

# *St. Cloud Mining Company*

P.O. Box 196 Winston, New Mexico 87943

Ph: 505-743-5215 Fax: 505-743-3333 (email)

Website: [apadilla@stcloudmining.com](mailto:apadilla@stcloudmining.com)

February 22, 2013

Chris Eustice, Permit Lead  
Mining Act Reclamation Program  
New Mexico Mining and Minerals Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

## **St. Cloud RS Drilling Exploration 2013**

Dear Mr. Eustice:

Enclosed is the Exploration application. St Cloud wants to prove the Zeolite deposits on the East Yellowjacket, Bowman Pit, Little Hermosa, and Big Hermosa deposits. We are contracting Layne Christensen Company to do the RS Drilling. We will be drilling 18 to 24 5.5" holes 135' – 75' deep depending on the depth of the water table. Collecting composite samples at 5' intervals. To determine the quality and location of the Zeolite deposits. The staging area will be located on the permitted area known as the Yellowjacket pit (Bowman Pit). There will be four locations where the drill bore holes will be drilled. Location 1: Drill holes 13, 12, 11, and 10 are located in the permitted area. Location 2: East Yellowjacket east of the permitted area contains drill holes 1,2,3,4,5,6,7,8,and 9, each of these drill holes will have over the land drill pads 80' x 20' the over land road will be approximately 1807' long x 15' wide. Location 3: called the Little Hermosa will have drill holes 15, 14, 16, and 17. This location calls for a new road approximately 100' x 30' and 784' x 15' over the land road. Drill hole 16 will have a drill pad to be constructed to fit the drill rig and support trucks 40' x 30', Drill holes 15, 14, and 17 will be over the land 80' x 20'. Location 4: will have 1023' x 15' of over the land road with one new road 100' x 30', drill holes 19,18,21,20,22,23, and 24 will have over the land drill pads 80' x 20'. There will be two locations where the pads will have to be re-shaped to allow for the RS drill rig to drill, also there are going to be two areas where the travel way will be modified; the first will be a ramp 100 x 30 feet to access the Little Hermosa deposit; the second area will be the filling in of a ravine to access the Big Hermosa deposit.

Please call me if you have any questions at 575-743-5215. We look forward to hearing from you.

Sincerely,



Audie Padilla

Zeolite Operations Superintendent

**PART 3**  
**MINIMAL IMPACT EXPLORATION OPERATION**  
**PERMIT APPLICATION**

Accompanying instructions for this permit application are available from MMD, and on MMD webpage:

<http://www.emnrd.state.nm.us/MMD/MARP/MARPAApplicationandReportingForms.htm>

Send 6 copies of the completed application to:

**STATE OF NEW MEXICO**  
**ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

Director

Mining and Minerals Division  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505  
Telephone: (505) 476-3400

Webpage: [www.emnrd.state.nm.us/MMD/index.htm](http://www.emnrd.state.nm.us/MMD/index.htm)

**CHECK OFF LIST TO DETERMINE YOUR PROJECT'S STATUS AS A MINIMAL IMPACT EXPLORATION OPERATION:**

- Yes     No    My project **will exceed 1000 cubic yards of excavation**, per permit (drill pads, mud pits, and roads will not be counted in excavated materials).
- Yes     No    Surface disturbances for constructed roads, drill pads and mud pits **will exceed 5 acres** total for my project.
- Yes     No    My project is located in or is expected to have a direct surface impact on wetlands, springs, perennial or intermittent streams, lakes, rivers reservoirs or riparian areas.
- Yes     No    My project is located in designated critical habitat areas as determined in accordance with the federal Endangered Species Act of 1973 or in areas determined by the Department of Game and Fish likely to result in an adverse impact on an endangered species designated in accordance with the Wildlife Conservation Act, Sections 17-2-37 through 17-2-46 NMSA 1978 or by the State Forestry Division for the Endangered Plants Act, section 75-6-1 NMSA 1978.

- Yes     No    My project is located in an area designated as Federal Wilderness Area, Wilderness Study Area, Area of Critical Environmental Concern, or an area within the National Wild and Scenic River System.
- Yes     No    My project is located in a known cemetery or other burial ground.
- Yes     No    My project is located in an area with cultural resources listed on either the National Register of Historic Places or the State Register of Cultural Properties.
- Yes     No    My project will or is expected to have a direct impact on ground water that has a total dissolved solids concentration of less than 10,000 mg/L, except exploratory drilling intersecting ground water may be performed as a minimal impact operation.
- Yes     No    My project is expected to use or using cyanide, mercury amalgam, heap leaching or dump leaching in its operations.
- Yes     No    My project is expected to result in point or non-point source surface or subsurface releases of acid or other toxic substances from the permit area.
- Yes     No    My project requires a variance from any part of the Mining Act Rules as part of the permit application.

If you answer yes to any of the above questions, your project does not qualify as a minimal impact exploration operation.

### Confidential Information

- Yes     No    Is any of the information submitted in this application considered by the applicant to be confidential in nature? If yes, please provide this information separately and marked as "confidential."

### Timeline

- Exploration applications must be provided no less than 45 days prior to the anticipated date of operations desired by the applicant.
- Renewal applications shall be filed at least 30 days preceding expiration of the current permit. Permits are valid for one year.
- Approved permit is valid for one year from the date of approval.

## SECTION 1 – OPERATOR INFORMATION (§304.D.1)

Project Name: **ST. CLOUD ZEOLITE RS DRILLING EXPLORATION 2013**

Nearest Town To Project: WINSTON, NM

Applicant Name and Contact Information (entity obligated under the Mining Act):

Name: St. Cloud Mining Company

Address: P. O. BOX 196 Winston, New Mexico 87943

761 Saint Cloud Road Winston, New Mexico 87943

Office Phone: 575-743-5215

Cell Phone: N/A

Fax Number: 575-743-3333

Email: apadilla@stcloudmining.com

Name of On-Site Contact, Representative, or Consultant:

Name: Audie Padilla

Address: P. O. BOX 196 Winston, New Mexico 87943

761 Saint Cloud Road Winston, New Mexico 87943

Office Phone: 575-743-5215

Cell Phone: 575-740-0385

Fax Number: 575-743-3333

Email: apadilla@stcloudmining.com

## SECTION 2 – RIGHT TO ENTER INFORMATION (§302.D.1)

A. Describe or attach copies of documents that give the applicant the right to enter the property to conduct the exploration and reclamation, include: lease agreements, access agreements, right of way agreements, surface owner agreements, and claim numbers, if applicable.

ST. CLOUD OWENS THE BOWMAN (YELLOWJACKET PIT), EAST BOWMAN PIT, LITTLE HERMOSA PIT, AND THE BIG HERMOSA PIT IS OWNED BY STANLEY AND VICKI ADAMS, WHICH ST. CLOUD HAS OBTAINED WRITTEN PERMISSION. SEE ATTACHED

Attachment   yes  

B. List the names and addresses of surface and mineral ownership within the proposed permit area. If the mineral is federal mineral, indicate as federal mineral, but provide the name of the claim holder or lease holder.

**Surface Estate Owner(s):**

Name	Address	Phone #
<input type="checkbox"/> U.S. BLM	_____	_____
<input type="checkbox"/> U.S. Forest Service	_____	_____
<input type="checkbox"/> State of NM	_____	_____
<input checked="" type="checkbox"/> Private/Corporate	_____	_____
Name: <u>St. Cloud Mining Company</u>	<u>P. O. Box 196 Winston, NM 87943</u>	<u>575-743-5215</u>
<input checked="" type="checkbox"/> Other	_____	_____
Name: <u>Stanley &amp; Vicki Adams</u>	<u>P. O. Box 81 Winston, NM 87943</u>	<u>575-743-0250</u>

# St. Cloud Mining Company

P.O. Box 196 Winston, New Mexico 87943

Ph: 575-743-5215 Fax: 575-743-3333

website: [www.stcloudmining.com](http://www.stcloudmining.com)

January 23, 2013

Stanley and Vicki Adams  
POB 81  
Winston, NM 87943

RE: Permission to cross your land *from 1/23-2013 to 4/1-2013, in T12S, R8W*

Dear Mr. and Mrs. Adams:

*on the NE 1/4 of Sect. 10*

This is to request permission to gain access to a St. Cloud Mining Company mineral deposit by crossing your land. At this time, the only traffic will be Mr. Audie Padilla walking to the deposit and setting a few flags.

Once it is determined how St. Cloud wishes to proceed with developing the deposit, a formal and detailed letter will be sent to you, and your input will be requested.

Thank you for your consideration to this request. Please sign the bottom of this letter indicating you are giving the requested permission.

