



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 MICHAEL R. STYLER  
*Executive Director*  
 Division of Oil, Gas and Mining  
 JOHN R. BAZA  
*Division Director*

# Inspection Report

Permit Number:	<b>C0070019</b>
Inspection Type:	PARTIAL
Inspection Date:	Thursday, July 16, 2020
Start Date/Time:	7/16/2020 8:30:00 AM
End Date/Time:	7/16/2020 3:00:00 PM
Last Inspection:	Tuesday, June 9, 2020

Representatives Present During the Inspection:	
OGM	Priscilla Burton
Company	Karin Madsen
OGM	Justin Eatchel

Inspector: Priscilla Burton,

Weather: sun, 75F

InspectionID Report Number: 6720

Accepted by: SCHRISTE  
 7/22/2020

Permittee: **ANDALEX RESOURCES INC**  
 Operator: **ANDALEX RESOURCES INC**  
 Site: **CENTENNIAL MINE**  
 Address: **PO BOX 910, EAST CARBON UT 84520-0910**  
 County: **CARBON**  
 Permit Type: **PERMANENT COAL PROGRAM**  
 Permit Status: **INACTIVE**

**Current Acreages**

2,274.77	<b>Total Permitted</b>
47.19	<b>Total Disturbed</b>
	<b>Phase I</b>
	<b>Phase II</b>
	<b>Phase III</b>

**Mineral Ownership**

- Federal
- State
- County
- Fee
- Other

**Types of Operations**

- Underground
- Surface
- Loadout
- Processing
- Reprocessing

**Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:**

We observed the conditions at each degas well on the plateau above the mine site. Appendix X, Fig. 1-1 shows the degas well locations. A spreadsheet titled, GVH Reclamation, attached, presents the current status of each well for quick reference, including those temporarily capped.

**Inspector's Signature: Priscilla Burton**

Priscilla Burton  
 2020.07.27 14:54:15 -06'00'

**Date** Monday, July 20, 2020

Priscilla Burton,  
 Inspector ID Number: 37

**Note:** This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining. telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • www.ogm.utah.gov



**REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENTS**

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
  - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
  - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Divison Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. AVS check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **1. Permits, Change, Transfer, Renewal, Sale**

MRP Appendix X describes the gob vent holes (GVH) on the plateau above the Centennial Mine. As stated in MRP Appendix X, Attachment 1-1, Liberty Pioneer/WEM Castlegate is the operator of the compressor station.

### **2. Signs and Markers**

All sites, except Site 15, are signed.

### **3. Topsoil**

There is a topsoil pile at degas well pad #9. This stockpile needs weed control.

### **9. Protection of Fish, Wildlife and Related Environmental Issues**

A weed control program is in place. Musk thistle is the dominant noxious weed under control. The weed contractor (SCAMP Excavation) is using GlyStar Plus (glyphosate) and Agri Star 2,4-D Amine 4 in combination. During the inspection a crew was spraying at site 8A. We observed that sites 1, 5, 5A, road to 6, site 6, road to site 11, site 11, road to site 12, site 8A, site 9, and site 17 require weed control. The road to site 8A had been sprayed recently.

### **10. Slides and Other Damage**

Grazing is causing considerable damage to the revegetation of sites 3, 4, 7, 7A, 8, 8A, 9, 15, 16, and 17 (see attached photos). These sites are fenced, but the fences have been breached. Cows have grazed the grasses down to the crown, limiting their ability to develop into robust, reproducing plants in the short growing season. Cows also carry the thistle and stickseed from site to site. Heavy grazing of desirable plants is selecting for less desirable species, such as squirrel tail grass. Ms. Madsen has contacted the landowner to no avail.

### **11. Contemporaneous Reclamation**

Final grading at sites sites 3, 4, 5A, 6, 7, 7A, & 11 and access roads to sites 6, 11 and 12 was finished in the fall of 2019. Final seeding at sites 3, 4, 5A, 6, 7, 7A, & 11 and access roads to sites 6, 11 and 12 was completed in May 2020.

