

RECEIVED

MAY 30 2012

MINERALS & MINING PROGRAM

Robert Larson
12140 Tara Rd
Custer SD 57730

Patrick Dillon
P.O. Box 611
Custer SD 57730

DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
PMB 200
Joe Foss Building
523 E. Capitol
Pierre, SD 57501-3182

5-9-2012 Final draft 5/29/2012

Eric Holm, et.al

1. corrected letter sent 4-18-12

2. let it be noted the date 1-30-12. This is the response we received after contacting the Custer County planning office sometime in the middle of Dec-2011. Please note the Application date 4-2-12.

When the application was submitted the best we could do to prevent any more of our process season being lost to waiting on replies. We explained to the planner whose hand written response and signature is on the 1-30-12 letter. It states we explained the application, the applied land in phase 1 appeared to be out of the floodplain. There will be no permanent structures built. And the wastewater did not apply due to the use of portable toilets. Now we have reestablished contact with that person, who is confused, due to the fact the grade permit in his realm deals with the road approach, the wastewater deals with septic systems, and he has stated we complied with his requirements to obtain permits as it becomes relevant to his department once the project is permitted as a mine permit.

I have been in contact with a County Commissioner on the land use subject. Apparently Custer County has no land use protocol for mines. At any rate the commissioner agenda is including a visit from Grace representatives to finalize the matter, with the road dept. as well. In so many words, I have been advised it is a waste of their time. We will present the letter from Eric Holm as an exhibit requiring their attention.

Please find exhibit 30 as the county planner letter.

3. Please find letters of receipt. Exhibit 1. Exhibit 2.

Subscript topic 3. New Article MP7.

4. SDCL 45-6B-32 (4)

Adverse impact to the well will be prevented by the use of carefully constructed lined ponds and the immediate backfilling of the excavation that comes to close proximity to the well fence boundary. The excavation at this point will also fall at a 45 degree angle to the exposed bedrock. Leaving 6ft of undisturbed ground mine side of fence; with the aggregate at an estimated 10ft depth at this site, the distance from the fenced boundary to bedrock will be around 16ft. The excavated alluvial will be reduced to -3 at the excavation area, ie. Grizzled. The -3 will be transferred to the wash plant. The +3 will be pushed right back into the excavation. The grade will be made stable by reintroducing the largest boulders to the bedden, then filling with the next size down mixed with the -3 and -3/4 from the wash plant off-bear. The action of the dozer blending all this together with some of the sands off-bear will compact the aggregate as needed. The clays obtained from the mechanical and static water clarifiers will be spread out after the base is compacted. Spread to a depth of 4 to 6 inches then the coarser fines salvaged from the wash plant will be amended and laid to a depth of 4 inches. The area will be then seeded and encouraged daily to produce cover. If it becomes apparent the cover will not take right off the area will be mulched. Most of the area close to the well is a very slight grade if not flat. No depressions are intended to be left. Prior to the release of the bond if the land has settled and depressions have occurred the decision will have to be made by DENR and USFS to have the depressions filled. The entire area is outlined with a berm 3ft in height at the beginning of site prep. This berm is intended to be left in place until the ground cover has reached an acceptable level. The purpose of the berm is to keep the extreme unexpected flood from entering the excavated and rehabilitated area, and to contain the drainage to the work area. Prior to bond release this berm will be dismantled. This will be the source for the material to fill an unexpected depression that may be determined to need adjustment.

Now the bridge..what bridge? there is no bridge, it is a culvert, and for the north culvert the excavation area is separated from the culvert area by the bermed area. The south culvert is the same situation with more distance involved.

5. SDCL 45-6B-33 (4 and 6)

As written in the permit application 46-6b-41 , and denr reply 3/28/2012 topic 8,4, and submitted Article 22, I had hoped to explain my lifetime observation of the water habit in this drainage. The city well if cased properly to eliminate the contamination of groundwater to the municipal well, as the well log article exhibit indicates the well is cased to either 140ft or 240ft. This indicates the well would obtain its supply from a depth greater than the 10 to 4 ft cover of alluvial noted on the geological cross section and by obvious observation on the ground. The rainfall exhibit indicates there is not sufficient rainfall to fill this 10ft to 4ft alluvial deposit with water to subsequently leak into the 140ft depth to provide a flow of 125,000 gallons of water per day to supply the city. The 5 acre area being sought for permit is on a bench above the live waters of the creek. This is evident by the lack of water in the numerous holes that had been scoured out by the 1930's dredge, or more than likely a dozer working with the dredge to locate high pay areas. The bottom of the holes currently set less than 2 ft above bedrock, they show no indication of holding water that is in the water table that connects to the creek flow.

To mitigate adverse impacts great care will be taken to build the holding ponds for the

recirculating system that is used to wash the aggregate.

In addition the plan is made to be concurrent which will not allow a large area of ground to be exposed. The alluvial once dug will be grizzled at the point of excavation and the base built back according to permit app. article so n so, and the trommel fines amended and seeded to quickly establish a stable grade that closely resembles the original grade.

Other close wells in the area that lay on the same elevation have already been compromised by the drilling of the city well. As I remember there may have been a lawsuit and the well owners put on the city service. Now I interject; the homes and court were not put on sewer connection, will the mine operation pump nitrates into the aquifer day in day out...forever? no it will not.

So, on to the topic of the creek rehabilitation; I had made input that the creek, well, and hydrology of this fraction of the french creek drainage would benefit from the manufacture of ponds in the channel. The ponds would allow for a storage of sorts for the well, the ponds would allow for the nitrate ppm to dissolve into a larger body of water, the ponds would allow for some siltation control on this fraction. Now I'm a can do guy, yes I'm not as procedure smart as some. But can't do won't do any of this and I felt my input was immediately dismissed as coming from not part of the group. We are offering the labor, our reward is the mineral wealth, the community has a lot of lasting reward that can come from the completion of Phase 2. Phase 1 is necessary to us to gain operating capital, and the benefit to the value of the residences in the immediate area will be gained at the end of phase 1 by the elimination of the spoil piles and pits that currently exist.

Other wells in the area lay in another elevation that is higher in the precambrian elevation. This should address whether the proposed operation and the reconstructed creek channel will result in the long term loss or long term reduction in productivity to the wells in the area. With the help of denr, usfs, army corp of eng, the opposite will be true and the area made more productive, providing it still rains on bear mountain.

The reason scenic impacts were addressed as socioeconomic impacts is the fact that people today somehow feel a need to impose the way they view things with no concern as to the other person's rights. The way we view things; We surveyed the land for mineral deposit and for the purpose of defining the boundary. We made the required filing fee to the BLM to validate the holders of the mine claim. We complete the required amount of work to the claim to hold the claim, as required by the mining law of 1872. This law gives rights to claim holders. This law was also intended to be made in a manner that a person of a fifth or eighth grade education level could file a claim without the need for an educated land or mineral surveyor. The law at that time also sought to protect the individual claim holder from larger more lawyered entities. Catch phrases: "If its not grown it is mined" "Small business is the growth engine of America" . I wonder, do we as claim holders have an advocate?

Time and time again I hear comments from people that drive by creating a lot of dust for Mr. Doyle every day, that they don't want to look at the disturbance the mine may create on the drive to their nitrate expelling home somewhere upstream. Most divulge this disgust after gleaning from me as much information as they can about the value of the deposit and how to file a claim. To save them the trouble of looking to the claim on the way I suggest the living fence, this will please Mr Doyle as well. Portions of the fence will be removed upon completion. This addresses the socio'.

We do not project this operation will employ more than two to four (our wives own everything we do, and work as wage earners as well) this will not impact housing, mercantile supply, utilities, or emergency services.

Reference to sdcl 45-6b-2 in the denr reply 3/28/2012 topic 8,6 is a typo in error. the correct reference will be 45-6b-33.2.

This statute I read to exclude a small mine from the task of a study, any information submitted on this topic is a courtesy. The definition set in 45-6B-53 applies. Is the intent of this law to delineate a difference between small terra impact and large terra impact. Here I would suggest that a small mine will impact a small acreage with the use of earthmoving machines. in most cases this difference between the pick and shovel, non permitted activity and the small mine is a case of the state attempting to condemn a working man to a pain-full retirement by restricting the use of small, modern day techniques and equipment by extensive use of regulatory powers.

6. Honestly I am at a loss as to what you want me to define. You have visited the site, we have provided you with a digital reference filmed of the area. We have written an application with all kinds of descriptions and ways to deal with it. Are you looking for a statement of compaction? If this is the case I would suggest the dozer going back and forth over the backfill to level it will provide enough compaction. The mix of the clays back into the soils will provide for a more stable soil. Do you want ½ inch material mixed into the soils as well?

