

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**



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RYAN FLYNN  
Cabinet Secretary  
BUTCH TONGATE  
Deputy Secretary

June 5, 2014

Mr. Mark Livingston, Director  
Shooting Star Mining Company LLC  
4099 McEwen Road, Suite 150  
Dallas, Texas 75244

**RE: Billali Mine; Minor; Unpermitted Discharge; SIC 1041; NPDES Reconnaissance Inspection;  
NPDES # NMU001879; May 13, 2014**

Dear Mr. Livingston:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the Federal Clean Water Act.

Introduction, treatment scheme, and problems noted during this inspection are discussed in the Further Explanations section of the inspection report.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the finding in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Racquel Douglas  
US Environmental Protection Agency, Region VI  
Enforcement Branch (6EN)  
1445 Ross Avenue, Suite 120  
Dallas, Texas 75202-2733

Bruce Yurdin  
New Mexico Environment Department  
Surface Water Quality Bureau  
Point Source Regulation Section  
P.O. Box 5469  
Santa Fe, New Mexico 87502

If you have any questions about this inspection report, please contact Daniel Valenta at (505) 827-2575 or [daniel.valenta@state.nm.us](mailto:daniel.valenta@state.nm.us).

Billali Mine, New Mexico  
June 5, 2014  
Page 2

Sincerely,

*/s/Bruce Yurdin*

Bruce J. Yurdin  
Program Manager  
Point Source Regulation Section  
Surface Water Quality Bureau

Cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail  
Carol Peters, USEPA (6EN-WM) by e-mail  
Brent Larsen, USEPA (6WQ) by e-mail  
Racquel Douglas, USEPA (6EN-WM) by e-mail  
Gladys Gooden-Jackson, USEPA (6EN-WC) by e-mail  
NMED District III, Mike Kesler by e-mail  
Chuck Schultz, Energy, and Mineral & Natural Resources Dept. by e-mail  
DJ Ennis, Mining and Minerals Division, by e-mail



Form Approved  
OMB No. 2040-0003  
Approval Expires 7-31-85

**NPDES Compliance Inspection Report**

**Section A: National Data System Coding**

Transaction Code			NPDES										yr/mo/day					Inspec. Type		Inspector		Fac Type									
1	N	2	5	3	N	M	U	0	0	1	8	7	9	11	12	1	4	0	5	1	3	17	18	R	19	S	20	2			
Remarks																															
U N P E R M I T T E D D I S C H A R G E																															
Inspection Work Days						Facility Evaluation Rating						BI		QA		Reserved															
67						70						71		72		73										74		75		80	

**Section B: Facility Data**

Name and Location of Facility Inspected ( <i>For industrial users discharging to POTW, also include POTW name and NPDES permit number</i> )		Entry Time /Date ~1027 hours / 5-13-2014		Permit Effective Date Unpermitted / Not Applicable	
Billali Mine/from Douglas AZ take Hwy 75 north 10 miles into NM, turn onto Bitter Creek Rd and travel 14 miles to mine.		Exit Time/Date ~1155 hours / 5-13-2014		Permit Expiration Date Unpermitted / Not Applicable	
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)				Other Facility Data	
Billali Mine - no site representative was present at the mine. Monzingo Ranch – Ranch owner Mr. Monzingo was available.				Latitude 32° 53” 04.91’ Longitude -108° 59” 01.59’	
Name, Address of Responsible Official/Title/Phone and Fax Number			Contacted		
Mr. Mark Livingston/ Director/Shooting Star Mining Company LLC 4099 McEwen Road, Suite 150/Dallas, Texas 75244/214-500-1406			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

**Section C: Areas Evaluated During Inspection**

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

U	Permit	N	Flow Measurement	N	Operations & Maintenance	N	CSO/SSO
N	Records/Reports	N	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
N	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
N	Effluent/Receiving Waters	N	Laboratory	N	Storm Water	N	Other:

