

Form MR-REV-att (DOGM – Revise/Amend Change Form)
 (Revised September 14, 2005)

Application for Mineral Mine Plan Revision or Amendment

Operator: Diamond K Gypsum	
Mine Name: Chalk Hills Quarry	File Number: M/015 /0095

Provide a detailed listing of all changes to the mining and reclamation plan that will be required as a result of this change. Individually list all maps and drawings that 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 or amend the existing Mining and Reclamation Plan. **Include page, section and drawing numbers as part of the description.**

DETAILED SCHEDULE OF CHANGES TO THE MINING AND RECLAMATION PLAN			
DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED			
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	The date has been updated on each page
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Page1, item 4: Section 34 is added to the operation
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Page 2, items 8 & 9: updated content for BLM coordination
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Page 3/4, item 2.i: Updates to operation details
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Page 4, item 2.ii: Added access details for additional mining area
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Page 5, item 2.iii: Updated haulage and traffic estimates
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Pages 8/9, item 2.vii: Updated commitments
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Page 10, item 3: Updated estimated acreages
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Page 13, item 9: Updated size of active mining area
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Pages 13/14, items 1-5: Updated to reflect new NEPA requirement
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Page 14, item 2: Revised to address plural roads
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix A maps replaced
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Appendix D soil report replaced

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 and obligations, herein.

Kris Allred, General Manager	<i>Kris Allred</i>	Apr 23 2026
Print Name	Sign Name, Position	Date

Return to:
 State of Utah
 Department of Natural Resources
 Division of Oil, Gas and Mining
 1594 West North Temple, Suite 1210
 Box 145801
 Salt Lake City, Utah 84114-5801
 Phone: (801) 538-5291 Fax: (801) 359-3940

FOR DOGM USE ONLY:
File #: <u>M/</u> / <u> </u>
Approved: _____
Bond Adjustment: from (\$) _____
to \$ _____

Notice of Intention for the Chalk Hills Quarry

M/015/0095

April 2026

Prepared for:

Diamond K Gypsum, Inc.

Prepared by:



1-800-748-5275
Project # 2512-051

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I. Rule R647-4-104 – Operator, Surface, and Mineral Owners

1. Mine Name:

Chalk Hills Quarry

2. Operator:

Diamond K Gypsum, Inc.
1720 South Red Hills Dr.
Richfield, UT 84701
(435) 896-8870

Type of Business: Corporation registered to do business in the State of Utah as Entity #1258952-0142

Local Business License: #390 (Issued by Sevier County)

Registered Utah Agent: Kris Allred
1720 South Red Hills Dr.
Richfield, UT 84701
(435) 896-8870 (office)
kris@diamondkgypsum.com

3. Contact Person for permitting, surety, and notices:

Kris Allred, General Manager
(435) 896-8870 (office)
(559) 280-3808 (emergency, weekend, or holiday phone)
kris@diamondkgypsum.com

4. Location of Operation:

Emery County, 30 miles northeast of Emery and 27 miles south-southwest of Price
T 19 S, R 10 E, Sections 23, 26, ~~and 27~~, and 34 (SLB&M).
See Map 1 in Attachment A.

5. Surface/Mineral landownership:

Bureau of Land Management – Price Field Office
125 S. 600 W., Price, UT 84501
(435) 636-3600

6. BLM Claim Numbers:

Section	Previous Serial Number	Current Serial Number	Claim Number
23	UMC384084	UT105786445	Wedge 23-19
26	UMC384066	UT105786449	Wedge 26-1
	UMC384067	UT105786441	Wedge 26-2

Section	Previous Serial Number	Current Serial Number	Claim Number
	UMC384068	UT105786440	Wedge 26-3
	UMC384069	UT105786446	Wedge 26-4
	UMC384070	UT105786442	Wedge 26-5
	UMC384071	UT105786436	Wedge 26-6
	UMC384072	UT105786447	Wedge 26-7
	UMC384073	UT105786443	Wedge 26-8
27	UMC384074	UT105786450	Wedge 27-9
	UMC384075	UT105786452	Wedge 27-10
	UMC384076	UT105786453	Wedge 27-11
	UMC384077	UT105786437	Wedge 27-12
	UMC384079	UT105786448	Wedge 27-14

7. Adjacent Landowners:

The mine is wholly within BLM-administered lands; there is no other landownership with ½-mile of the quarry.

8. Have the land, mineral, and adjacent landowners been notified in writing?

Yes. This NOI will be provided to the Bureau of Land Management (BLM) and has received the NOI and completed an environmental analysis will be completed to authorize analyze the project. The environmental assessment (EA), finding of no significant impact (FONSI), and decision record (DR) documents will be are included as Attachment B.

9. Does the Permittee / Operator have legal right to enter and conduct mining operations on the land covered by this notice?

Yes. The BLM authorized the proposed expansion on December 10, 2020. The decision record is included in Attachment B Partially.

II. Rule R647-4-105 - Maps, Drawings, and Photographs

Maps and Drawings are provided in Attachment A. Photos are provided in Attachment C.

1. Base Map: A topographic base map with contour intervals. The scale is approximately 1 inch = 2,000 feet. The map shows:
 - The location of lands to be affected and calculations of the proposed area of surface disturbance.
 - Property boundaries of surface ownership on an inset map due to the mine's location wholly within BLM-administered boundaries lands.
 - Roads and nearby bodies of water. There are no perennial streams, springs, buildings, landing strips, electrical transmission lines, water wells, oil or gas pipelines, existing wells, or other existing structures within 500 feet of the proposed mining operations.

- The proposed route of access from the nearest publicly maintained highway is shown on the inset map.
 - Known areas previous affected by mining or exploration operations within the proposed disturbed area.
2. Surface Facilities Map: The scale is approximately 1 inch = 1,000 feet. This map shows:
 - Proposed surface facilities, including the temporary road alignment. There are no buildings, stationary mining/processing equipment, utilities, power lines, proposed drainage control structures, tailings or processed waste facilities, or solid and liquid wastes and wastewater discharge treatment and containment facilities.
 - A border clearly outlining the acreage proposed to be disturbed by mining operations.
 - Topsoil storage areas are not shown as topsoil is stockpiled temporarily and used in concurrent reclamation as mining progresses.
 - Overburden disposal areas are not shown, as overburden has not been encountered in mining operations. If encountered, overburden would be used in concurrent reclamation behind the current mining activity.
 3. Site Layout Map: This map shows the anticipated sequence of areas to be mined, and includes details for areas that are currently mined or have been previously mined and reclaimed.
 4. Mining Claim Overview: This map shows Diamond K's relevant claim boundaries ~~relative to the proposed expansion~~.
 5. Quarry Status Maps: Maps 5a and 5b show the status of identified sites; this map is typically updated and submitted to UDOGM annually.

III. Rule R647-4-106 - Operation Plan

1. Minerals to be mined:

Gypsum, $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$

2. Type of Operation Conducted:

This proposed plan of operations is to permit a larger area for continued operation of the existing Chalk Hills Quarry (Permit No. M/015/0095; UTU-79585).

i. Operations

Up to ~~160.5~~405 new acres could be mined in the permitted area (see Map 1 in Attachment A); the actual area mined will depend on the nature of the deposit and the topography of the site. The sequence of bonding and mining within the permit area will also depend on the nature of the deposit; estimated areas to ensure that disturbance remains within acreage limits are shown on Map 3 in Attachment A. This estimated sequence assumes mining of an average of 5 acres per year.

At any given time, the amount of disturbed area (includes processing pad and active quarry, but excludes areas undergoing reclamation and roadway) shall not exceed more than ~~10~~15.0 acres.

Boundaries of the bonded areas of the site will be clearly marked and maintained for the duration of the mining operation, typically with t-posts and lath. If PVC pipe is used to mark the boundary of the permit area, the pipe will be capped.

Mining is accomplished with use of a ~~2012 Bomag Model MPH 122 2~~ reclaimer, which grinds the gypsum and stacks it in low windrows on the quarry floor. The windrows are then pushed into storage piles by a ~~Kawaski Model 90ZV 2 wheel~~ loader. A ~~Caterpillar Model 950F~~ front-end loader moves stacked material to a ~~Chieftain 1400~~ screen as needed. The loaders also fill trucks for haulage of the mined material to the mill in Richfield.

Work typically occurs during 8-hour shifts, 6 days a week year-round.

Mining operations will remain west of the top of the east ridge of the quarry. The west side of the ridge will also be mined. Using appropriate techniques, the low ridge formed by shale and weathered gypsum will continue to provide a visual screen from CR-405 while the back side of the ridge is mined. The mining will not be visible from the county road.

The site includes a small tool and parts trailer, a 1,000-gallon double-walled fuel tank, and a commercial portable toilet. Secondary containment for the petroleum containment system will be implemented per 40 CFR 112.7(c).

Other equipment which might be needed for specific purposes such as access road construction, topsoil removal, and reclamation will be moved in from other locations or contracted on a temporary basis and removed from the site upon completion of the specific project.

Quarry facilities (tool/supply trailer and commercial portable toilet) and equipment (reclaimer and loader) will continue to be hidden from close-by public roads to the extent possible and painted in colors approved by BLM and consistent with the surroundings, except as may be required by safety considerations. Much of the operation will continue to be hidden from CR-405 by topography.

ii. Access

The existing access road will continue to be extended into the active mining areas. ~~This~~The road will be approximately 30 feet wide to accommodate a 14-foot wide travel surface, and will be located in the most suitable topographic location. The access road will be gated and locked when the quarry is unattended.

