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ENVIRONMENT DEPARTMENT
Surface Water Quality Bureau



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Certified Mail Return Receipt Requested

May 15, 2012

Geoff McMahon, President
Morningstar Minerals Corporation
P.O. Box 9
Farmington, New Mexico 87499

RE: Industrial Storm Water, SIC 1499, NPDES Compliance Evaluation Inspection, Morningstar Minerals Corporation / Humate Mill and Manufacturing Facility, Farmington, NMR05HG37, May 3, 2012

Mr. McMahon:

Enclosed, please find a copy of the report 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.

I appreciate both your and Robby Wharton, Production Manager, Morningstar Minerals Corporation cooperation during this inspection.

Sincerely,

/s/Erin S. Trujillo

Erin S. Trujillo
Surface Water Quality Bureau

cc: Marcia Gail Adams, USEPA (6EN-AS) by e-mail
Samuel Bates, USEPA (6EN-AS) by e-mail
Carol Peters-Wagon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Darlene Whitten-Hill, USEPA (6EN-AS) by e-mail
Everett Spencer, USEPA (6EN) by e-mail
Christina Kracher, USEPA, Region 6, Water Legal Branch (6RC-EW)
Robert Italiano, District Manager, NMED District II by e-mail
Robby Wharton, Production Manager, Morningstar Minerals Corporation by e-mail

Morningstar Minerals Corporation
Humate Mill and Manufacturing Facility
NMR05HG37
Compliance Evaluation Inspection – Industrial Stormwater
May 3, 2012

Further Explanations

Introduction

On May 3, 2012, Erin Trujillo, accompanied by Sandra Gabaldón, both of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB), conducted a follow up Compliance Evaluation Inspection (CEI) at the Morningstar Minerals Corporation's humate mill and manufacturing facility at #44 CR 3697, Farmington, New Mexico 87410 along the Animas River in San Juan County, New Mexico. This inspection also included observations on properties west and southwest of the facility.

A previous CEI (NPDES Tracking No. NMU001745) was conducted by Erin Trujillo on June 28, 2011 to document the operator's status regarding the NPDES permit requirements for stormwater discharges associated with industrial activity under 40 Code of Federal Regulations (CFR) 122.26(b)(14) and the industrial stormwater Multi-Sector General Permit (MSGP). Morningstar Minerals Corporation submitted a Notice of Intent (NOI) to obtain permit coverage under the 2008 Multi-Sector General Permit for industrial stormwater discharges on June 30, 2011 (NPDES Tracking No. NMR05HG37). This follow-up industrial stormwater CEI was conducted at the request of USESPA, Region 6. The purpose of this inspection was to obtain additional information on structural control measures (e.g., berm) and potential for industrial stormwater discharges.

Robby Wharton, Production Manager, Morningstar Minerals Corporation was contacted and informed of the purpose of the inspection prior to this inspection. Upon arrival at the Morningstar Minerals Corporation office at #22 CR 3957, Farmington, New Mexico at approximately 1020 hours on May 3, 2012. The inspector made introductions, presented credentials and explained the purpose of the inspection to Mr. Wharton. The inspector also made introductions and explained the purpose of this inspection to Geoff McMahan, President, Morningstar Minerals Corporation and Andrea Corporation. The inspectors, Mr. Wharton and Mr. McMahan toured property owned by Andrea Corporation, including Morningstar Minerals Corporation operation areas at #44 CR 3697 along the Animas River. The tour included portions of land owned by Larry Dimmick Trust and Lillian Rose Trust. Larry Dimmick provided verbal permission by telephone to the inspector on May 1, 2012 to access the Larry Dimmick Trust parcel south-southeast of the Animas River. Noel Chitwood, son of Lillian Chitwood, provided permission during the tour to access the Lillian Chitwood Trust parcel. Preliminary observations of the inspector were discussed with Mr. Wharton and/or Mr. McMahan during the tour. The inspectors left the site and off-site parcels at approximately 1350 hours on the day of this inspection.

This report is based on a map provided by the Permittee's on-site representative after the previous inspection; observations made by the NMED inspector; records and reports kept by NMED; surface water rights maps reviewed at the State of New Mexico Office of the State Engineers (OSE) in Aztec, New Mexico; and readily available on-line information and mapping tools, including San Juan County, New Mexico Assessor and U.S. Federal Emergency Management Agency web sites <http://www.sjassessor.net/Disclaimer.html> and <http://www.fema.gov/hazard/map/firm.shtm>. Excerpts of reviewed maps and aerial photographs are provided in Figures 1 thru 11.

Map and Aerial Photograph, Tour and Photo Summary

Generally, surface elevations on topography maps are shown to slope from the southeast to the northwest toward the Animas River. At the site and along the Animas River, topography is shown to be relatively flat. Based on a review of aerial imagery from different dates, the width of the Animas River and deposition along the banks vary through time which is consistent with a stream having varying water levels. Morningstar mill and manufacturing facility (operation or site) and lands adjacent to Animas River are in a 100-year flood hazard area.

Photos 1 thru 4 show areas north of the Morningstar operation along the Animas River, including the Animas Valley Land & Water Co., LLC reservoir or pond for raw water storage. Using on-line Google Earth measurement tools from imagery dated 06/10/2011, the distance of the northern bank of the pond to the Animas River varies from approximately 45 to 65 feet. The aerial photograph measured width of the pond varies from approximately 70 to 115 feet. Photos 5 thru 7 show areas immediately adjacent to the Morningstar operation north and east of the metal building on site. The aerial photograph measured distance of the metal building on site to the previously discussed pond is approximately 50 feet.

Entrances to the access road to the Animas Valley Land & Water Co., LLC water intake channel and raw water storage pond adjacent to the Animas River is through the Morningstar operation. Staining was observed at one entrance of the access road (Photo 6). Local drainage at the area of the staining appeared to be generally south and back into the operational area. Dark solids were off site and east of the disturbed area shown in Figure 5 (Photo 5) which corresponds to the area described by Mr. Wharton to be the limits of the Morningstar operation. The dark solids appeared to be humate from the mill and manufacturing facility. Vehicle tracking of dark solids from the Morningstar operation did not appear to continue onto the access road adjacent to the pond or Animas River.

Photos 8 thru 12 show a constructed berm west of the metal building on site continuing north of the humate storage area shown in Photo 12. Photos 12 and 13 show dark solids on the berm and north of the berm. The dark solids appeared to be humate from the mill and manufacturing facility. In the area of the humate storage area shown in Photo 12, the aerial photograph measured distance between the berm and the Animas River varies from approximately 50 to 75 feet.