**Section D: Summary of Findings/Comments (Attach additional sheets if necessary)**

1. SEE ATTACHED FURTHER EXPLANATIONS AND PHOTO LOG.

Name(s) and Signature(s) of Inspector(s)		Agency/Office/Telephone/Fax		Date	
Daniel Valenta /s/Daniel Valenta		NMED/SWQB/505-827-0418			
Signature of Management QA Reviewer		Agency/Office/Telephone/Fax		Date	
Sarah Holcomb		NMED/SWQB/505-827-2798			

**Shooting Star Mining Company, LLC  
Billali Mine, New Mexico  
NPDES Tracking No. NMU001879  
Reconnaissance Inspection  
May 13, 2014**

**Further Explanations**

**Introduction**

On May 13, 2014, Mr. Daniel Valenta of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB), conducted a Reconnaissance Inspection of an unpermitted discharge of groundwater from the Billali Mine in Grants County, New Mexico. With the Inspector was Mr. David Ennis, Mining and Minerals Division (MMD) and Mr. Joseph Navarro, USDI-Bureau of Land Management (BLM).

NMED received notice from the MMD that a discharge was occurring from the mine and the discharge may not be permitted. The purpose of this Reconnaissance was to determine compliance with 40 Code of Federal Regulations (CFR) Part 122 and National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

NMED performs a certain number of Reconnaissance and Compliance Evaluation Inspections for the U.S. Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the Federal Clean Water Act. USEPA uses these inspections to determine compliance with the NPDES permit program. This inspection report is based on information provided by the reporter to NMED, owner/operator representatives, observations made by the NMED inspector.

**Clean Water Act and NPDES Permit Requirements**

Section 301 of the Federal Clean Water Act states:

*Except as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this Act, the discharge of any pollutant by any person shall be unlawful.*

40 CFR 122.1(b) states, “*The NPDES program requires permits for the discharge of “pollutants” from any “point source” into “waters of the United States.”* The terms pollutant, point source and waters of the United States are defined at §122.2.”

40 CFR 122.21(a) states, “*Duty to apply. Any person who discharges or proposes to discharge pollutants”.... “shall submit a complete application (which shall include a BMP program if necessary under 40 CFR 125.102) to the Director in accordance with this section and part 124.”*

