0024

C/007/041 Incoming

cc: Steve C.

FILE COPY

State of Utah
JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Department of
Environmental Quality

William J. Sinclair
Acting Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

May 14, 2009

Mr. Bruce Hill, President & CEO
Mr. David Shaver, Resident Agent
UtahAmerican Energy, Inc.
West Ridge resources, Inc.
P.O. Box 910
East Carbon, UT 84520-0910

Subject: Inspection Reports – UPDES Permit No. UT0025640 (West Ridge Mine)

Dear Mr. Hill and Mr. Shaver:

On April 29, 2009 I met with Mr. Shaver and conducted Reconnaissance and Compliance Sampling Inspections in regards to your UPDES Permit facility referenced above. Specifically we discussed the current status and corrective action plan while touring the downstream catchment structures upon DWQ sampling the discharging outfall (002).

Enclosed are copies of the inspection reports for your records. Please review the "Deficiencies" and "Requirements" and "Recommendations" sections of the report and contact me with any questions. I appreciate your efforts to facilitate the inspection and keep me informed of the operations. If you have any questions, please contact me at (801) 538-6779 or by e-mail at jstudenka@utah.gov.

Sincerely,

Jeff Studenka

Jeff Studenka, Environmental Scientist
UPDES IES Section

Enclosures

cc (w/encl): Amy Clark, EPA Region VIII
Claron Bjork, SE District Health Department
Dave Ariotti, SE District Engineer
Daron Haddock, Division of Oil Gas & Mines

F:\wp\Genwal-Westridge-Tower Mines\West Ridge Mine\RI+CSI April2009 covltr.doc

RECEIVED
MAY 18 2009
DIV. OF OIL, GAS & MINING

288 North 1460 West • Salt Lake City, UT
Mailing Address: P.O. Box 144870 • Salt Lake City, UT 84114-4870
Telephone (801) 538-6146 • Fax (801) 538-6016 • T.D.D. (801) 536-4414
www.deq.utah.gov

United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

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Section A: National Data System Coding *(i.e., ICIS)*

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac. Type
N	[redacted]	090429	S	S	2

Remarks

Inspection Work Days	RI	QA	Reserved
2	N	N	

Facility Data

Name and Location of Facility *(include POTW name and NPDES permit number)*
West Ridge Resources, West Ridge Mine
794 North "C" Canyon Road, Carbon County, UT

Entry Time/ Date	Permit Effective Date
9:00 am/ 4-29-2009	5-1-2006
Exit Time/ Date	**Permit Expiration Date**
12:45 pm /4-29-2009	4-30-2011

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Dave Shaver, Resident Agent, West Ridge Mine, (435) [redacted]
phone (435) 637-9645, fax (435) 637-8679

Other Facility Data *(e.g., SIC NAICS, and other descriptive information)*
Bituminous Coal Underground Mining Facility
SIC Code 1222
NAICS 212112

SEE ATTACHED

Name, Address of Responsible Official/Title/Phone and Fax Number
Bruce Hill, President and CEO
UtahAmerican Energy, Inc.
P.O. Box 1077
Price, UT 84501
(435) 888-4000

Contacted
☐ Yes ☒ No

Section C: Areas Evaluated During Inspection *(Check only those areas evaluated)*

☒ Permit	☒ Self Monitoring Program	☐ Pretreatment	☐ MS4
☒ Records/Reports	☐ Compliance Schedule	☐ Pollution Prevention	
☒ Facility Site Review	☐ Laboratory	☐ Storm Water	
☒ Effluent/Receiving Waters	☐ Operations & Maintenance	☐ Combined Sewer Overflow	
☒ Flow Measurement	☐ Sludge Handling/Disposal	☐ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description
A 0 0 1 2	Numeric Effluent Violations

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Number(s)	Date:
JEFF STUDENKA, ENVIRONMENTAL SCIENTIST	DWQ (801) 538-6779	5-13-09
Name and Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Number(s)	Date:
MIKE HERKIMER, MANAGER UPDES IES SECTION	DWQ (801) 538-6058	5/14/09

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INSP

UP UTU0025640 - West Ridge Mine
In Reconnaissance Inspection + Compliance Sampling Inspection (CSI)
In April 29, 2009
W Sunny and warm, ~ 60 °F.

Jeff of the Division of Water Quality (DWQ) met with Dave Shaver at the UtahAmerican **Energy, Inc.**, West Ridge Mine facility (West Ridge). The purpose for the site visit was to perform **reconnaissance and** compliance sampling inspections as a result of recent elevated total iron **concentrations and coal** fines in the mine water discharge. The EPA Region 8 NPDES Inspection **Checklist was also** completed. Since the previous CSI on 2/3/2009, West Ridge has been actively **pursuing water distribution** options underground to increase settling time and to reduce the amount of **coal fines present** in the discharge. Once completed, the process can begin for removing the coal fines **deposited along** the stream channel. Concurrently and also since the previous CSI, West Ridge has **recently constructed** four catchment basin structures (A, C, E, & F) downstream to collect the coal fines **for subsequent** removal.

FACILITY DESCRIPTION

Location: 794 North "C" Canyon Road, near East Carbon, Utah
Coordinates: Outfall 001 – 39° 36' 45" North latitude, 110° 26' 26" West longitude
Outfall 002 – 39° 36' 58" North latitude, 110° 26' 10" West longitude

Average Flow: ~ 1 MGD (Outfall 002, mine water discharge)

Receiving water: "C" Canyon Ephemeral Drainage → Grassy Trail Creek

Process: Underground coal mining operation utilizing long-wall technology. Water from the mine is conveyed to a below ground collection area, where it is treated for iron via chemical flocculent and then continuously pumped out of the mine and discharged to the surface via Outfall 002. Surface water runoff is conveyed to an above ground settling pond system with a single discharge point (Outfall 001). Outfall 001 has not discharged to date.