When mining moves to claims 27-15, 27-16, 27-17, and 34-18, existing access roads on the south side of the quarry will be used.

The mine access and its associated drainage will be regularly maintained to avoid erosion or the creation of a muddy, braided road. The road will not be flat-bladed, but will be crowned and ditched to maintain a dry running surface. Dust emissions on the access road from the quarry to the county road will be minimized by maintaining low speeds (up to 5 mph) for mine vehicles.

iii. Haulage

Typical product haulage will continue to utilize 40-ton semi tractor-trailers. At the projected production rate, there will be no more than ~~40-14~~ round trips (~~280~~ total vehicle trips) per day between the quarry and Diamond K Gypsum's mill near Richfield. Haul trucks will be washed approximately three times per week by the Robinson and Barney trucking companies in Salina, Utah. Operating personnel will be instructed to power-wash their personal vehicle after each off-road use in pastures, forests, or other areas likely to contain invasive weed species.

Two quarry employees and an average of one additional service/visitor round trip will add an additional three round trips per day (6 total vehicle trips), for a total of ~~173~~ round trips per day (~~26-34~~ total vehicles), or ~~4~~3.25 vehicles per hour during a single 8-hour shift. No road improvements are anticipated by Diamond K Gypsum or Emery County specifically for this traffic, which will continue to be governed by the terms and conditions of annual haul permits issued by Emery County. Emery County has a program to apply magnesium chloride surface treatment to main roads in the region, including CR-401 and CR-405, on an annual basis. Two routes will continue to be permitted by Emery County to Utah Highway 10: CR-405 to CR-401 to U10 just north of Castle Dale, and CR-405 to EM332 to EM325 to U10 just south of Huntington. Haulage will then continue to the southwest on U10 to I-70, and west on I-70 to Richfield. Use of county roads during adverse weather will continue to be subject to the stipulations in the Emery County permit.

Emery County routinely treats all unpaved public roads that will continue to be used for truck haulage from the site. Diamond K Gypsum will continue to participate in county road maintenance in accordance with the required Annual Haul Permit. Loaded haul trucks will continue to be covered to prevent in-transit fugitive dust and minimize product loss.

iv. Dust Control

Practicable methods for dust control will be applied according to experience with current conditions; however, as circumstances change, methods may also change to best suit the new conditions.

Temporary product stockpiles and soil stockpiles will be created within the disturbed area, and away from the edges to prevent dust blowing onto undisturbed areas. Stockpiles will be no greater than 15 feet in height. Stockpiles will also be oriented parallel to the prevailing winds to prevent fugitive dust. Stockpiled product will be loaded into trucks and hauled off-site; stockpiled soils will be used for concurrent reclamation.

Magnesium chloride solution will be applied to the county road as needed, and loaded haul trucks will be covered.

v. Site Maintenance

A commercial portable toilet and a trash container will continue to be located within the quarry. The toilet holding tank will be pumped and its contents disposed of at an authorized facility in Emery County by Castle Country Pumping on an as-needed basis in accordance with applicable rules regarding sewage treatment and disposal. All trash, debris, and waste materials will continue

to be removed from the site and disposed of in a certified landfill. General site cleanup will continue to occur every day. No petroleum products or toxic material will be drained onto the ground surface. Waste oil, lubricants, toxic material, or contaminated soil will be removed from the site and disposed of at an approved facility in Emery County on an as-needed basis. For the purposes of analysis, it is assumed that disposal of all waste products will require approximately one vehicle round-trip per week.

Site maintenance measures have been developed in accordance with the BLM's Green River District Reclamation Guidelines. The project area ~~would~~ will be maintained in a noxious weed-free condition to prevent weed seed production. All new noxious weed infestations on BLM-administered lands ~~would~~ will be reported to the BLM weed coordinator. New infestations ~~would~~ will be controlled when found, and before seed set if possible. Some populations may require more than one treatment per year.

A Pesticide Use Proposal (PUP) would be approved prior to chemical application on BLM-administered lands. Only BLM-approved pesticides and adjuvants would be used. All pesticide applications would be recorded on Pesticide Application Record (PAR) forms and submitted to the BLM within 24 hours of application.

Pesticides may be applied through:

1. backpack spot sprayer (preferred)
2. wick application (preferred)
3. low or high boom sprayers mounted on truck or ATV
4. aerial
5. other label recommended method

All pesticide applications must strictly follow label instructions.

Standard stipulations for pesticide application are as follows:

1. Spraying or application of pesticides would not be done when wind speeds exceed 10 miles per hour or if heavy rainfall or other adverse weather conditions exist.
2. No pesticide application would occur within the following distances of open water, such as springs, wetlands, streams, ponds, or lakes, unless otherwise specified on the pesticide label:
 - 100 feet aerial application
 - 25 feet boom truck application
 - 10 feet backpack sprayer application
3. Herbicide applications within 1,500 feet of special status plants or populations would be coordinated with the BLM weed coordinator. Additional measures may be incorporated into application plans for control around special status plants or populations.
4. All commercial and private applicators of pesticides would be currently licensed or hold a reciprocal license with the State of Utah. (Utah Pesticide Control Act)
5. Empty containers would be disposed of in accordance with label instructions.
6. Equipment would NOT be washed out or cleaned near streams, open water, or drainages that can carry water.

7. Pesticides would only be transported when properly secured and with containers properly sealed and labeled.

vi. Reclamation

Reclamation measures have also been developed in accordance with the BLM's Green River District Reclamation Guidelines. The proposed quarry area consists almost entirely of bare gypsum rock or gypsum covered with between 0 to 4 feet (average less than 1 foot) of topsoil and subsoil. Topsoil, topsoil covered by significant biological soil crust, and weathered gypsum and surface gypsum contaminated with windblown silt will be removed and stockpiled separately for reclamation. Stockpiles will be created along the disturbed area but away from disturbance edges, then used for ongoing reclamation as mining proceeds.

Stockpiles will be no greater than 15 feet in height. Stockpiles will be oriented parallel to the prevailing winds to prevent loss of topsoil. All areas to be disturbed will be photographed prior to disturbance; disturbed areas will be returned to approximate natural contour and reseeded during reclamation in compliance with applicable BLM and UDOGM regulations and policies.

Reclamation will consist of a combination of grading of the pit floor and spreading and compacting of weathered gypsum to restore the general original contour. Topsoil will be spread over the compacted material, and the area will be seeded with the approved seed mixture. With the exception of the access road, reclamation will occur behind the advancing quarry; the access road will be reclaimed as part of final reclamation.

At the time of final abandonment, all quarry equipment and facilities will be removed. Ongoing and final reseeded will be performed in the fall following completion of the reclamation operations, between September 1 and November 30 depending on moisture conditions, with the approved seed mixture. The mix must be certified weed free and tags shall be sent to the BLM.

Common Name	Scientific Name	PLS/LBS per acre*
Indian ricegrass	<i>Oryzopsis hymenoides</i>	3
Galleta grass	<i>Hilaria jamesii</i>	2
Russian wild rye	<i>Elymus psathyrostachys</i>	2
Fourwing saltbush	<i>Atriplex canescens</i>	0.5
Castle Valley clover (Gardner saltbush)	<i>Atriplex garneri var cuneata</i>	1
Shadscale	<i>Atriplex confertifolia</i>	1
Winterfat	<i>Eurotia lanata</i>	1
Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.5
Forage kochia	<i>Kochia prostrata</i>	0.25
Total		11.25

* Pure live seed pounds per acre

vii. Design commitments

- At any given time, the amount of disturbed area (includes processing pad and active quarry, but excludes roads and areas undergoing reclamation) shall not exceed more than 1540.0 acres.
- Mining will not occur within 50 feet of known suitable habitat (as delineated by Wetland Resources 2018) for San Rafael cactus.
- Mining activities would not occur within approximately 100 feet of known individuals or occupied habitat as identified by Wetland Resources 2018 for San Rafael cactus.
- Education of the onsite operators about the native plants, including the *Pediocactus despainii* and the *Aliciella tenuis*, will occur through annual meetings with the BLM and monitoring efforts.
- Diamond K Gypsum will continue to monitor annually the condition of the known cactus and avoidance suitable and occupied habitat. With the help of the BLM, permanent photo plots will be were established to demonstrate that project activities have remained within the authorized limits. Photos and a report will be submitted to the BLM by May 31 of each year. Up to 10 A total of 9 photo plots with tagged cactus would be were established in 2021 by the BLM and Diamond K Gypsum. Photos, condition of the cactus, and number of cactus in the plots would be read annually by Diamond K Gypsum.
- In the event that the San Rafael cactus (*Pediocactus despainii*) is discovered within the proposed quarry, work would cease immediately and the Price Field Office Manager or their representative would be notified immediately. The operator would then receive guidance on how to proceed within 15 days. The BLM will transplant the observed cacti greater than 300 feet from the project and within suitable habitat. The BLM would complete annual monitoring for 5 years to document success of the transplant.