Photos 14 thru 17 show material storage and structures (silt fence and concrete barriers) at a northern cleared area at the western end of the humate storage area shown in Photo 12. The cleared area is visible in the 06/10/2011 aerial photograph (Figure 11). This northern cleared area near the Animas River was relatively flat. The local topography appeared to slope to the south—southeast and back toward the humate storage area. The silt fence and barriers did not appear to be intended for erosion or sediment control as confirmed by Mr. Wharton. The silt fence in this area was not trenched. Torn bags containing potash according to Mr. Wharton and Mr. McMahon were observed (Photo 16) in this area. Mr. Wharton stated that potash is not used in Morningstar operations. A heavy equipment backhoe existed west of the barriers (Photo 15). The aerial photograph measured distance from where material, silt fence and concrete barriers were observed during the tour north-northwest to the Animas River is approximately 130 feet.

Photos 32 thru 36 show the eastern end of a trench shown in Photos 17, 18 and 21 south of the humate storage area. The trench south of the humate storage area continues west toward the Andrea Corporation western parcel boundary. Mr. Wharton described how the water level in the trench fluctuates depending upon irrigation and level of the Animas River. Filter backwash flows from the adjacent Animas Valley Land & Water Co., LLC Water Treatment Plant and reverse osmosis backwash from the Morningstar operation enters this trench. No backwash flows into this trench were observed during this inspection, but the water flow in the trench was to the west. Photos 32, 33 and 37 show an exposed material berm between the trench and the humate storage area. The materials in the berm included light-colored fine and sand-size grained material and dark solids. The dark solids appeared to be humate from the mill and

manufacturing facility. The berm was not stabilized. Light-colored fine and sand-size grained material existed on the ground from the berm to the trench (Photo 34). The bed of the trench was also light in color (Photos 34 thru 36). Humate was observed in the trench (Photos 35 and 36).

Photos 19 and 20 show a silt fence and dark solids on the upland area along this trench. The upland or cleared area is visible in the 06/10/2011 aerial photograph (Figure 11). The silt fence was not trenched. A pile of dark solids which appeared to be humate from the mill and manufacturing facility were west of the silt fence outside disturbed areas shown in Figure 5.

Photos 22 and 23 show a ditch which was determined during this inspection to be connected to the western end of the trench shown in Photo 21. Photos 24 thru 26 are of the trench outlet which allowed flow from the trench into the ditch (Photo 27). The ditch continued toward the Andrea Corporation western parcel boundary (Photo 28). Another vegetated ditch (Photos 29 thru 30) from CR 3697 south of the Morningstar operation entrance was connected to the ditch (Photo 28). The ditch continued to the adjacent Woodard parcel.

West of the Woodard property, flood irrigation was occurring on the adjacent Hamilton-Kasselman and Chitwood parcels shown in Photos 43 and 45 on the day of this inspection. Mr. Chitwood described that irrigation water from the main irrigation ditch (labeled Terrell Ditch on maps) flows north to Hamilton-Kasselman and Chitwood parcels. Observed flood irrigation by sheet flow or by entering irrigation ditches continued toward the Animas River. Flow in the irrigation ditch along the eastern boundary of the Hamilton-Kasselman parcel flowed into the irrigation ditch on the western boundary of the Chitwood parcel (Photo 45). Flow in the Chitwood irrigation ditch (Photo 45 then Photo 43) continued to a cattail pond (Photos 38 and 39) on the Chitwood parcel. Photos 40 thru 42 show the surface water or seepage from the cattail pond along the Animas River. The water did not continue to the Animas River on the day of this inspection.

The aerial photograph measured distance, using San Juan County parcel maps, of the Andrea Corporation western parcel boundary (location of trench and ditch) west to the Animas River is approximately 420 feet. The aerial photograph measured distance, using San Juan County parcel maps, of the Andrea Corporation western parcel boundary west along cleared pasture of the Woodard and Hamilton-Kasselman parcels to the cattail pond on the Chitwood parcel is approximately 650 feet. Based on aerial photographs, the measured distance of the cattail pond on the Chitwood parcel is approximately 55 feet and surface water or seepage from the cattail pond southwest along the river varies between approximately 35 and 60 feet to the Animas River.

Figures 1 and 2: General Site Maps (Aerial Photograph and Topographic Map)

Created by: Erin S. Trujillo	Map Source: NMED SWQB ArcGIS
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Subject: Top aerial photograph is provided to locate metal building on site. Lower topographic map (same scale as top aerial photograph) shows intermittent surface water, including Terrell Ditch, and surface elevations. Older topo map does not show metal building on site or CR 3697.	