Sincerely,



Audie Padilla,  
Plant Superintendent  
St. Cloud Mining Company

Permission granted:

*Stanley Adams*  
STANLEY ADAMS

*Vicki Adams*  
VICKI ADAMS

**Lease Holder(s) of Surface Estate (if applicable):**

Name	Address	Phone #
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Mineral Estate Owner(s):**

Name	Address	Phone #
<input type="checkbox"/> Bureau of Land Management	_____	_____
	_____	

<input type="checkbox"/> US Forest Service	_____	_____
	_____	

<input type="checkbox"/> State of NM	_____	_____
	_____	

<input type="checkbox"/> Claim/Lease Holder	_____	_____
Name: _____	_____	

Claim Numbers: \_\_\_\_\_

<input type="checkbox"/> Claim/Lease Holder	_____	_____
Name: _____	_____	

Claim Numbers: \_\_\_\_\_

<input checked="" type="checkbox"/> Other	_____	_____
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Name: St. Cloud Mining Company    P. O. Box 196 Winston, NM 87943    575-473-5215

C. Has a Cultural Resource Survey been performed on the site?

X Yes  No If yes, please provide the author, title, date and report number, and include a copy of the survey with this application, if possible:

**Department of Cultural Affairs Historic Preservation Division Dated December 7, 2007**  
**St. Cloud Permit Modification Application SI006RE.**

Attachment Yes

D. Has a wildlife survey or vegetation survey been performed for the permit area?

X Yes  No If yes, please provide the author, title, date and report number, and include a copy of the survey with this application, if possible:

**St. Cloud Mine Application for Permit Modification, SI006RE; Project No. 11815 dated November 29, 2007**

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Attachment Yes





BILL RICHARDSON  
Governor

STATE OF NEW MEXICO  
DEPARTMENT OF CULTURAL AFFAIRS  
HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING  
407 GALISTEO STREET, SUITE 236  
SANTA FE, NEW MEXICO 87501  
PHONE (505) 827-6320 FAX (505) 827-6338



November 30, 2007

Chris Eustice  
Permit Lead  
Mining Act Reclamation Program  
Mining and Minerals Division  
1220 South Saint Francis Drive  
Santa Fe, NM 87505

Re: St. Cloud Zeolite Permit Modification Application, SI006RE

Dear Mr. Eustice:

I am writing in response to your request for review and comment on the above referenced application received November 14, 2007. Under rule 19.10.5.505 NMAC, the Director shall evaluate whether a permit modification would adversely impact cultural resources listed on either the National Register of Historic Places or the State Register of Cultural Properties.

There are no cultural resources listed on the National or State Registers within the permit area. However, a review of our archeological records database shows that a cultural resource survey of the proposed mining operation was not conducted and there is a potential for unknown archaeological sites to exist with the boundaries of the mining permit.

Although the expansion of mining will be within the original design limits, continued mining and reclamation activities in areas that have not already been disturbed have the potential to affect cultural resources eligible for listing to the State or National Register. Please encourage the mining operator to contact the Historic Preservation Division if any archaeological artifacts are discovered so that we have the opportunity to evaluate the significance of the findings. Section 18-6-11.2 of the New Mexico Cultural Properties Act prohibits the disturbance of unmarked human burials on all lands in New Mexico. If unmarked human burials are discovered, all burial disturbing activity must cease and the local law enforcement and the Office of the Medical Investigator must be notified.

If you have any questions concerning these comments, please do not hesitate to contact me. I can be reached by telephone at 827-4064 or by email at [michelle.ensey@state.nm.us](mailto:michelle.ensey@state.nm.us).

Sincerely,

Michelle M. Ensey  
Archaeologist

Log: 82916

GOVERNOR  
Bill Richardson



DIRECTOR AND SECRETARY  
TO THE COMMISSION

Bruce C. Thompson, Ph.D.

Robert S. Jenks, Deputy Director

STATE OF NEW MEXICO  
DEPARTMENT OF GAME & FISH

One Wildlife Way  
Post Office Box 25112  
Santa Fe, NM 87504  
Phone: (505) 476-8008  
Fax: (505) 476-8124

Visit our website at [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us)  
For information call 505-476-8000  
To order free publications call 1-800-862-9310

STATE GAME COMMISSION

Alfredo Montoya, Chairman  
Alcalde, NM

Dr. Tom Arvas, Vice-Chairman  
Albuquerque, NM

Sandy Buffett, Commissioner  
Santa Fe, NM

Jim McClintic, Commissioner  
Albuquerque, NM

Terry Z. Riley, Ph.D., Commissioner  
Tijeras, NM

M. H. "Dutch" Salmon, Commissioner  
Silver City, NM

Lao V. Sims, II, Commissioner  
Hobbs, NM

November 29, 2007

Chris Eustice, Permit Lead  
EMNRD Mining & Minerals Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505



Re: St Cloud Zeolite Mine Application for Permit Modification, SI006RE; NMDGF Project No. 11815

Dear Mr. Eustice:

In response to your letter dated November 9, 2007, the New Mexico Department of Game & Fish (NMDGF) has reviewed the above referenced document. The operator proposes to increase the area of disturbance at the Yellowjacket Pit. No change in financial assurance would be needed as the difference is cancelled out by reclamation accomplished at the Main Pit. Each of these pits is approximately 20 acres in extent. No change in the permit design limit is requested. No site inspection was conducted by NMDGF staff in connection with this consultation request.

No significant impact to wildlife or wildlife habitat would be expected as a result of MMD approval of this modification. Thank you for the opportunity to comment on this permit action. If there are any questions, please contact Rachel Jankowitz at 505-476-8159, or [rjankowitz@state.nm.us](mailto:rjankowitz@state.nm.us).

Sincerely,

Matthew Wunder, Chief  
Conservation Services Division

cc: Ecological Services Field Supervisor, USFWS  
Pat Mathis, SW Area Habitat Specialist, NMGF

## SECTION 3 – MAPS AND PROJECT LOCATION (§302.D.2)

A. Project Location:

Township 12S Range 8W Section 3,4,10, & 11  
 Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_  
 Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_

List the drill hole/exploration name and the GPS coordinates for each site.

I.D. Number	Northing / Latitude	Easting / Longitude
St Cloud Yellowjack et		
Scy # 1	N33 16.922	W107 38.184
Scy # 5	N33 16.940	W107 38.247
Scy # 3	N33 16.960	W107 38.219
Scy # 2	N33 16.955	W107 38.178
Scy # 6	N33 16.951	W107 38.149
Scy # 4	N33 16.966	W107 38.257
Scy # 7	N33 16.972	W107 38.298
Scy # 8	N33 17.006	W107 38.290
Scy # 9	N33 17.012	W107 38.328
Bowman Pit		
Scb # 10	N33 17.017	W107 38.368
Scb # 11	N33 17.031	W107 38.405
Scb # 12	N33 17.052	W107 38.429
Scb # 13	N33 17.075	W107 38.464
Little Hermosa Pit		
LHP # 17	N33 16.981	W107 38.775
LHP # 16	N33 16.984	W107 38.814
LHP # 14	N33 16.990	W107 38.854
LHP # 15	N33 16.997	W107 38.893

I.D. Number	Northing / Latitude	Easting / Longitude



**DRILL HOLES LOCATIONS**

Hole #	Longitude coordinates	Latitudes Coordinates	Elevations in Ft.	Drilling Depth Ft.	Bottom depth Ft.	Road Level Ft.	Depth below road Ft.	Ground Water depth Ft.
St Cloud Yellowjacket								
Scy # 1	N33 16.922	W107 38.184	5956	125	5831	5869	38	50
Scy # 5	N33 16.940	W107 38.247	5974	135	5839	5869	30	50
Scy # 3	N33 16.960	W107 38.219	5965	135	5830	5869	39	50
Scy # 2	N33 16.955	W107 38.178	5968	135	5833	5869	36	50
Scy # 6	N33 16.951	W107 38.149	5972	135	5837	5869	32	50
Scy # 4	N33 16.966	W107 38.257	5968	135	5833	5869	36	50
Scy # 7	N33 16.972	W107 38.298	5970	135	5835	5869	34	50
Scy # 8	N33 17.006	W107 38.290	5965	135	5830	5869	39	50
Scy # 9	N33 17.012	W107 38.328	5965	135	5830	5869	39	50
				1205	-1205		1205	
Bowman Pit					0		0	
Scb # 10	N33 17.017	W107 38.368	5981	120	5861	5900	39	50
Scb # 11	N33 17.031	W107 38.405	5991	125	5866	5900	34	50
Scb # 12	N33 17.052	W107 38.429	6008	135	5873	5900	27	50
Scb # 13	N33 17.075	W107 38.464	5986	125	5861	5900	39	50
				505	-505		505	
Little Hermosa Pit					0		0	
LHP # 17	N33 16.981	W107 38.775	5954	75	5879	5918	39	50
LHP # 16	N33 16.984	W107 38.814	5965	85	5880	5918	38	50
LHP # 14	N33 16.990	W107 38.854	5995	115	5880	5918	38	50
LHP # 15	N33 16.997	W107 38.893	5993	115	5878	5918	40	50
				390	-390		390	
Big Hermosa Pit					0		0	
BHP # 19	N33 16.905	W107 38.900	6027	145	5882	5918	36	50
BHP # 18	N33 16.899	W107 38.862	6016	135	5881	5918	37	50
BHP # 20	N33 16.895	W107 38.822	6007	125	5882	5918	36	50
BHP # 21	N33 16.927	W107 38.816	6002	120	5882	5918	36	50
BHP # 22	N33 16.924	W107 38.776	6000	120	5880	5918	38	50
BHP # 23	N33 16.927	W107 38.736	5985	105	5880	5918	38	50
BHP # 24	N33 16.948	W107 38.718	5977	95	5882	5918	36	50
				845				
Total				2945				

Yes  N/A – Areas of proposed road improvement

Attachments Yes

Are maps or figures included with the application showing the approximate dimensions and locations of drill pads and other disturbances:

Yes – Drill pad dimensions and constructed drill pad locations

Attachments Yes

C. Provide detailed driving directions to access the site: From Truth or Consequences on I-25 go North to exit 81, then north on HWY 181 to HWY 52 west to the town of Winston, NM, take second street to left, go ¾ mile take left on gravel road for 8 miles to St Cloud office.