- Restoration plan will follow the Green River District Guidelines; specifically, seeding will occur only with native plants.
- Control of noxious weeds within 1,500 feet of known suitable *Pediocactus despainii* habitat will be coordinated with the BLM weed specialists, and additional measure may be applied. Special considerations will be given to protect the listed plant and control the weeds through the PUP process.
- Diamond K Gypsum will instruct all employees and contractor supervisors that if they encounter cultural resources during mining operations, all operations are to cease immediately, and the Price Field Office Field Manager or Associate Field Manager will be contacted.
- In the event that white-tailed prairie dogs (*Cynomys leucurus*) move into (colonize) the active (15+ acre) area of the mine site, work will cease immediately at the site and the Price Field Office Manager or their representative shall be notified. Diamond K Gypsum will then receive guidance on how to proceed with operations within 15 days.
- During the operation of the quarry, signs warning travelers on CR-405 of trucks turning onto the road from the mine access road or the road to the south shall be placed as directed by Emery County.
- The quarry will continue to suspend operations during the extended Easter weekend (Thursday through Sunday), and during Memorial Day and Labor Day weekends (Saturday through Monday) each year.
- The mine is located within an active grazing allotment. Equipment operators and truck drivers will reduce speeds when livestock are present. If livestock are hit by equipment or trucks during the operation of the mine, the BLM will be notified.
- Existing range facilities (water tanks, troughs, pipelines) will be avoided by project activities.
- To ensure that mining will not be visible from the county road when driving next to the mine, operations will remain west of the ridge between the quarry and county road, which will allow the ridge to provide a visual screen from the county road.
- Boundaries of the bonded areas of the site would be clearly marked and maintained for the duration of the mining operation, typically with t-posts and lath.
- No camping in connection with the operation will be allowed.
- Any berms created for fluid control will be made of native non-topsoil materials.
- The project area would be maintained in a noxious weed-free condition to prevent weed seed production. All new noxious weed infestations on BLM-administered lands would be reported to the BLM weed coordinator. New infestations would be controlled when found, and before seed set if possible.
- All trash, debris, and waste materials would continue to be removed from the site and disposed of in a certified landfill. General site cleanup would continue to occur every day.

- No petroleum products or toxic material would be drained onto the ground surface. Waste oil, lubricants, toxic material, or contaminated soil would be removed from the site and disposed of at an approved facility in Emery County on an as-needed basis.
- If the site is inactive for 3 consecutive years and no contracts are scheduled, reclamation procedures will be initiated. Abandoned portions of the quarry will be reclaimed within 1 year.
- Reclamation at the site may include placement of mulch as directed by the Authorized Officer.
- Reclamation shall be considered complete when so determined by the Authorized Officer.
- Reclamation will include re-grading and re-contouring all surface disturbances related to the mining activity, including the mine access road. Per the Green River District Reclamation Guidelines, the operator will meet the BLM requirement for 75 percent of the basal cover of the surrounding native area.
- Diamond K Gypsum will submit an annual reclamation report to the Authorized Officer by March 31st of every year. The report will document compliance with all aspects of the reclamation objectives and standards.
- Fencing of any reclaimed area to keep livestock out of the site will be completed at the discretion of the Authorized Officer.
- Any significant departures from the Plan of Operations will require a submission of a request for mine plan modification to the Price Field Office. The modification will need to be approved prior to the on-the-ground change. The authorized officer will determine what constitutes a significant departure from the Plan of Operations.

3. Estimated Acreages

Area Description	Area (acres)
Existing mine disturbance ⁺ (includes road)	10.7 6.0
Reclaimed areas	55.0 59.7
Total proposed new disturbance	146.1 405.0
Total Acreage	211 470.7

*Numbers may not appear to sum correctly due to rounding.

Total proposed area: ~~211~~470.7 acres

Estimated acreage to be disturbed/reclaimed sequentially: ~~151~~0 acres

⁺~~The actual area mined is less than 150 acres per permit conditions; the total area calculation considers polygons that were identified at a high level to allow for flexibility in mining and concurrent reclamation configuration.~~

4. Nature of material including waste rock/overburden and estimated tonnage

Nature of overburden: Topsoil and weathered gypsum (gypsite) constitute the only overburden to be removed. Overburden thicknesses range from 0 to 4 feet, with an average of less than 1 foot.

Estimated annual volume of gypsum mined: Approximately 34,000 cubic yards

Estimated annual volume of overburden: Approximately 3,500 cubic yards

Thickness of mineral deposit: Thickness varies from 5 to 25 feet, including lenses of waste rock.

Estimated annual volume of tailings/reject materials: None; all material that is not hauled off as product is used in reclamation efforts.

5. Existing soil types, location of plant growth material

An NRCS soil report is attached as Attachment D.

Soil sampling reports from the previously approved NOI are included as Attachment E.

6. Plan for protecting and redepositing existing soils

Topsoil, topsoil containing biological soil crust, and subsoil will be removed by bulldozer or front-end loader, and will be stockpiled separately. As reclamation will be ongoing, with new piles created as previous piles are used for reclamation, no protective measures such as wind fencing or interim seeding are proposed.

7. Existing vegetative communities to establish revegetation success

A vegetation study was conducted in 2008; the species identified included winterfat, shadscale, sand dropseed, and purple threawn. Vegetated ground cover was estimated to be approximately 12 percent. The page from the previously approved NOI is included as Attachment H.

Revegetation will be considered successful when vegetative cover in the reclaimed area is at least 70 percent of the existing cover, or when UDOGM has determined revegetation has been completed within practical limits.

8. Depth to groundwater, extent of overburden material

There are no monitoring or water wells in the immediate vicinity of the mine. There are two historic oil wells less than 1 mile northeast of the quarry.² The Federal 1-C well (BLM lease UTU-33967; API 43-015-30056) was drilled to a depth of 1,467 feet in 1978; no water was recorded, and the well was plugged and abandoned in 1978. The Bush 1-A well (BLM lease UTU-56040; API 43-015-30237) was drilled to a depth of 1,500 feet in 1989. A trace of water was found between the depths of 200 and 210 feet; however, no significant water zones were encountered. The well was plugged and abandoned in 1989.

The Buckhorn Well, which is approximately 2.5 miles northwest of the mine, was bored to a depth of 476 feet³; however, there is no associated information about water depth or quantity.

² <https://dataexplorer.ogm.utah.gov/>; accessed 12-29-2020.

³ <https://apps.geology.utah.gov/gwdp/>; accessed 12-29-2020.

Groundwater has not been encountered by mine operations to date.

The depth to groundwater at the quarry is unknown, but based on the nearest drill records, it is likely greater than 150 feet.

Overburden material occurs in variable depths across the site. Overburden thickness ranges from 0 to 4 feet, with an average of less than 1 foot.

The Chalk Hills Quarry is located in Jurassic rocks exposed around the flanks of the San Rafael Swell, a physiographically significant uplift that is part of the larger San Rafael anticline. The anticline is strongly asymmetrical, with the thick sequence of sedimentary rock that forms bedrock on the Swell folded to near-vertical along the eastern margin, forming the dramatic serrated ridge known as the San Rafael Reef, while dips of 10° or less form broad westerly-dipping slopes on the west side. Dip in the project area is a relatively-uniform 2° to the northwest except in and immediately adjacent to contorted gypsum beds. The fold is the result of either a large shallow intrusive or the reactivation of older faults in the subsurface, in either case formed during the late Laramide orogeny from middle Eocene to late Paleocene, 40 to 60 million years ago (mya). There is some evidence that uplift may have begun as early as the Late Cretaceous and lasted into the Oligocene⁴. Sedimentary rocks originally deposited in the area of what is now the San Rafael Swell range in age from Permian (290 to 248 mya) to at least early Paleocene (65 to 61 mya), although all rocks younger than Jurassic (206 to 144 mya) have been eroded from the Swell itself.

Rocks on and in the immediate vicinity of the Diamond K Gypsum Chalk Hills claims belong to the Carmel Formation, of Middle Jurassic age (roughly 190 to 169 mya). On the claims themselves, exposures are limited to the highest beds of the lower member of the Carmel Formation and the upper gypsum-bearing member. These two units can be described as follows (modified from Witkind 1988⁵ and Doelling 2002⁶):

Upper member: Also known as the Winsor Member. Reddish-brown to greenish-gray thin-bedded siltstone with a few thin sandstone beds in upper part, interbedded with gypsum beds from 2 feet to 5 feet thick, locally coalescing to form beds up to 25 feet thick, mostly in middle portion; forms broad, intricately dissected slopes. About 250 feet thick.

Lower member: Also known as the Paria River Member. Light-gray to brownish-gray, locally pale green, thin-bedded dense limestone. In places passes laterally into a very fine-grained calcareous sandstone. Ripple marks, raindrop pits, and other sedimentary features indicate shallow-water deposition. From 30 to 50 feet thick.

⁴ Witkind, I. J. 1988. Geologic map of the Huntington 30' x 60' quadrangle, Carbon, Emery, Grand, and Uintah Counties, Utah. U.S. Geological Survey Miscellaneous Investigations Series Map 1-1764.

⁵ Witkind, I. J. 1988. Geologic map of the Huntington 30' x 60' quadrangle, Carbon, Emery, Grand, and Uintah Counties, Utah. U.S. Geological Survey Miscellaneous Investigations Series Map 1-1764.