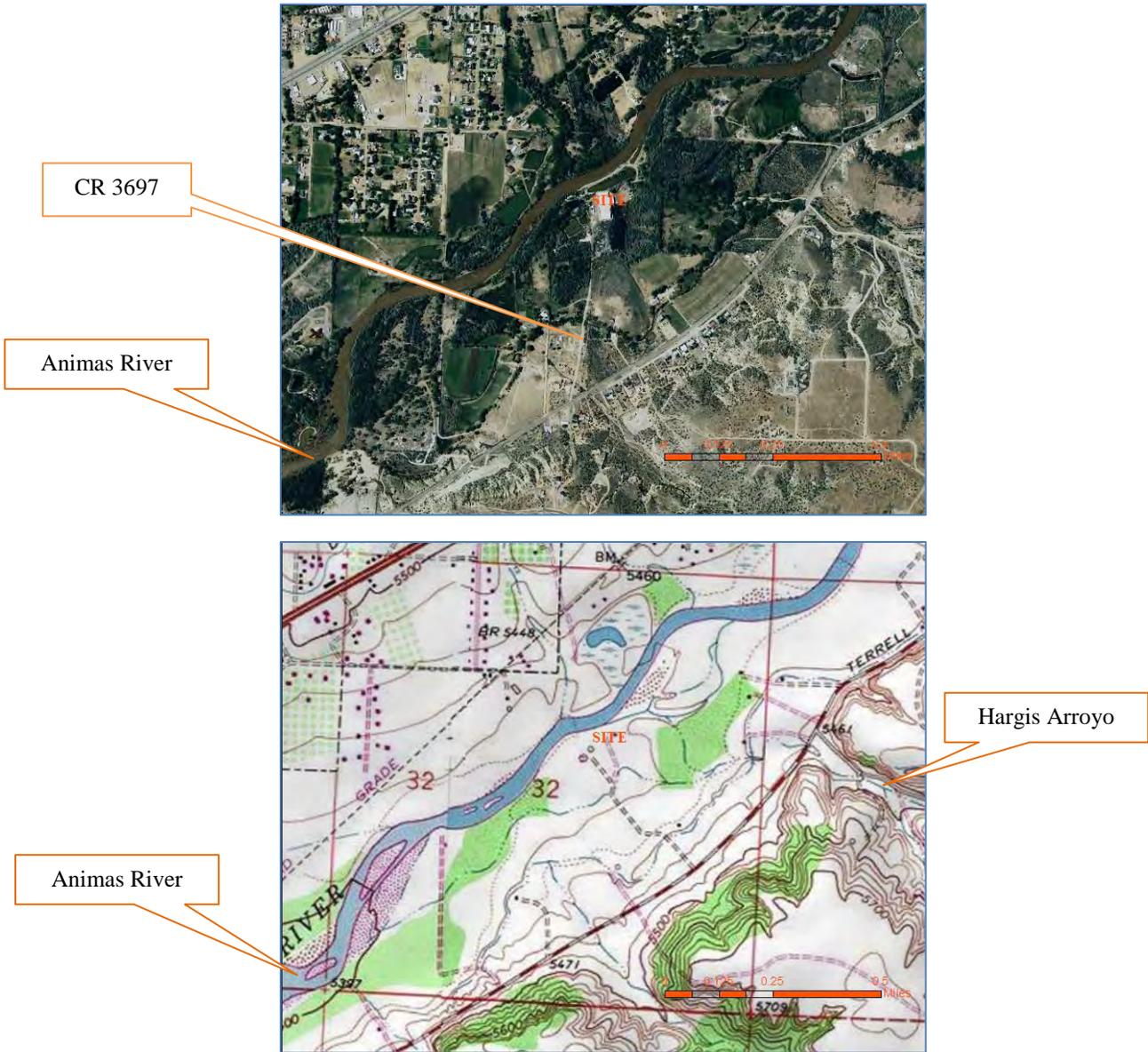
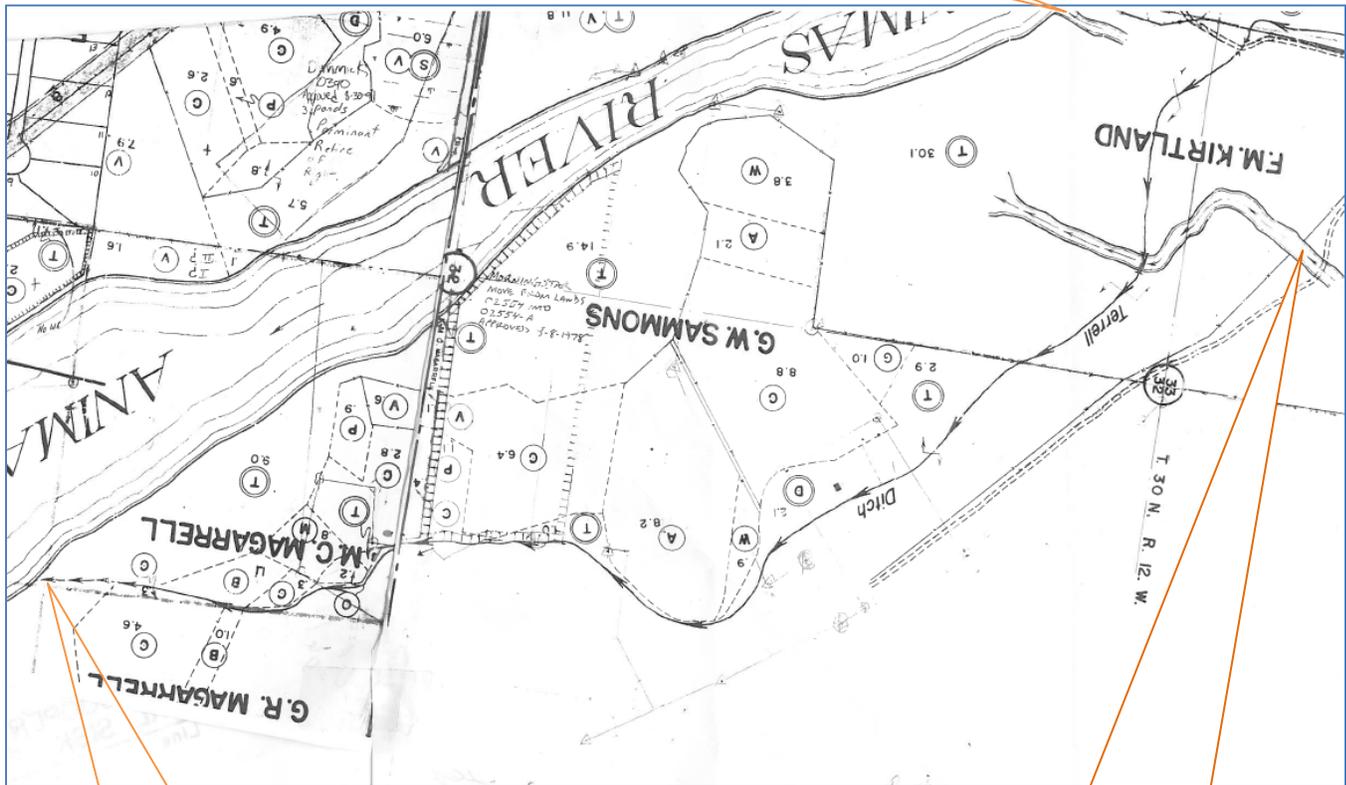


Figure 3: Water Rights Maps

Created by: Erin S. Trujillo	Map Source: NM OSE Aztec, New Mexico Water Right Map copies obtained 06/29/2011
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Subject: Surface water right maps show the flow direction of Terrell Ditch south of Animas River and the site from northeast to south then west to the Animas River. Hargis Arroyo labeled on topography map (Figure 2) is not shown to continue to the Animas River. Upstream of where Terrell Ditch is shown to enter the Animas River, only one channel or ditch is shown to enter Animas River upstream (northeast) of the Morningstar operations.	

Location upstream of Morningstar operations where a channel or ditch is shown to enter the Animas River



Location where Terrell Ditch is shown to enter Animas River

Although not labeled, this flow channel appears to be at the location of Hargis Arroyo shown on topo and flood maps

Figure 4: Flood Insurance Rate Map (FIRM)

Created by: Erin S. Trujillo	Map Source: On-line National Flood Insurance Program FIRM #35045C0715F effective August 5, 2010
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Subject: Flood map shows the metal building on site and the special flood hazard area subject to inundation by the 1% annual chance flood (100-year flood). Zone AE indicates that base flood elevations have been determined.	

