

Sub-surface Ownership Map

LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- Outcrop
- School Trust Lands (SITLA)
- Penta Creek/ Magnificent Seven
- U.S.A. (BLM)
- Dave Hinkins
- East Carbon City

RECEIVED APR 12 2011 DIV. OF OIL, GAS & MINING

WEST RIDGE RESOURCES, INC.

SCALE: 1"=2000'

DATE: 4-01-11 REV: 20 ACAD REF: MAP5-3 SUBSURFOWNREV20

STATE LEASE
ML 51744

STATE LEASE
ML 47711

FEDERAL LEASE
UTU-78562

Potential Future Fault Zone

FEE

STATE LEASE
ML 49287

STATE LEASE
ML 47711

Whitmore Canyon

BEAR CANYON
GVH SITES

FEE

Potential Fracture/Fault Zone

Grassy Trail
Reservoir

FEDERAL LEASE
UTU-78562

Fault

FEE

FEE

FEDERAL LEASE
SL-068734

Fault

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

COUNTY ROAD

46 KV POWERLINE

STATION
PIT AREA

I CERTIFY THIS MAP TO BE TRUE AND CORRECT
TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED
#6449561
David W. Hibbs
4/1/11
PROFESSIONAL ENGINEER

Strike

13%

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

YEAR KEY:

2011
2012
2013
2014
2015

Mined Area

NOTE:
Mine projections are subject to change depending on conditions encountered in the underground mine workings.
Actual mine works are shown as of January 23, 2011.
Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions.
No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements.
West Ridge Resources acknowledges that permission to mine within the permit boundary does not imply permission to mine beyond the permit boundary.

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APR 12 2011
DIV. OF OIL, GAS & MINING

WEST RIDGE MINE

Map 5-4A

Mining Projections

LEGEND:
Permit Boundary
Federal Lease
State Lease
Penta Creek Fee
Surface Facility Area
GVH Site
Outcrop

N

WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'

.TE: 4-01-11 REV: 19 ACAD REF: WRTIMEA REV19

Note: Economic minability of this area to be determined upon development of 1st Left entries and other future evaluation of the area.

STATE LEASE ML 51744

STATE LEASE ML 47711

FEDERAL LEASE UTU-78562

STATE LEASE ML 49287

STATE LEASE ML 47711

BEAR CANYON GVH SITES

FEDERAL LEASE UTU-78562

FEDERAL LEASE UL-068754

FEE

FEE

FEE

FEE

Grassy Trail Reservoir

Whitmore Canyon

Potential Future Fault Zone

Fault

C-Canyon

B-Canyon

A-Canyon

Strike 13%

Kaiser Steel Corp. Sunnyside Mine Workings (Inactive)

Kaiser Steel Corp. Sunnyside Mine Workings (Inactive)

STATION
IT AREA

NOTE:
Mine projections and barrier pillar location(s) are subject to change depending on conditions encountered in the underground mine workings.
Actual mine works are shown as of January 23, 2011.
Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions. No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements.
West Ridge Resources acknowledges that permission to mine within the permit boundary does not imply permission to mine beyond the permit boundary.

2011
2012
2013
2014
2015
Mined Area

I CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs 4/1/11

RECEIVED APR 12 2011 DIV. OF OIL, GAS & MINING

WEST RIDGE MINE
Map 5-4B
Mining Projections (Extended Reserves)

DATE: 4-01-11 REV: 20 ACAD REF: WRTIMEB REV20

LEGEND:
Permit Boundary
Federal Lease
State Lease (ML 49287)
Penta Creek Fee
Surface Facility Area
GVH Site
Outcrop

N

WEST RIDGE RESOURCES, INC.

SCALE: 1"=2000'

STATE LEASE
ML 51744

STATE LEASE
ML 47711-OBA

FEDERAL LEASE
UTU-78562

STATE LEASE
ML 49287

STATE LEASE
ML 47711-OBA

FEE

FEE

FEE

FEE

FEDERAL LEASE
UTU-78562

FEDERAL LEASE
SL-068754

BEAR CANYON
GVH SITES

PRIVATE
CABIN

Whitmore Canyon

Grassy Trail
Reservoir

GTR 1

GTR 2

#4

#7

#6

#173

#77

#22

97-B

#9

#11

#10

#12

#13

W. Q SEC 13

C–Canyon

B–Canyon

A–Canyon

Strike

13%

2000' COVER

2500' COVER

1000' COVER

1500' COVER

500' COVER

CARBON COUNTY ROAD

46 KV POWERLINE

PUMP STATION
PERMIT AREA

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

NOTE:

Mine projections are subject to change depending on conditions encountered in the underground mine workings.