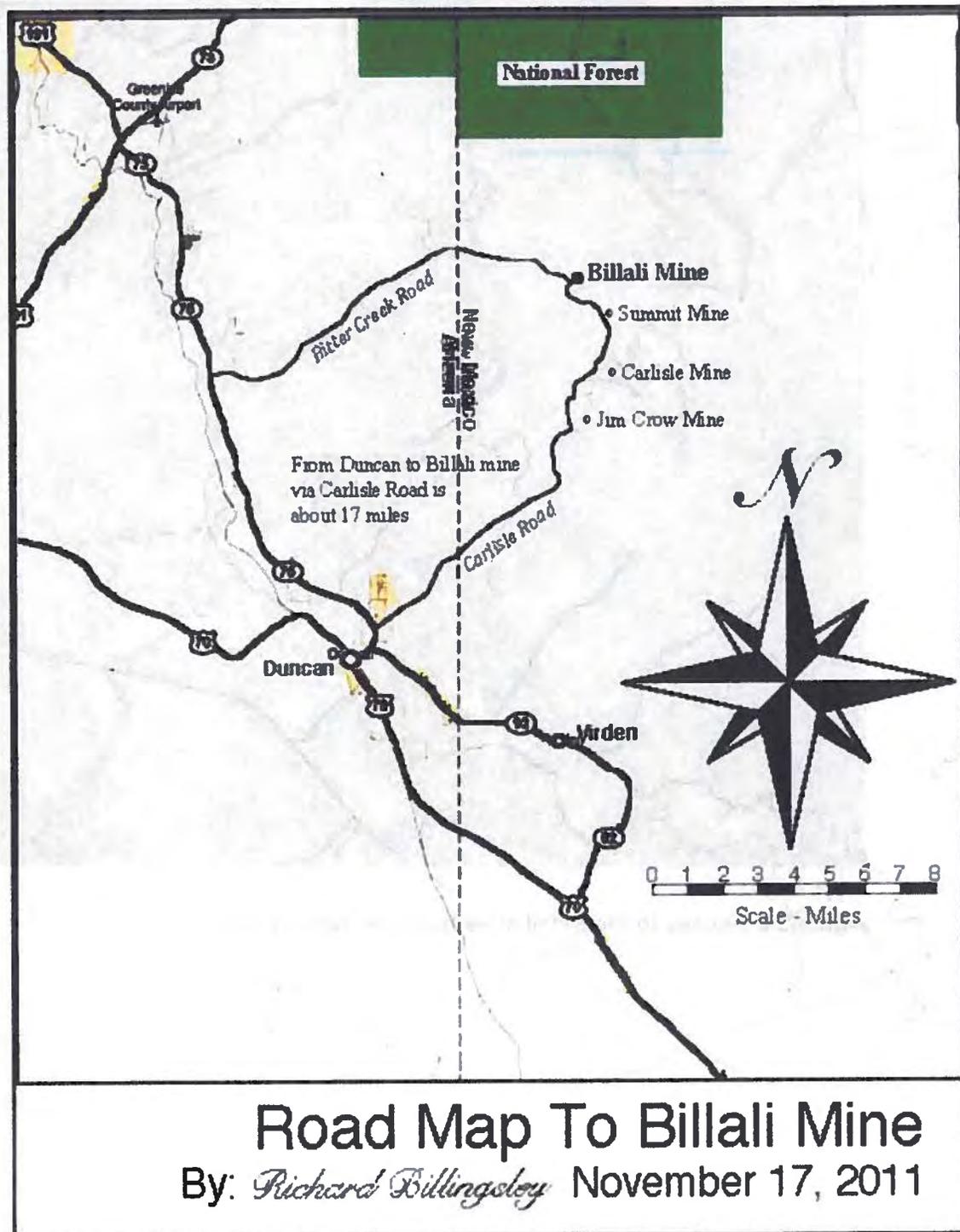
**Findings**

The inspector arrived at the mine site at approximately 1027 hours on May 13, 2014 with MMD and BLM staff. The BLM was present to verify the removal of mining equipment from BLM land. No operators were present at the mine. The discharge pipe from the mine has been removed. At the Monzingo ranch the discharge pipe was being disconnected and loaded into a trailer. At the Monzingo ranch the point of discharge was observed due to the erosion of surrounding material. The following pictures document the discharge into an unnamed arroyo that is a tributary to Bitter Creek. The discharge did not appear to reach Bitter Creek however it is unknown what was in the discharged water that may be mobilized downstream during the next rain event.

**Shooting Star Mining Company, LLC  
Billali Mine, New Mexico  
NPDES Tracking No. NMU001879  
Reconnaissance Inspection  
May 13, 2014**

Attached is a field inspection report completed by Gila-San Francisco Basin Manager, Water Resource Specialist Senior Mr. Adrain Manning on October 4, 2013 detailing the activities observed. Speaking with Mr. Monzingo concerning the discharge, he was told by the mine operators an estimated 3 million gallons had been discharged at his ranch.

**From the Billali mine in Grant County, New Mexico, groundwater from the flooded mine was discharged into a surface water of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit as required by 40 Code of Federal Regulations (CFR) Part 122. and National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.**