The top-soil replacement material will be amended with coarse organic material, mixed with an amount of clay, as well as fertilizer. The guide set in Article 18 states that top-soil treated in this fashion will decrease the chance of erosion. At present the soils located to harvest for top-soiling are not highly erodible.

In Phase 1 the area on the perimeter will be bermed all around the 5 acre area to a height of 3ft. Of course the crest of the berm will angle down to the ground, a stable angle of 32 degrees is general practice for a temporary structured grade. The excavation will approach the berm leaving a 45 degree angle from bedrock to the base of the berm. the excavated ground ranges from 4 to 6ft in depth on the north and west to 12ft in depth on the south. The excavated area is filled back with the overs and...this is explained in topic 5, this reply. The minerals extracted account for approx 15% of the alluvial. The grade returned to original height would mandate this 15% reduction in fill will end up making the south side short. This is also very conveniently where a temporary diversion channel could be placed for Phase 2. When this slope is contoured for intermediate reclamation the grade will be 25 degrees on both sides of the temporary channel. If Phase 2 is not realized then the mound that sits closest to the creek will be blended into the grade left from Phase 1. At the end of Phase 2 the mound will be blended as well to leave a final grade against the creek some 15 degrees or so. This grade will be constructed with the BMP articles submitted in the permit app pertaining to wattle construction and erosion control techniques.

Also ref Article MP 11.

The grades will be stable due to the construction of the coarsest boulder at the bedden and increasingly smaller rap filling to the top. The whole slope then covered with the cobble loam, the creek is going to wash this 25 degree grade and it doesn't matter, at high flood levels, any cover

put over the boulder base is going down stream. The cover at the top will most likely stay.

There will be a slight berm some 1ft or so in height left on the perimeter of the final reclaimed grade. This will be constructed to retard water flow from the gradual grade extending from the well to the 15 degree slope into the creek. A silt fence will be placed 1/2 way down the 15 degree grade upon completion of final reclamation. The silt fence will be inspected 3 times per year, repaired as needed, then removed after six years of service. The collected stuff at the base will be evaluated for content, the brush removed and the soils raked out to blend into the established cover.

No depressions to accumulate water will be left during final reclamation and grading.

7. Please find enclosed letter Article 25

Upon your visit here we can select the meadow that we suggest and you choose. Use valders on west side of creek. I like to point out that excavation up the road. It has been grown in and the vicinity to well # 10 is a reference to precedent.

8. I believe in the permit application the need for amendment and fertilization was addressed. What is not known at this time is how much. I will also add this will not be known until some material for this use is accumulated for testing.

An estimate: using the Gold Bug experience; By volume, 2% is boulder, 5% is +3", -18", 58% is -3", +1/4", 33% is -1/4", 2% is clays. So using this guide be it absolutely right or not, 5 acres X 43560 X average depth of 8 ft; = 1742400 cu ft. X 35% = 609840 cu ft of fines available. 50% of this will be mixed in with the backfill to cushion the voids between the boulders and present a more stable base. That leaves 304920 cu ft of fines for topsoil work. $304920 / 1742400 = .175$ X 12 = 2.1 inches. In producing a more stable cobbly type material the washed -3/4" +1/4" can be mixed in when producing the topsoil an off-hand estimate would bring the total to 3", 5" if the sands are not mixed into the base fill.

There is approx. 1 acre of a topsoil on the SW corner of the proposed 5 acre area, 2' deep. There should be adequate soil available for cover.

When digging of materials the very large cobble will stay in hole while the other will be grizzlied down to runnable size, the cobble not ran will be placed back in hole. Any wood or other materials will be roto screened from the stock. The wood will be piled for burning during fire permit time. Old scrap metal or non burnables will be hauled off to be deposited of.

9. a. Please find submitted map. MP 2 Pages 1,2,3.
- b. Please find submitted map. MP 12
- c. Please find submitted map. MP 13

9.d. That hydroseed would work for the erosion on reclaimed areas plus with the wattles will keep sediment in mine area. Since there is high bank around the whole mining area the drainage is not an issue for outside of of mine site. when grass is stable on high bank wattles will be removed. As for the bond release, the mine area will be reclaimed completely before silt control will be removed.

It has been my apparent attempt to put together a drainage, erosion, sediment plan by listing as articles, references to best management practices. The intent of that action is to infer that the guides set forth in these articles will be followed to: protect the excavation area, keep the drainage from the disturbance in the excavation area, build the soil base to the best recommendation, ensure that the seeded cover is established before removing the protection berm, follow best practices to build a top-soil and base that proves results. The area contained in the phase 1 boundary is very slightly tapered and will return to that same grade. The ground there now displaces the rain and snow that falls on it due to the aggregate base. This base is being washed then returned to the same placement, I would expect it to displace the rain and snow just as well.

subscript 9. We are not diverting any surface runoff due to if water runs into pit, the pit will not hold water. Spring of 2011 18" of snow and 6" of rain and could mine the next morning for the ground is all gravel. Will not hold water!! And for phase 2 that is couple of years away and conceptual.

10. Contractor has been contacted to produce the plan. Will submit when available.

11. The permit boundary was submitted in Article MP 4. The maps are all produced from the same plate submitted as Article MP 3. to aid in the clearness of the topo features through the picture explanation the boundary and utilities were drawn on a plastic overlay and if you compare the berm on phase 1 you will notice this is the boundary of the 5 acre area.

We would request that the permit be submitted AT YOUR SUGGESTION as the 10 acres allowed. And as a technical revision That the area in phase 2 be deferred to a later determination. As you are probably aware, the development of the 5 acre area outside of the water-table is enough of a headache. To ask us to produce both plans at one time is going to take another 2 years and this is burdensome and unproductive. Phase 1 can be completed without advancing to phase 2. Elements of phase 2 can be constructed at the end of phase 1.

12. The reason that the reclamation plan was stated is the fact that the mining is concurrent and due to the fact the project will last at least 7 years a lot of the land affected will have had a 5 year grow in period. So I interject..most of the post closure will be done. The last area to be mined will be the E side. To produce a post closure plan... The mine area will be monitored for growth and areas of lagging growth will be re amended and reseeded. The protection structures will be removed when the ground cover is sufficient to stabilise the area during summer storms. The collection of debris will be sorted through and disposed of. The silt collected will be scattered in the immediate area. The Weed contractor will be notified to control weeds as noticed. The road in will be removed and graded to match the surrounding area, and if a bridge was constructed to provide access to the conceptual area in phase 2 it will be removed as well. Actually the bridge would have been removed when the diversion channel was filled with the berm that separated it from the activities of phase 2, leaving the finish grade that would be inspected for the bond release, so that would be done pre-closure.

13. 4. reference topic 4, this letter
6. reference topic 6, this letter

14. Please find letter Article 26

It is an accepted belief in cattle circles that 1 cow/horse will need 10 acres to sustain it. Our intent to reclaim for livestock is a courtesy to the USFS and by letter is their choice. Also to repair the fence is also a courtesy to the USFS and surrounding landowners if the USFS puts cattle back into that grazing unit.

Recreational uses are also required of the USFS by letter as a choice for reclamation. The GF&P has identified steam fishing to be a viable resource for South Dakota in some cases whether there is a fish caught or not. The permit application for phase 1 will not contain areas that apply to recreational uses. The reclamation choice of recreational use is requested to not be required in any of the permit area as the French Creek in this area is listed as marginal, and the choice of reclamation for recreation, mainly angling, could be difficult to attain, as the flows in this section of creek diminish during the summer.

We consider the requirement of the bond and subsequent posting of bond to be proof that we have the financial ability to do the required reclamation. Perhaps DENR is aware of a grant that may be available for reclamation of previously mined areas currently unreclaimed? If so the financial help would be considered.

As it is, this project is not perceived, or intended to be projected, as any more than a limited amount of machinery washing a small amount of land then interim reclamation of that acre before advancing to the next 1/3rd of an acre. At that juncture in time the economic viability for the rest of the permit will be proven.

Interim reclamation will be done as the project advances as the topsoil will be mixed and moved.

15. Reference topic 4, and 5 of this letter,

16. As we asked for a technical revision dealing with phase 2 most of these issues will be dealt with during the permitting of the expansion.

17. NO. We can follow instructions well and have good problem solving skills. As I read the law pertaining to this topic it states that the plan for reclamation be chosen by a competent person. I have to argue that the USFS has chosen the plan for reclamation.

Subscript 1. As you are well aware of, the Army Corp. of engineers needs to have a complete study of the volumes in the area being considered. The cart goes before the horse. What can you do to help us get the data needed to reclaim this perception of devastation that happened to French creek? This is why we ask for the separation of the two plans. The phase 2 part will take years.