Actual mine works are shown as of January 23, 2011.

Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions.

No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements.

West Ridge Resources acknowledges that permission to mine within the permit boundary does not imply permission to mine beyond the permit boundary.

Longwall panels will be reconfigured as needed to prevent unauthorized subsidence beyond the permit area if extended reserves are not acquired in the future.

Additional control points will be added as mine advances.

ERTIFY THIS MAP TO BE TRUE AND CORRECT
TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED
#6449561
David W. Hibbs
4/1/11
PROFESSIONAL ENGINEER

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WEST RIDGE MINE

Map 5-7

Subsidence Map

LEGEND:

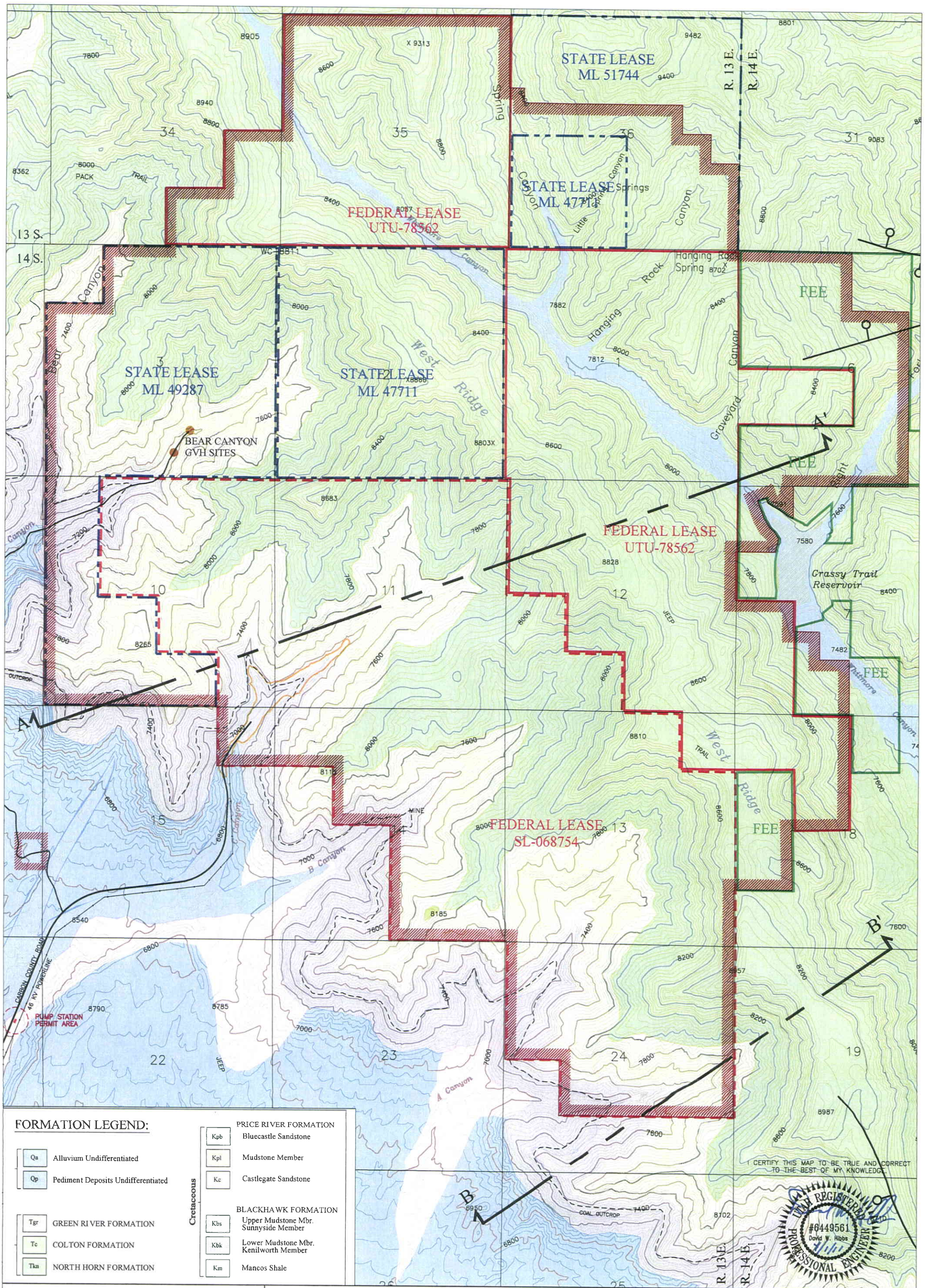
- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- Outcrop
- Cover
- Drill Hole
- Possible Subsidence Area
- Existing Photogammetric Control Points
- Future Photogammetric Control Points