Source: Billingsley, 2011

Figure 3-5 Detailed access to the Billali mine

OFFICE OF STATE ENGINEER, DISTRICT III

BILLALI MINE / WHITE PINE / SHOOTING STAR, LLC



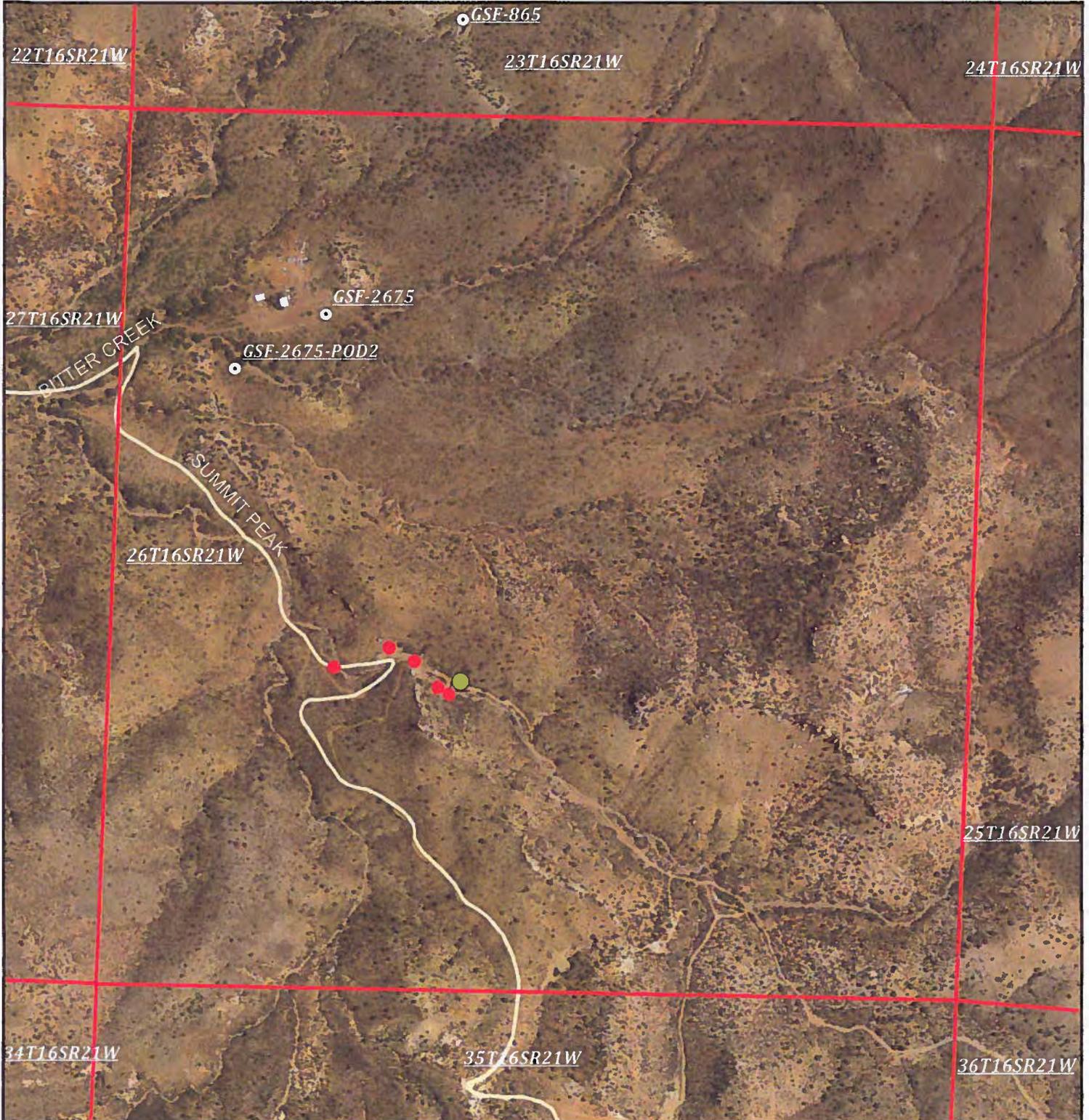
GSF- SUBFILE: PRIORITY DATE: CAUSE; 16290 PERMIT: NONE  
AS OF THE DATE OF FIRST VISIT TO MINE NO APPLICATION FOR THE PUMPING OF WATER HAS BEEN FILED 10-4-2013

LOCATION OF POD: BILLALI UNDERGROUND MINE DECLINE / NE¼SW¼, of Section 26, Township 16 South, Range 21 West, N.M.P.M.