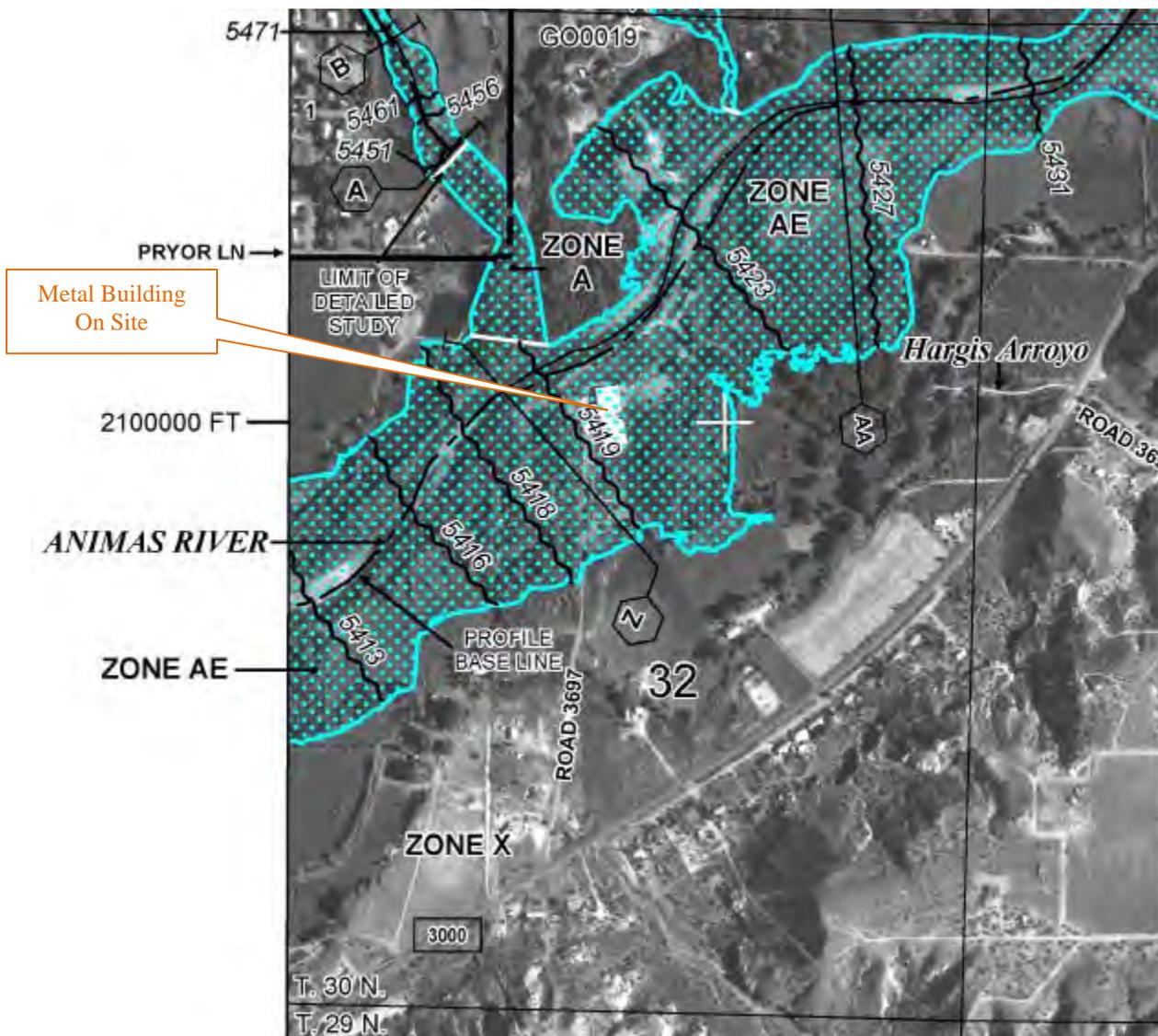


Figure 5: Morningstar Disturbance Map

Created by: Erin S. Trujillo	Map Source: Mr. Wharton in e-mail to inspector on 07/01/2011 after the previous inspection
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Note: Gas well is not correctly located on this map.	

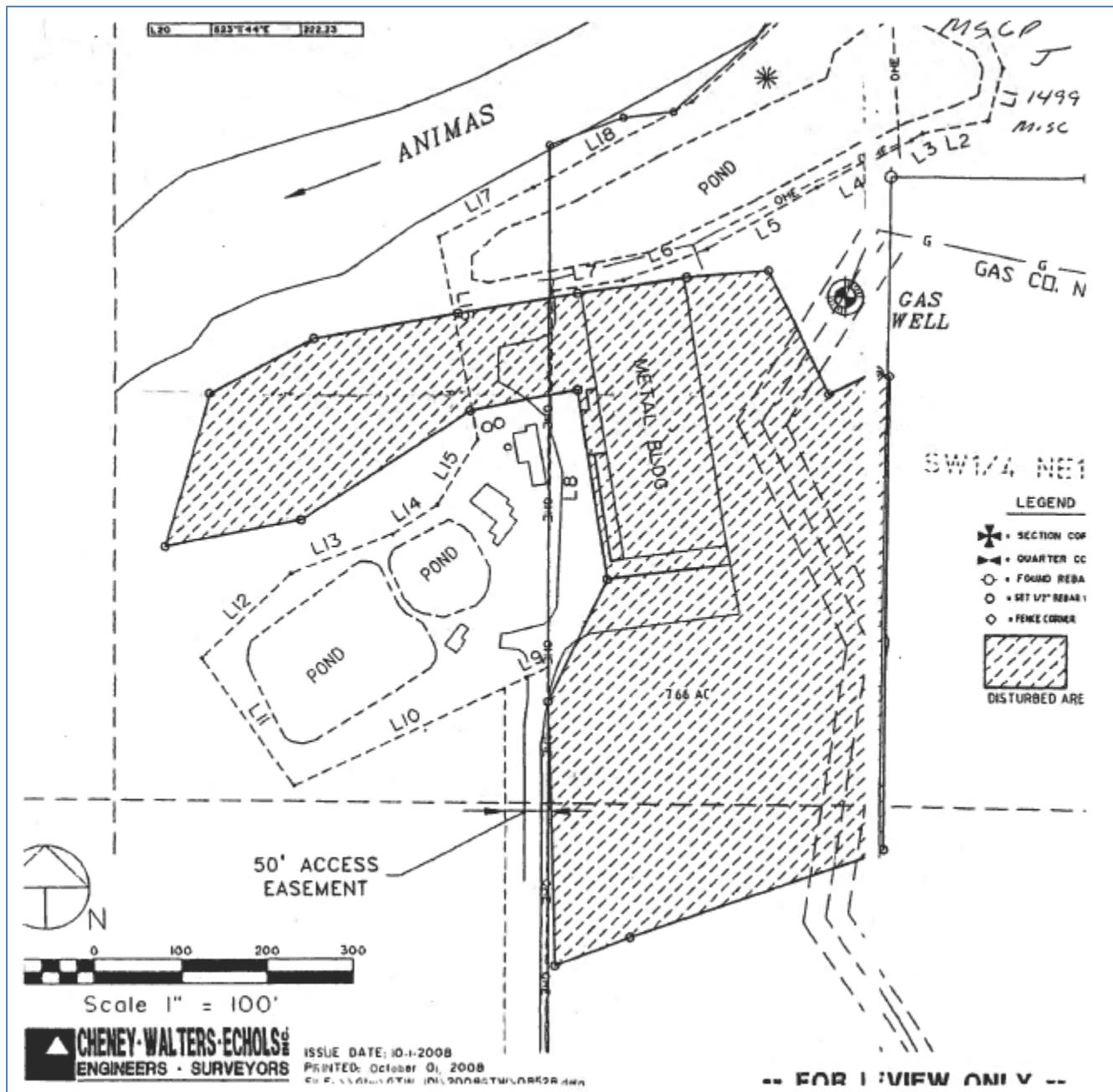


Figure 6: Parcel Map

Created by: Erin S. Trujillo	Map Source: On-line San Juan County, New Mexico Assessor Parcel Search
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Subject: Parcels east of CR 3697	