⁶ Doelling, H. H., 2002. Interim Geologic Map of the San Rafael Desert 30' x 60' Quadrangle, Emery and Grand Counties, Utah. Utah Geological Survey Open File Report 404.

9. Location and size of ore and waste stockpiles, tailings facilities, and water storage/treatment ponds

Ore and waste (overburden) ~~are~~ will be stockpiled separately within the active ~~15~~10-acre mining area. Stockpiles will be no greater than 15 feet in height. Stockpiles will also be oriented parallel to the prevailing winds to prevent fugitive dust. Stockpiled product will be loaded into trucks and hauled off-site; stockpiled overburden will be used for concurrent reclamation.

There are no tailings facilities or water storage or treatment ponds associated with the quarry.

10. Amount of material extracted, moved, or proposed to be moved

Estimated annual volume of gypsum mined: Approximately 34,000 cubic yards

Estimated annual volume of overburden: Approximately 3,500 cubic yards

IV. Rule R647-108 - Hole Plugging Requirements

No drilling is proposed; therefore, plugging requirements do not apply.

V. Rule R647-109 - Impact Statement

1. Surface Projected impacts to surface and groundwater systems and groundwater systems

No surface waters occur within the proposed mining area; therefore, no Clean Water Act Section 404 permits are required. All stormwater will be contained within the mine area; therefore, there will be no discharges to surface waters. Mining operations are permitted under the Multi-Sector General Permit (MSGP) UTR001401; a stormwater pollution prevention plan (SWPPP) is maintained onsite.

Groundwater will not be affected by mine operations.

2. Projected impacts to federally threatened and endangered species or their critical habitats ~~Listed species and critical habitats~~

~~The BLM consulted with U.S. Fish and Wildlife Service (USFWS) on listed species and critical habitats during the NEPA process. Conservation measures~~ Design commitments to have been identified to minimize impacts to the endangered San Rafael cactus (*Pediocactus despainii*) ~~are an integral part of the BLM permit and this mining plan.~~

3. Projected impacts to existing soil resources ~~Existing soil resources~~

Adverse impacts to existing soil resources would be reduced w ~~Through the NEPA process, the BLM determined that there would be no adverse impact to existing soil resources (see Attachment B for BLM NEPA documents)~~ ith application of the proposed reclamation methods.

4. Projected impacts to slope stability, erosion control, air quality, public health and safety

~~The BLM determined that there would be no adverse impact to air quality or public health and safety. Based on current operations at the site, slope stability is not a concern. Erosion control measures will prevent adverse impacts to soil and water resources. The BLM determined that there would be no adverse impact to a~~ **Air quality impacts would be localized to fugitive dust in the vicinity of the mine.** ~~or p~~ **Public health and safety would not be impacted as the mine is not open to the public.** ~~Based on current operations at the site, slope stability is not a concern.~~

5. Mitigation Actions to mitigate impactsactions

No mitigation measures were identified as necessary by the BLM during the 2018 NEPA process. This determination was documented in the FONSI, which states that, “Mitigation was not identified for the proposed action, as the project design features listed in section 2.2.1.6 of the EA precluded the need for mitigation measures” (see Attachment B for BLM NEPA documents).

VI. Rule R647-4-110 - Reclamation Plan

1. Current land use and post-mining land use

The area is currently used for livestock grazing. The post-mining land use is anticipated to be livestock grazing.

2. Reclamation of mine features

Upon completion of mining, the mine access roads would be obliterated and reclaimed with the same methods as the rest of the mined area. Due to the nature of the material and mining methods, there will be no highwalls, impoundments, drainages, pits, ponds, piles, shafts, adits, or drill holes to be reclaimed.

3. Surface facilities to be left

Upon completion of mining, any surface facilities (including fuel tanks, fences, and gates) will be removed.

4. Treatment, location, and disposition of deleterious materials

No deleterious or acid-forming materials will be located on-site. All trash, debris, and waste materials will be removed from the site and disposed of in a certified landfill.

5. Revegetation planting program

Reclamation measures have been developed in accordance with the BLM’s Green River District Reclamation Guidelines. The proposed quarry area consists almost entirely of bare gypsum rock or gypsum covered with between 0 to 4 feet (average less than 1 foot) of topsoil and subsoil. Topsoil, topsoil covered by significant biological soil crust, and weathered gypsum and surface gypsum contaminated with windblown silt will be removed and stockpiled separately for

reclamation. Stockpiles will be created along the disturbed area but away from disturbance edges, then used for ongoing reclamation as mining proceeds.

Stockpiles will be no greater than 15 feet in height. Stockpiles will be oriented parallel to the prevailing winds to prevent loss of topsoil. All areas to be disturbed will be photographed prior to disturbance; disturbed areas will be returned to approximate natural contour and reseeded during reclamation in compliance with applicable BLM and UDOGM regulations and policies.

Reclamation will consist of a combination of grading of the pit floor and spreading and compacting of weathered gypsum to restore the general original contour. Topsoil will be spread over the compacted material, and the area will be seeded with the approved seed mixture. With the exception of the access road, reclamation will occur behind the advancing quarry; the access road will be reclaimed as part of final reclamation.

At the time of final abandonment, all quarry equipment and facilities will be removed. Ongoing and final reseeded will be performed in the fall following completion of the reclamation operations, between September 1 and November 30 depending on moisture conditions, with the approved seed mixture. The mix must be certified weed free and tags shall be sent to the BLM.

Common Name	Scientific Name	PLS/LBS per acre*
Indian ricegrass	<i>Oryzopsis hymenoides</i>	3.0
Galleta grass	<i>Hilaria jamesii</i>	2.0
Russian wild rye	<i>Elymus psathyrostachys</i>	2.0
Fourwing saltbush	<i>Atriplex canescens</i>	0.5
Castle Valley clover (Gardner saltbush)	<i>Atriplex garneri var cuneata</i>	1.0
Shadscale	<i>Atriplex confertifolia</i>	1.0
Winterfat	<i>Eurotia lanata</i>	1.0
Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.5
Forage kochia	<i>Kochia prostrata</i>	0.25
Total		11.25

* Pure live seed pounds per acre

6. Operator Statement

Diamond K Gypsum will conduct reclamation as required by UAC R647-4.

VII. Rule R647-4-112 – Variance

No variance is requested for operation practices, hole plugging requirements, or reclamation practices.

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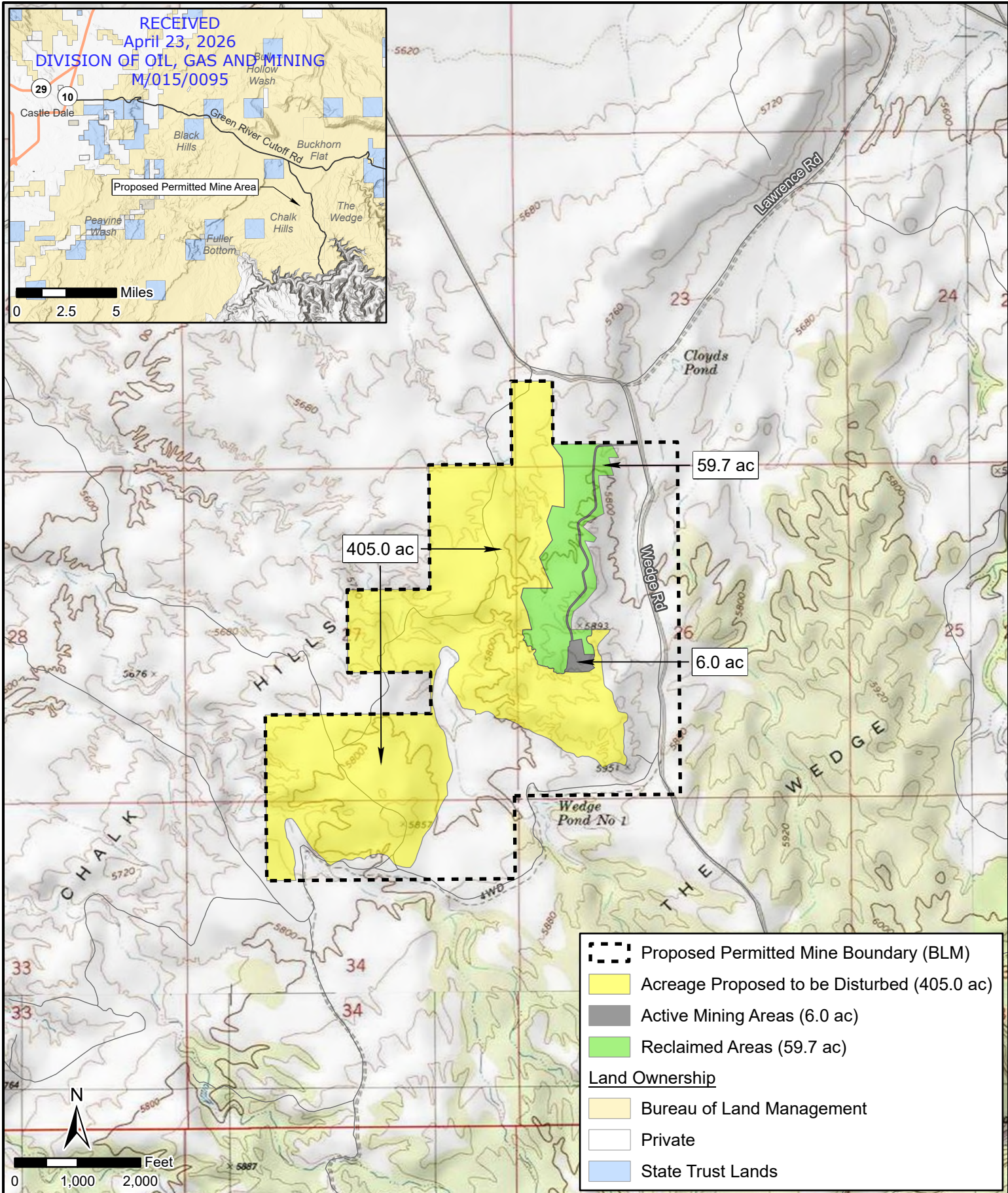
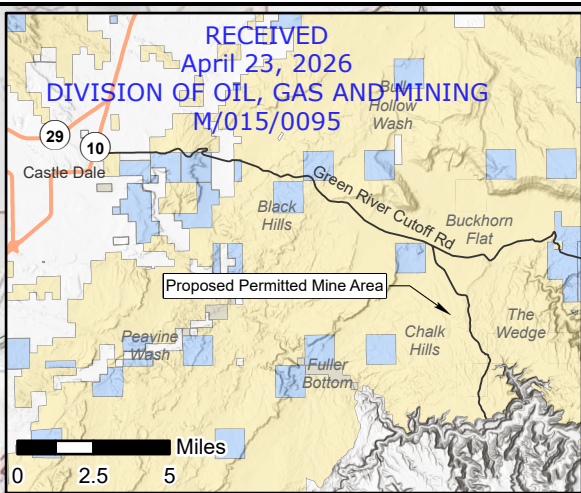
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April 2026 May 2024