N

WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'

TE: 4-01-11 REV: 21 ACAD REF: MAP5-7A SUBSIDE REV21



WEST RIDGE MINE

Map 6-1

Regional Geology Map

DATE: 4-01-11 REV: 17 ACAD REF: MAP6-1 GEOLOGY REV17

LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- Fault

N

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WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'

STATE LEASE
ML 51744

STATE LEASE
ML 47711

FEDERAL LEASE
UTU-78562

STATE LEASE
ML 49287

STATE LEASE
ML 47711

FEE

FEE

FEE

FEE

FEDERAL LEASE
UTU-78562

FEDERAL LEASE
SL-068754

Grassy Trail Reservoir

Whitmore Canyon

Potential Fracture/Fault Zone

Fault

BEAR CANYON GVH SITES

C-Canyon

B-Canyon

A-Canyon

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

PUMP STATION PERMIT AREA

46 KV POWERLINE

Strike

13%

NOTE:
Mine projections are subject to change depending on conditions encountered in the underground mine workings.
Actual mine works are shown as of January 23, 2011.
Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions.
No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements.
West Ridge Resources acknowledges that permission to mine within the permit boundary does not imply permission to mine beyond the permit boundary.

CERTIFY THIS MAP TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED PROFESSIONAL ENGINEER #6449561 David W. Hibbs

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WEST RIDGE MINE

Map 6-2

Coal Seam Structure Map

LEGEND:
- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- Outcrop
- Structure Contour (Base of Lower Sunnyside Seam)
- Drill Hole/Channel Samples (S-7)

N

WEST RIDGE RESOURCES, INC.

SCALE: 1"=2000'

TE: 4-01-11 REV: 20 ACAD REF: MAP6-2 STRUCTURE REV20

FEDERAL LEASE
UTU-78562

STATE LEASE
ML 51744

STATE LEASE
ML 47711

STATE LEASE
ML 49287

STATE LEASE
ML 47711

BEAR CANYON
GVH SITES

FEDERAL LEASE
UTU-78562

FEDERAL LEASE
SL-068754

FEE

FEE

FEE

Grassy Trail
Reservoir

Whitmore Canyon

Potential Fracture/Fault Zone

Fault

C-Canyon

B-Canyon

A-Canyon

Strike
13%

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

PUMP STATION
PERMIT AREA

NOTE:
Mine projections are subject to change depending on conditions encountered in the underground mine workings.
Actual mine works are shown as of January 23, 2011.
Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions.
No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements.
West Ridge Resources acknowledges that permission to mine within the permit boundary does not imply permission to mine beyond the permit boundary.

ERTIFY THIS MAP TO BE TRUE AND CORRECT
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4/1/11