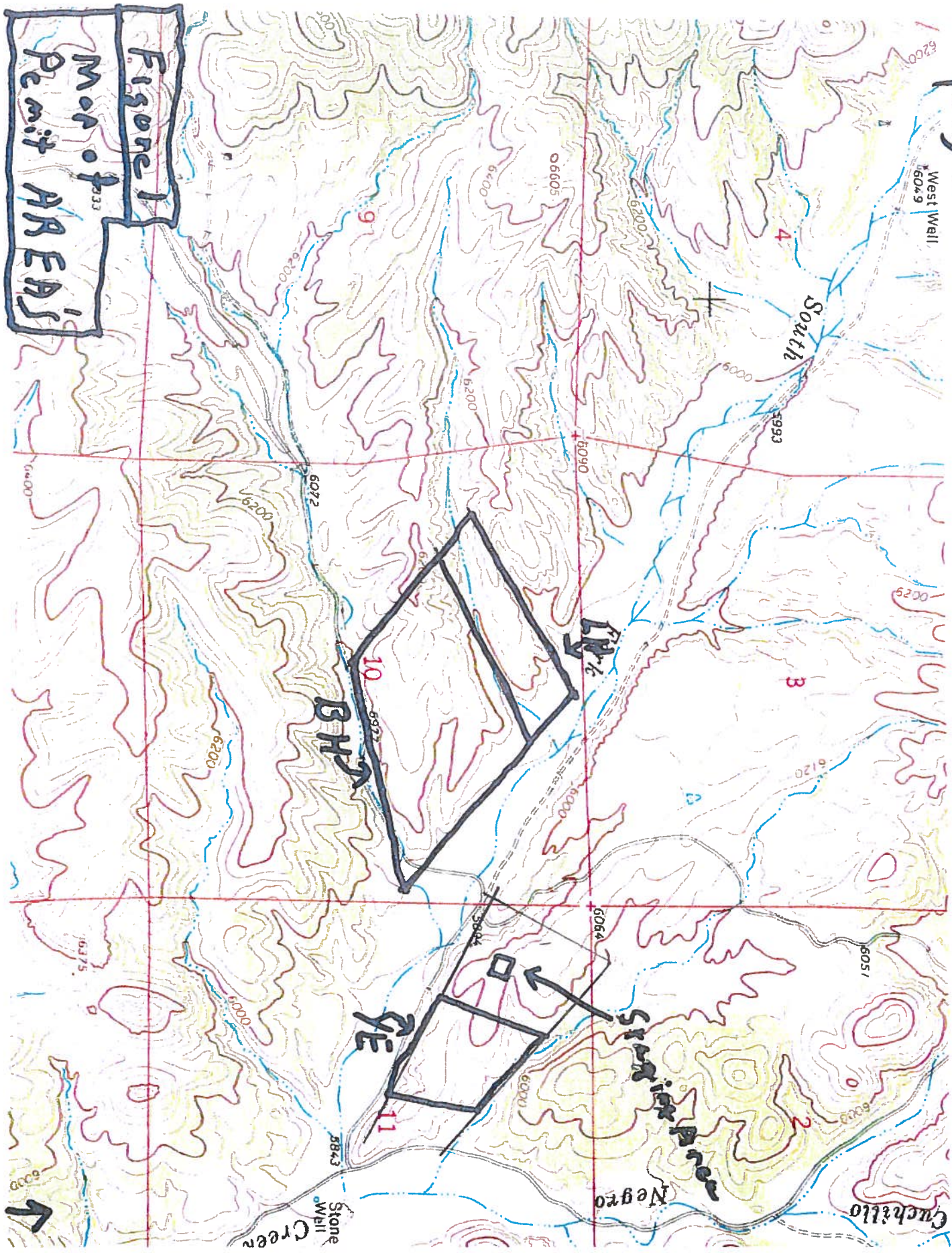
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\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(LH) Little Heron