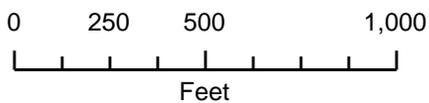
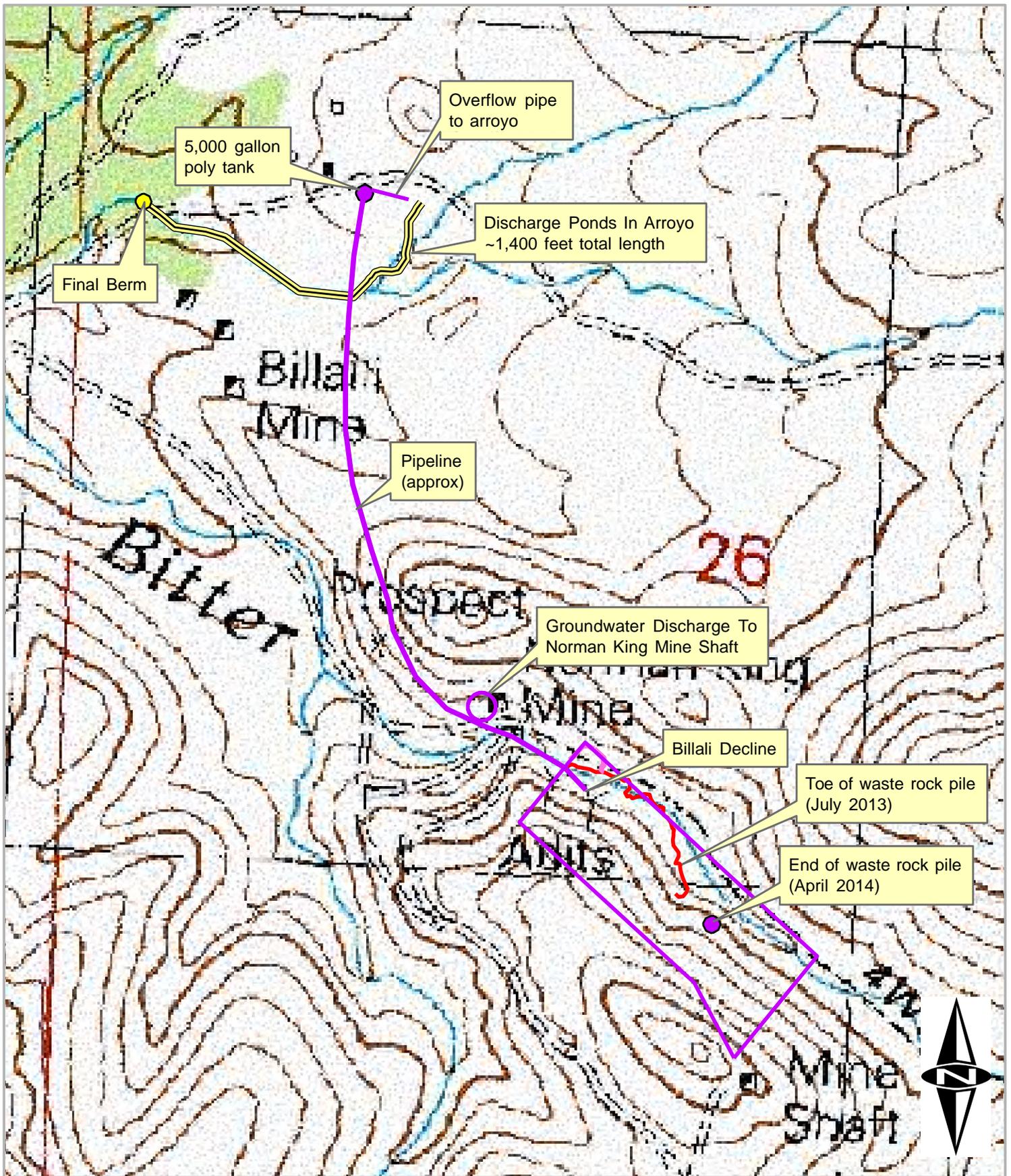
GPS: LATITUDE: N 32°53'05.97239" / LONGITUDE: W 108°59'00.65633" / 5336.999 usft