INSPECTION SUMMARY

The reconnaissance inspection was limited to outside the mine where the water collection and distribution systems are exposed. The two outfall locations were observed as well as the receiving waters of "C" Canyon Drainage and Grassy Trail Creek. As part of the reconnaissance inspection, the four catchment basin structures were observed (A, C, E, & F) downstream from the mine site (see attached map for locations). As part of the CSI, DWQ collected discharge compliance grab samples @ 9:05 am from Outfall 002 for TDS, TSS, total iron, and oil & grease parameters and the results will be compared to the April 2009 DMR as soon as both are available. At the time of the inspections, the mine water discharge was the only flow in "C" Canyon and the discharge was observed downstream in Grassy Trail Creek as well. At Outfall 002, the discharge appeared to be mostly clear with a light grayish color with black coal fines deposited along the edges of the stream channel. Twenty photos were also collected and are attached herein with a photo log.

Environmental Protection Agency
Washington, D.C. 20460

Compliance Inspection Report

FILE COPY

Section A: National Data System Coding *(i.e., ICIS)*

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac. Type
N	[redacted]0 2 5 6 4 0	0 9 0 4 2 9	R	S	2
1	11	12 17	18	19	20

Remarks

21 66

Monitoring Evaluation Rating: 4 (70) | BI: N (71) | QA: N (72) | Reserved (73 74) (75 80)

Section B: Facility Data

Name, Address of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and address)*

[redacted] Ridge Mine
[redacted] Carbon County, UT

Entry Time/ Date	Permit Effective Date
9:00 am/ 4-29-2009	5-1-2006
Exit Time/ Date	**Permit Expiration Date**
12:45 pm /4-29-2009	4-30-2011

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

Dave Shaver, Resident Agent, West Ridge Mine, (435) 888-4017
phone (435) 637-9645, fax (435) 637-8679

Other Facility Data *(e.g., SIC NAICS, and other descriptive information)*

Bituminous Coal Underground Mining Facility
SIC Code 1222
NAICS 212112

SEE ATTACHED

Name, Address of Responsible Official/Title/Phone and Fax Number

Bruce Hill, President and CEO
UtahAmerican Energy, Inc.
P.O. Box 1077
Price, UT 84501
(435) 888-4000

Contacted
☐ Yes ☒ No

Section C: Areas Evaluated During Inspection *(Check only those areas evaluated)*

☒ Permit	☒ Self Monitoring Program	☐ Pretreatment	☐ MS4
☒ Records/Reports	☐ Compliance Schedule	☐ Pollution Prevention	
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☐ Flow Measurement	☐ Sludge Handling/Disposal	☐ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Description

Name(s) of Inspector(s)	Agency/Office/Phone and Fax Number(s)	Date:
[redacted] ENVIRONMENTAL SCIENTIST	DWQ (801) 538-6779	5-13-09
Name [redacted] Q A Reviewer	Agency/Office/Phone and Fax Number(s)	Date:
MIKE [redacted] MANAGER UPDES	DWQ (801) 538-6058	5/14/09

EPA Form [redacted] editions are obsolete

USEPA REGION 8 NPDES INSPECTION CHECKLIST

NPDES PERMIT #: UT0025640 **INSPECTION DATE:** 4-29-09

FACILITY: West Ridge Resources, Inc (0900 - on site, 1245 - off site) J. Studenka - DWQ
West Ridge Mine - Dave Shaver - Resident Agent

I. PERMIT VERIFICATION Weather: Sunny, clear ~60°F

(YES) NO **Inspection observations verify information contained in permit.**

(Yes) No N/A 1. Current copy of permit on site. office bldg.

(Yes) No N/A 2. Name, mailing address, contact, and phone number are correct in PCS. If not, indicate correct information on Form 3560.

3. Brief description of the wastewater treatment plant:

Underground water in collected in Mine and distributed to settling area + pump stations. Nalco chemical flocculant is added underground to treat for iron particulates prior to discharge (003)

(Yes) No N/A 4. Facility is as described in permit. If not, what is different? _____

Yes No (N/A) 5. EPA/State has been notified of any new, different, or increased loading to the WWTP.

(Yes) No N/A 6. Number and location of discharge points are as described in the permit. 2

(Yes) No N/A 7. Name of receiving water(s) is/are correct. "C" Canyon Drainage

Comments:

II. RECORDKEEPING AND REPORTING EVALUATION

(YES) NO **Records and reports are maintained as required by permit.** At office bldg.

(Yes) No N/A 1. All required information is current, complete, and reasonably available.

(Yes) No N/A 2. Information is maintained for the required 3 year period.

3. Sampling and analysis data are adequate and include: Performed by Karla Knop of JBR ENV. Consultants, Inc

(Yes) No N/A a. Dates, times, locations of sampling.
(Yes) No N/A b. Initials of individual performing sampling.
(Yes) No N/A c. Referenced analytical methods and techniques in conformance with 40 CFR Part 136.
(Yes) No N/A d. Results of analyses and calibration.
(Yes) No N/A e. Dates of analyses (and times if required by permit).
(Yes) No N/A f. Initials of person performing analyses.
Yes No (N/A) g. Instantaneous flow at grab sample stations.

(Yes) No N/A 4. Sampling and analysis completed on parameters specified in permit.

(Yes) No N/A 5. Sampling and analysis done in frequency specified by permit. (2/mo. on all parameters since Feb. 2008)

Comments:

(YES) NO **DMR completion meets the self-monitoring reporting requirements.**

(Yes) No N/A 1. Monitoring for required parameters is performed more frequently than required by permit. Parameter(s) Currently TSS, total Iron, O&G & pH are monitored twice per month (once/month required)

(Yes) No N/A 2. Analytical results are consistent with the data reported on the DMRs.

(Yes) No N/A 3. All data collected are summarized on the DMR.

(Yes) No N/A 4. Monthly, weekly, and/or daily average loading values are calculated properly and reported on the DMR. *(Effluent loadings are calculated using effluent flow.)* TDS

Yes No (N/A) 5. The geometric mean is calculated and recorded for fecal coliform data.

(Yes) No N/A 6. Weekly and monthly averaging is calculated properly and reported on the DMR. TSS

(Yes) No N/A 7. The maximum and minimum values of all data points are reported properly.

(Yes) No N/A 8. The number of exceedances column (No. Ex.) is completed properly.