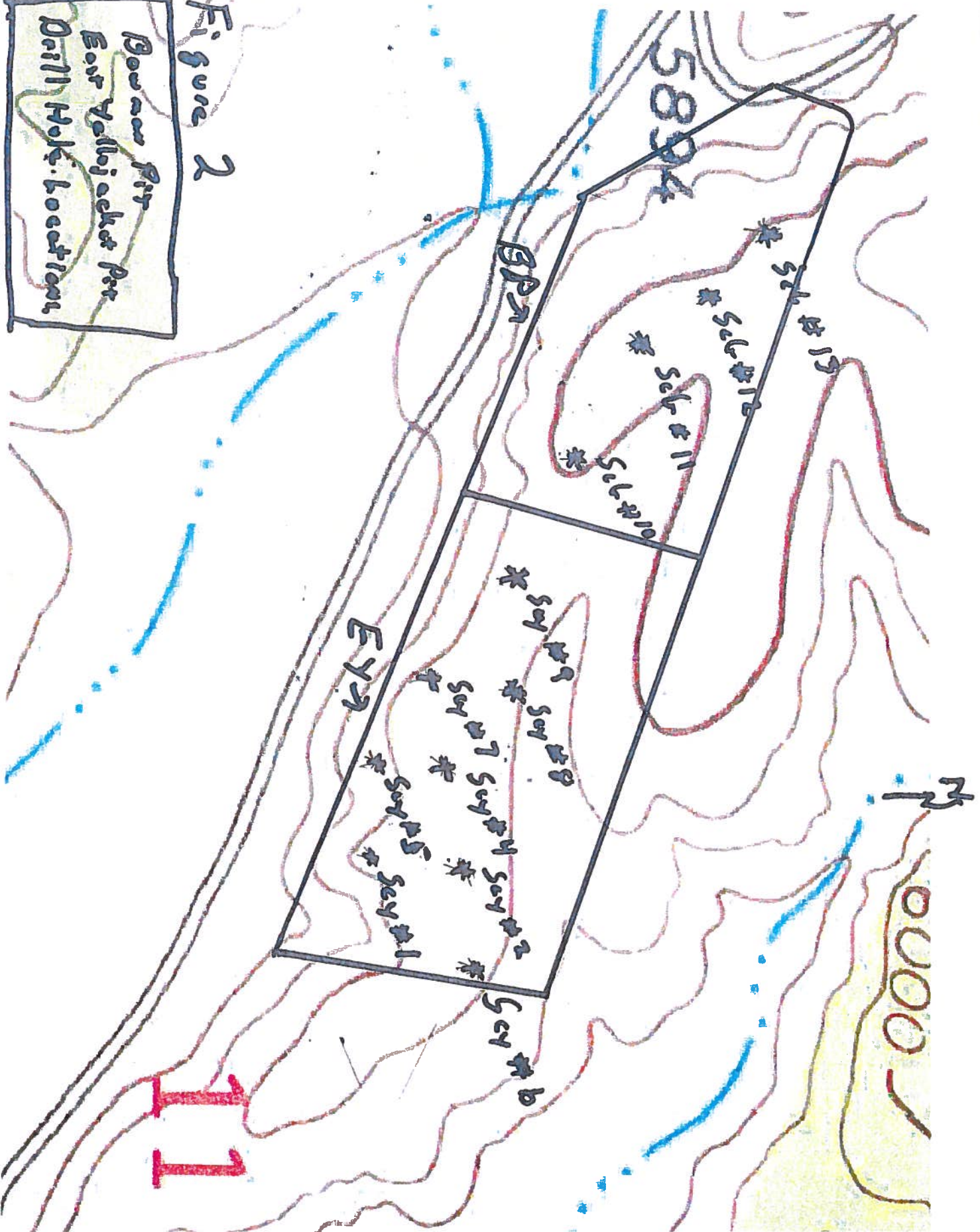
(BN) Big Heron

(YE) yellow swam



Bowser Pitt  
 East Yellowknife Pit  
 Drill Hole Locations

Figure 2





Drill Hole Locations

Figure: 3

-6200

BH 10

5977

BH # 19

BH # 18

BH # 20

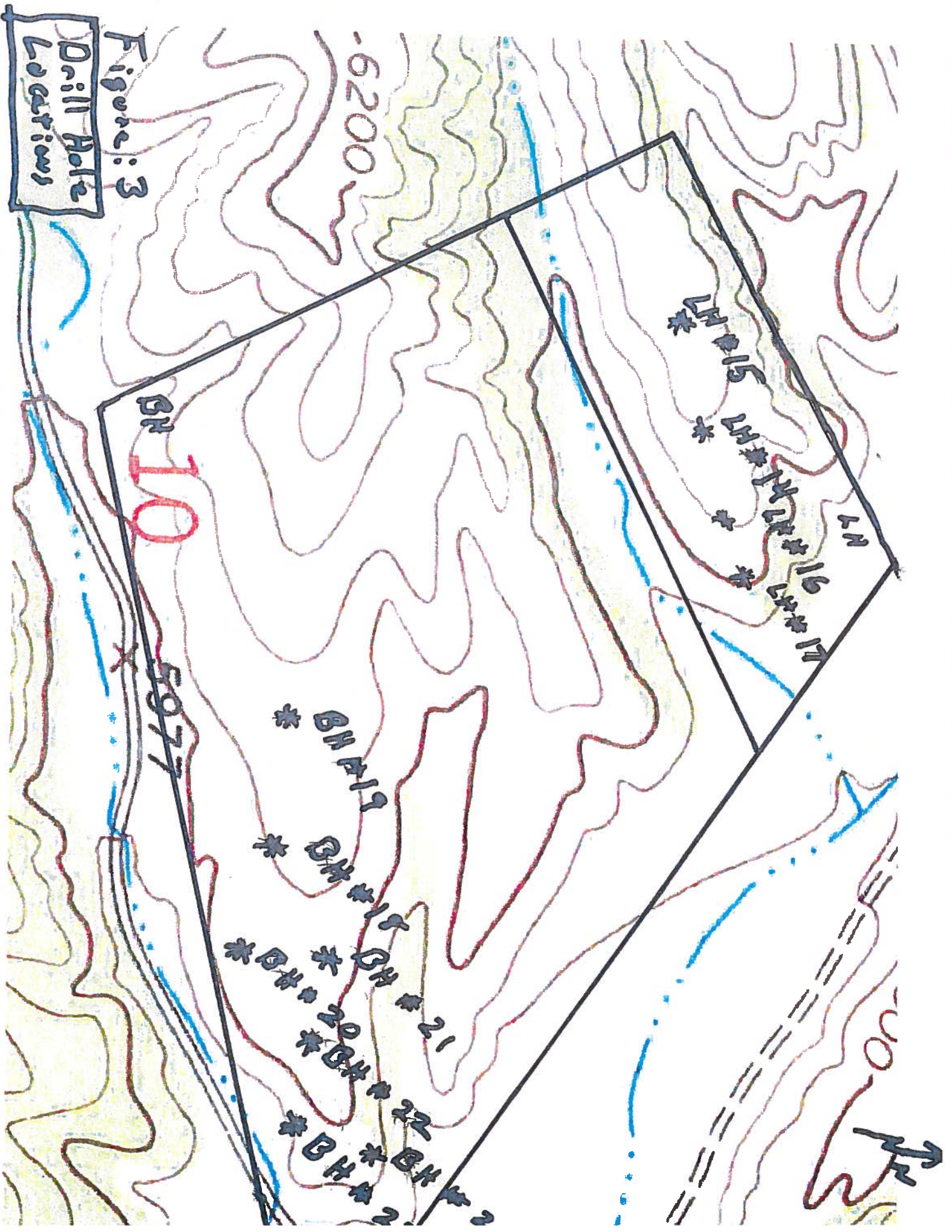
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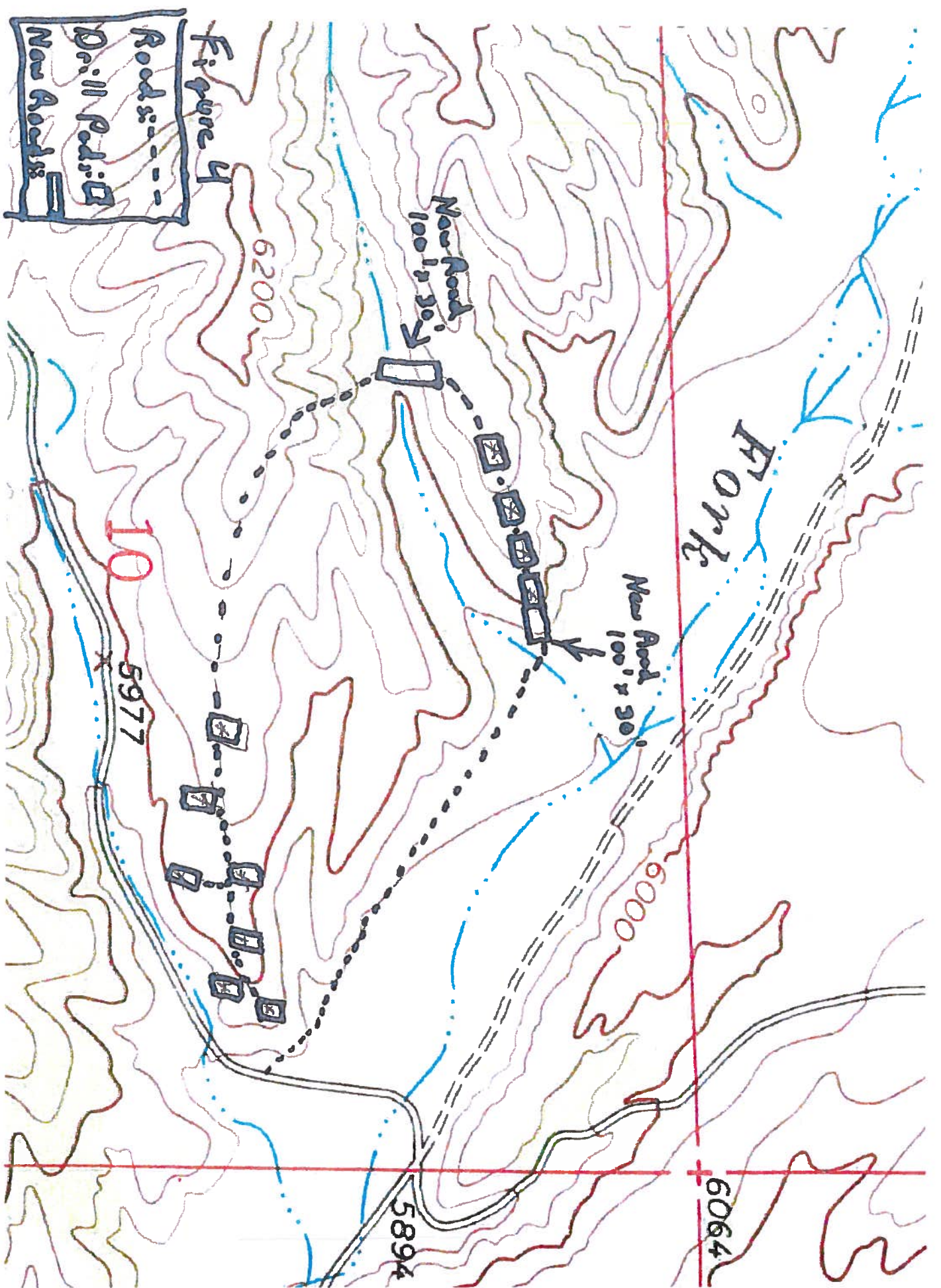
BH # 22

BH # 23

BH # 15  
BH # 17  
BH # 16  
BH # 14

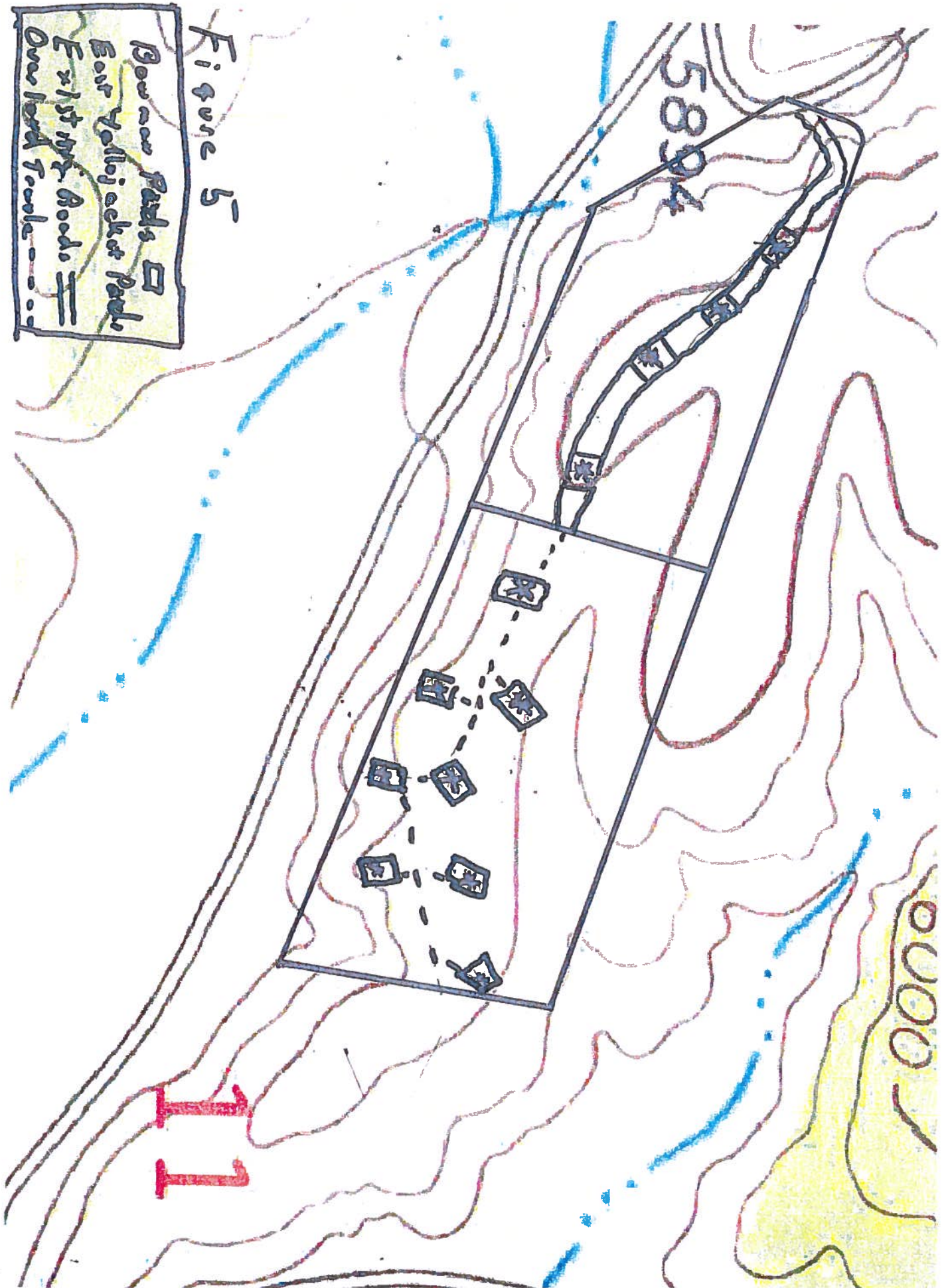
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N