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WEST RIDGE MINE

Map 6-3

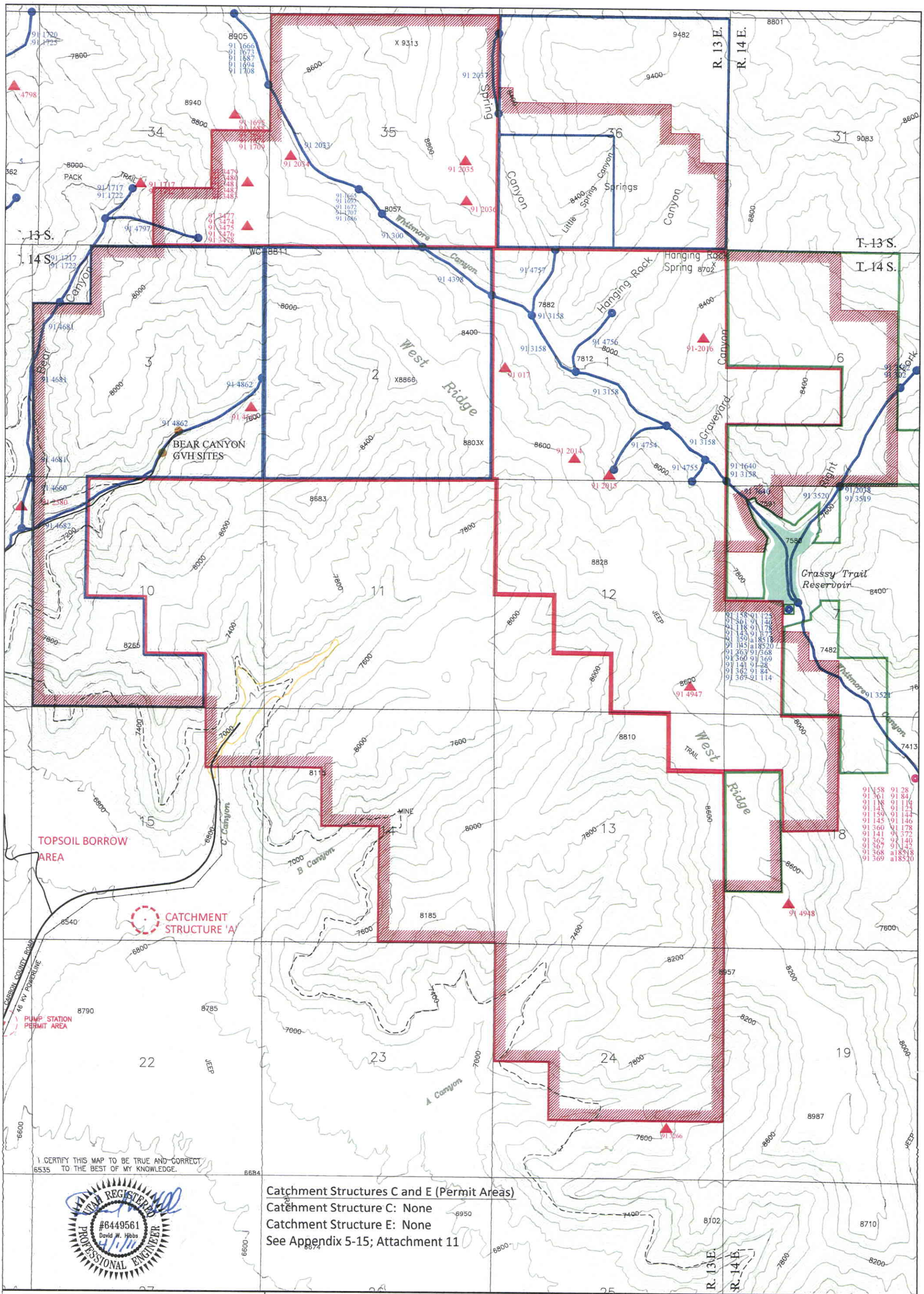
Lower Sunnyside Coal Seam Isopach Map

TE: 4-01-11 REV: 20 ACAD REF: MAP6-3 ISOPACH REV20

LEGEND:
- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site
- Outcrop
- Coal Isopachs
- Drill Hole/Channel Samples

WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'



Catchment Structures C and E (Permit Areas)
Catchment Structure C: None
Catchment Structure E: None
See Appendix 5-15; Attachment 11

WEST RIDGE MINE

Map 7-3

Water Rights

LEGEND:
- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Water Right:
  - Point to Point
  - Spring
- Ground Water Right
- Municipal Water System Intake

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SCALE: 1"=2000'

TE: 4-01-11 REV: 20 ACAD REF: MAP7-3 WATERIGHTS REV20

June 1986
Seep and Spring
Inventory Area

October 1985 Seep and Spring
Inventory Area

November 1999
Inventory Area

August 2010
Inventory Area

Grassy Trail
Reservoir

BEAR CANYON
GVH SITES

TOPSOIL BORROW
AREA

CATCHMENT
STRUCTURE 'A'

Catchment Structures C and E (Permit Areas)
Catchment Structure C: None
Catchment Structure E: None
See Appendix 5-15; Attachment 11

I CERTIFY THIS MAP TO BE TRUE AND CORRECT
TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED
#6449561
David W. Hibbs
PROFESSIONAL ENGINEER

SEEP AND SPRING LEGEND

	Seep and Spring Inventory Boundary
F-17	Location of Seep or Spring, October 1985
S-208	Location of Seep or Spring, June 1986
△	Spring Monitoring Station (1985-1989)
S-208	Location of Seep or Spring, Nov.1999