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M/015/0095

Attachment A. Maps

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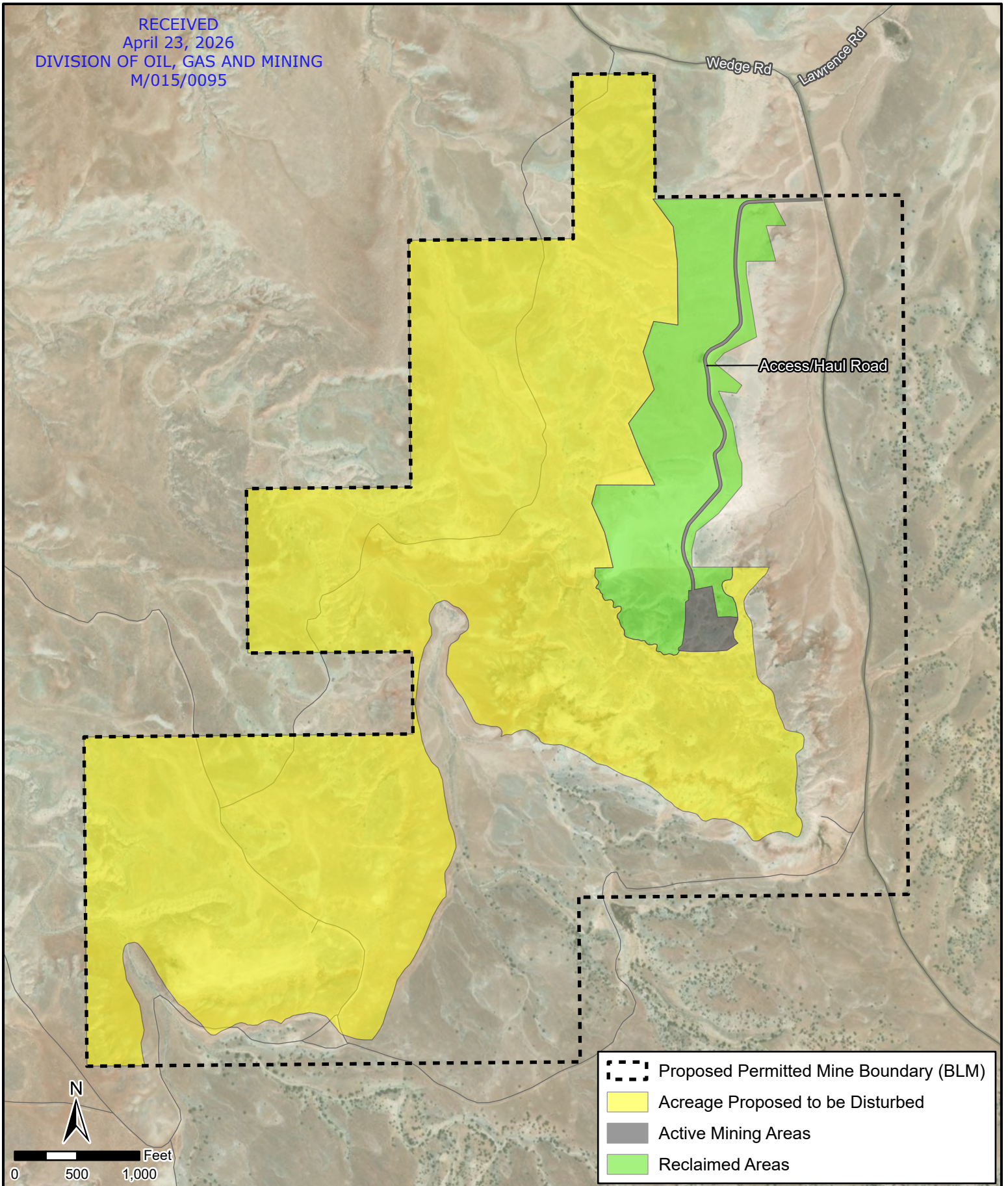


	Proposed Permitted Mine Boundary (BLM)
	Acreage Proposed to be Disturbed (405.0 ac)
	Active Mining Areas (6.0 ac)
	Reclaimed Areas (59.7 ac)
Land Ownership	
	Bureau of Land Management
	Private
	State Trust Lands

**Jones & DeMille
 Engineering**

Diamond K Gypsum, Inc.	Emery County
Chalk Hills Quarry Permitting Base Map	Scale: 1" = 2,000'
Map Name: H:\2512-051\GIS\Projects\2512-051_Env\2512-051_Env.aprx - 1_Base_Map	1
Project Number: 2512-051	Last Edit: 04/06/2026
Drawn by: ALP 02-26	

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- Proposed Permitted Mine Boundary (BLM)
- Acreage Proposed to be Disturbed
- Active Mining Areas
- Reclaimed Areas



**Jones & DeMille
Engineering**

Diamond K Gypsum, Inc.

Emery County

**Chalk Hills Quarry Permitting
Surface Facilities Map**

Scale: 1" = 1,000'

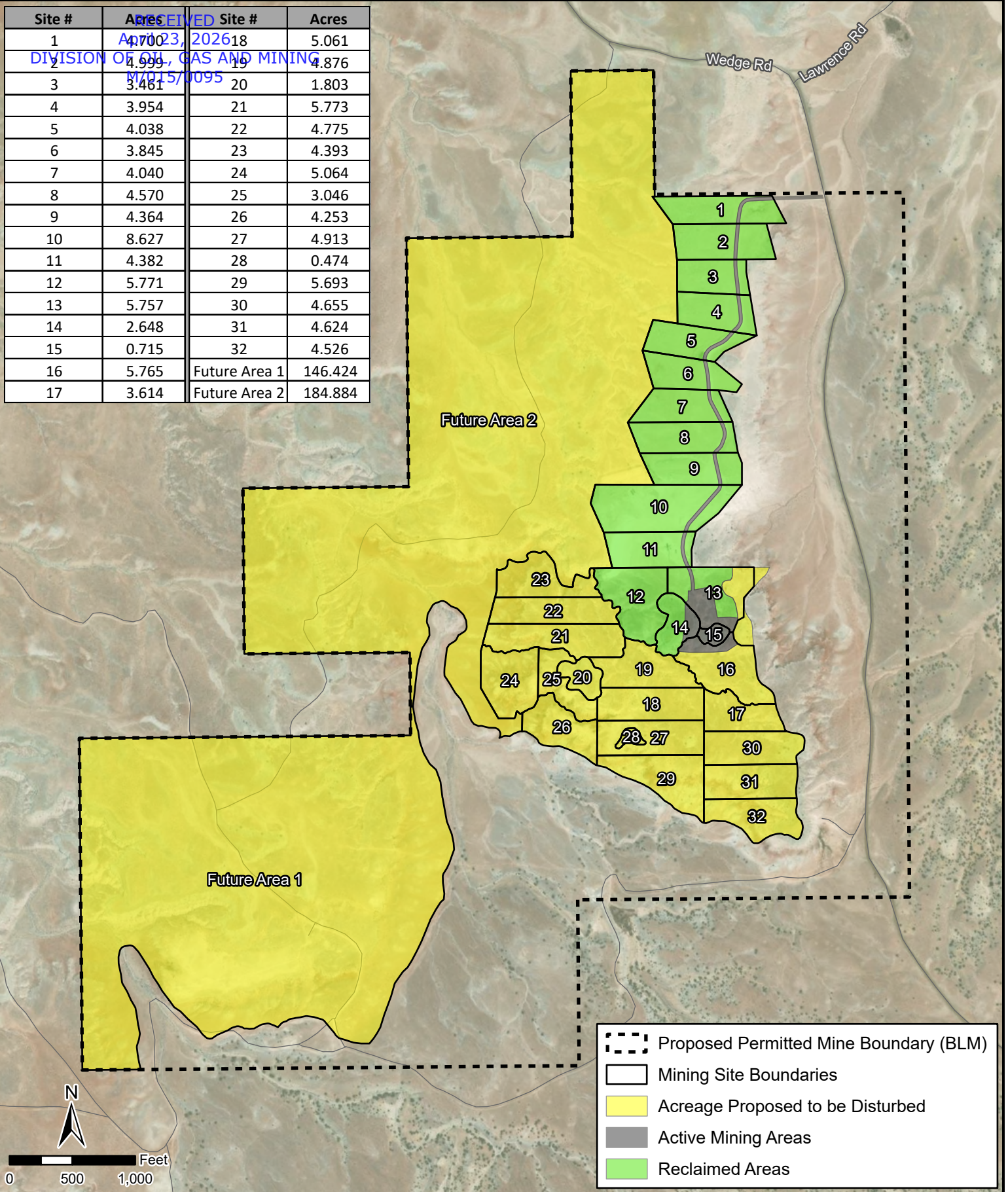
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Project Number: 2512-051