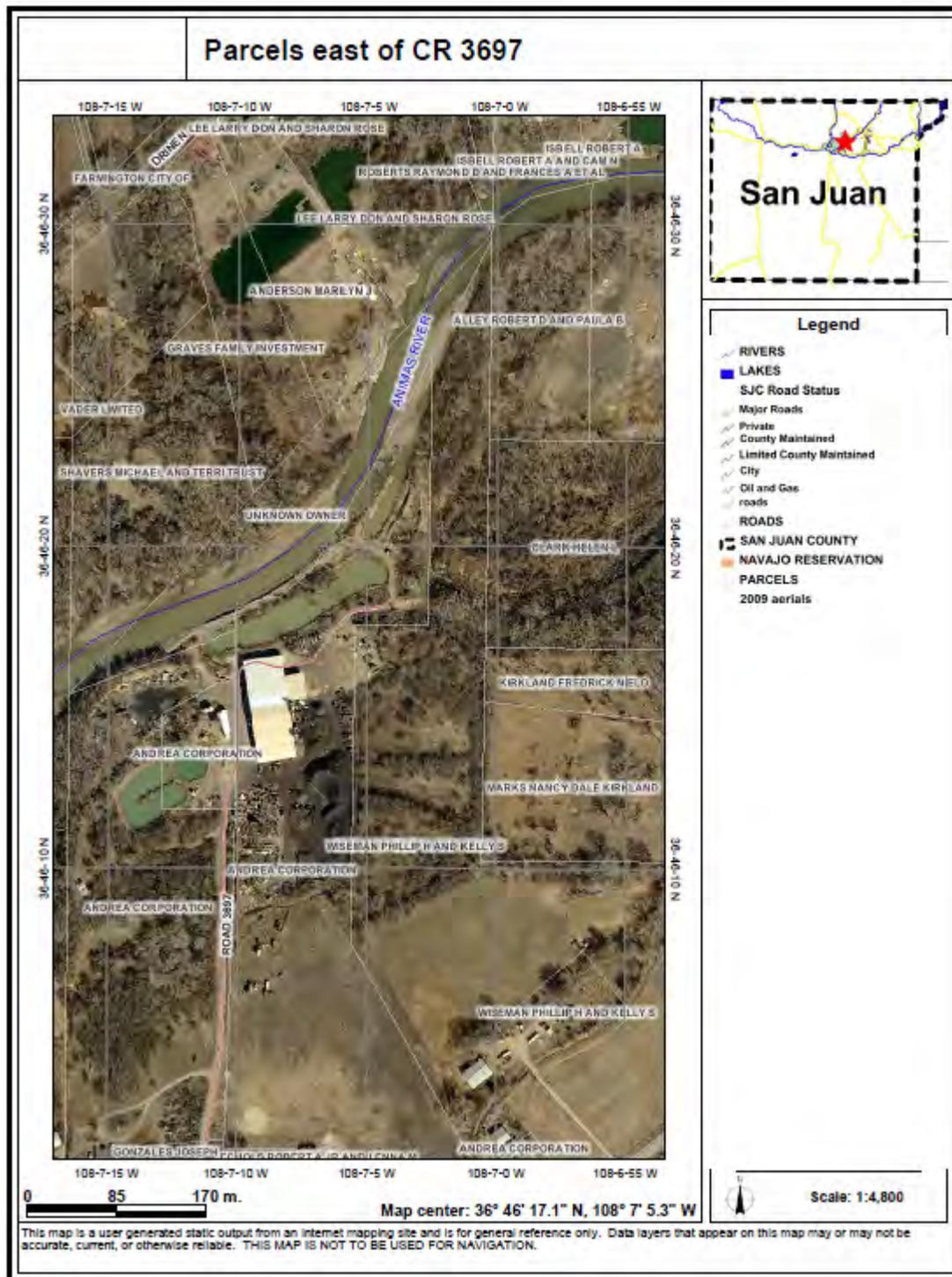


Figure 7: Parcel Map

Created by: Erin S. Trujillo	Map Source: On-line San Juan County, New Mexico Assessor Parcel Search
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Subject: Parcels west of CR 3697	