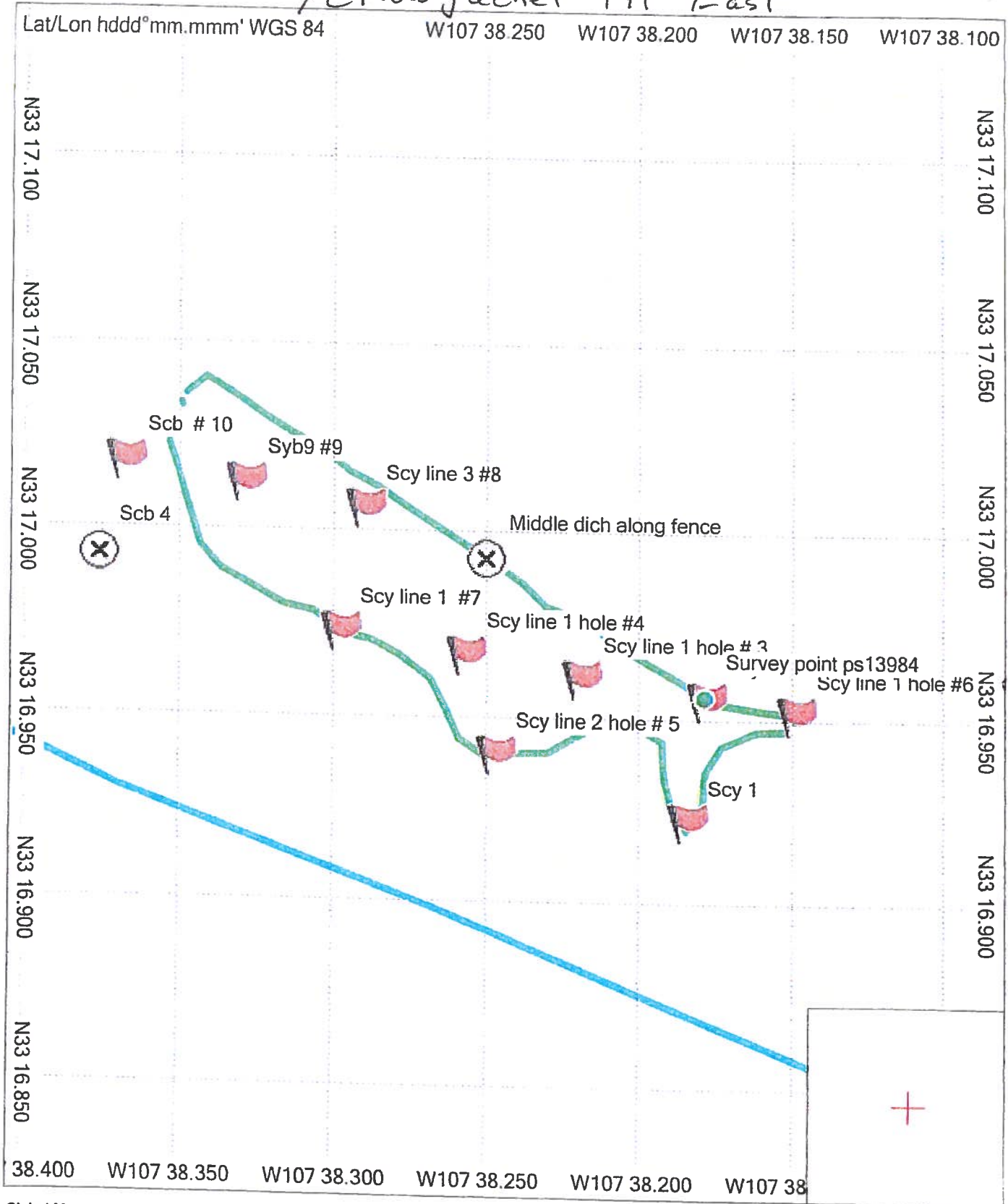


Downer Ponds □  
Bear Yellowjacket Ponds  
Existing Ponds =  
Overland Flowline

Figure 5



# Yellowjacket Pit East



Global Map



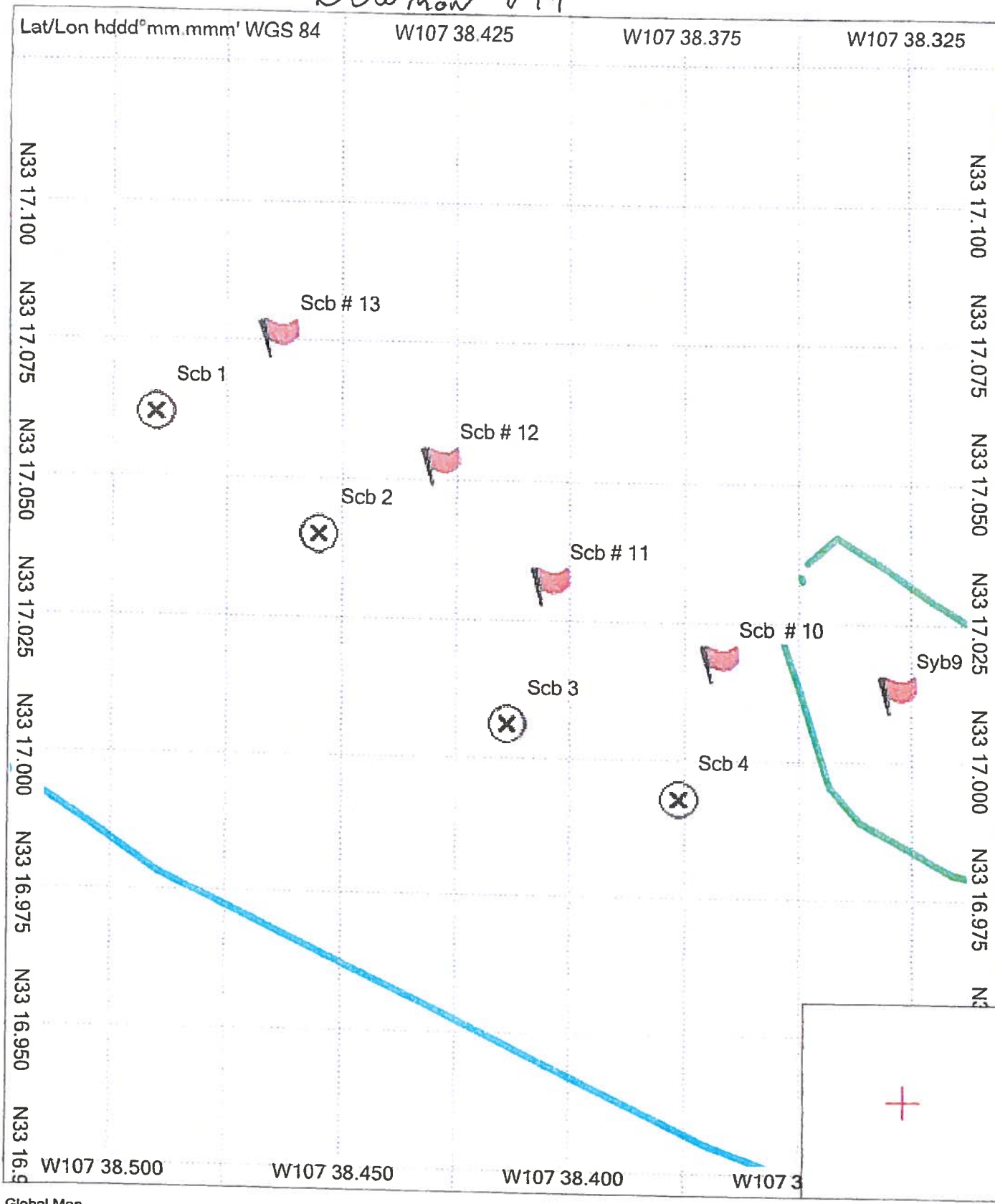
TN MN  
9.5°

Internal Storage

GARMIN

1/7/2010

# Bowman Pit

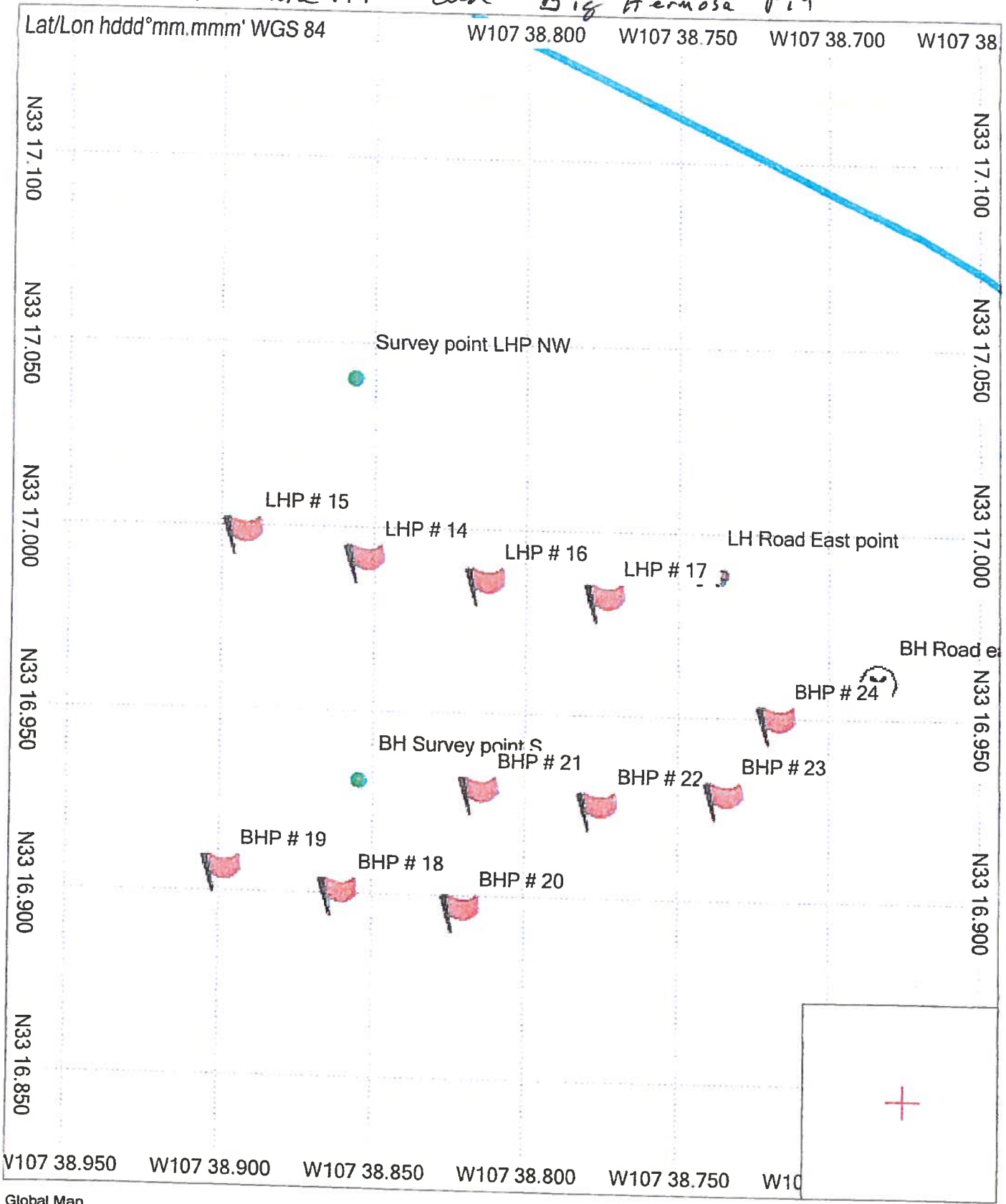


TN MN  
95°  
1/1/2010

Internal Storage



# Little Hermosa Pit and Big Hermosa Pit



Global Map