Technical comment 1. The city of Custer has been contacted to supply us the water from a commercial permitted source. Is the City telling you they will not accept us as a customer? We have not been advised of this from the city. If they refuse us an account we will have to seek a water permit.

Technical comment 2. Advised.

Technical comment 3.

The slopes of the reclaimed grade conforming to 32 degrees is mis-stated.

The correct statement is; The slopes on the interim reclaimed grades are 32 degrees, specifically in the grade adjacent to either side of the diversion channel.

The diversion channel is a temporary structure that is intended to be in place not more than 3 years. The base of the slopes on both sides of the channel will be placed with the coarsest of boulders, 3' X 3' in size, of clean stone and weighing 1 to 2 ton each. These boulders will form a pyramid at the base of each side. The next layer will be of smaller boulders 1/2 to 1 ton and the top 1 to 1/2 foot of the sides will be the cobbly loam seeded, mulched with wattles and benches to the guides of BMP articles. The width of the channel will be calculated using the measurement derived at the present channel site, (ref A1-A2. B1- B2.). The base of the channel will be covered with -4, +3/4 washed aggregate to a depth of 8 inches. The processing of the delta in Phase 1 will remove about 15% of the aggregate in the form of heavy sand particles <1/4". In order to return the grade to the original height, or even a little higher to provide additional flood protection to the vicinity of the city well. The extracted 15% will show up as a void where the excavation approaches the protection zone against the creek. The next three years will prove the plan for Phase 2 and by the time the excavation in phase 1 reaches this zone will determine if the diversion is to be built. If the diversion is not to be built the protection berm against the creek will be blended into the excavation and the grade finished to <28 degrees not to be <12 degrees. This zone is the only place on Phase 1 that submits to a grade. The rest is relatively flat.

Listed below are technical revisions requested for future use.

1. Modifying topsoil stripping plans and storage piles;
2. Modifying or relocating access roads within the permit boundary;
3. Modifying or relocating erosion, sedimentation, or drainage control structures;
4. Modifying seeding mixtures or rates;
5. Modifying plans and specifications for permitted facilities;
6. Modifying water usage, storage, and sources as allowed by water rights permits;
7. Modifying the size of area to be worked at any one time;
8. Relocating or modifying chemical or petroleum storage areas;
9. Modifying or moving portions of the permitted mine path;
10. Modifying the mineral processing flow chart;
11. Modifying the operating and reclamation plan to accommodate the approved US Forest Service operating plan within the constraints of ARSD 74:29:03;
12. Modifying quality control and quality assurance plans; and

13. Modifying reservoir locations and dimensions.

New maps are included to establish the permit boundary, MP 4-A, MP 4-B, MP 4-C. The ground is flagged, and the gps coordinates are provided. In establishing the boundary for phase 1 an effort is made to keep the edge on the highest elevation next to the creek. I noticed the "Map Source" and "Google Earth" do not show the creek in the exact position.

The positions were done using a Garmin E-Trex Legend C. The contraction indicated the accuracy to be 4 ft on most all of the points.

There are two sets of points on the maps, RCA and RCB. These points, 1 and 2 measure the creek channel across from one side to the other. They are provided to help determine the diversion channel width and depth, if and when needed.

Please consider this the final reply to letter dated 4/13/2012.

At the time of mailing the weed contractor has not contacted us with her written plan. This will be sent as soon as we get it.

Handwritten signature of Robert Hanson in cursive script.

EXHIBIT #1

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MAY 30 2012
MINERALS & MINING PROGRAM

CUSTER COUNTY HIGHWAY DEPARTMENT
25.365 U.S. HWY 385
CUSTER S.D.
57730

Grace Mine
12140 Tara Rd
Custer, SD.
57730

Date: 5-7-12

To whom It may concern,
I Gary Woodford, have recieved a copy of a placer mine application & operating plan that has also been sent to SD Dept. of Environment and Natural Resources for process by a representative of Grace mine.

sig. Gary Woodford

Date: 5-7-12

Representative: Robert Benson

Exhibit 2

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MAY 30 2012
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DOYLE JOHNSON
25150 UPPER FRENCH CREEK RD.
CUSTER S.D. 57730

Grace Mine
12140 Tara Rd
Custer, SD.

57730

Date: 5-24-2012

To whom it may concern,

I Doyle Johnson, have received a copy of a placer mine application & operating plan that has also been sent to SD Dept. of Environment and Natural Resources for process by a representative of Grace mine.

sig. Doyle Johnson

Date: 5-24-2012

Representative: Robert Larsen

Article 13 supplement 1

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Search Results for South Dakota Water Well Completion Reports

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Business	Fname	Lname ▲	Cmpltd	Depth	Qsec	Sec	Twn	N/S	Rng	Link
	PAUL	BLADDE	11/28/2000	160		28	3	S	4	PDF Details
	DICK	CLEMANS	12/1/1995	340	NENE	28	3	S	4	PDF Details
CUSTER CITY OF WELL	CITY OF	CUSTER	1/16/1974	240	S	28	3	S	4	PDF Details
CUSTER, CITY OF	CITY OF	CUSTER	3/21/1989	360		28	3	S	4	PDF Details
	IKE	KEWLEY	6/27/1984	95		28	3	S	4	PDF Details
	LARRY	LEDBETTER	6/14/1977	81		28	3	S	4	PDF Details
	BOB	MOORE	5/8/2000	240	SW	28	3	S	4	PDF Details
	BRUCE	SCHAFFER	6/12/1977	147		28	3	S	4	PDF Details
	DENNIS	SCHMITZ	2/12/1981	242	NESW	28	3	S	4	PDF Details

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Article 13 supplement 2

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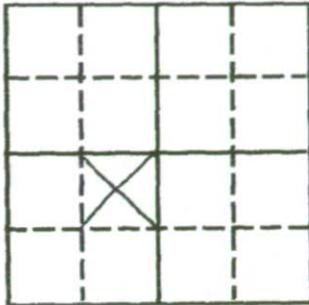
Link:	PDF image of well completion report						
Name/Business:	WYLEEN MAY	County:	CUSTER				
Date Completed:	6/16/2006	Well Type:	DOMESTIC	Depth (feet):	395		
Legal Description:	NESW	Sec	29	Tw	3	S	Rng 4 E

SOUTH DAKOTA WATER WELL COMPLETION REPORT

RECEIVED 11-02
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Location NE 1/4 SW 1/4 Sec 29 Twp 3S Rg 4E

County Custer



Please mark well location with an "X"

Well Completion Date

6/16/2006

Distance to nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)
? 150.0 ft. from Sewer (identify source)

PROPOSED USE:

- Domestic/Stock Irrigation
- Municipal Industrial
- Business Institutional
- Test Holes Monitoring well

METHOD OF DRILLING:

Rotary

CASING DATA:

- Steel
- Plastic
- Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN
160.0	6.00	0.0	40.0	8.75

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
		Lb/gal	0.0 Ft	40.0 Ft
Port Cement	4	16.0		

Describe grouting procedure _____

SCREEN:

- Perforated pipe
- Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information _____

WAS A PACKER OR SEAL USED?

- Yes
- No

If so, what material? _____

Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

- Yes, How? Chlorine Tablets
- No, Why Not? _____

Lab sample sent to for water quality analysis _____

Well Owner: Wyleen May

Business Name: _____

Address: 2507 Trails End Rd.

City, State, Zip: Acton CA 93510-2448

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Mica Shist	0	395

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JAN 31 2007

WATER RIGHTS PROGRAM

STATIC WATER LEVEL 70.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow 4.0 through _____ Inch pipe

Controlled by Valve Reducers Other _____

Reduced flow rate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

Pumped Describe: _____

Bailed

Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

This well was drilled under license # 363

And this report is true and accurate.

Drilling firm: Howe Well Drilling & Excavating Inc.