Comments: DMR data file review yielded no problems

. WHOLE EFFLUENT TOXICITY TESTING AND REPORTING n/a – no WET testing required.

ES NO **WET sampling by permittee adequate to meet the conditions of the permit.**

s No a. Chain of custody used.

s No b. Method of shipment and preservation adequate *(iced to 4°C)*.

c. Type of sample collected _____ *(as required by permit)*.

s No d. Holding time met *(received w/in 36 hours)*.

s No N/A 2. Lab reports/chain of custody sheets indicate temperature of sample at receipt by lab.

a. Indicate temperature _____

s No N/A 3. Permittee has copy of the latest edition of testing methods or Region 8 protocol. *(Latest version is July 1993 - Colorado has its own guidance.)*

s No N/A 4. Permittee reviews WET lab reports for adherence to test protocols.

s No N/A 5. Lab has provided quality control data, i.e., reference toxicant control charts.

Yes No N/A 6. Permittee has asked lab for QC data.

Yes No N/A 7. Permittee maintains copies of WET lab reports on site for required 3 year period, and makes them available for review by inspectors.

Yes No N/A 8. Evaluation and review of WET data by permittee adequate such that no follow up at lab is necessary. *(Follow up to be conducted by EPA and/or State.)*

Comments:

IV. FACILITY SITE REVIEW

YES NO **Treatment facility properly operated and maintained.** (Industrial facility)

Yes No N/A 1. Standby power or other equivalent provision is provided. Specify type: Generators as needed

Yes No N/A 2. Facility has an alarm system for power or equipment failures. What kind of problems has the facility experienced due to power failures? None

Yes No N/A 3. Treatment control procedures are established for emergencies.

Yes No N/A 4. Facility can be by-passed (internal, collection system, total). Describe by-pass procedures:

Yes No N/A 5. Regulatory agency was notified of any bypassing (treated and/or untreated).

Dates:

Yes No N/A 6. WWTP has adequate capacity to ensure against hydraulic and/or organic overloads.

Yes No N/A 7. All treatment units, other than back-up units, are in service. If not, what and why?

Yes No N/A 8. O&M manual available and up-to-date.

Yes No N/A 9. Procedures for plant O&M, including preventive maintenance schedules, are established and performed on time.

Yes No N/A 10. Adequate spare parts and supplies inventory (including flow meters) are maintained, as well as major equipment specifications and/or repair manuals.

Yes No N/A 11. Up-to-date maintenance and repair records are kept for major pieces of equipment.

→ This is not a mechanical WWTP. Therefore much of this section does not apply.

12. Number of qualified operators and staff. n/a

How many?	Certification Level

Yes No (N/A) 13. Certification level meets State requirement?

14. What procedures or practices are used to train new operators? n/a

V. SAFETY EVALUATION

(YES) NO **Facility has the necessary safety equipment.**

(Yes) No N/A 1. Procedures are established for identifying out-of-service equipment. What are they?
Logout / Tag out

(Yes) No N/A 2. Personal protective clothing provided (safety helmets, ear protectors, goggles, gloves, rubber boots with steel toes, eye washes in labs).

Yes No (N/A) 3. Laboratory safety devices (eyewash and shower, fume hood, proper labeling and storage, pipette suction bulbs) available. no Lab on Site

(Yes) No N/A 4. Plant has general safety structures such as rails around or covers over tanks, pits, or wells. Plant is enclosed by a fence.

(Yes) No N/A 5. Portable hoists for equipment removal available.

(Yes) No N/A 6. All electrical circuitry enclosed and identified.

7. Chlorine safety is adequate and includes: no chlorine treatment

Yes No (N/A) a. NIOSH-approved 30-minute air pack.
Yes No (N/A) b. All standing chlorine cylinders chained in place.
Yes No (N/A) c. All personnel trained in the use of chlorine.
Yes No (N/A) d. Chlorine repair kit.
Yes No (N/A) e. Chlorine leak detector tied into plant alarm system.
Yes No (N/A) f. Ventilation fan with an outside switch.
Yes No (N/A) g. Posted safety precautions.

(Yes) No N/A 8. Warning signs (no smoking, high voltage, nonpotable water, chlorine hazard, watch-your-step, and exit) posted.

Yes No (N/A) 9. Gas/explosion controls such as pressure-vacuum relief valves, no smoking signs, explosimeters, and drip traps present near anaerobic digesters, enclosed screening or degritting chambers, and sludge-piping or gas-piping structures.

(Yes) No N/A 10. Emergency phone numbers listed.

Yes No N/A 11. Plant is generally clean, free from open trash areas.

Yes No N/A 12. MSDS sheets, if required, are accessible by employees. main office bldg.

Comments:

VI. FLOW MEASUREMENT

YES NO FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF PERMIT

A. PRIMARY EFFLUENT FLOW MEASUREMENT

1. General

Type of primary flow measurement device: In line meters underground (2) 6" + 8" McCrometer / McPropeller

Yes No N/A 1. Primary flow measuring device is properly installed and maintained.

Where? _____

Yes No N/A 2. Flow measured at each outfall. Number of outfalls: 2

3. Frequency of routine inspection of primary flow device by operator: ~~/day~~. week or as needed

4. Frequency of routine cleaning of primary flow device by operator: ~~/week~~. as needed

Yes No N/A 5. Influent flow is measured before all return lines.

Yes No N/A 6. Effluent flow is measured after all return lines.

Yes No N/A 7. Proper flow tables are used by facility personnel.

8. Design flow: ~1.5 mgd. (effluent capacity)

Yes No N/A 9. Flow measurement equipment adequate to handle expected ranges of flow rate. 0.7 → 1.2 MG AVG.

2. Open Channel Primary Flow Measuring Devices

Flumes

Type and size: n/a EFF

Yes No N/A 1. Flume is located in a straight section of the open channel, without bends immediately upstream or downstream.

Yes No N/A 2. Flow entering flume appears reasonably well distributed across the channel and free of turbulence, boils, or other distortions.

Yes No N/A 3. Flume is clean and free of obstructions, debris or deposits.