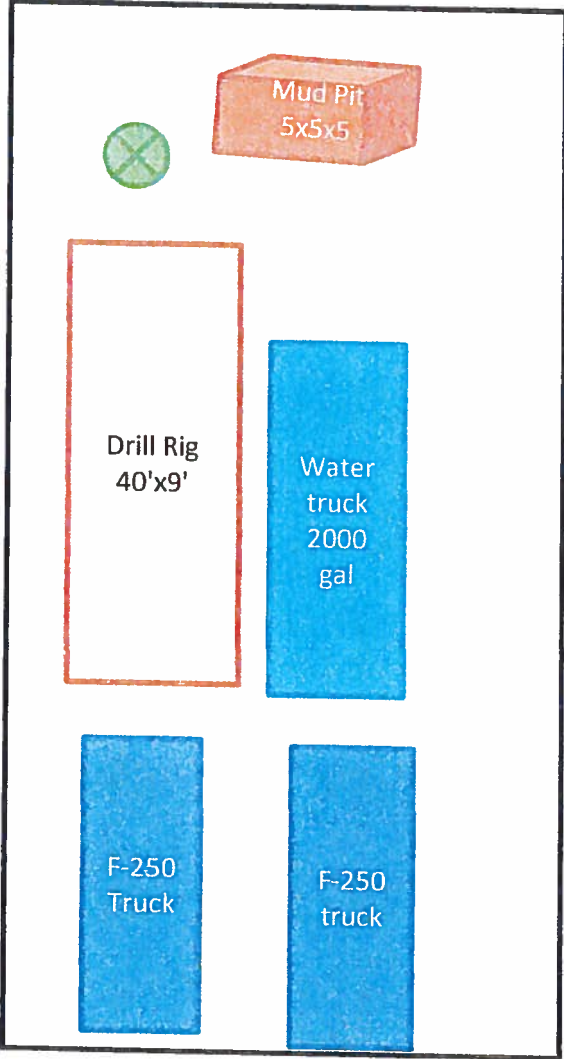


Internal Storage



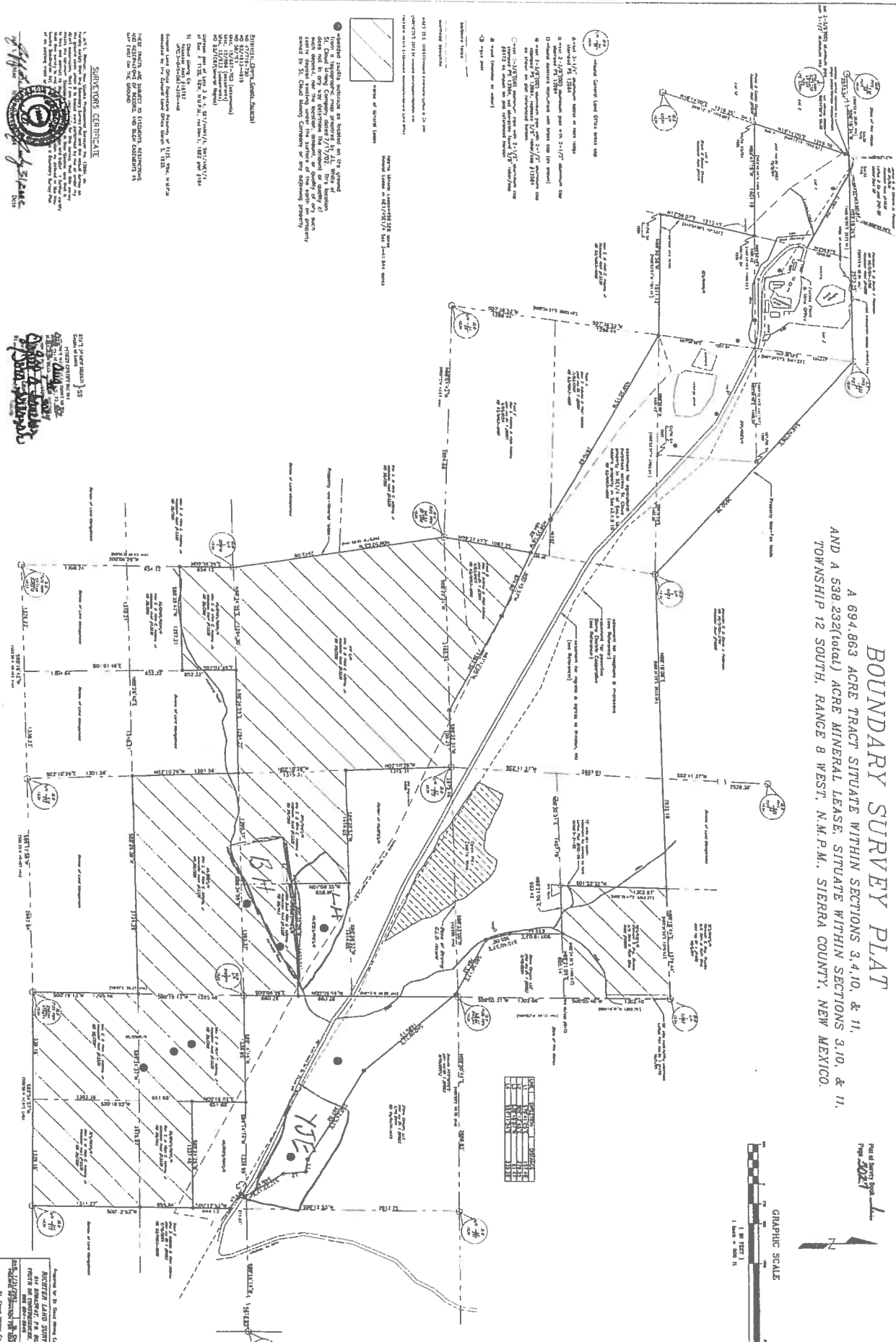
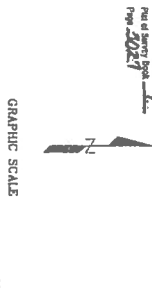
TN MN  
9.5°  
1/1/2010

**Drill Pad 80' x 20'**



**BOUNDARY SURVEY PLAT**  
 A 694.863 ACRE TRACT SITUATE WITHIN SECTIONS 3, 4, 10, & 11,  
 AND A 598.232 (total) ACRE MINERAL LEASE, SITUATE WITHIN SECTIONS 3, 10, & 11,  
 TOWNSHIP 12 SOUTH, RANGE 8 WEST, N.M.P.M., SIERRA COUNTY, NEW MEXICO.