Signature of License Representative:

Charles Howe

Signature of Well Owner or Equitable Property Holder: _____

Date: 6/16

Article 25

Rob Larson

From: "Bossert, Kory - NRCS, Hot Springs, SD" <kory.bossert@sd.usda.gov>
To: "Rob Larson" <roblarson@goldenwest.net>
Sent: Thursday, May 03, 2012 8:12 AM
Subject: RE: Revised seed mix

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Using the format that is already set up, this is the mix I would recommend and endorse:

Species	Low Elevation - Mid Zone	Cost/lbs/pls
annual rye (<i>Lolium multiflorum</i>)	15%	0.50
slender wheatgrass (<i>Elymus trachycaulus</i>)	25%	1.80
prairie junegrass (<i>Koeleria macrantha</i>)		23.25
western wheatgrass (<i>Pascopyrum smithii</i>)	10%	2.80
Canada wildrye (<i>Elymus canadensis</i>)		5.15
Canby bluegrass (<i>Poa canbyi</i>)		5.25
green needlegrass (<i>Nassella viridula</i>)	15%	2.05
American vetch (<i>Vicia americana</i>) or purple prairie clover (<i>Dalea purpurea</i>)	5%	18.00
		6.75
**Warm season combination- see below	30%	4.50
AVERAGE COST/LBS/PLS	53.36	
Normal rate all mixes 20 lbs./acre		
**Warm season combination - any of the following:		
blue grama (<i>Bouteloua gracilis</i>)	10%	8.50
switchgrass (<i>Panicum virgatum</i>)		4.50
indiangrass (<i>Sorghastrum nutans</i>)		9.25
sideoats grama (<i>Bouteloua curtipendula</i>)	20%	4.50
AVERAGE COST/LBS/PLS		6.69
updated05/01/2012 KB		

We do not usually recommend an annual grass (rye) in our normal practices as they use up available water. I did leave 15% annual rye in this mix so there will be some cover early. In addition the slender wheatgrass is a quick establishing plant and will eventually die out. That is what we typically use for an early cover the same as an annual grass.

The purple prairie clover could be reduced down to 2% or 3%.

/s/ Kory Bossert 5/3/12

KORY BOSSERT

District Conservationist
NRCS Field Office
341 S Chicago St
Hot Springs, SD 57747

ARTICLE 26



United States
Department of
Agriculture

Forest
Service

Black Hills
National
Forest

330 Mt Rushmore Road
Custer SD 57730
605-673-4853

Hell Canyon Ranger District
1225 Washington Blvd
Newcastle WY 82701
307-746-2782

File Code: 2810-Grace Claim Mining
Proposal

Date: April 24, 2012

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ROBERT LARSON
12140 TARA ROAD
CUSTER, SD 57730

Dear Mr. Larson;

We are in receipt of the April 13, 2012 letter from the South Dakota Department of Environment and Natural Resources-Minerals and Mining Program concerning the appropriate post mine land use for your proposed mining operation. Based on discussions with our resource specialists the Forest Service agrees that grazing and recreation are appropriate post mine land uses.

Please contact Gary Haag of my staff at 673-4853 if you have any questions concerning this letter.

Sincerely,

LYNN D. KOLUND
District Ranger



Exhibit 30



CUSTER COUNTY

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May 2, 2012

Robert Larson
12140 Tara Road
Custer, SD 57730

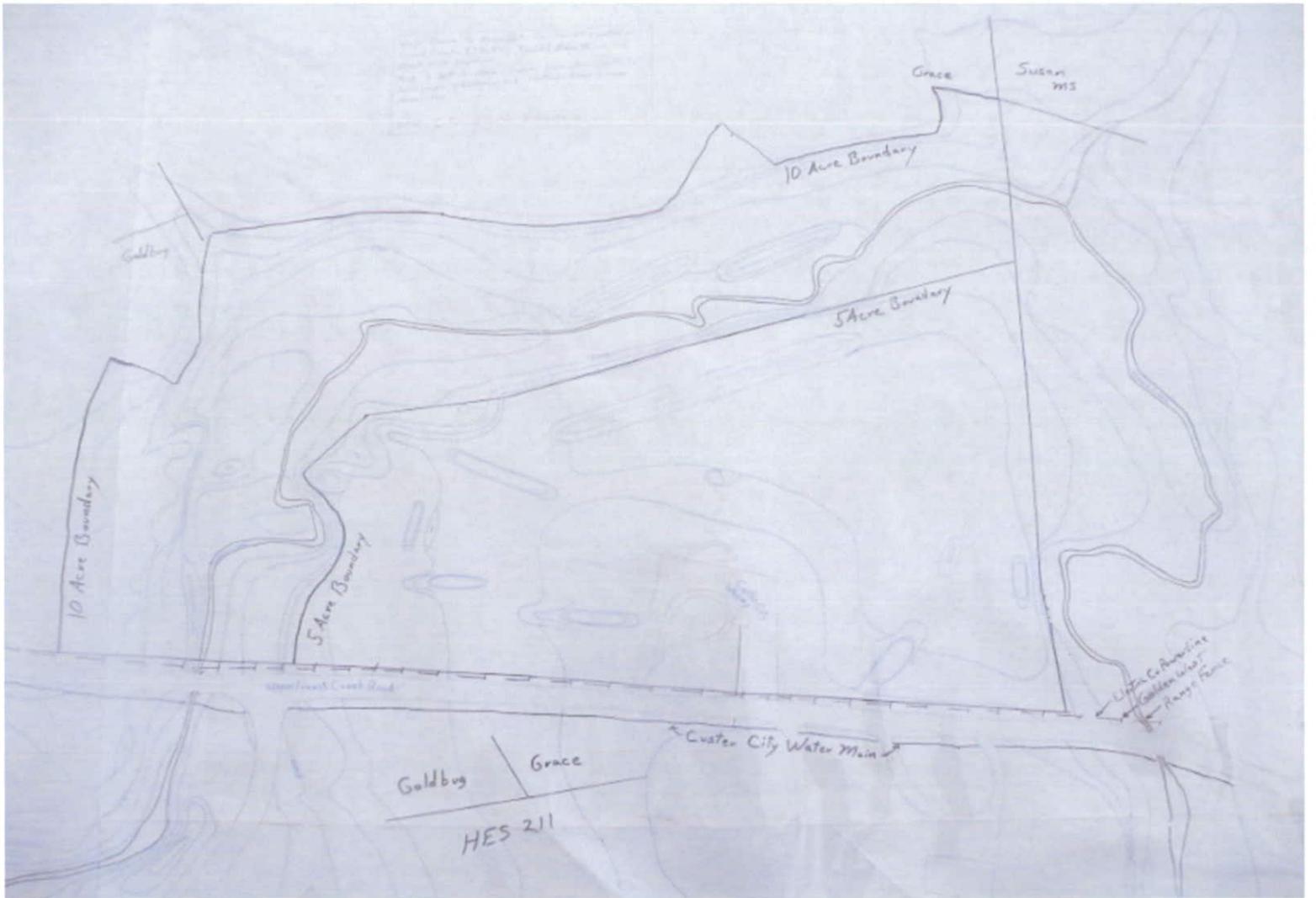
Mr. Larson

In response to your inquiry about county issued permits related to your proposed mining operations Custer County submitted a communication, dated January 30, 2012, that delineated the permits that may be necessary. As stated previously, the acquisition of permits is not necessary at this time. However, you will need to acquire your permits in advance of any construction activities. As you have submitted you mining operation plan and have discussed and understand the county permitting requirements, we believe that at this time you are in substantial compliance with applicable county ordinances and standards. Neither the Planning Department or the Board object to the proposed temporary land use. When the time arrives to secure the grading, building and floodplain permits, the planning office will be available to assist you.

David J. Green, CFM
Custer County Planning
and Economic Development, Director
420 Mt. Rushmore
Custer, South Dakota 57730
605-673-8174
Fax: 605-673-8150