Yes No N/A 4. All dimensions of flume accurate and level.

Yes No N/A 5. Sides of flume throat are vertical and parallel.

Yes No N/A 6. Side walls of flume are vertical and smooth.

Yes No N/A 7. Flume head is being measured at proper location. *(Location dependent on flume type - see NPDES Compliance Inspection Manual or ISCO book.)*

Yes No N/A 8. Flume is under free flow conditions at all times. *(Flume is not submerged.)*

Weirs

Type: N/a EFF

Yes No N/A 1. Weir is level.

Yes No N/A 2. Weir plate is plumb and its top edges are sharp and clean.

Yes No N/A 3. Downstream edge of weir is chamfered at 45°.

Yes No N/A 4. There is free access for air below the nappe of the weir.

Yes No N/A 5. Upstream channel of weir is straight for at least four times the depth of water level, and free from disturbing influences.

Yes No N/A 6. Distance from sides of weir to side of channel at least 2H.

Yes No N/A 7. Area of approach channel at least 8 x nappe area for upstream distance of 15H. *(If not, is velocity of approach too high?)*

Yes No N/A 8. Weir is under free-flow conditions at all times. *(Weir is not submerged.)*

Yes No N/A 9. The stilling basin of the weir is of sufficient size and clear of debris.

Yes No N/A 10. Head measurements are properly made by facility personnel.

Yes No N/A 11. Weir is free from leakage.

3. Closed Channel Primary Measuring Devices

Electromagnetic Meters (2)

Type and model: 6" + 8" in-line flow meters/totalizers (McCrometer/McPropeller) EFF

Yes No N/A 1. There is a straight length of pipe or channel before and after the flowmeter of at least 5 to 20 diameters.

Yes No N/A 2. There are no sources of electric noise in the near vicinity.

Yes No N/A 3. Magnetic flowmeter is properly grounded.

Yes No N/A 4. Full pipe requirement is met.

Venturi Meters

Type and model: N/a EFF

Yes No N/A 1. Venturi meter is installed downstream from a straight and uniform section of pipe?

B. Secondary Flow Measurement no secondary flow measurements

1. General

1. What are the most common problems that the operator has had with the secondary flow measurement device? n/a

Yes No N/A 2. Flow records properly kept.
Yes No N/A a. All charts maintained in a file.
Yes No N/A b. All calibration data kept.

Yes No N/A 3. Secondary device calibration records are kept.

a. Frequency of secondary device calibration:____ / year.

4. Frequency of flow totalizer calibration:___ / year.

Yes No N/A 5. Secondary instruments (totalizers, recorders, etc.) are properly operated, calibrated, and maintained.

Floats

Type and model: n/a EFF

Bubblers

Type and model: n/a EFF

Ultrasonic

Type and model: n/a EFF

Electrical

Type and model: n/a EFF

Comments: Primary only, no secondary measurements.

2. Flow Verification

Accuracy of Flow Measurement (Secondary against Primary) n/a	
	Type and size of primary device
	EFF:
Reading from primary standard, feet and inches	
Equivalent to actual flow, mgd	
Facility-recorded flow from secondary device, mgd	
Percent Error	
Correction Factor	

Fill in above only if the primary device has been correctly installed, or if correction factor is known.

Comments: Primary only

VII. LABORATORY QUALITY ASSURANCE

(YES) NO **Laboratory procedures meet the requirements and intent of the permit.**

(Yes) No N/A 1. Commercial laboratory is used.

Parameters	TSS, TDS, total iron, O&G
Name	Horizon Labs
Address	Price, UT
Contact	on file
Phone	"

(Yes) No N/A 2. According to the permittee, commercial laboratory is State certified (ND & UT only).

Yes No (N/A) 3. Written laboratory quality assurance manual is available, if the facility does its own lab work. pH only on site by JBR ENV.

Yes No N/A 4. Quality control procedures are used. Specify: Calibrations before testing, duplicates, blanks, etc.

Yes No (N/A) 5. Calibration and maintenance of laboratory instruments and equipment is satisfactory.

Yes No (N/A) 6. Samples are analyzed in accordance with 40 CFR 136.

Yes No (N/A) 7. Results of last DMR/QA test available. Date: _____

Yes No (N/A) 8. Facility lab does analyses for other permittees. If yes, list the facilities and their permit numbers. No facility lab

VIII. COMPLIANCE SCHEDULE STATUS REVIEW n/a

YES NO **The permittee is meeting the compliance schedule**

1. Is the facility subject to a compliance schedule either in its permit or in an order? If facility is subject to an order, note docket number:_____

N/A 2. What milestones remain in the schedule?_____

_____

(Attach additional sheets as necessary.)

Yes No N/A 3. Facility is in compliance with unachieved milestones.

Yes No N/A 4. Facility has missed milestone dates, but will still meet the final compliance date.

IX. PERMITTEE SAMPLING EVALUATION

YES NO **Sampling meets the requirements and intent of the permit.**

Yes No N/A 1. Samples are taken at sampling location specified by permit. 001 + 002

Yes No N/A 2. Locations are adequate for representative samples.

Yes No N/A 3. Flow proportioned samples are obtained. not required

Yes No N/A 4. Permittee is using method of sample collection required by permit.
Required method: Grab
If not, method being used is:
( ) Grab
( ) Manual
( ) Automatic composite

Yes No N/A 5. Sample collection procedures adequate and include:
Yes No N/A a. Sample refrigeration during compositing.
Yes No N/A b. Proper preservation techniques. (bottles w/ preservatives from lab, then
Yes No N/A c. Containers in conformance with 40 CFR 136.3. stored in cooler w/ ice.)
Specify any problems:_____

_____

Comments: No problems identified from sampling evaluation.
- Photo log completed separately
- Site walk & visit to each catchment structure (map included)