Drawn by: ALP 2-26

Last Edit: 04/06/2026

Site #	Acres	Proposed Site #	Acres
1	4.700	23	5.061
2	4.999	19	4.876
3	3.461	20	1.803
4	3.954	21	5.773
5	4.038	22	4.775
6	3.845	23	4.393
7	4.040	24	5.064
8	4.570	25	3.046
9	4.364	26	4.253
10	8.627	27	4.913
11	4.382	28	0.474
12	5.771	29	5.693
13	5.757	30	4.655
14	2.648	31	4.624
15	0.715	32	4.526
16	5.765	Future Area 1	146.424
17	3.614	Future Area 2	184.884



**Jones & DeMille
Engineering**

Diamond K Gypsum, Inc.

*Chalk Hills Quarry Permitting
Site Layout Map*

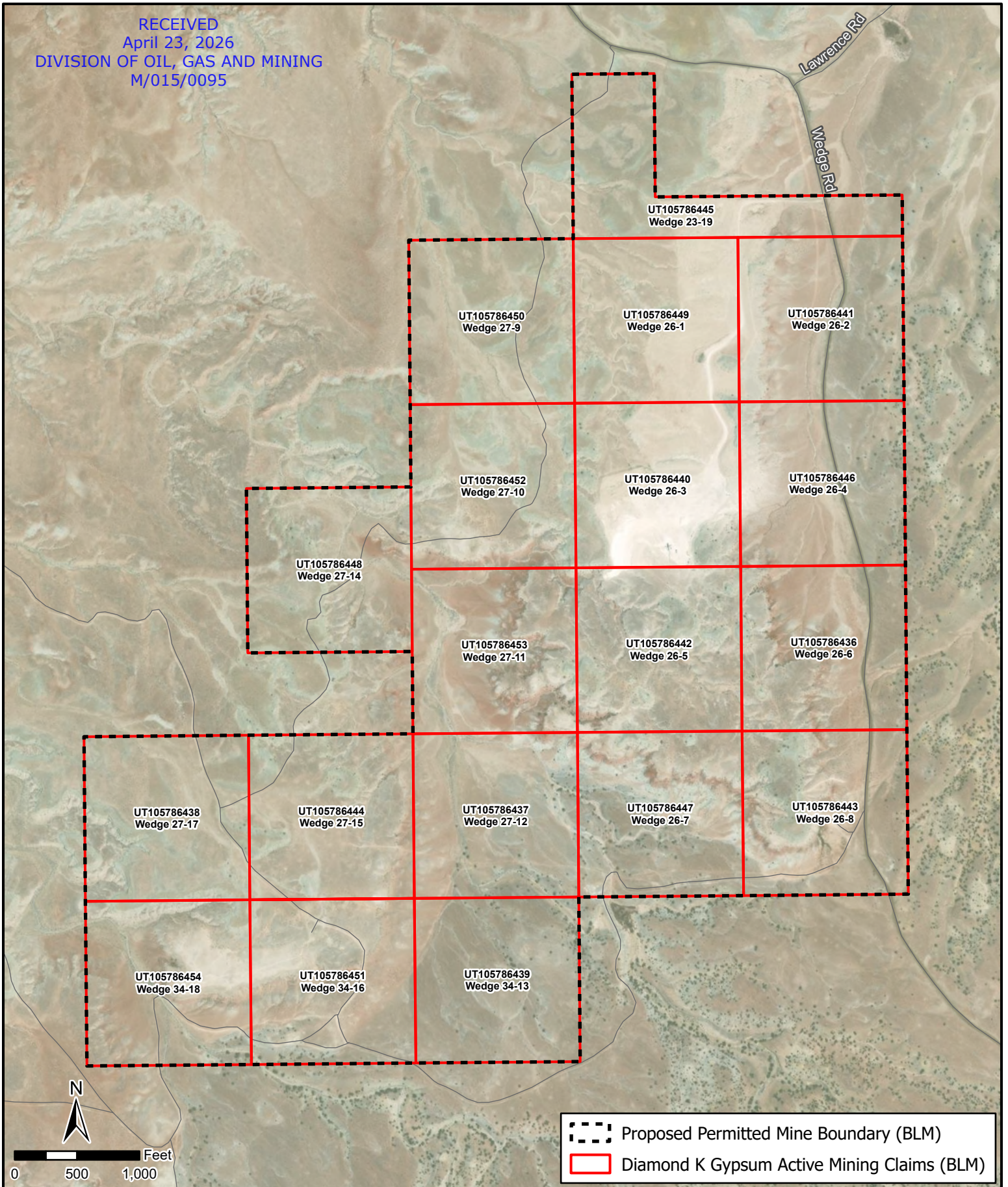
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 Project Number: 2512-051 Drawn by: ALP 2-26 Last Edit: 04/06/2026

Emery County

Scale: 1" = 1,000'

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 Engineering**

Diamond K Gypsum, Inc.

Emery County

*Chalk Hills Quarry Permitting
 Mining Claim Overview*

Scale: 1" = 1,000'

Map Name: H:\2512-051\GIS\Projects\2512-051_Env\2512-051_Env.aprx - 4_Claim_Overview






Project Number: 2512-051

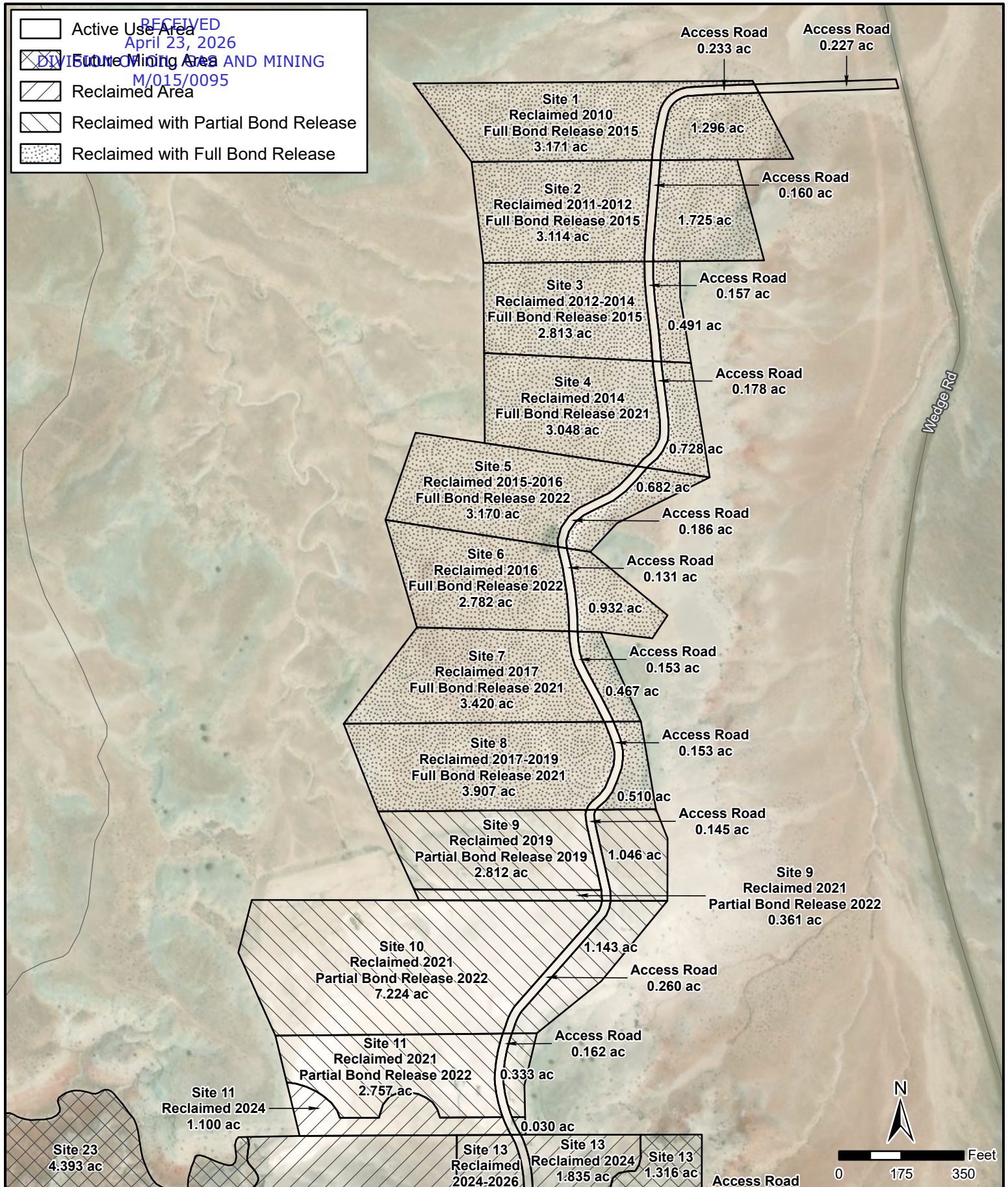
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Last Edit: 04/06/2026

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-  Active Use Area
-  Future Mining Area
-  Reclaimed Area
-  Reclaimed with Partial Bond Release
-  Reclaimed with Full Bond Release



Jones & DeMille Engineering

Diamond K Gypsum, Inc.