### **13. Revegetation**

The seed mix scattered in May 2020 is attached to this report. Sagebrush seeded in May 2020 has emerged and grown quickly on the recently reclaimed roads and pads. It is only been 6 weeks since seeding. All sites should be watched closely for vegetation establishment and possible re-seeding this fall.

### **15. Cessation of Operations**

The mine has been in temporary cessation since April 1, 2008.

**16.a Roads: Construction, Maintenance, Surfacing**

The water bars along several sections of the Deadman Canyon access road are in need of maintenance and repair, particularly in the switchbacks and upper reaches of the road. Anywhere that water bars exist or where runoff has otherwise been diverted has completely washed out the Excelsior logs and silt fences that were previously installed, causing sediment to deposit on the slopes beneath the road. Since this road will be retained through reclamation, erosion and siltation must be maintained as per R645-301-534.150.

**16.b Roads: Drainage Controls**

The access up the Right Fork of Deadman Canyon is a primary road, because it is to be retained for post mining land use (R645-301-527.123). R645-301-742.423.1 requires that sediment control be maintained on this road. There are many drainage structures on this road that require maintenance.

**17. Other Transportation Facilities**

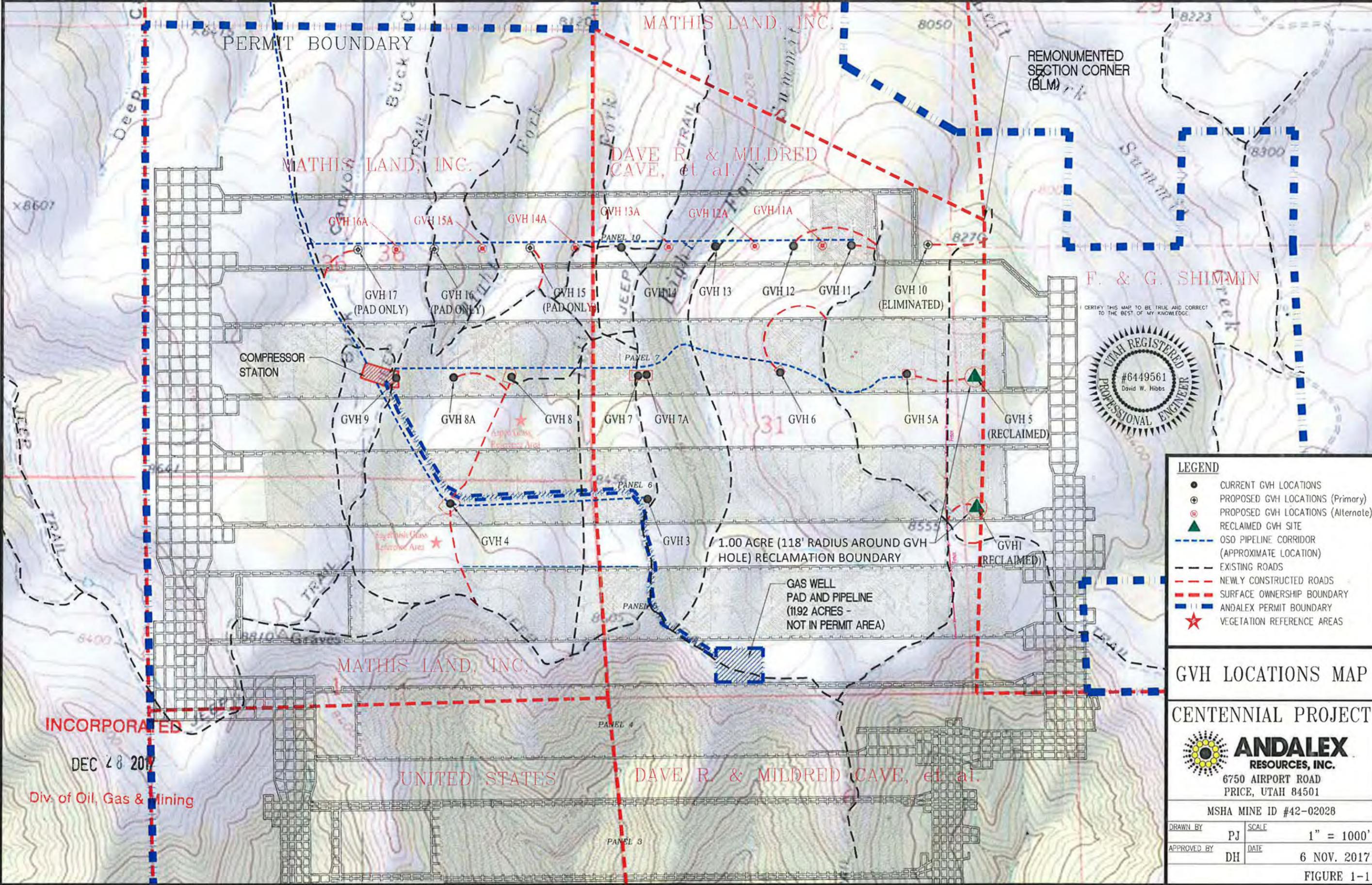
Access roads to sites 1, 5A, 6, 11, 12, 15, and 17 have been reclaimed. The access road through site 4 to sites 8 and 8A will be reclaimed when the wells at GVH pads 8 and 8A are reclaimed.