Westridge Mine Site Visit 4-29-09 J. Studenka

Photo Log				
Photo Number	File Name	Description	Date/ Time	Photographer
001	118-1850	Outfall 002 (Mine water discharge)	4/29/09 09:12	J.S.
002	118-1851	Downstream from 002	"	"
003	118-1852	Sed. pond + outfall 001	09:32	"
004	118-1853	Catchment basin "A"	09:50	"
005	118-1854	Downstream from "A"	"	"
006	118-1855	upstream from Catchment basin "A"	09:51	"
007	118-1856	Diversion channel from "A"	10:02	"
008	118-1857	Looking upstream at "A"	10:02	"
009	118-1858	Looking upstream from Catchment basin "C"	10:32	"
010	118-1859	Catchment Basin "C"	"	"
011	118-1860	" " " Log bales being replaced	10:34	"
012	118-1861	Looking downstream from "C"	10:36	"
013	118-1862	Looking upstream from Catchment Basin "E"	10:57	"
014	118-1863	Catchment Basin "E"	10:58	"
015	118-1864	Looking downstream from "E"	10:58	"
016	118-1865	Looking upstream at "E"	10:59	"
017	118-1866	Catchment Basin "F"	11:15	"
018	118-1867	Catchment Basin "f" baffles	11:16	"
019	118-1868	Looking downstream from "f"	11:17	"
020	118-1869	Looking upstream from "F"	11:17	"
END				