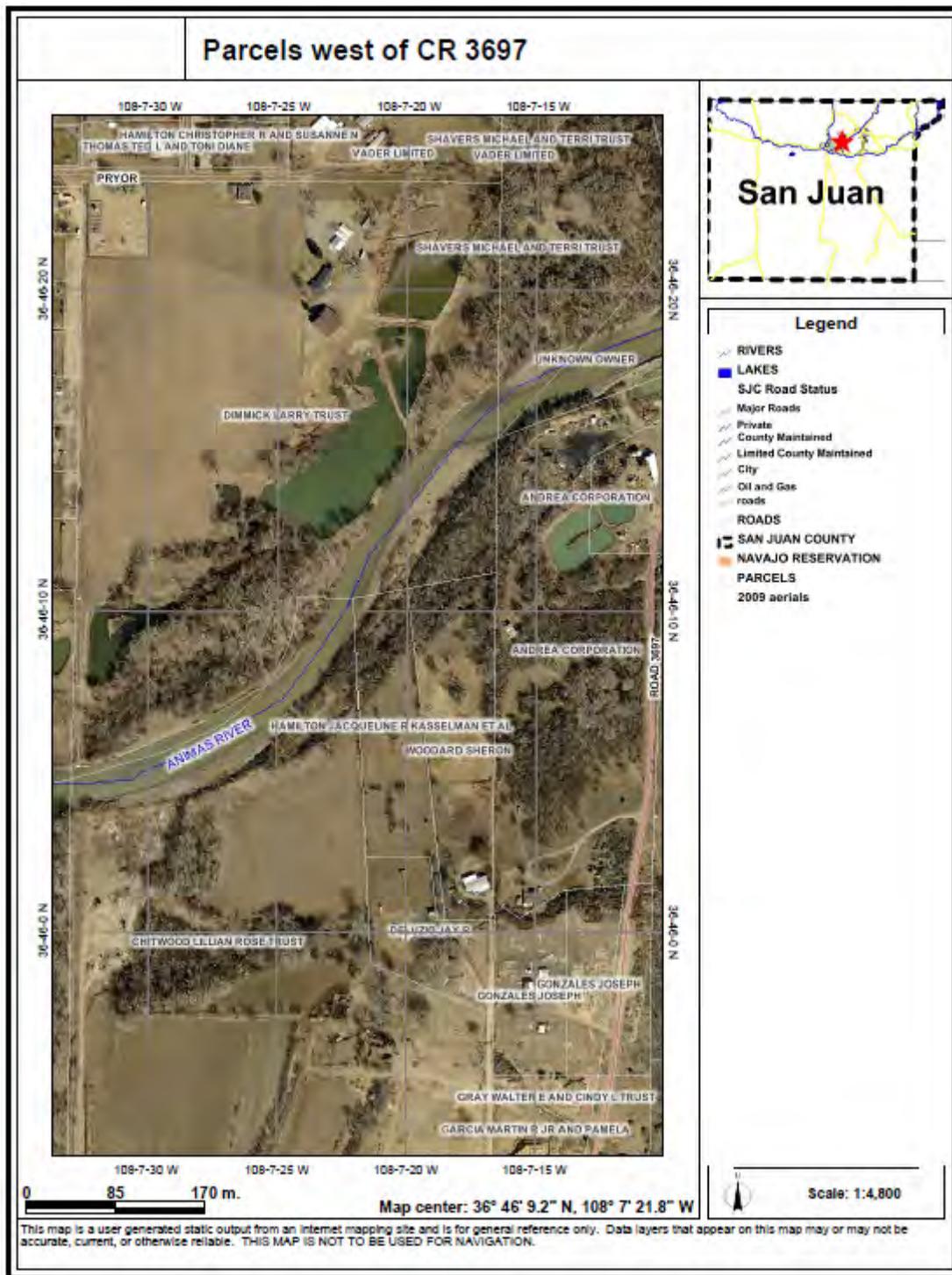


Figure 8: Aerial Photograph dated 10/08/1997

Created by: Erin S. Trujillo	Map Source: Google Earth
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Subject: No metal building and humate storage on site visible.	



Figure 9: Aerial Photograph dated 6/2005

Created by: Erin S. Trujillo	Map Source: Google Earth
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Date: Metal building on site visible. Dark areas where humate is currently stored on site are visible.	

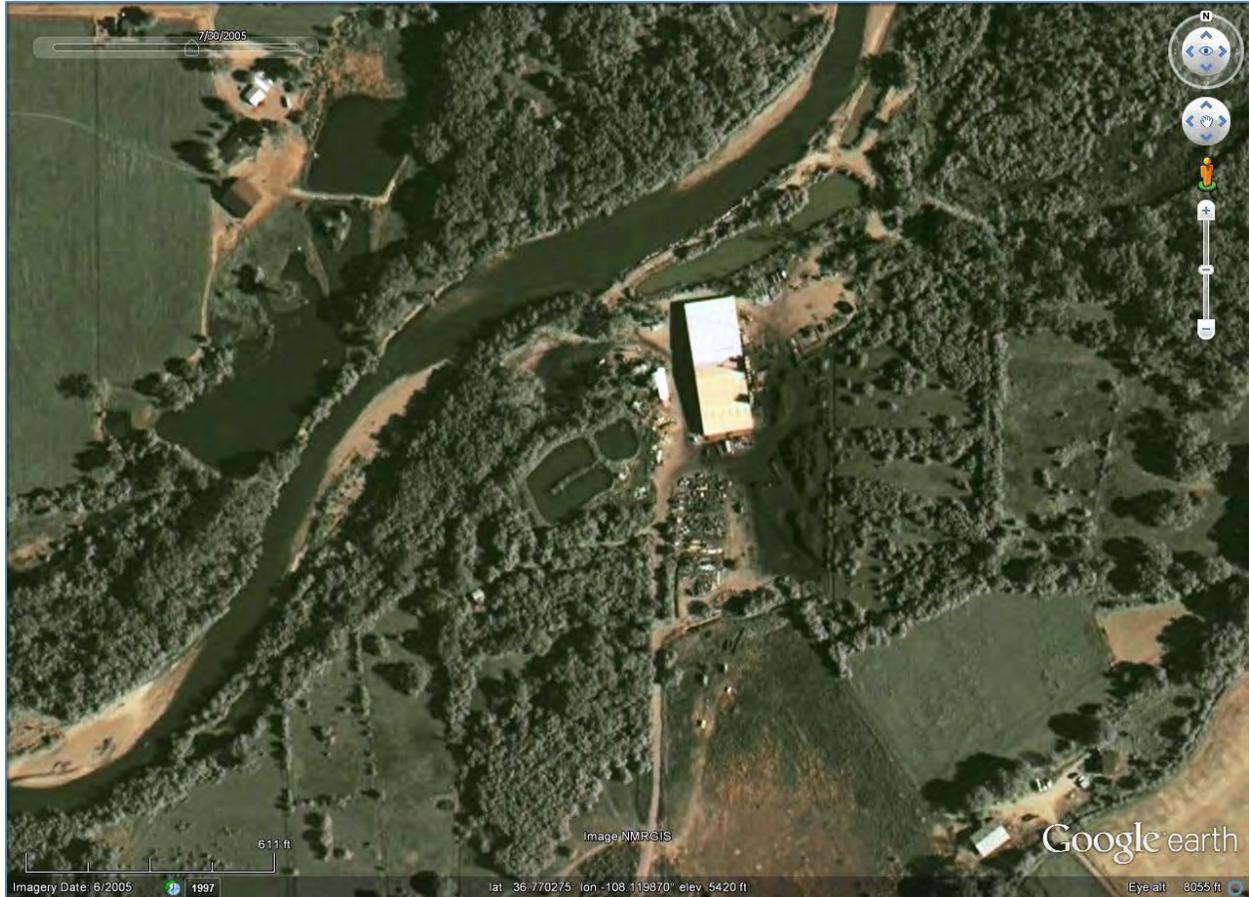


Figure 10: Aerial Photograph dated 5/8/2009

Created by: Erin S. Trujillo	Map Source: Google Earth
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Date: Metal building and humate storage on site visible.	