**18. Support Facilities, Utility Installations**

Well valves remain at GVH 8, GVH8A, GVH 9. The wells are temporarily capped. No wells are currently in production. The compressor station was idle.

GVH #	Pad Constructed	Drilled	Final Reclamation	Surface Owner	Producing	Depth	Bond	Plugged	Reduced Pad	Fenced	Seeded	Veg Survey	Elig Phase
1	Yes	2005	2009	Cave	No	2608	\$0	Yes	Yes	Yes	2009	2017	Ye
3	Yes	2005	2019	Cave	No	2617	\$10,346	Yes	Yes	Yes	2020		Ye
4	Yes	2005	2019	Mathis	No	2676	\$10,346	Yes	Yes	Yes	2020		Ye
5	Yes	2005	2009	Cave	No	2738	\$0	Yes	Yes	Yes	2009	2017	Ye
6	Yes	2005	2019	Cave	No	2771	\$10,346	Yes	Yes	Yes	2020		Ye
7	Yes	2006	2019	Cave	No	2689	\$10,346	Yes	Yes	Yes	2020		Ye
8	Yes	2006		Mathis	Temporarily Capped	2725	\$10,346	No	Yes	Yes			N
11	Yes	2006	2019	Cave	No	2853	\$10,346	Yes	Yes	Yes	2020		Ye
12	Yes	2006	2014	Cave	No	2801	\$10,346	Yes	Yes	Yes	2014	2017	Ye
13	Yes	2006	2014	Cave	No	2669	\$10,346	Yes	Yes	Yes	2014	2017	Ye
14	Yes	2006	2014	Cave	No	2755	\$10,346	Yes	Yes	Yes	2014	2017	Ye
15	Yes	Not Drilled	2012	Mathis	No	0	\$10,346		Yes	Yes	2014	2017	Ye
16	Yes	Not Drilled	2012	Mathis	No	0	\$10,346		Yes	Yes	2014	2017	Ye
17	Yes	Not Drilled	2012	Mathis	No	0	\$10,346		Yes	Yes	2014	2017	Ye
5A	Yes	2006	2019	Cave	No	n/a	\$10,346	Yes	Yes	Yes	2020	2017	Ye
7A	Yes	2006	2019	Cave	No	n/a	\$0	Yes	Yes	Yes	2020		Ye
8A	Yes	2006		Mathis	Temporarily Capped	n/a	\$10,346	No	Yes	Yes			N
9	Yes	2006		Mathis	Temporarily Capped	2754	\$10,346	No	No	Yes			N