*Chalk Hills Quarry Permitting
Site Status Map*

Emery County

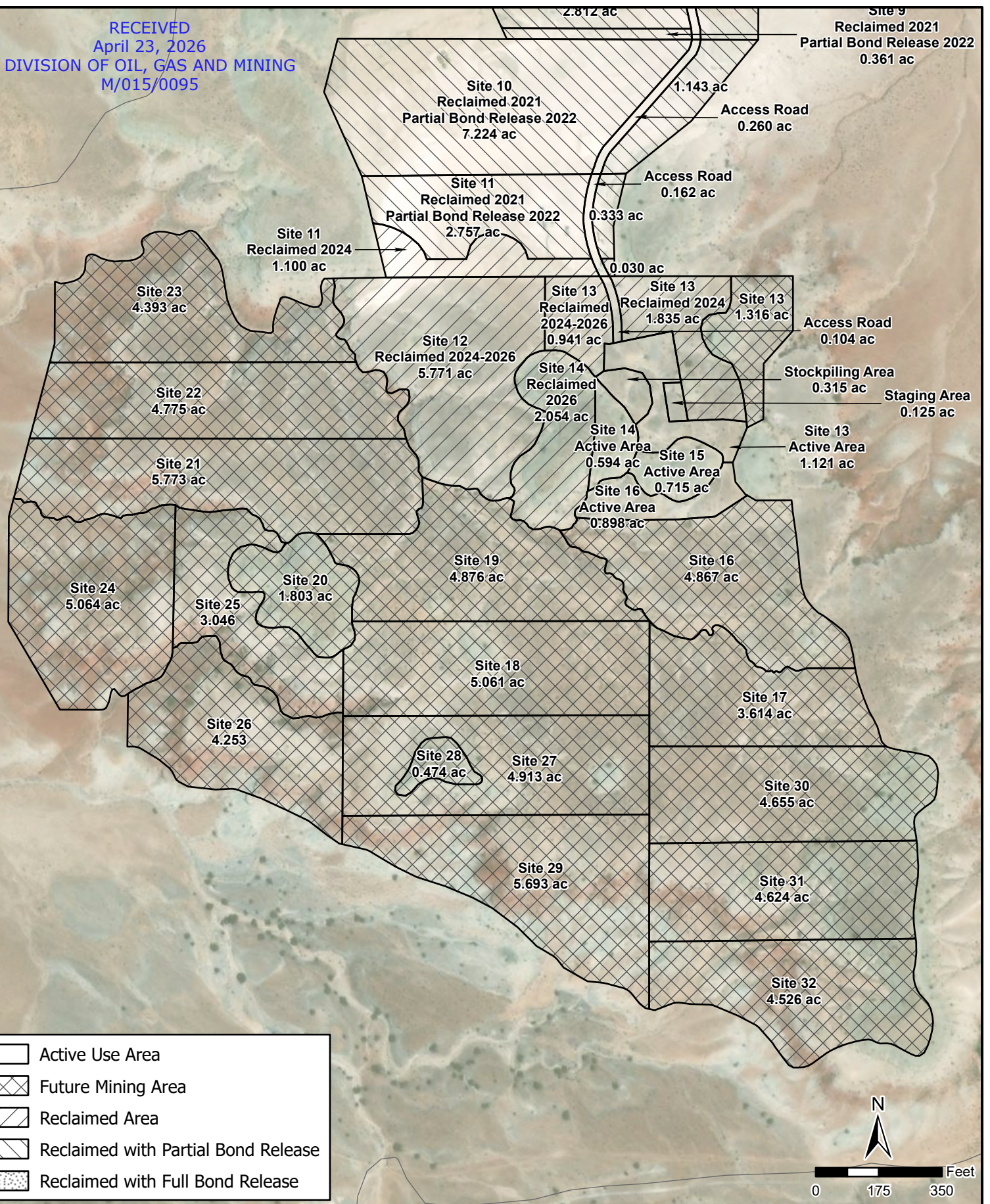
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Project Number: 2512-051

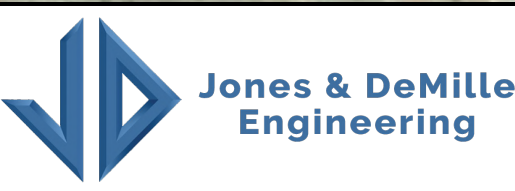
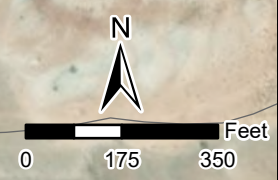
Drawn by: ALP 2-26

Last Edit: 04/06/2026

5a



	Active Use Area
	Future Mining Area
	Reclaimed Area
	Reclaimed with Partial Bond Release
	Reclaimed with Full Bond Release



Diamond K Gypsum, Inc.

*Chalk Hills Quarry Permitting
 Site Status Map*

Map Name: H:\2512-051\GIS\Projects\2512-051_Env\2512-051_Env.aprx - 5b_Quarry_Status_Map
 Project Number: 2512-051 Drawn by: ALP 2-26 Last Edit: 04/06/2026

Emery County

Scale: 1" = 350'

5b

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April 2026 May 2024

Attachment B. BLM NEPA Documents

Attachment C. Photos



Figure 1. Representative vegetated area in proposed mining area, south of current mining operations, looking due west at 270° (J. Jorgensen, 4-5-18)



Figure 2. Representative topography along southern edge of proposed mining area, looking due north at 0° (J. Jorgensen, 4-5-18)



Figure 3. Representative topography on top of gypsum formations, southeast of current mining operations, looking southwest at 225° (J. Jorgensen, 4-5-18)



Figure 4. Representative vegetation and topography near western boundary of project area, looking northwest at 300° (J. Jorgensen, 4-5-18)

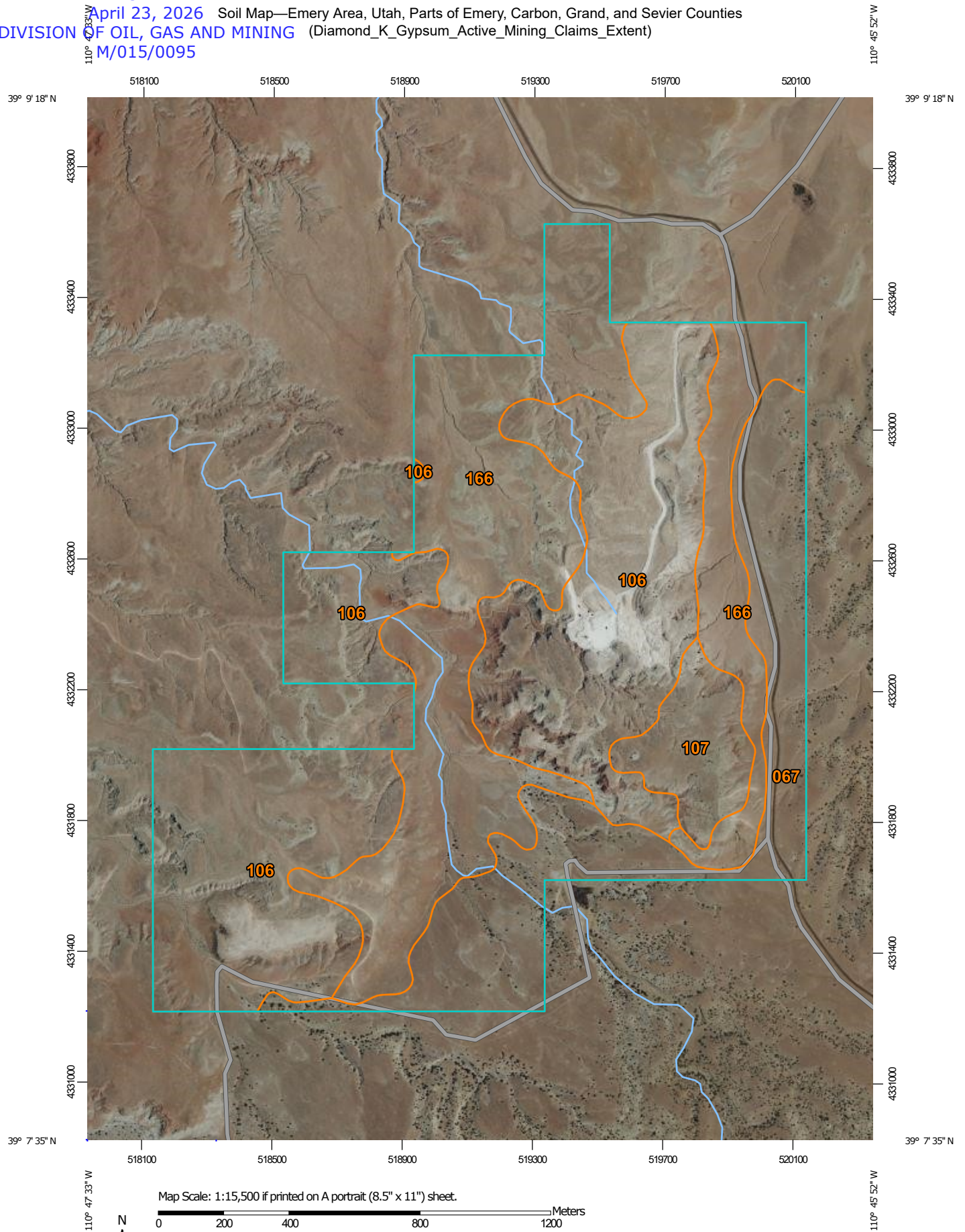
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Attachment D. NRCS Soil Survey Report





MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Emery Area, Utah, Parts of Emery, Carbon, Grand, and Sevier Counties
 Survey Area Data: Version 14, Aug 27, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 31, 2022—Jul 17, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
067	Hideout-Gerst-Kaiar association, 3 to 30 percent slopes	134.2	17.8%
106	Mussentuchit-Goblin-Swell association, 3 to 20 percent slopes	332.3	44.1%
107	Mussentuchit-Humbug-Sinbad complex, 3 to 25 percent slopes	35.9	4.8%
166	Swell-Mussentuchit association, 2 to 12 percent slopes	251.7	33.4%
Totals for Area of Interest		754.0	100.0%



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M/015/0095

Attachment E. Soil Sample Analysis Reports

BRIGHAM YOUNG UNIVERSITY
Soil and Plant Analysis Laboratory

255 WIDB
Provo, UT 84602
801-422-2147

**Plant and Animal Science
 Department**

Name Diamond K. Gypsum
 Street 1720 South Red Hills Drive
Richfield UT 84701
 City State Zip

**SOIL TEST REPORT
 AND
 RECOMMENDATIONS**

Date: 16-Sep-08
 Telephone: _____
 Fax: _____

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
Chesler #1	Turf	7.08				Silt Loam		

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recommendations
Nitrate-Nitrogen ppm N	4.45	X					
Phosphorus ppm P	9.81		X				
Potassium ppm K	73.60			X			
Salinity-EcE dS/m	2.40		X				
SAR-Sodium Absorption Ratio	0.02	X					
Calcium-SAR ppm Ca	483.84						
Magnesium SAR ppm Mg	11.52						
Sodium SAR ppm Na	1.44						

Notes:

Sample location: 39.14750N, 110.77252W
 Elevation: 5,797 ft

BRIGHAM YOUNG UNIVERSITY

Soil and Plant Analysis Laboratory

**255 WIDB
 Provo, UT 84602
 801-422-2147**

**Plant and Animal Science
 Department**

Name Diamond K. Gypsum
 Street 1720 South Red Hills Drive
Richfield UT 84701
 City State Zip

**SOIL TEST REPORT
 AND
 RECOMMENDATIONS**

Date: 16-Sep-08
 Telephone: _____
 Fax: _____

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
Chesler #2	Turf	7.24				Silt Loam		

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recommendations
Nitrate-Nitrogen ppm N	3.84	X					
Phosphorus ppm P	15.17		X				
Potassium ppm K	70.40			X			
Salinity-EcE dS/m	2.46		X				
SAR-Sodium Absorption Ratio	0.04	X					
Calcium-SAR ppm Ca	473.60						
Magnesium SAR ppm Mg	16.16						
Sodium SAR ppm Na	2.88						

Notes:

Sample location: 39.14610N, 110.77284W
 Elevation: 5,801 ft

BRIGHAM YOUNG UNIVERSITY

Soil and Plant Analysis Laboratory

**255 WIDB
 Provo, UT 84602
 801-422-2147**

**Plant and Animal Science
 Department**

Name Diamond K. Gypsum
 Street 1720 South Red Hills Drive
Richfield UT 84701
 City State Zip

**SOIL TEST REPORT
 AND
 RECOMMENDATIONS**

Date: 16-Sep-08
 Telephone: _____
 Fax: _____

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
Chesler #3	Turf	7.16				Silt Loam		

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recommendations
Nitrate-Nitrogen ppm N	4.52	X					
Phosphorus ppm P	8.97		X				
Potassium ppm K	57.60		X				
Salinity-ECe dS/m	2.42		X				
SAR-Sodium Absorption Ratio	0.00	X					
Calcium-SAR ppm Ca	460.80						
Magnesium SAR ppm Mg	11.84						
Sodium SAR ppm Na	0.16						

Notes:

Sample location: 39.14302N, 110.77334W
 Elevation: 5,832 ft

BRIGHAM YOUNG UNIVERSITY

Soil and Plant Analysis Laboratory

255 WIDB
Provo, UT 84602
801-422-2147

**Plant and Animal Science
 Department**

Name Diamond K. Gypsum
 Street 1720 South Red Hills Drive
Richfield UT 84701
 City State Zip

**SOIL TEST REPORT
 AND
 RECOMMENDATIONS**

Date: 16-Sep-08
 Telephone: _____
 Fax: _____

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
Chesler #4	Turf	7.17				Silt Loam		

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recommendations
Nitrate-Nitrogen ppm N	3.33	X					
Phosphorus ppm P	4.58	X					
Potassium ppm K	54.40		X				
Salinity-EcE dS/m	2.50		X				
SAR-Sodium Absorption Ratio	0.01	X					
Calcium-SAR ppm Ca	588.80						
Magnesium SAR ppm Mg	11.52						
Sodium SAR ppm Na	0.96						

Notes:

Sample location: 39.14061N, 110.77422W
 Elevation: 5,847 ft (approx)

BRIGHAM YOUNG UNIVERSITY
Soil and Plant Analysis Laboratory
255 WIDB
Provo, UT 84602
801-422-2147

**Plant and Animal Science
 Department**

Name Diamond K Gypsum
 Street 1720 South Red Hills Drive
Richfield UT 84701
 City State Zip

**SOIL TEST REPORT
 AND
 RECOMMENDATIONS**

Date: 18-Aug-08
 Telephone: 435-896-8870
 Fax: _____

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
Lower	Turf	7.09				Silt Loam		

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recommendations
Nitrate-Nitrogen ppm N	7.57	X					
Phosphorus ppm P	14.67		X				
Potassium ppm K	96.00			X			
Salinity-ECe dS/m	1.10		X				
SAR-Sodium Absorption Ratio	0.23	X					
Calcium-SAR ppm Ca	652.32						
Magnesium SAR ppm Mg	13.76						
Sodium SAR ppm Na	22.08						

Notes: These soils are gypsiferous soils. Therefore a complete texture analysis cannot be performed. However, we did texture by feel (which is displayed in the "soil texture" box).

Sample location: 39.14847N, 110.76970 (approx)
 Elevation: 5,757 (approx)

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Attachment F. Quantitative Vegetation Inventory



Intermountain Ecosystems, LLC.
270 east 1230 north
Springville, Ut. 84663
801-489-4590

2008 DIAMOND K GYPSUM QUANTITATIVE VEGETATION INVENTORY

Diamond K Gypsum of Richfield Utah has contracted Intermountain Ecosystems to conduct a quantitative vegetation analysis on entire proposed 62.28-acre quarry in Wedge Claim 23-19 and adjacent areas as defined by Diamond K. The area studied includes all or parts of Wedge Claims 23-10, 26-1 through 4, 27-9 and 27-10. The vegetation analysis estimated the percent live cover of shrubs, forbs and grasses. Two 50 meter line intercept transects were employed along a north to south axis and percent vegetative cover was estimated by species. The inventory was conducted July 9th 2008. by Dr Ronald J. Kass, botanist.

Common Name	Scientific Name	Plant Type	Percent Cover
Winterfat	<i>Ceratoides lanata</i>	Shrub	4.1
Shadscale	<i>Atriplex confertifolia</i>	Shrub	1.2
Sand dropseed	<i>Sporobolus cryptandrus</i>	Grass	2.0
Purple threeawn	<i>Aristida purpureus</i>	Grass	2.0
Snakeweed	<i>Xanthrocephalum sarothorae</i>	Shrub	0.84
Castle Valley saltbush	<i>Atriplex nuttallii</i> var <i>cuneata</i>	Shrub	0.65
Galleta grass	<i>Hilaria jamesii</i>	Grass	0.75
Yellow cryptantha	<i>Cryptantha flava</i>	Forb	0.75
Total Vegetative Cover			12.29

Plant cover is slightly biased because of late season lack of forb cover. There was some cryptobiotic crust but this was not estimated. Cattle were present in the surrounding areas.

%Ground Cover	%Litter	%Rock	%Bare ground
12.29	11.5	27.1	49.2