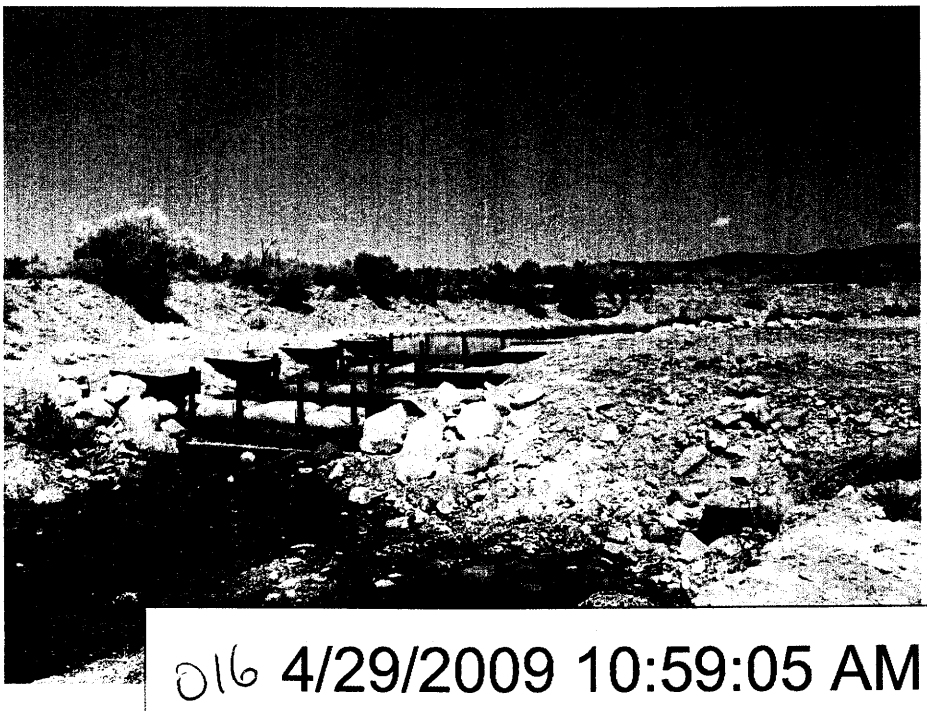
West Ridge Mine 4-29-2009

013 4/29/2009 10:57:33 AM

014 4/29/2009 10:58:02 AM

West Ridge Mine 4-29-2009

015 4/29/2009 10:58:33 AM



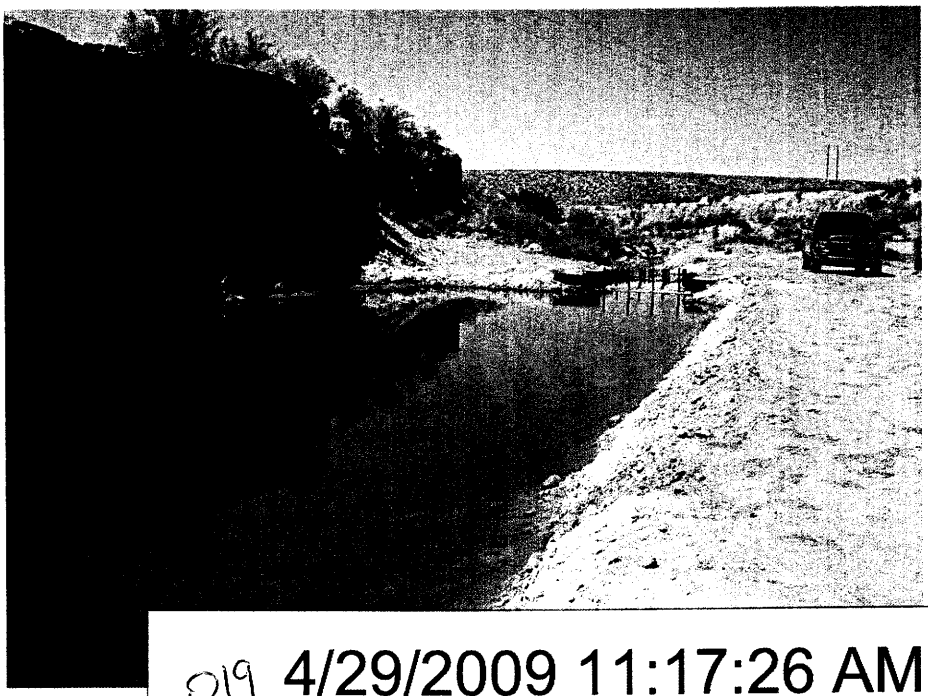
016 4/29/2009 10:59:05 AM

West Ridge Mine 4-29-2009

017 4/29/2009 11:15:32 AM

018 4/29/2009 11:16:06 AM

West Ridge Mine 4-29-2009

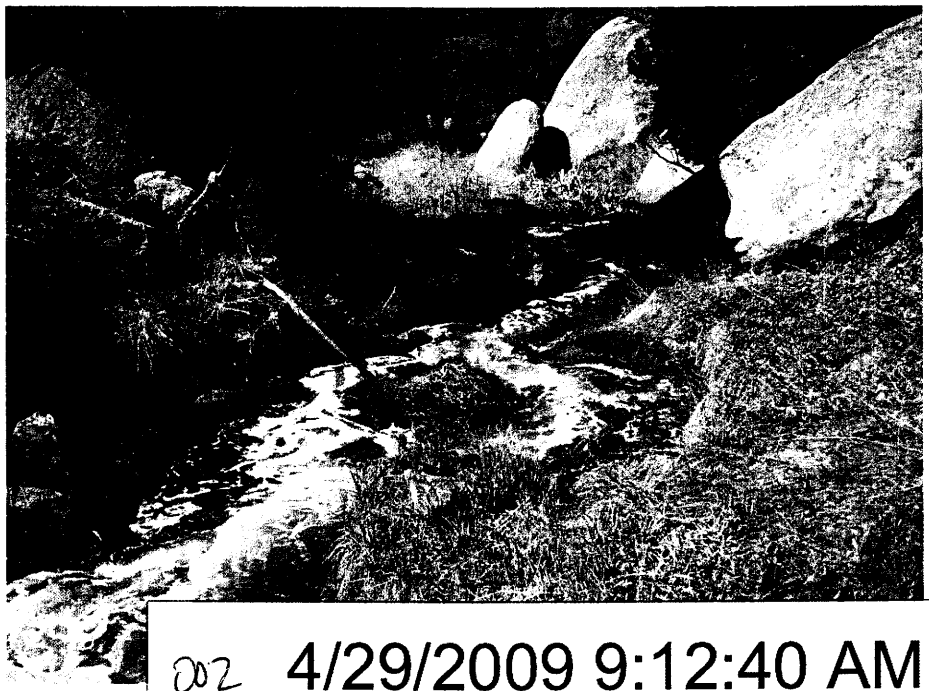


019 4/29/2009 11:17:26 AM

020 4/29/2009 11:17:40 AM

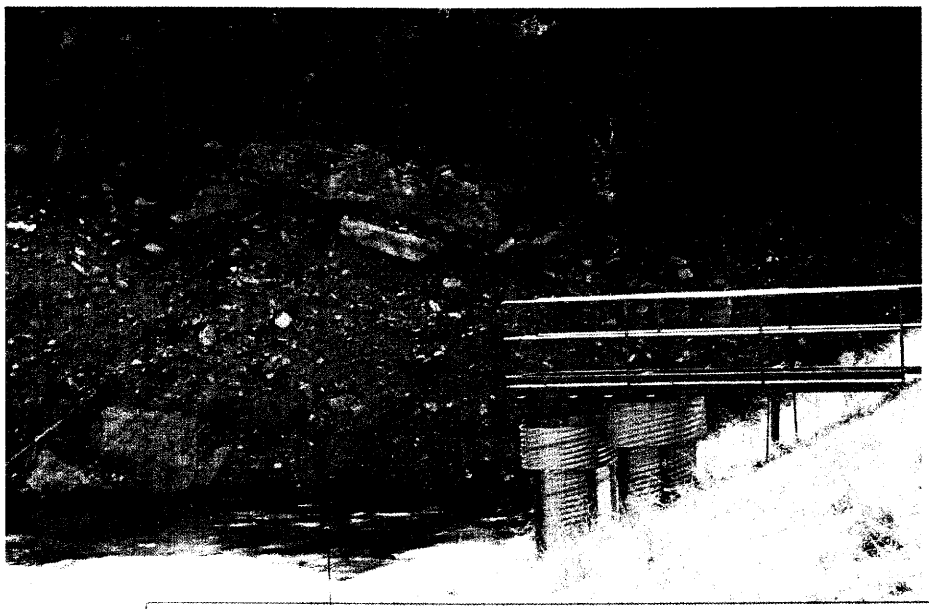
West Ridge Mine 4-29-2009

001 4/29/2009 9:12:28 AM



002 4/29/2009 9:12:40 AM

West Ridge Mine 4-29-2009



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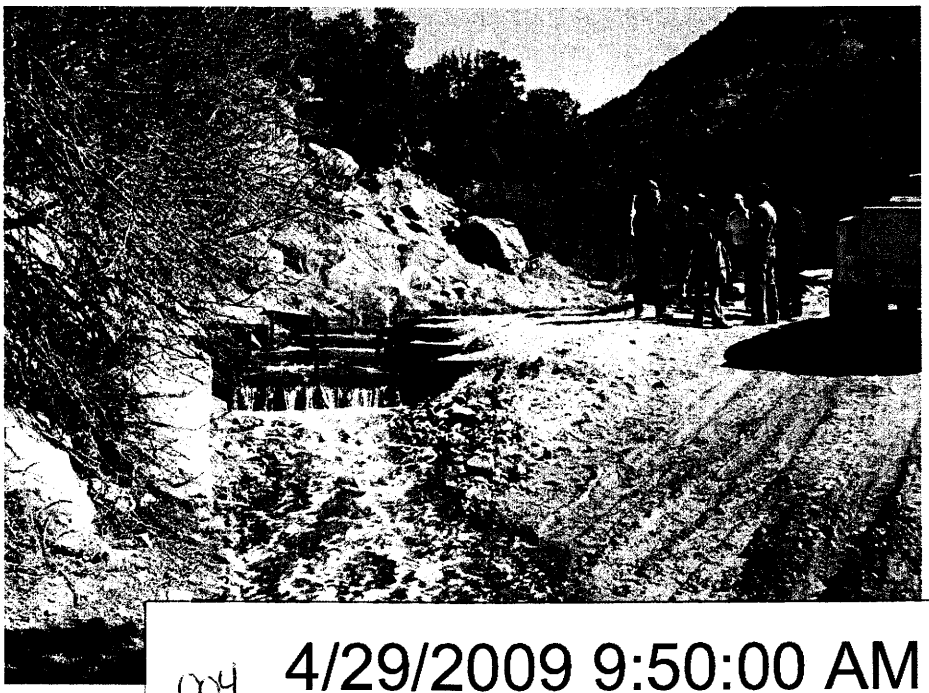