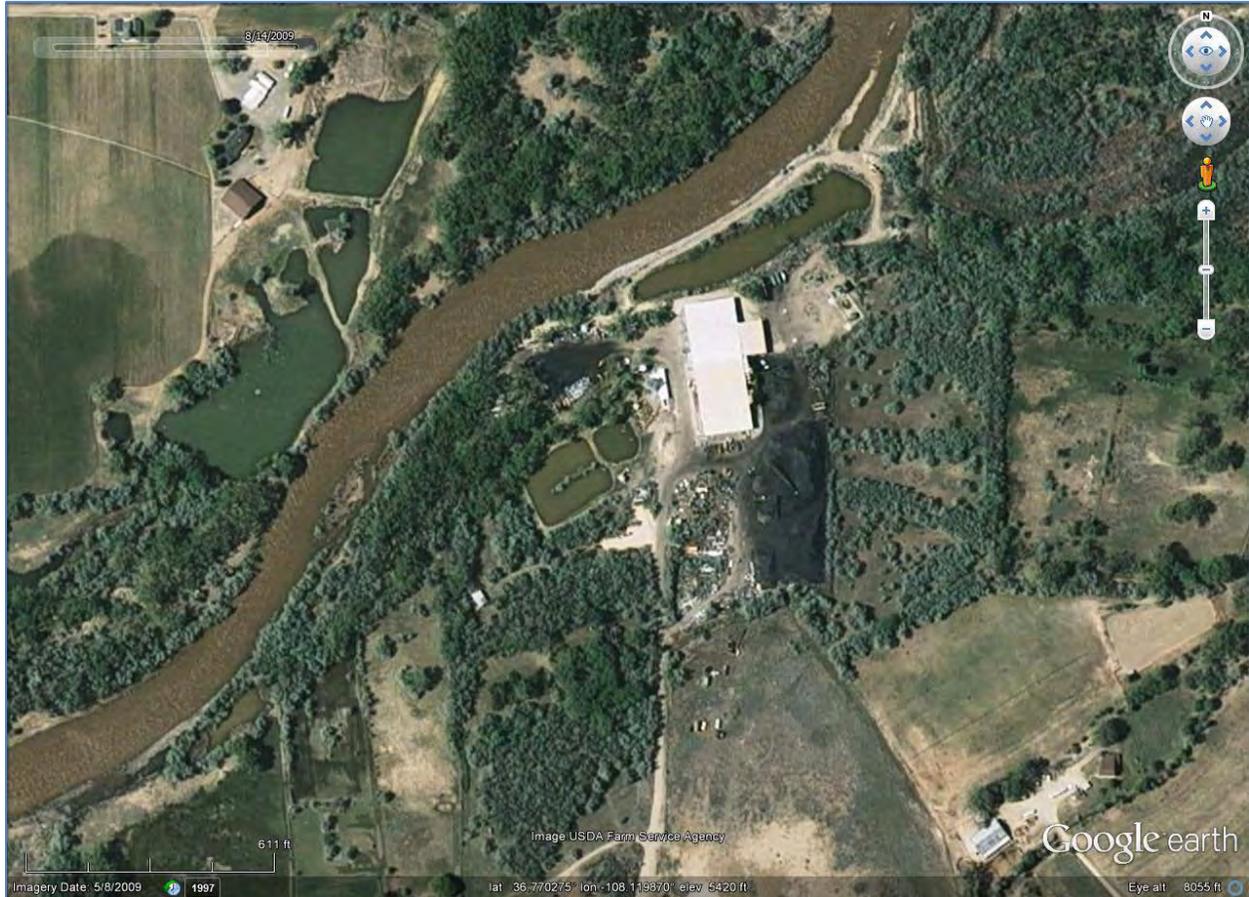


Figure 11: Aerial Photograph dated 06/10/2010

Created by: Erin S. Trujillo	Map Source: Google Earth
City/County: Near Farmington / San Juan	State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility	
Date: Additional cleared areas visible. Brightness and contrast was increased 20% from original image for report.	



Approximate location of the surface water or seepage along Animas River on the Chitwood parcel observed on the day of this inspection

Approximate location of cattail pond (Photos 38 and 39) on the Chitwood parcel observed on the day of this inspection

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1100 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally east (upstream) from the bank of the Animas River at cobble along bank, adjacent access road, vegetation and Animas Valley Land & Water Co., LLC raw water reservoir or pond between the Morningstar operation and the river.		



NMED/SWQB
Official Photograph Log
Photo # 2

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1101 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally southwest (downstream) from same location as previous photo at cobble and vegetation along the bank of the Animas River.		



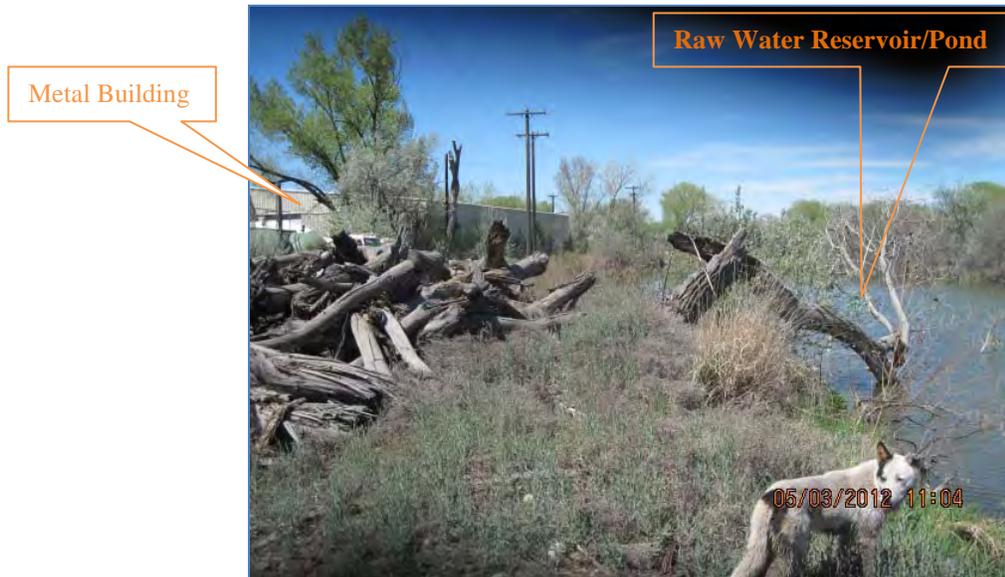
**NMED/SWQB
Official Photograph Log
Photo # 3**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1101 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west at brush pile between Morningstar's berm (see Photo 12) and the Animas River.		



**NMED/SWQB
Official Photograph Log
Photo # 4**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1104 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: East and north of disturbed area shown in Figure 5, looking generally west at metal building on site and vegetation south of the pond.		



NMED/SWQB
Official Photograph Log
Photo # 5

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1105 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: South of previous photo, looking generally west toward metal building on site. Mr. Wharton stated that the heavy equipment shown in photo was not part of the Morningstar operation. Dark soils are outside the disturbed area shown in Figure 5. Called out dark solids appear to be humate from mill and manufacturing facility.		



**NMED/SWQB
Official Photograph Log
Photo # 6**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1106 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally north near the northeast corner of the metal building on site at staining on ground.		



**NMED/SWQB
Official Photograph Log
Photo # 7**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1106 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west at access road and vegetation between metal building on site and pond.		



NMED/SWQB
Official Photograph Log
Photo # 8

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1108 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally north from west side of metal building on site at access road/constructed berm. Photo was taken standing at a lower elevation than the top of the berm/access road. Called out pond is not visible in this photo.		