WEST RIDGE MINE

Map 7-5

Seep/Spring Survey Map

LEGEND:

- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site

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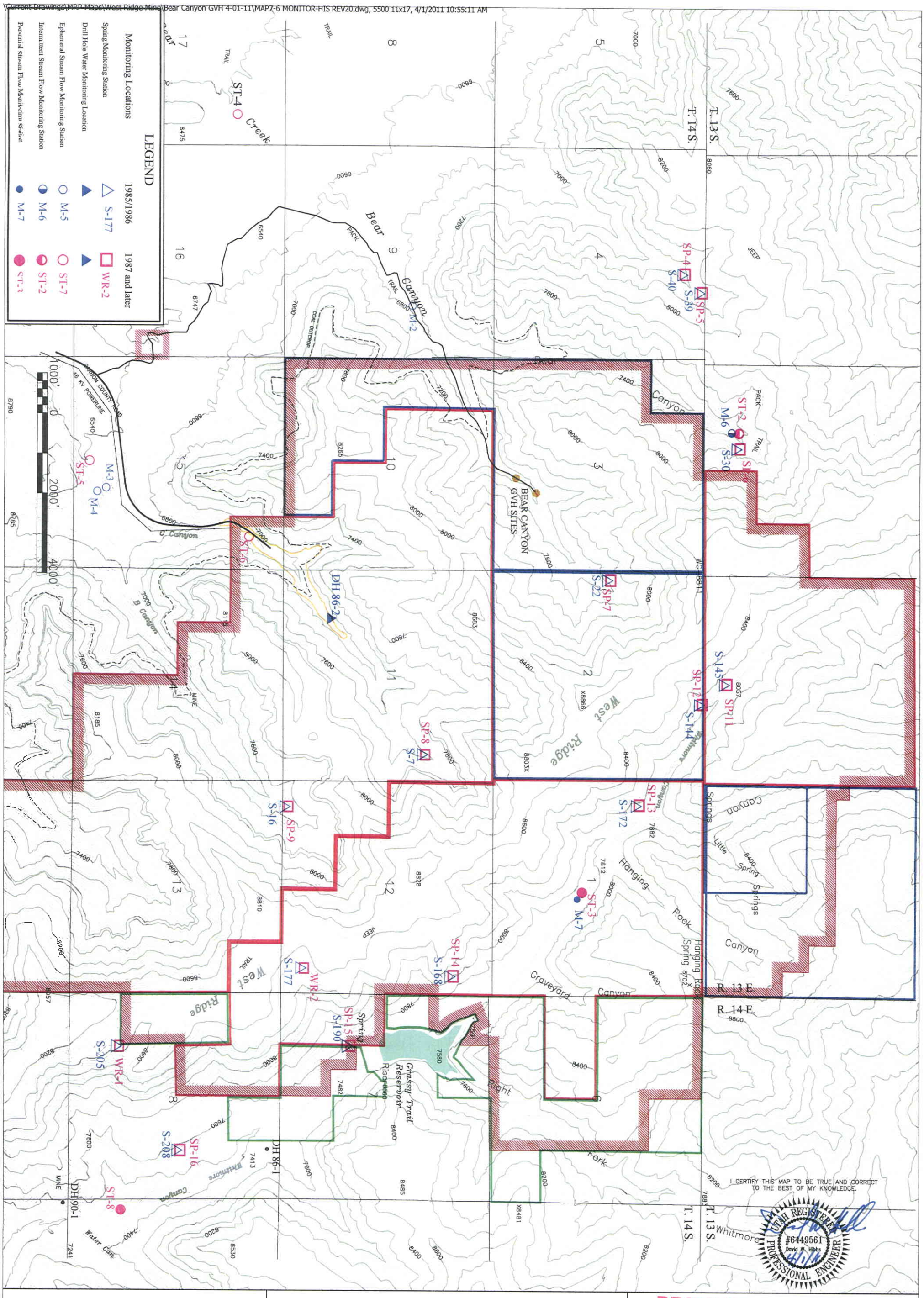
SCALE: 1"=2000'

DATE: 4-01-11 REV: 20 ACAD REF: MAP7-5 SEEP-SPRING REV20



WEST RIDGE MINE
Map 7-6
Hydrologic Monitoring Map
(Historical Monitoring Locations)