PUMPING TO LOCATION: NORMAN KING MINE SHAFT / GRANT COUNTY / NE¼SW¼, of Section 26, Township 16 South, Range 21 West, N.M.P.M.

SURFACE AREA/ACRES: 0.0/SQFT: 0.00 CAPACITY / AMOUNT PER ANNUM - IN ACRE-FEET: /GALLONS: 0.00



DIRECTIONS: Going west on US 70 from Lordsburg into Arizona turn right onto AZ75 in Duncan and cross the railroad tracks and go to the forth turn to the right Carlisle road once you leave the highway follow the main dirt road for 17.1 miles to the entrance to the Billali Mine on the right side of the road



**Billali Mine Site Map**  
**Grant County, New Mexico**  
**Inspection Date: May 13, 2014**

**NMED/SWQB  
Official Photograph Log**

Photo # 1

Photographer: Daniel Valenta	Date: May 13, 2014	Time: 1039 hours
City/County: Monzingo Ranch/Grant County		
Location: Billali Mine, New Mexico, next to Bitter Creek road coming from Hwy 75 north of Douglas AZ.		
Subject: Entrance to the Billali mine where groundwater was pumped out to enable samples to be taken.		



**NMED/SWQB  
Official Photograph Log**

Photo # 2

Photographer: Daniel Valenta	Date: May 13, 2014	Time: 1126 hours
City/County: Monzingo Ranch/Grant County		
Location: Monzingo Ranch, New Mexico, next to Bitter Creek road coming from Hwy 75 north of Douglas AZ.		
Subject: Pipe discharges groundwater from the mine into unnamed arroyo on the Monzingo ranch, this is a tributary to Bitter creek. A series of check dams have been built to retain the water. A white residue was left as the water was absorbed into the ground.		



**NMED/SWQB  
Official Photograph Log**

Photo # 3

Photographer: Daniel Valenta	Date: May 13, 2014	Time: 1130 hours
City/County: Monzingo Ranch/Grant County		
Location: Monzingo Ranch, New Mexico, next to Bitter Creek road coming from Hwy 75 north of Douglas AZ.		
Subject: A series of small check dams had been built to retain the water until flowing around and into the next check dam. A white residue was left on the ground as the water was absorbed into the ground.		



**NMED/SWQB  
Official Photograph Log**

Photo # 4

Photographer: Daniel Valenta	Date: May 13, 2014	Time: 1143 hours
City/County: Monzingo Ranch/Grant County		
Location: Monzingo Ranch, New Mexico, next to Bitter Creek road coming from Hwy 75 north of Douglas AZ.		
Subject: A series of small check dams had been built to retain the water until flowing around and into the next check dam. A white residue was left on the ground as the water was absorbed into the ground.		



**NMED/SWQB  
Official Photograph Log**

Photo # 5

Photographer: Daniel Valenta	Date: May 13, 2014	Time: 1148 hours
City/County: Monzingo Ranch/Grant County		
Location: Monzingo Ranch, New Mexico, next to Bitter Creek road coming from Hwy 75 north of Douglas AZ.		
Subject: A series of small check dams had been built to retain the water until flowing around and into the next check dam. A white residue was left on the ground as the water was absorbed into the ground.		