PLAT OF SURVEY  
 Page 2027



- ① Shaded areas within or located on the ground shown on this plat are hereby declared to be the mineral interest in the land shown on this plat, and the mineral interest in the land shown on this plat is hereby declared to be the mineral interest in the land shown on this plat.
- ② Shaded areas within or located on the ground shown on this plat are hereby declared to be the mineral interest in the land shown on this plat, and the mineral interest in the land shown on this plat is hereby declared to be the mineral interest in the land shown on this plat.
- ③ Shaded areas within or located on the ground shown on this plat are hereby declared to be the mineral interest in the land shown on this plat, and the mineral interest in the land shown on this plat is hereby declared to be the mineral interest in the land shown on this plat.

**SURVEYOR'S CERTIFICATE**  
 I, the undersigned, being duly sworn, depose and say that I am a duly licensed Surveyor in the State of New Mexico, and that I am the author of the foregoing plat, and that the same is a true and correct copy of the original record of the same as the same appears in my office, and that I am not aware of any fraud or collusion in the execution of the same, and that I am not aware of any fraud or collusion in the execution of the same, and that I am not aware of any fraud or collusion in the execution of the same.

**NOTICE TO THE PUBLIC**  
 This plat is a true and correct copy of the original record of the same as the same appears in my office, and that I am not aware of any fraud or collusion in the execution of the same, and that I am not aware of any fraud or collusion in the execution of the same, and that I am not aware of any fraud or collusion in the execution of the same.

Approved by the State Survey Commission  
 on this 14th day of July, 1927.  
 State Surveyor  
 J. H. ...



## SECTION 4 – EXPLORATION DESCRIPTION (§302.D.3 & 4)

A. Anticipated exploration: Start Date: May 6, 2013 End Date: May 27, 2013

B. List the mineral(s)/element(s) to be explored for: Zeolite

C. Proposed method(s) of exploration:

**X Air drilling (air rotary, coring, etc.):**

24 # of holes      145 -75 Depth (ft.)      5.5 Diameter (in.)

24 # of drill pads      80 Length (ft.)      20 Width (ft.)

Will drill pads be graded/bladed or overland:  Graded/bladed       Overland

Will drill pads need some mechanical leveling (grading/blading):  Yes       No

Approx. Weight of Drill Rig (lbs.) 40,000      Number of Axles: 2

Total length of drill stem that can be carried on the rig: 300 ft

Is a support pipe truck anticipated?  Yes       No      \_\_\_\_\_ Weight (lbs.)

Weight of support compressor (lbs.): \_\_\_\_\_ Trailer mounted? \_\_\_\_\_

Anticipated Drilling Contractor: Layne      License No WD-368

**X Mud/fluid drilling:**

24 # of holes      20' - 50' Depth (ft.)      5.5 Diameter (in.)

24 # of drill pads      80' Length (ft.)      20' Width (ft.)

Will drill pads be graded/bladed or overland:  Graded/bladed       Overland

Will drill pads need some mechanical leveling (grading/blading):  Yes       No

Will a closed loop system be used or will mud/fluid pits be used? Mud Pits

If mud/fluid pits are proposed:

24 # of pits 5 Length (ft.) 5 Width (ft.) 5 Depth (ft.)

Anticipated excavating equipment: Cat 446 Backhoe

How will excavating equipment be transported to the site (i.e., driven, low-boy, etc.):

Driven

Will mud pits be lined?:  Yes  No

If yes, proposed material to line the mud pits: \_\_\_\_\_

Approx. Weight of Drill Rig (lbs.) 40,000 Number of Axles: 2

Anticipated Drilling Contractor Layne License No. WD-368

**Test pits / exploratory trenches:**

       # of pits        Length (ft.)        Width (ft.)        Depth (ft.)

Anticipated excavating equipment: \_\_\_\_\_

How will excavating equipment be transported to the site (i.e., driven, low-boy, etc.): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Other methods of exploration** (i.e., cuts, shafts, tunnels, adits, declines, blasting,

etc.). Indicate method and details: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**TOTAL ACREAGE TO BE DISTURBED DUE TO DRILL PADS = 0.87936 acres**  
(to convert to acres, multiply total square footage of drill pads by 0.0000229)

D. Disposal of drill cuttings

If this exploration project is for uranium or other radioactive elements/minerals, applicant agrees to perform a gamma radiation survey at each drill site prior to, and after, exploration activities. Applicant/Owner/Operator agrees to restore gamma radiation levels at each drill site to pre-exploration levels.  Yes  No  N/A

Will excess drill cuttings be buried at each drill site location or within a single disposal pit?  
X At each drill pad location  Within a single disposal pit

If a single disposal pit is proposed, please provide the following:

Description or GPS coordinates of the proposed cuttings disposal pit location:

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Dimensions of the single proposed cuttings disposal pit (length, width, and depth):

\_\_\_\_\_ Length (ft.) \_\_\_\_\_ Width (ft.) \_\_\_\_\_ Depth (ft.)

**TOTAL ACREAGE TO BE DISTURBED DUE TO DISPOSAL PIT = \_\_\_\_\_ acres**  
(to convert to acres, multiply total square footage of disposal pit by 0.0000229)

E. Other Supporting Equipment (check all that apply):

X	4x4 Trucks/Vehicles	Quantity:	2
X	Water Truck	Weight (lbs.):	26000
<input type="checkbox"/>	Geophysical Truck	Weight (lbs.):	_____
<input type="checkbox"/>	Pipe Truck (rig support)	Weight (lbs.):	_____
X	Bulldozer	Type:	Cat D-8N
X	Backhoe	Type:	Cat 446
<input type="checkbox"/>	Trackhoe	Type:	_____
<input type="checkbox"/>	Scaper/Grader	Type:	_____
<input type="checkbox"/>	Trailers	Quantity/Type:	_____
<input type="checkbox"/>	Portable Toilet	Quantity:	_____
X	Other	List:	W750 RC Rig 40,000 lbs
			_____
			_____
			_____

F. Roads and Overland Travel:

List of new roads to be constructed for this exploration project:

Description of <i>NEW</i> Roads	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
Ramp	100	30	0.0687
Fill in ravine for crossing	100	30	0.0687
<b>TOTAL ACRES DISTURBED BY NEW ROAD CONSTRUCTION :</b>			<b>0.01374</b>

Describe how new roads will be constructed:        Ramp will be constructed using existing material.        The ravine using existing material.

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List for extension or widening of existing roads:

Description of Modification to <i>EXISTING</i> Roads	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
<b>TOTAL ACRES DISTURBED BY ROAD IMPROVEMENTS :</b>			

Describe how existing roads will be extended or widened:       

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## SECTION 5 – CHEMICAL USE (§302.D.4)

A. Check any and all chemicals that will be used for this project.

<input checked="" type="checkbox"/> Drilling Mud (i.e., EZ Mud)	Type/Quantity:	EZ Mud, N seal, Quik Gel 500#
<input checked="" type="checkbox"/> Diesel Fuel	Quantity:	600 gal
<input type="checkbox"/> Down-hole Lubricants	Type/Quantity:	_____
<input type="checkbox"/> Lost Circulation Materials	Type/Quantity:	_____
<input checked="" type="checkbox"/> Oils/Grease	Quantity:	15 lb
<input type="checkbox"/> Gasoline	Quantity:	_____
<input type="checkbox"/> Hydraulic Fluid	Quantity:	_____
<input type="checkbox"/> Ethylene Glycol	Quantity:	_____
<input type="checkbox"/> Cement	Type/Quantity:	250 bags of Portland Cement
<input checked="" type="checkbox"/> Water	Source:	St. Cloud Mining Company
<input type="checkbox"/> Bentonite	Quantity:	_____
<input type="checkbox"/> Fertilizer	Type/Quantity:	_____
<input checked="" type="checkbox"/> Other	Type/Quantity:	Zeolite 100#
		_____
		_____

B. Describe, in detail, a plan for the containment, use and disposal of all chemicals listed above:

St. Cloud Will follow its Spill Prevention Control and Countermeasure Plan in the event of a spill St cloud will use an absorbent Zeolite to absorb spill, then remove contaminated material into a 55 gallon drum and dispose in accordance to State and Federal regulations.