DATE: 4-01-11 REV: 20 ACAD REF: MAP7-6 MONITOR-HIS REV20

LEGEND:
- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site

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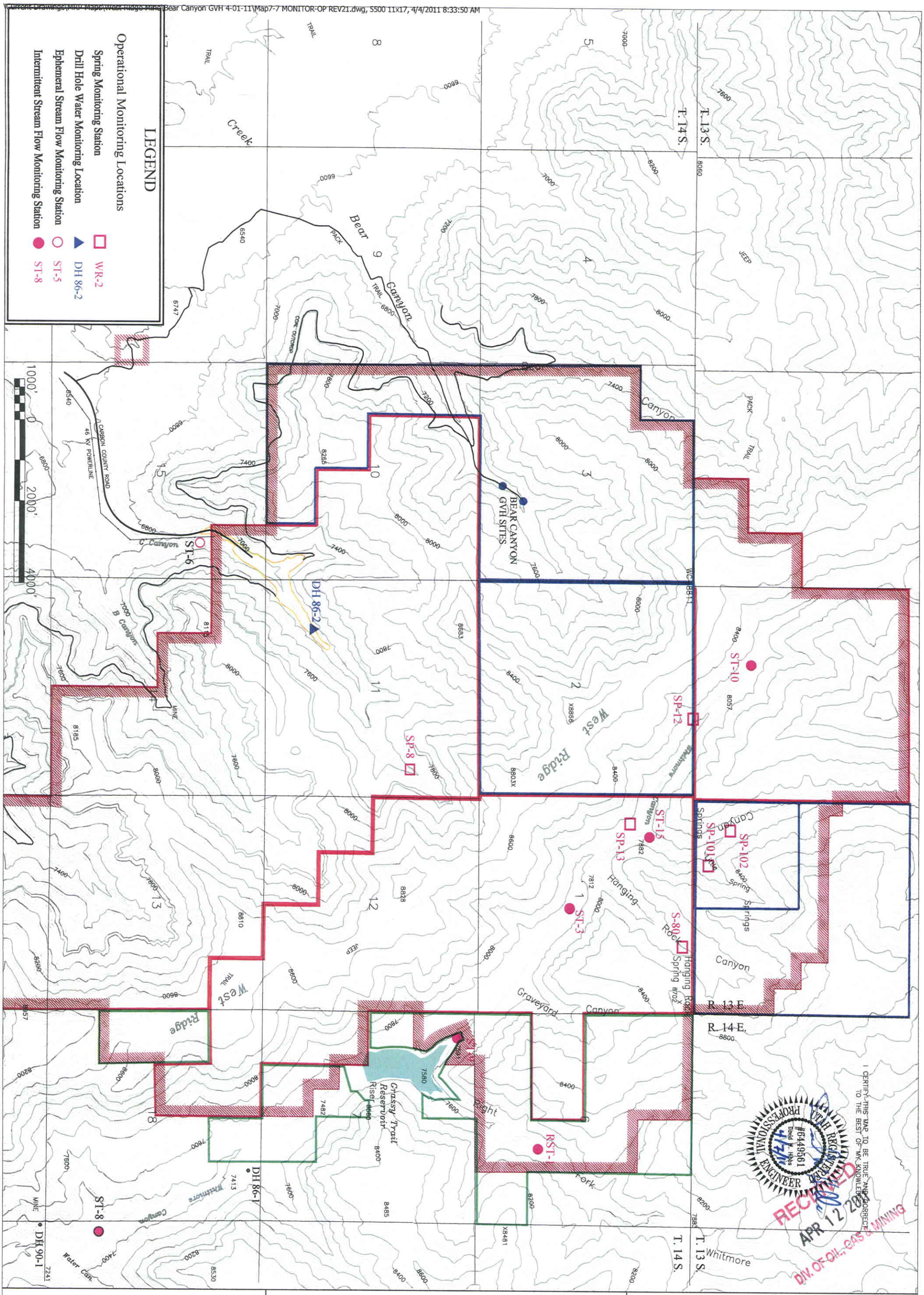
RESOURCES, INC.

SCALE: 1"=2000'



WEST RIDGE MINE
Map 7-7
Operational Monitoring Locations

LEGEND:
- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- GVH Site

WEST RIDGE
RESOURCES, INC.

SCALE: AS SHOWN

DATE: 4-01-11 REV: 21 ACAD REF: MAP7-7 MONITOR-OP REV21