**NMED/SWQB  
Official Photograph Log**

Photo # 6

Photographer: Daniel Valenta	Date: May 13, 2014	Time: 1155 hours
City/County: Monzingo Ranch/Grant County		
Location: Monzingo Ranch, New Mexico, next to Bitter Creek road coming from Hwy 75 north of Douglas AZ.		
Subject: Approximately 1,400 ft. downstream of discharge point, road to the Monzingo ranch house crosses the unnamed arroyo. Mr. Monzingo was contracted by the mine operators to level the berms in the arroyo using heavy equipment from the ranch.		



**FIELD INSPECTION REPORT****BILLALI MINE 1****Sub-Basin: GSRR****WHITE PINE / SHOOTING STAR, LLC**

**FILE** NONE  
**PERMIT** NONE  
**APPLICANT** BILLALI MINE  
**SUBJECT** PUMPING OF WATER WITHOUT A PERMIT  
**DECREE** Subfile: Cause: 16290 Certificate & License:  
**PRIORITY** NONE / NO WATER RIGHT  
**SOURCE** Gila-San Francisco Underground Water Basin  
**USE** NO PERMITTED USE  
**POD** NE $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 26, Township 16 South, Range 21 West, N.M.P.M.  
**LAND** Pt. NE $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 26, Township 16 South, Range 21 West, N.M.P.M.  
**CHECKED** 10-4-2013  
**CHECKED BY** Adrain Manning  
**DIRECTIONS** Going west on US70 from Lordsburg into Arizona turn right in Duncan onto AZ75 and follow that to the fourth road to the right which should be Carlisle Road; once you leave the highway follow the main dirt road for 17.1 miles to a road going to the right just above the bottom of the drainage of Bitter Creek; the mine is just around the side of the hill.

**REMARKS** Upon a field inspection of personnel from the OSE Deming office the following was revealed. The District 3 office called me while in the field and informed me that a rancher in the area of the Steeple Rock Mining District had called and reported that the Billali Mine operated at the time by White Pine Mining were pumping water into Bitter Creek From the Billali Mine shaft at a rate of 150 gpm and had increased the pumping rate since it had rained. When I arrived at the Billali Mine operation I made contact with the mine foreman John Rasmussen, and project engineer Shawn Harrison, and was told that Earl Harrison was the owner and they supplied me with their names and phone numbers and the name of the mining company and the mailing address. They stated they were pumping water from the Billali Mine Decline into the Norman King mine shaft 140 feet away to the north at a rate of 150.0 gpm. During my initial visit the mine foreman, and project engineer stated that they had a permit from the environmental department in Silver City to pump the water like they were doing because there was a fault connection between the Billali and King Mine shafts so they were just circulating the water while allowing them to mine underground in the Billali Mine or that they could even dump the water into Bitter Creek on the surface. They were informed that the pumping of any water in the Gila-San Francisco Water Basins required a permit from the Office of the State Engineer, and no water was to be pumped onto the surface and allowed to run down the drainage because that was a waste of water and illegal in the state of New Mexico and that I would order them to stop pumping if they pumped any water into Bitter Creek or any place on the surface. They were also told that I was going to find out from our hydrologist if there could actually be an exchange of water between the Billali and King Mine shafts. At that time there was two pipelines running from the Billali Mine shaft into the King Mine shaft (one black drisco pipe 3", and one PVC line 4") the foreman and project engineer stated they were pumping at a rate of 150.0 gallons per minute to keep the water level below where they were working in the shaft. Also there was a 1" PVC pipeline running down Bitter Creek to a 4000 gallon steel storage tank that they said was where they were supplying a local rancher with water for his cattle. I took a few pictures which can be viewed later in this report.