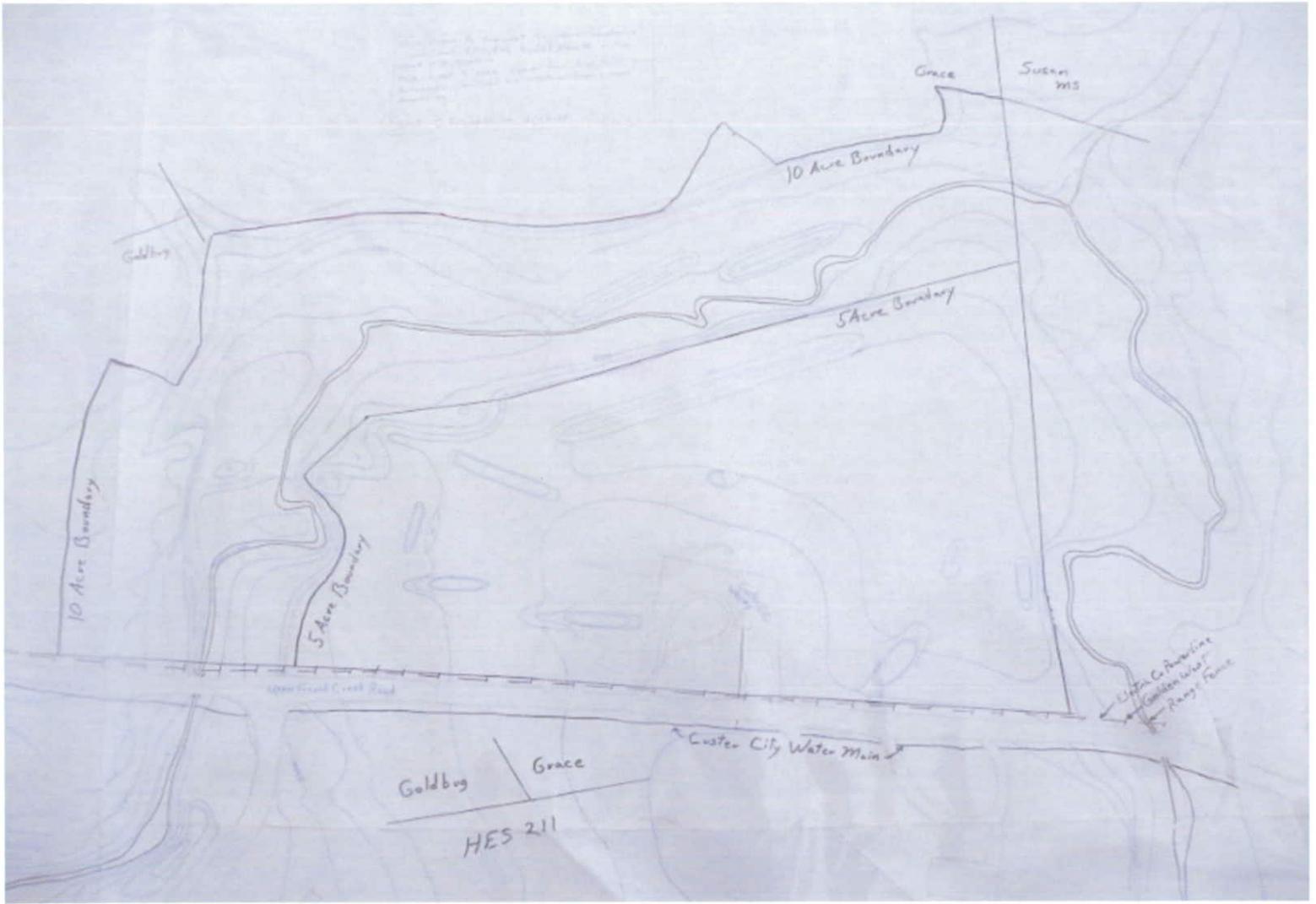
Travis Bies, Chairman
Custer County Board of Commissioners

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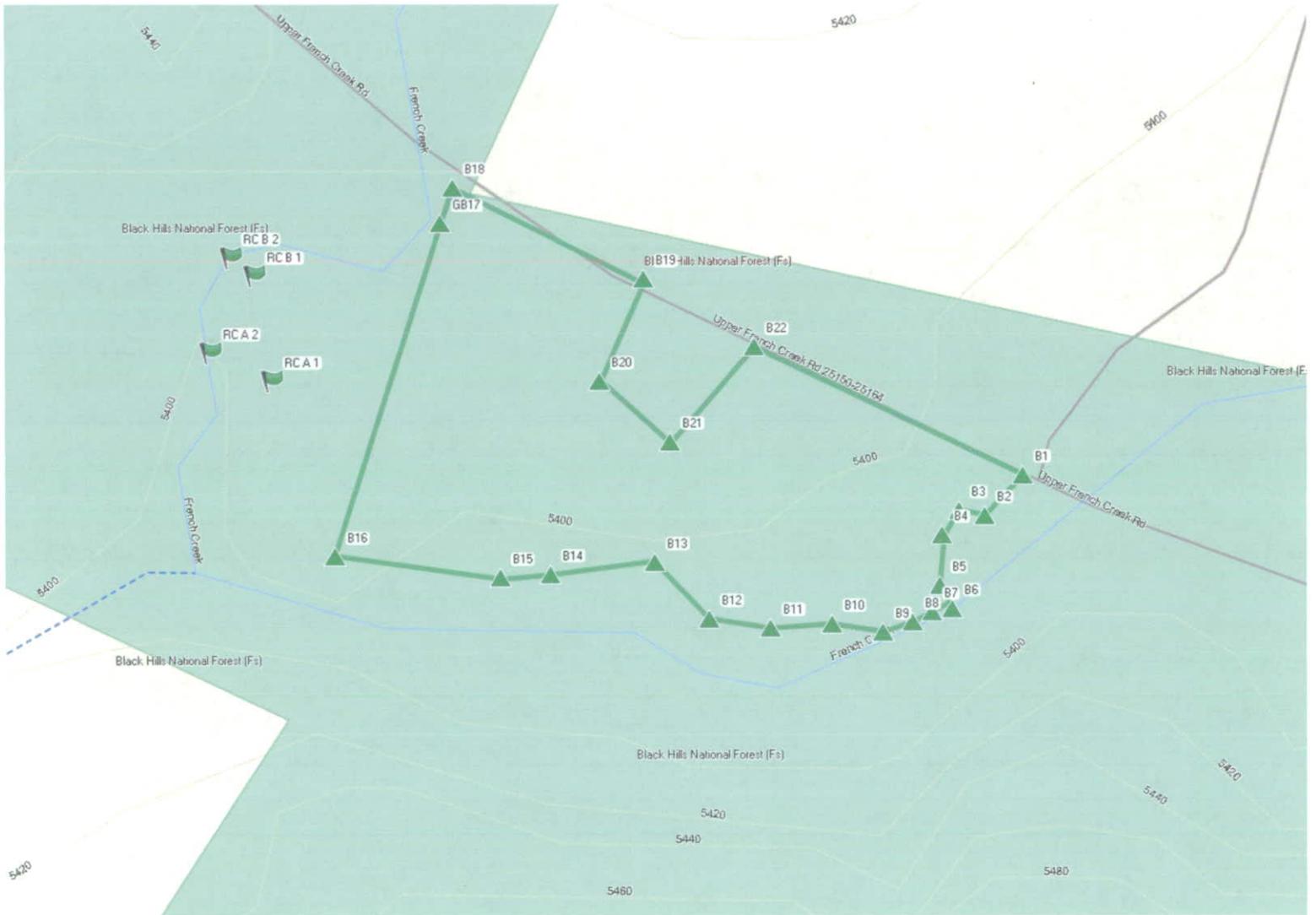
MP4 - A