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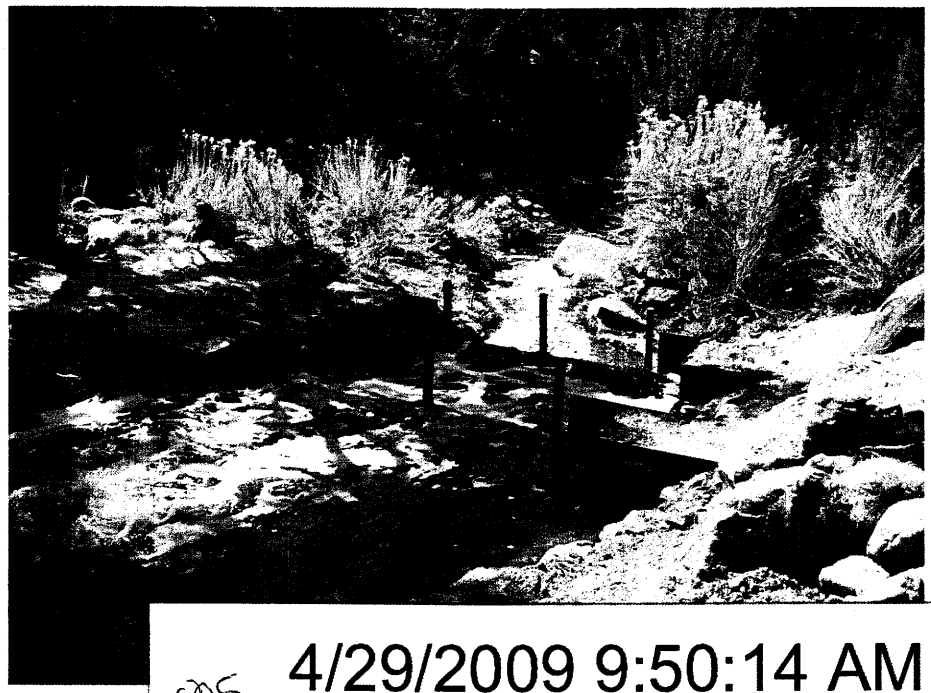

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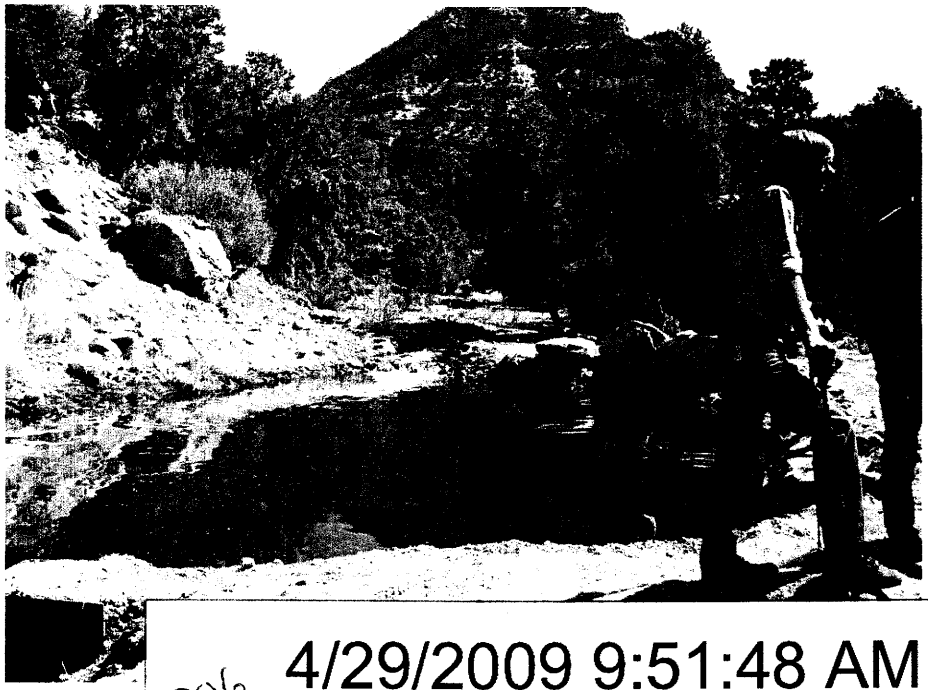

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West Ridge Mine 4-29-2009

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West Ridge Mine 4-29-2009

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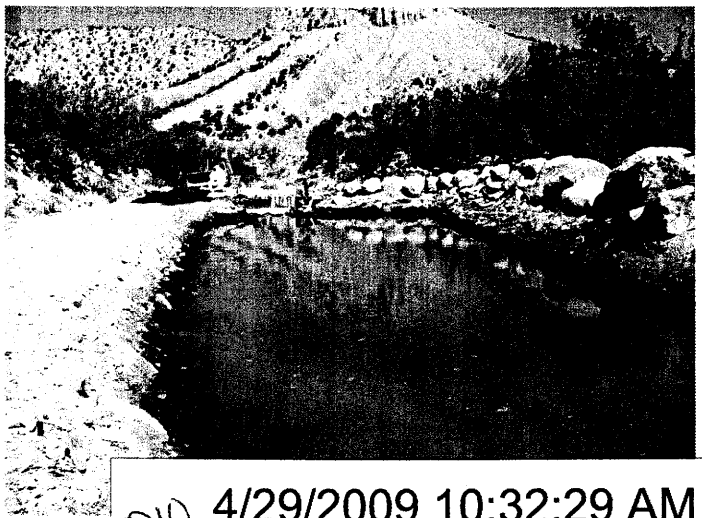