\*by Pat  
Collins,  
Report  
located in  
2018 Annual  
Report



**LEGEND**

- CURRENT GVH LOCATIONS
- ⊕ PROPOSED GVH LOCATIONS (Primary)
- ⊙ PROPOSED GVH LOCATIONS (Alternate)
- ▲ RECLAIMED GVH SITE
- OSO PIPELINE CORRIDOR (APPROXIMATE LOCATION)
- - - EXISTING ROADS
- - - NEWLY CONSTRUCTED ROADS
- - - SURFACE OWNERSHIP BOUNDARY
- - - ANDALEX PERMIT BOUNDARY
- ★ VEGETATION REFERENCE AREAS

**GVH LOCATIONS MAP**

**CENTENNIAL PROJECT**



MSHA MINE ID #42-02028

DRAWN BY	PJ	SCALE	1" = 1000'
APPROVED BY	DH	DATE	6 NOV. 2017

FIGURE 1-1

G:\Current Drawings\Buildings & Construction\Tower Mine\GVH Drawings\Figure 1-9-22-09 Rev1.dwg, 11x17, 11/6/2017 2:21:36 PM

DEC 28 2017  
Div. of Oil, Gas & Mining

INCORPORATED

# UEI Tower/Andalex Resources 5 Acre Mix

Purity	Mixture Contents	Origin	Germ/Hard
11.01%	Antelope Bitterbrush, VNS	ID	94 %
10.78%	Mountain Brome, Garnet	ID	96 %
10.53%	Western Wheatgrass, Rosana	ID	93 %
8.02%	Bluebunch Wheatgrass, Anatone	ID	86 %
7.50%	Indian Ricegrass, Rimrock	WA	92 %
7.26%	Slender Wheatgrass	CA	95 %
5.85%	Rocky Mountain Penstemon, VNS	UT	59 %
4.31%	Utah Serviceberry, VNS Native	UT	80 %
4.15%	Mountain Mahogany- Curleaf	WY	83 %
3.79%	Sweetvetch Utah, Timp	CO	91 %
3.75%	Mountain Mahogany , True	UT	92 %
3.71%	Lewis Flax, Appar	WA	93 %
3.63%	Mountain Snowberry, Native	SD	95 %
2.03%	Sweet Clover, Yellow Blossom	ID	85 %
1.05%	Big Sagebrush, Mountain	UT	66 %
0.95%	Rocky Mountain Penstemon, Bandera	CO	91 %
0.90%	Sandberg Bluegrass, Mountain Home	WA	96 %
0.38%	Louisiana Sagebrush, VNS	SD	91 %

0.24% Crop  
 10.06% Inert  
 0.07% Weed, No Noxious Found  
 Oldest Test Date: 12/11/2018

Maple Leaf  
 450 South 50 East  
 Ephraim, UT 84627  
 PO #1054182/3100  
 Lot #36140  
 Net Weight 44.99 Lbs.

PHOTO ATTACHMENT

Centennial Mine Degas Well Inspection 7/16/2020



GVH1



GVH 3



GVH4



GVH 5

**PHOTO ATTACHMENT**

**Centennial Mine Degas Well Inspection 7/16/2020**



GVH 5A access road



GVH 5A



GVH 6 access road



GVH 6



GVH 7/7A



GVH 7/7A



GVH 8



GVH 8A



GVH 9



GVH 11 access road



GVH 11



GVH 12 access road

PHOTO ATTACHMENT

Centennial Mine Degas Well Inspection 7/16/2020



GVH 12



GVH 13



GVH 14



GVH 15



GVH 16



GVH 17



GVH 16. Buried Culvert Location is similarly marked at all GVH sites.



Sediment control maintenance required on the R. Fk. Deadman Cyn access road