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MP4-A

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MP4 - B

Coordinates for 5 acre area - Grace Placer Mine

B1 N 43.75755, W 103.64257

B2 N 43.75740 W 103.64277

B3 N 43.75741, W 103.64288

B4 N 43.75733, W 103.64296

B5 N 43.75717, W 103.64297

B6 N 43.75710, W 103.64297

B7 N 43.75710, W 103.64300

B8 N 43.75698, W 103.64304

B9 N 43.75698, W 103.64316

B10 N 43.75704, W 103.64345

B11 N 43.75702, W 103.64372

B12 N 43.75702, W 103.64400

B13 N 43.75723, W 103.64424

B14 N 43.75719, W 103.64471

B15 N 43.75717, W 103.64494

B16 N 43.75723, W 103.64568

B17 N 43.75828, W 103.64536

B18 N 43.75847, W 103.64520

B19 N 43.75815, W 103.64432

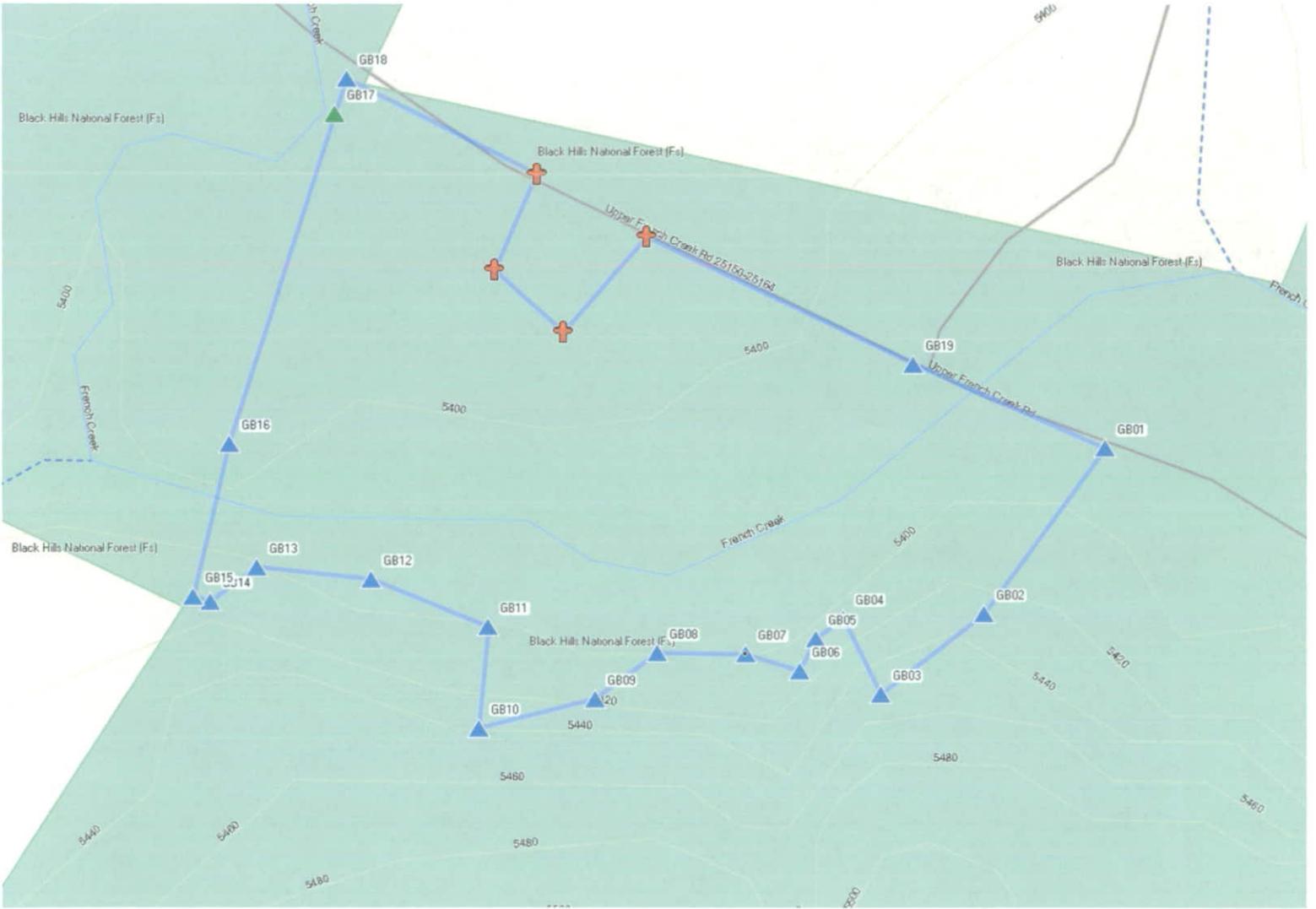
B20 N 43.75781, W 103.64451

B21 N 43.75762, W 103.64419

B22 N 43.75797, W 103.64375

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MP 4 - C

Coordinates for ten acre permit area - Grace Placer Mine

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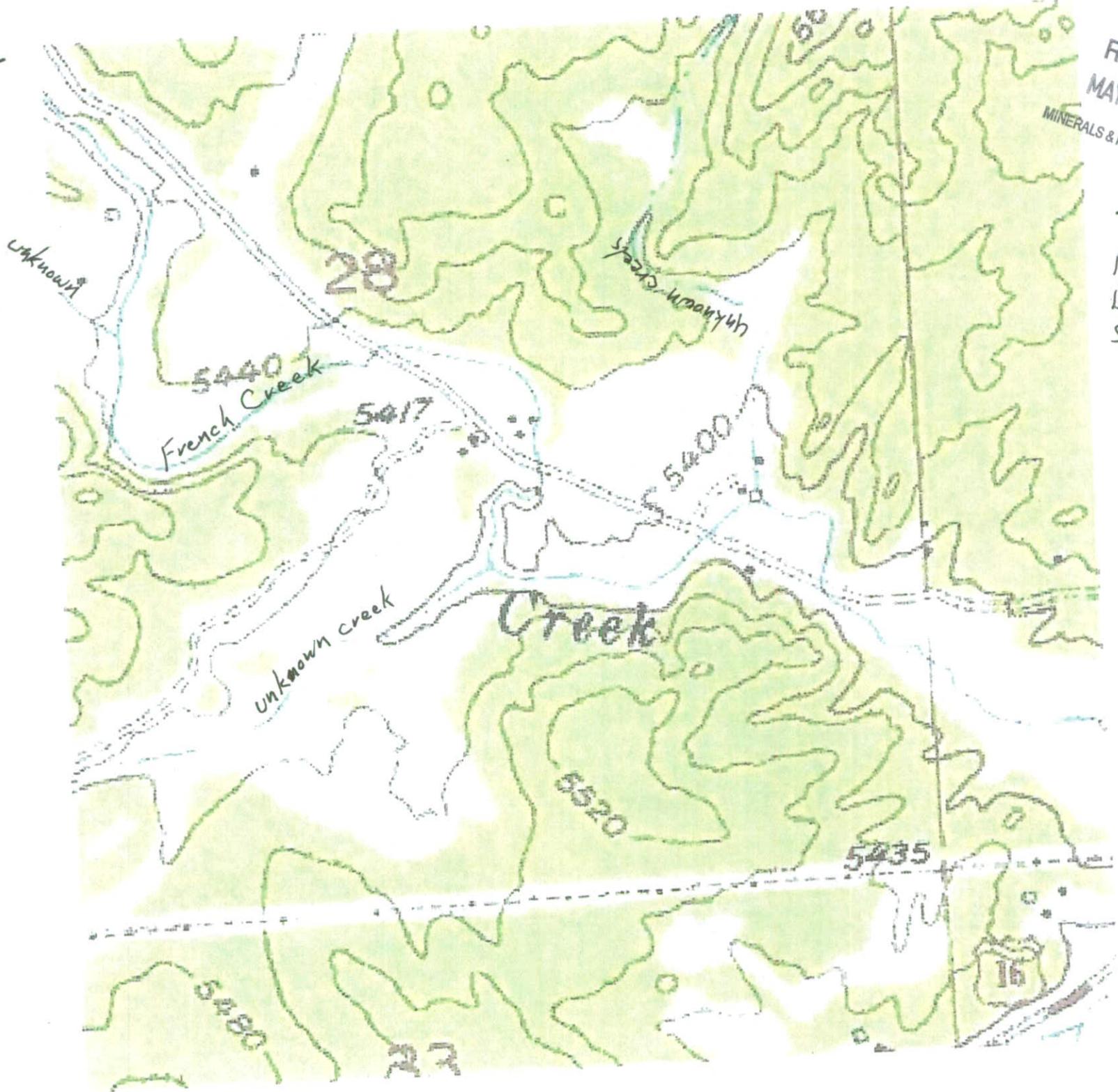
MINERALS & MINING PROGRAM