The Drilling mud in the pit will allowed to dry then cover with the top soil.

\_\_\_\_\_

\_\_\_\_\_

C. Describe where equipment fueling/refueling will occur:

All fueling will occur at the Bowman Pit next to the staging area .

\_\_\_\_\_

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D. Describe how hazardous material spills/leaks will be handled:

All spills or leaks will be absorbed with Zeolite or absorbent pads and disposed in a contamination 55 gal drum. There will be a an emergency spill kit on site.

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E. Identify spill cleanup materials that will be kept on-site (check all that apply):

Bentonite clay or cat litter

Adsorbent pads, rolls, mats, socks, pillows, dikes, etc.

Drum or barrel for containing contaminated soil/adsorbent materials

Other/list: Emergency spill kit

Other/list: \_\_\_\_\_

Other/list: \_\_\_\_\_

F. Applicant/owner/representative agrees to immediately notify the State of New Mexico immediately of any spills of hazardous materials (see page 1 of this application for phone numbers to notify):     Yes     No

**SECTION 6 – GROUNDWATER/SURFACE WATER INFORMATION**  
**(§302.D.5)**

A. Provide an estimate of depth to ground water and the total dissolved solids (TDS) concentration.

Depth to groundwater (ft.): 50ft      TDS concentration (mg/L): 360 mg/l

Describe the source of this information: Measurements by nearby monitoring well, provided by a pervious discharge permit application (DP-314) approved February 3, 1994.

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B. Will dewatering activities be conducted:     Yes       No

If yes, please describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

C. Is groundwater anticipated to be encountered during exploration:     Yes       No

**If YES:**

Have you completed Form WR-07 (Application for permit to drill a well with no consumptive use of water) and mailed it to the District Office of the State Engineer?     Yes

Have you completed Form WD-08 (Well plugging plan of operations) and mailed it to the District Office of the State Engineer?     Yes

Attachment \_\_\_\_\_ (copies of the completed WR-07 and WD-08 forms)

D. Exploration Borehole Abandonment

## Dry Boreholes

- Dry hole abandonment (option 1): 100% bentonite pellets/chips (i.e. HOLEPLUG® manufactured by Baroid Industrial Products), dropped from surface then hydrated in place according to the manufacturer's recommendations, emplaced from total depth to within 12 feet of the original ground surface, followed by 10 feet of neat cement, followed by 2 feet of topsoil/topdressing.
- X Dry hole abandonment (option 2): Neat cement slurry, mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 2 feet of the original ground surface, followed by 2 feet of topsoil/topdressing.
- Dry hole abandonment (option 3): Cement + 6% bentonite slurry, mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 2 feet of the original ground surface, followed by 2 feet of topsoil/topdressing.
- Dry hole abandonment (option 4): High-density bentonite clay ( $\geq 20\%$  active solids; i.e. QUIK-GROUT® manufactured by Baroid Industrial Products), mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 12 feet of the original ground surface, followed by 10 feet of neat cement, followed by 2 feet of topsoil/topdressing.
- Dry hole abandonment (option 5): Other materials / describe and justify use:  

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## Wet Boreholes

- Wet hole abandonment (option 1): Neat cement slurry, mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 2 feet of the original ground surface, followed by 2 feet of topsoil/topdressing.
- Wet hole abandonment (option 2): High-density bentonite clay ( $\geq 20\%$  active solids; i.e. QUIK-GROUT® manufactured by Baroid Industrial Products), mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 12 feet of the original ground surface, followed by 10 feet of neat cement, followed by 2 feet of topsoil/topdressing.
- Wet hole abandonment (option 3): Other sealing material approved by the Office of the State Engineer. Describe and include well plugging plan approval by the State Engineer:  

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- D. Applicant agrees to contain any water produced from the exploration borehole at the drill site and acknowledges that discharge of this water to a watercourse may be a violation of the Federal Clean Water Act:      X Yes     No
- E. Is any drilling proposed to occur within the channel of any perennial, intermittent, or ephemeral streams?       Yes    X No
- F. Is any drilling anticipated to occur within 100 feet of any perennial, intermittent, or ephemeral streams?    X Yes     No

**SECTION 7 – RECLAMATION & OPERATION PLAN**  
**(§302.D.6 AND 302.I.K)**

**A. Salvage/Preservation of Topsoil**

Before any grading/blading or similar activities occur in relation to this project, operator agrees to salvage and preserve all topsoil and topdressing for use in future reclamation of this project X Yes  No

Describe how topsoil will be salvaged prior to initiation of exploration activities (check all that apply):

- N/A – no construction work will occur, therefore no soil salvage is needed.
- X Excavated from drill pads and stored at each drill pad
- X Excavated from road improvements/construction and stored adjacent to road
- X Excavated from mud/fluid pits and storage at each pit
- Other, describe: \_\_\_\_\_  
\_\_\_\_\_

**B. Erosion Control**

Describe the best management practices that will be implemented to control erosion:

- X Silt fencing                      Location: At the base of the ravine and Ramp.
- X Straw waddles                      Location: Around Stockpiles
- Straw bales                      Location: \_\_\_\_\_
- Ditches/swales                      Location: \_\_\_\_\_
- Berms/dikes/dams                      Location: \_\_\_\_\_
- Sediment basins                      Location: \_\_\_\_\_
- Other or N/A                      Type/Location: \_\_\_\_\_  
\_\_\_\_\_

C. Wildlife Protection / Noxious Weed Prevention

Will the perimeter of drill pits be fenced to prevent wildlife entrapment?  Yes  No

Proposed pit perimeter fence material: Plastic Fence 48 in high.

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Describe how the pit perimeter fencing will be installed and secured (i.e., T-posts, wooden stakes, etc.):

The fence will be installed and secured with T-posts.

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Will at least one side of the interior of the drill pits be sloped at 3:1 as a ramp for wildlife escape?  Yes  No

If No, will another type of constructed escape ramp be installed? Describe:

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Applicant/Owner/Operator commits to pressure-washing or steam-clean all equipment prior to entering the permit area:  Yes  No

D. Reclamation Details

Describe in general how re-contouring or re-establishment of the surface topography will be restored:

**Upon completion of the work, the disturbed areas will be re-graded and scarified to match the existing terrain. The mud pits will be backfilled and graded to the original contour of the drill pad site. All equipment and any waste materials will be removed and properly disposed of including any petroleum product spills.**

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Describe how the reclamation of portals, adits, drilling fluid/mud and/or waste pits, shafts, ponds, roads and other disturbances will be performed:

N/A

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Broadcast applied or drill-seeded:  Broadcast  Drill-seeded

Scarification Methods (check all that apply):

- Primary tillage to greater than 6-inches depth of all constructed drill pads and roads
- Secondary tillage of all constructed drill pads and roads, and/or overland travel routes
- Chain drag or tire drag over seeds in areas used for overland travel
- Light raking of soil over seeds in areas used for overland travel
- None

Other/describe: primary tillage using a dull disc at a depth of 3" overland traveled where accessible if not then we will light raking of soil over seeds in area for overland travel. On graded new roads will disc after reencountering.

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Mulch Use:

- Certified weed-free straw mulch will be placed over areas that have been tilled/disc'd or ripped at a rate of 2 tons per acre, and will be crimped in place
- No mulch is proposed

#### E. Reclamation Timeline

Applicant/Owner/Operator commits to reclamation of the disturbed area as soon as possible following the completion or abandonment of the exploration operation, unless the disturbed area is included within a complete permit application for a new mining permit:

Yes  No

Anticipated Start of Reclamation:

- 0-30 days after completion of drilling
- 31-60 days after completion of drilling
- Other/specify: \_\_\_\_\_

**SECTION 8 – PERMIT FEES AND FINANCIAL ASSURANCE**  
**(§302.1.2 AND 5)**

A. Financial assurance must be posted with Mining and Minerals Division prior to approval of this application. The acceptable forms of financial assurance are surety bonds, letters of credit, and certificates of deposit. Provide an estimate of, and an instrument for, the proposed financial assurance required by Subpart 3.

Surety Bond

Letter of Credit

Cash Account / Certificate of Deposit

Estimated amount of financial assurance: \_\_\_\_\_

Or

Applicant will provide the amount of financial assurance calculated by MMD.

B. Attach the permit fees as determined pursuant to Subpart 2. The application fee for a minimal impact exploration permit is \$500.00.

Money Order/Cashier's Check

Check

Check Number : 18356

Financial Institution: Wells Fargo

**SECTION 9 – CERTIFICATION REQUIREMENT (§302.1.3 & 4)**

I certify that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals responsible for obtaining the information; I believe the submitted information is true, accurate, and complete. I agree to comply with the reclamation requirements set forth in this permit application and related correspondence, the New Mexico Mining Act and the Rules. Further, I certify that I am not in violation of any other obligation under the New Mexico Mining Act or the Rules adopted pursuant to that Act and I allow the Director to enter the permit area, without delay, for the purposes of conducting inspections during exploration and reclamation.

Signature of Permittee or Authorized Agent: Audie Padilla  
Name (type or print): Audie Padilla  
Title/Position: Plant Manager  
Date: 2/22/13