Upon returning to the office it was calculated that at 150 gallons per minute they were pumping 216,000 gallons per day, (since July when pumping started 123 days before pumping stopped on October 30<sup>th</sup>, 2013) 26,568,000 gallons of water (81.53 acre-feet) have been pumped from the Billali Mine shaft without a permit of any kind. Also Martin McMillan informed that Larry Monzingo the local rancher that had reported the pumping had a well at his house (which is just downhill from the mining operation) fail him and that Earl Harrison had stated that he had figure that would happen and that they would drill him an new well. Monzingo also had stated to Mr. McMillan that he had an agreement with Earl Harrison to supply him with water in the 4000 gallon tank he had setup alongside of Bitter Creek by the entrance to the mine area, and that they were pumping water into Bitter Creek at night and stopping in the day time; so he had built a small dam in the bottom of Bitter Creek to hold some of that water.

The Watermaster had owners and operators from the four mines in that area attend a meeting in the District 3 office to address the issues and permitting requirements for all of the mines in that area.

A second field inspection was conducted on October 16, 2013 by Martin McMillan, Karl Frisch, and Adrain Manning along with members of the New Mexico Environmental Department, New Mexico Mine and Minerals Department of Santa Fe. During this inspection we were guided around the property by Earl Harrison, and Shawn Harrison. During my documentation Earl Harrison stated that the discharge line from the Billali Mine Shaft had broken on two different occasions and discharge water onto the surface for an unknown period of time and the location of the breaks were shown to me (see attached map for the location of the breaks). With the attached pictures I will try to follow each of the different lines leaving the Billali Mine shaft from start to finish:

**SEE ATTACHED PHOTOS AND MAP:**  
**Pictures taken 10-4-13**



1) View of the Norman King Shaft looking south



2) Note two pipe lines dumping 150 gpm into shaft



3) Lower Pipe line on this date was dumping water onto the Surface then allowing it to run back into a shaft opening



4) PVC line dumping directly into Norman King Shaft



5) 1" PVC line running to 4000 gallon storage tank and it is noted that the creek bed is wet yet it has not rained recently

Pictures taken 10-15-13



1) Opening for the Billali Decline, looking west



2) Discharge water line on the north wall



3) Discharge line running away from the Billali Shaft to the north and a road crossing where it is buried



4) Earl Harrison stated they had two breaks at this location one on the PVC line, and one on the rubber line disconnected (line on the right) discharging water onto the surface



5) PVC line running along berm for the west road (entrance) to the Billali Mine



6) Looking east at the PVC section buried by shower room (note green barrels are the same two in previous picture)



7) View of where the PVC line surfaces from the lower buried crossing (note 1" PVC line to storage tank)



8) Point where PVC discharge line dumps into the Norman King Shaft



9) The line on the top left of the south wall is used for drill water and discharge into the King Shaft



10) View of line crossing Bitter Creek to Storage tank on the east side of the drainage



11) The 1" PVC line to the rancher's storage tank and the drisco line that dumps into the King Shaft branch off here and run through the culvert to the north



12) The other branch goes to this 5500 gallon storage tank which is then pressurized then flow back into the Billali Mine for drilling



13) the other branch runs along the ground on the east bank of the drain (black line in the center bottom of picture)



14) Out house for use by employees; drisco line runs along next to this building



15) Point the drisco line dumps into the Norman King Shaft (this was changed from original observation because of evaporative losses when dumped on surface)



16) Part of line no longer being used as part of system



17) 1" PVC line running to rancher's storage tank



18) 4000 gallon storage tank for the rancher to water cattle From filled with water from Billali Mine Shaft (note open over flow line, line laying on the ground to the right)



19) Intake line to the rancher's storage tank and valve to fill The metal drinker next to the tank



20) Line connected to valve from ranchers storage tank that was laid out down the drainage of Bitter Creek



21) Another view of the same line discussed under previous Picture



22) Shower room next to the ventilation shaft for workers to clean up after working



23) Inside view of shower building (two showers and wash Bin)



24) Holding tank for all water used in shower building which is pumped out by a service truck and hauled back to Duncan



25) 5500 gallon storage tank for drill water inside the mine



26) Air compressor line that is connected to the water storage tank to pressurize the water for drilling



27) Air line connected to water tank



28) Point where drill water reenters the Billali Mine Shaft