NMED/SWQB
Official Photograph Log
Photo # 9

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1108 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west at vegetation and access road/constructed berm between Morningstar operation and pond.		



NMED/SWQB
Official Photograph Log
Photo # 10

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1109 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally south at constructed berm from access road west of pond. Building and tanks in background of this photo are associated with the Animas Valley Land & Water Co., LLC water treatment plant.		



NMED/SWQB
Official Photograph Log
Photo # 11

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1110 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally north from humate storage area shown in photo #12 at constructed berm. Photo was taken standing at a lower elevation than the top of the berm. Called out dark solids appear within the disturbed area shown in Figure 5.		



NMED/SWQB
Official Photograph Log
Photo # 12

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1110 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west-southwest at humate stockpile. Bags contain humate according to permittee on-site representatives. Base of humate storage area on left side of photo is lower than the top of the berm. Called out dark solids on top of berm appear to be humate from mill and manufacturing facility.		



NMED/SWQB
Official Photograph Log
Photo # 13

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1111 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally north (standing on berm near location of previous photo) at brush pile and solids between berm and Animas River. Called out dark solids appear to be humate from mill and manufacturing facility.		



**NMED/SWQB
Official Photograph Log
Photo # 14**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1114 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: West of humate storage area shown in Photo #12, looking generally south at concrete barriers and silt fence. Silt fence was not trenched. This northern cleared area is visible in the aerial photograph dated 06/10/2011 (Figure 11).		



**NMED/SWQB
Official Photograph Log
Photo # 15**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1116 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: West of humate storage area shown in Photo #12, looking generally north at concrete barriers and silt fence. Heavy equipment is west of silt fence and concrete barrier.		



**NMED/SWQB
Official Photograph Log
Photo # 16**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1117 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Tarp does not cover torn bags labeled Horizon AG products. Bags contain potash according to Mr. Wharton and Mr. McMahon. Mr. Wharton stated that potash is not used in Morningstar operations.		



**NMED/SWQB
Official Photograph Log
Photo # 17**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1127 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Water in trench south of humate storage area shown in Photo 12 that flows to the west.		



NMED/SWQB
Official Photograph Log
Photo # 18

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1128 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west, water exists in trench that continues west of humate storage area shown in Photo 12.		



NMED/SWQB
Official Photograph Log
Photo # 19

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1132 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west, silt fence west of humate storage area shown in Photo 12. Silt fence was not trenched.		



NMED/SWQB
Official Photograph Log
Photo # 20

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1139 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: West of silt fence shown in previous photo, called out dark solids appear to be humate from mill and manufacturing facility.		



NMED/SWQB
Official Photograph Log
Photo # 21

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1133hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west at water in the west end of the trench shown in Photos 17, 18, and 32 thru 36.		



NMED/SWQB
Official Photograph Log
Photo # 22

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1139 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Vegetation and leaf litter in ditch that existed toward Andrea Corporation western property boundary.		



NMED/SWQB
Official Photograph Log
Photo # 23

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1139 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Leaf litter in ditch that existed toward Andrea Corporation western property boundary.		



NMED/SWQB
Official Photograph Log
Photo # 24

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1142 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Outlet of water from trench shown in Photo 21 to ditch shown in Photos 22 and 23.		



NMED/SWQB
Official Photograph Log
Photo # 25

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1142 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Close up of water in outlet shown in previous photo.		



NMED/SWQB
Official Photograph Log
Photo # 26

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1143 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west, close up of water in ditch.		



**NMED/SWQB
Official Photograph Log
Photo # 27**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1143 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west from same location as previous photo at wet soils in ditch. Ditch continues to location shown in Photos #21 and #22.		



**NMED/SWQB
Official Photograph Log
Photo # 28**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1150 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Ditch shown in Photos #21 and #22 continues toward the Woodard parcel.		



NMED/SWQB
Official Photograph Log
Photo # 29

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1150 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Culvert in shallow vegetated ditch. This ditch enters ditch shown in previous photo.		



NMED/SWQB
Official Photograph Log
Photo # 30

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1150 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Culvert shown in previous photo.		



NMED/SWQB
Official Photograph Log
Photo # 31

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1151 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally east from culvert shown in previous photo. This ditch continues to CR 3957 south of the Morningstar entrance.		



NMED/SWQB
Official Photograph Log
Photo # 32

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1221 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west, eastern end of channel shown in Photos 17, 18 and 21.		



**NMED/SWQB
Official Photograph Log
Photo # 33**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1221 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Looking generally west at unstablized berm between humate stockpile on right side and trench on left side of photo. Berm contained mix of fine and coarse sized material.		



**NMED/SWQB
Official Photograph Log
Photo # 34**

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1223 hours
City/County: Near Farmington / San Juan		State: New Mexico
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Lighter colored material similar to material used in berm shown in previous photo appears on bank and trench.		



NMED/SWQB
Official Photograph Log
Photo # 35 and 36

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1223 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Dark solids (humate) in channel. Lighter colored material similar to material used in berm appears in bed of trench.		



NMED/SWQB
Official Photograph Log
Photo # 37

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1224 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Called out dark solids in berm shown in Photos 32 and 33 appear to be humate from mill and manufacturing facility.		



NMED/SWQB
Official Photograph Log
Photo # 38

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1314 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Cattail pond in northeast corner of the Chitwood parcel along Animas River.		



NMED/SWQB
Official Photograph Log
Photo # 39

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1314 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Cattails in pond on Chitwood Property near Animas River		



NMED/SWQB
Official Photograph Log
Photo # 40

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1315 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Surface water and/or seepage south-southwest from cattail pond shown in previous photos.		



NMED/SWQB
Official Photograph Log
Photo # 41

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1316 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Connected to previous photo, surface water and/or seepage south-southwest from cattail pond.		



NMED/SWQB
Official Photograph Log
Photo # 42

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1317 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Connected to previous photo, surface water and/or seepage south-southwest from cattail pond.		



NMED/SWQB
Official Photograph Log
Photo # 43

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1326 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Irrigation flow in ditch on the Chitwood parcel. This irrigation ditch enters cattail pond shown in Photo 38.		



NMED/SWQB
Official Photograph Log
Photo # 44

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1327 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Irrigation ditch on the Hamilton-Kasselmann parcel. Trench appeared to continue east along northern limit of pasture.		



NMED/SWQB
Official Photograph Log
Photo # 45

Photographer: Erin S. Trujillo	Date: 05/03/2012	Time: 1328 hours
City/County: Near Farmington / San Juan	State: New Mexico	
Location: Morningstar Minerals Corporation Mill and Manufacturing Facility		
Subject: Flood irrigation flow on the Hamilton-Kasselmann parcel (background) flowing west into irrigation ditch on the Chitwood parcel (foreground).		