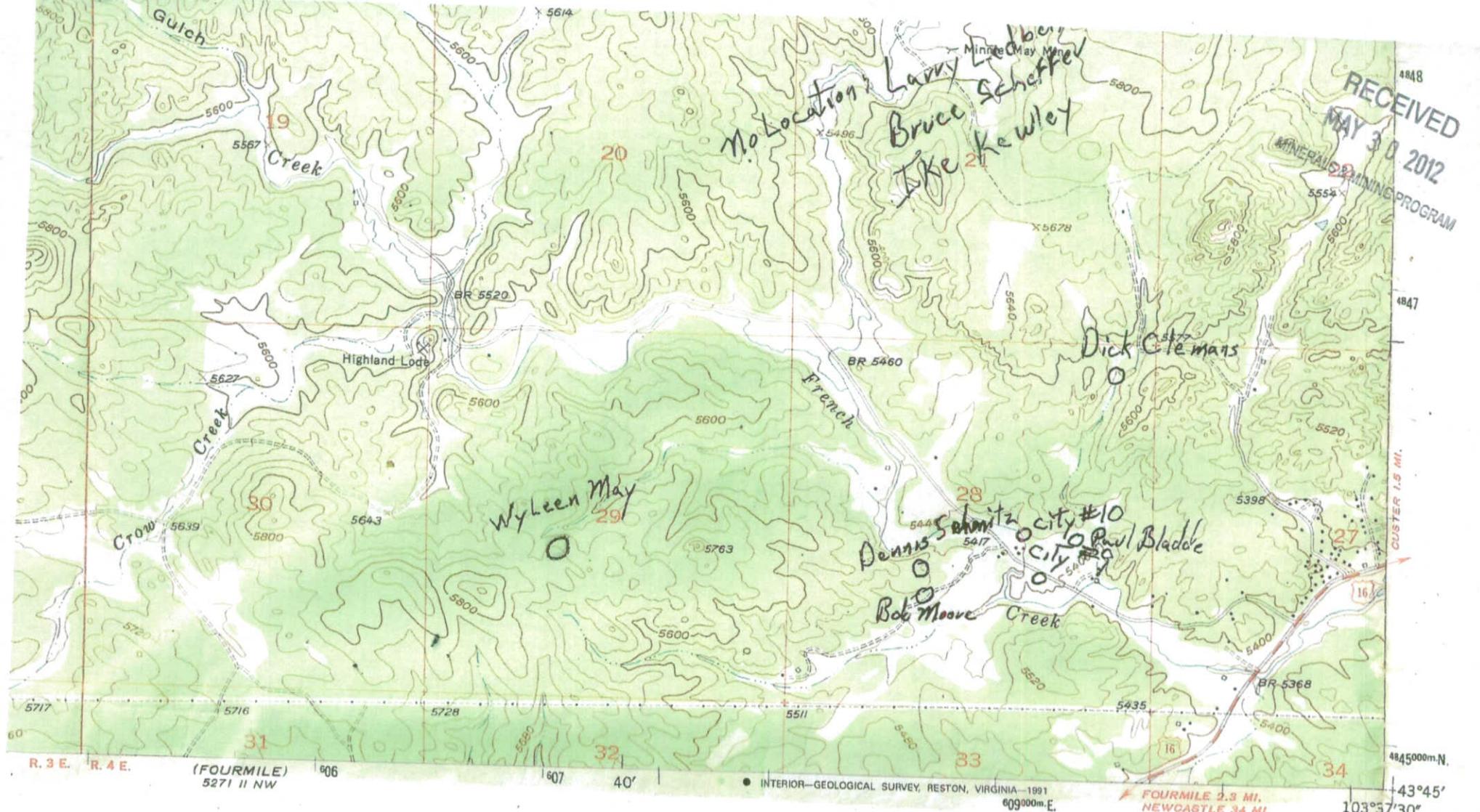
GB01	N 43.75727,	W 103.64173
GB02	N 43.75672,	W 103.64226
GB03	N 43.75645,	W 103.64272
GB04	N 43.75670,	W 103.64290
GB05	N 43.75663,	W 103.64302
GB06	N 43.75652,	W 103.64309
GB07	N 43.75658,	W 103.64333
GB08	N 43.75657,	W 103.64373
GB09	N 43.75642,	W 103.64401
GB10	N 43.75632,	W 103.64454
GB11	N 43.75666,	W 103.64451
GB12	N 43.75680,	W 103.64503
GB13	N 43.75683,	W 103.64556
GB14	N 43.75672,	W 103.64575
GB15	N 43.75674,	W 103.64584
GB16	N 43.75723,	W 103.64568
GB17	N 43.75828,	W 103.64536
GB18	N 43.75847,	W 103.64520
City Well	N 43.75815,	W 103.64432
City Well	N 43.75781,	W 103.64451
City Well	N 43.75762,	W 103.64419
City Well	N 43.75797,	W 103.64375
GB19	N 43.75755,	W 103.64257

MP # 12

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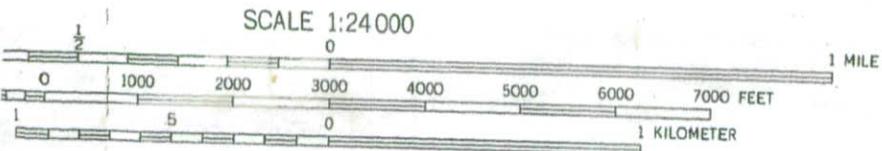
T3S
R4E
B4M
Sec 28





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MINERAL EXPLORATION PROGRAM

R. 3 E. R. 4 E. (FOURMILE) 5271 II NW



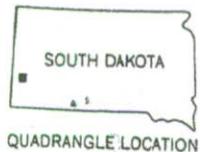
CONTOUR INTERVAL 40 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

● INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1991
609000m. E.

★ FOURMILE 2.3 MI. NEWCASTLE 34 MI.

ROAD CLASSIFICATION

Heavy-duty		4 LANE 16 LANE	Light-duty	
Medium-duty		4 LANE 16 LANE	Unimproved dirt	
		U. S. Route		State Route



QUADRANGLE LOCATION

BERNE, S. DAK.
43103-G6-TF-024

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS FOR SALE BY U. S. GEOLOGICAL SURVEY DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092. DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Map photoinspected 1977
No major culture or drainage changes observed

1954
PHOTOINSPECTED 1977
DMA 5271 I SW—SERIES V873

(CICERO 5271 II NE)

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S & MINING PP

Alexander R. Easson, Pamela S.
25152 Upper French Creek
Custer SD 57730

Judith Hoover
P.O. Box 5066
Custer SD 57730
12071 Hoover Ct

Mark Hopkins
9305 High Meadows Dr
Black Hawk, SD 57718-8286

Doyle Johnson
25150 Upper French Creek
Custer SD 57730

Custer Property
622 Crook St
Custer SD 57730

5 acre
Permit
Area

Wes & Anita Boyum
113 Cookout Mr Dr.
Ellensburg, WA 98926

Article MP7

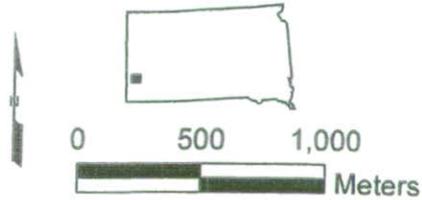
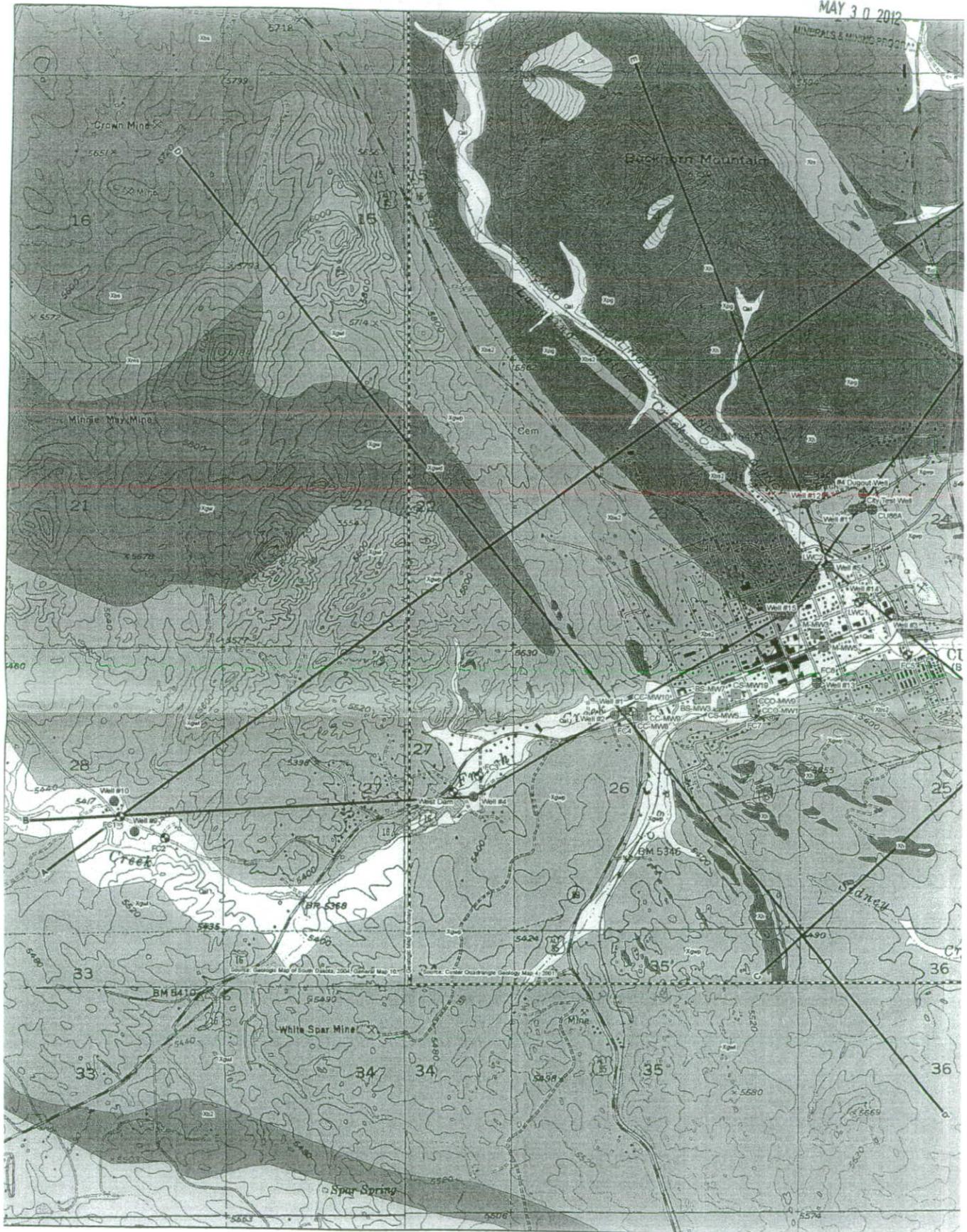
© 2012 Google
Image © 2012 DigitalGlobe