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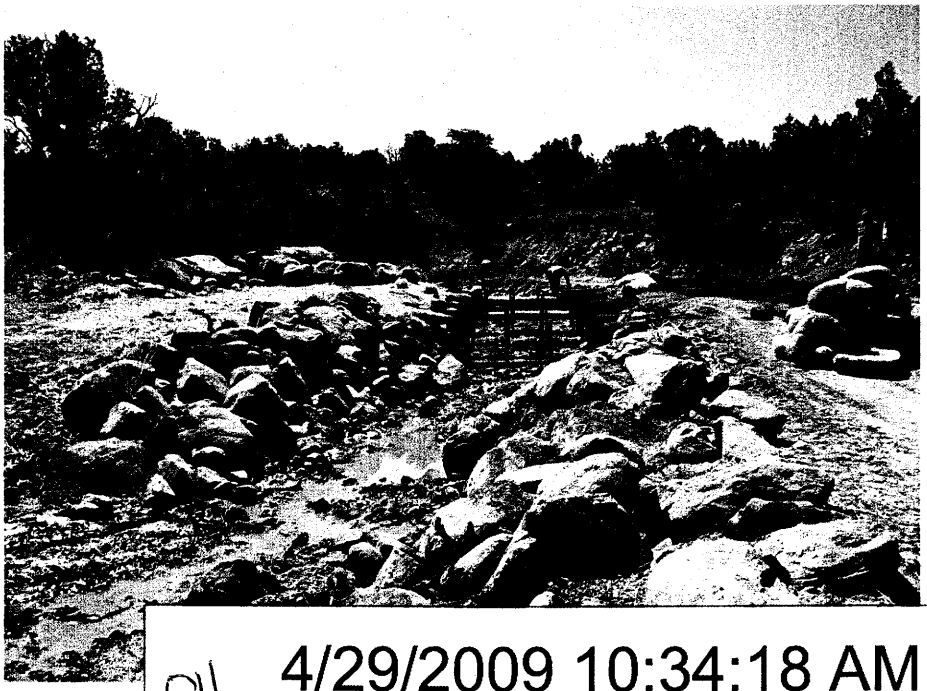

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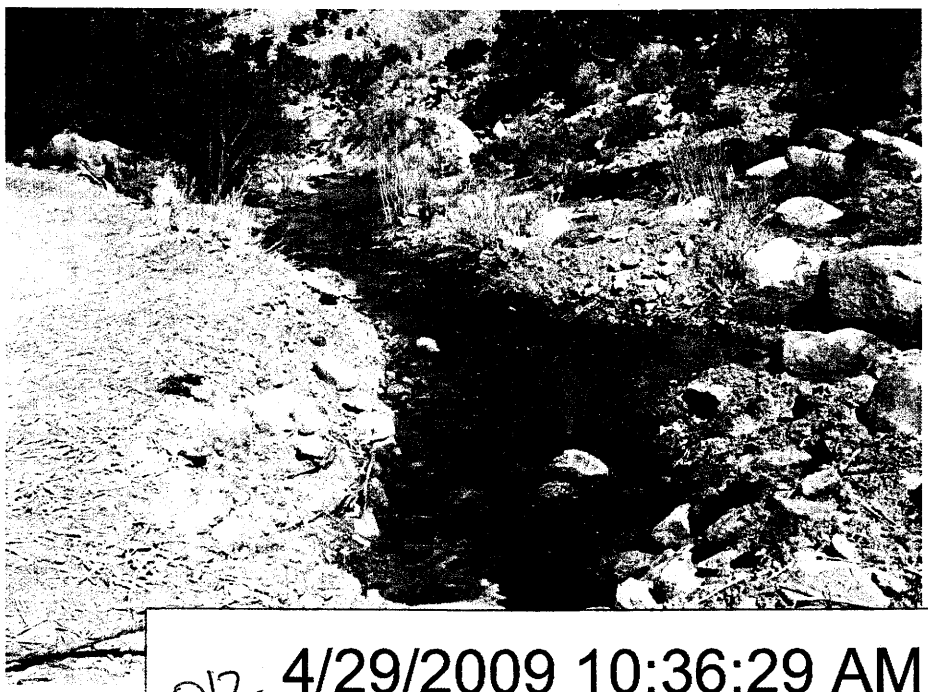

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West Ridge Mine 4-29-2009

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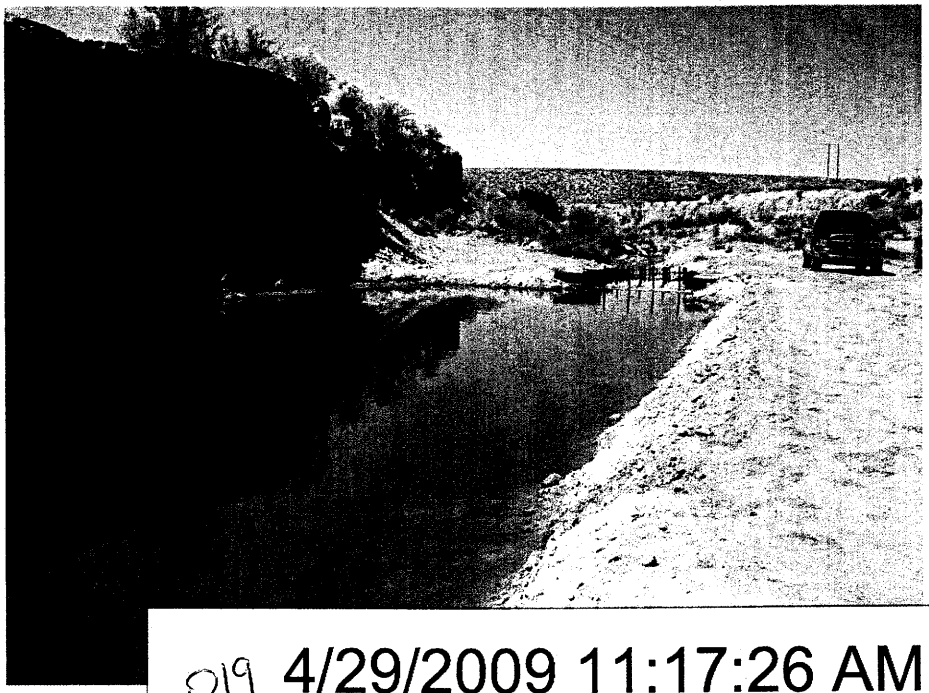

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