Google

Eye alt

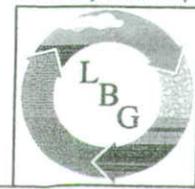
43°45'30.81" N 103°38'38.07" W elev 5416 ft

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MAY 3 0 2012



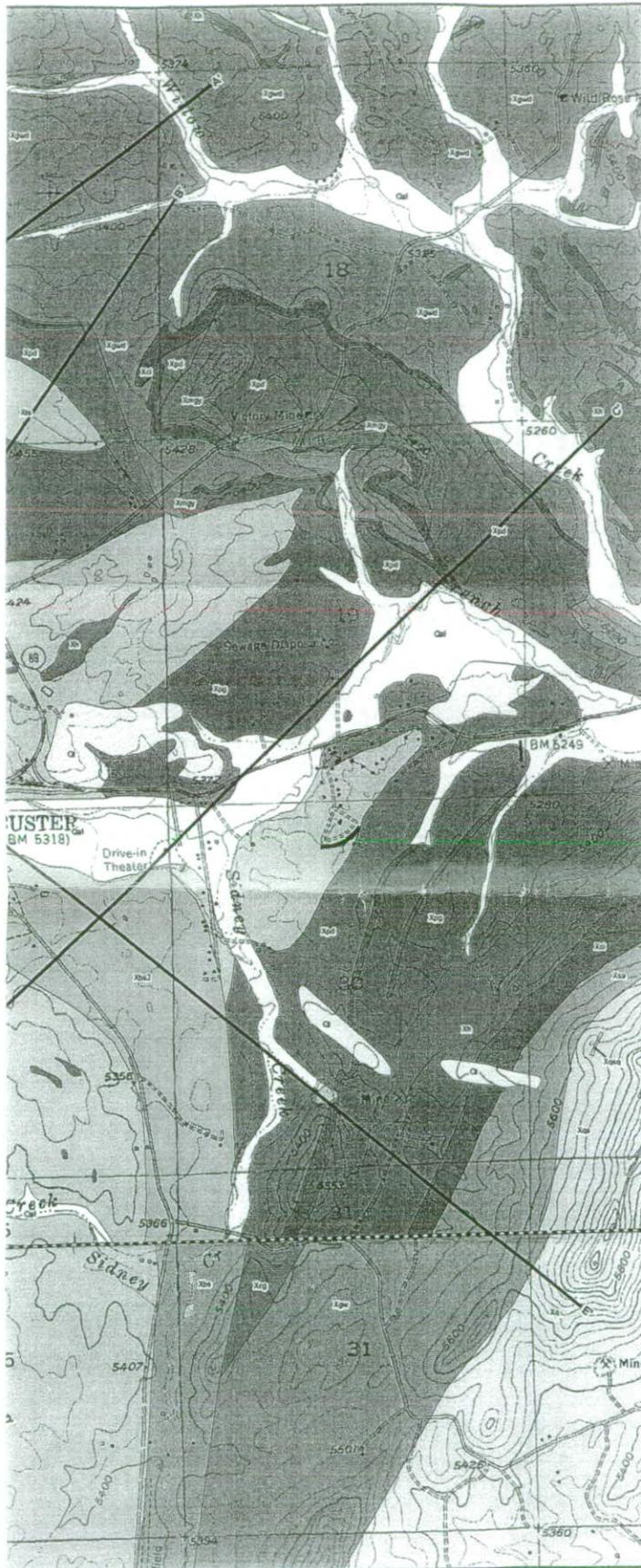
- City Well
- Release Site Monitoring Well
- Surface Water Monitoring Location
- Cross-Section Location Line

Source: Geologic Map of South Dakota, 2004, C
 Note: Many units overlap in stratigraphic time. A



LEGGET

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Quaternary	Qal	Alluvium - Poorly consolidated to unconsolidated, angular to rounded, clay to boulder-size clasts. Deposited in present-day drainages and floodplains.
	Qc	Colluvium - Unconsolidated, generally angular, clay to boulder-size clasts. Locally derived and deposited along steep slopes.
	Qt	Terrace deposit - Undifferentiated deposits of unconsolidated to poorly consolidated, angular to rounded, clay to boulder-size clasts. Occurs as much as 40 feet above present drainages.
	Unconformity?	
	Xh	Harney Peak Granite - Fine grained to pegmatic, S-type granite, typically layered. Batholith consists of many individual sills and dikes and its contact is approximate. Isolated sills, dikes, and small bodies are similar to the central granite mass; some are zoned pegmatites. Sills and dikes in contact with a larger body are thin extensions and boundary contact with larger body should be ignored.
	Xmgy	Metagabbro - Protolith is gabbro. Sills and dikes of dark green hornblende-plagioclase amphibolite.
	Xqs	Quartzite and schist - Protolith is sandstone and shale. Xqs is thick-bedded quartzite with interbeds of quartz-mica schist and quartz-biotite-sillimanite schist. Xqsq is massive quartzite beds. Xqs unit bounded by fault contacts, relative age uncertain.
	Xqsq	
	Xsa	Sillimanite schist and andalusite schist - Protolith is shale. Includes garnetiferous quartz-mica schist and minor medium-bedded quartzite.
	Xbs2	Garnet schist and biotite schist - Protolith is black shale. Typically thin-bedded; locally contains graphite, sulfides, and thin quartzite beds.
Xts	Mica schist and sillimanite schist - Protolith is tuff and shale. Thin- to medium-bedding.	
Xci	Banded iron-formation - Protolith is chert and carbonate facies iron-formation. Quartzite and cummingtonite-grunite schist; varies between massive streaked quartzite and interbedded thin quartzite and cummingtonite beds.	
Xpd	Garnet-sillimanite schist and quartz-mica schist - Protolith is shale and debris flow. Typically medium-bedded; locally sizeable clasts of quartzose schist and quartzite.	
Unconformity?		
Xpg	Quartz-mica schist and mica schist - Protolith is graywacke turbidite deposits.	
Xgwd	Metagraywacke - Protolith is graywacke turbidite deposits, distal facies. Thin- to medium-bedded, grayish tan quartz-mica schist.	
Xb2	Metabasalt - Alkalic basalt, greenstone, and actinolite schist. Includes metamorphosed volcanoclastic rocks and iron-rich schist.	
Xms	Metamorphosed tuffaceous shale - Light-gray to light-tan, muscovite schist and muscovite phyllite. Laterally equivalent to Xsi (metamorphosed siltstone). Thickness approximately 1000-3000 ft (305-914 m).	
Xgw	Metagreywacke - Light- to dark-gray, siliceous mica schist and impure quartzite. Thickness from 1000 ft (305 m) to 5000 ft (1524 m).	
Xcg	Metamorphosed conglomerate - Gray to grayish brown, conglomeratic biotite phyllite, siliceous biotite phyllite, mica schist, quartzite, and iron-formation. Thickness up to 2000 ft (610 m).	
Xbs	Metamorphosed black shale - Dark-gray biotite schist, biotite-muscovite schist, pyritic biotite schist, and locally massive chert beds. Thickness approximately 2000-4000 ft (610-1219 m).	
Xq	Metaquartzite - Light-tan quartzite, siliceous schist, and minor chert. Thickness 800-5000 ft (244-1524 m).	
Xgwp	Metagraywacke - Protolith is graywacke turbidite deposits, proximal facies; dominantly Bouma A beds. Thick-bedded, tan, quartzose schist.	
Xgwl	Lower metagreywacke - Light- to dark-gray, medium- to thick-bedded, quartz-mica schist containing calc-silicate lenses and ellipsoidal masses. Thickness up to 7000 ft (2134 m).	
Precambrian	Lower Proterozoic	

4. General Map 10. Custer Quadrangle Geology Map 4, 2001. USGS Berne, Custer, Fourmile, and Cicero Peak 7.5-Minute Quadrangle Maps.
e. All units are presented in order of approximate age relative to their most recent age. See the above referenced Custer Quadrangle Geology Map for structural data.

Prepared By:
ETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and
Environmental Engineering Services
140 East Hinks Lane, Suite 126
Sioux Falls, SD 57104
(605) 334-6000

SD PETROLEUM RELEASE COMPENSATION FUND
CUSTER HYDROGEOLOGIC EVALUATION
CUSTER, SOUTH DAKOTA

CUSTER GEOLOGIC COMPOSITE MAP
AND CROSS SECTION LOCATIONS

FILE:	G3CUSTER01J.MXD	DATE:	07/20/2005	FIGURE:	3
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