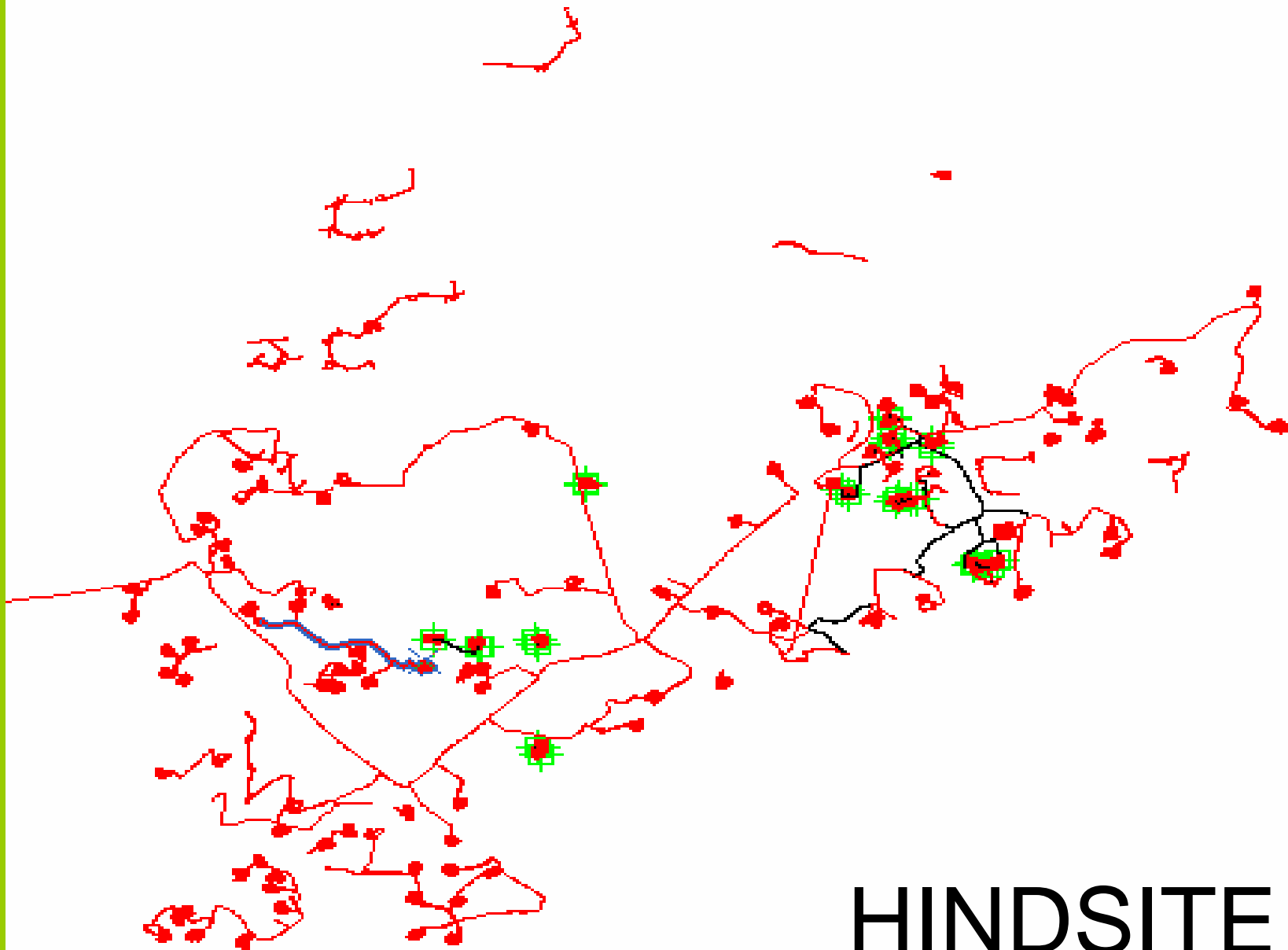




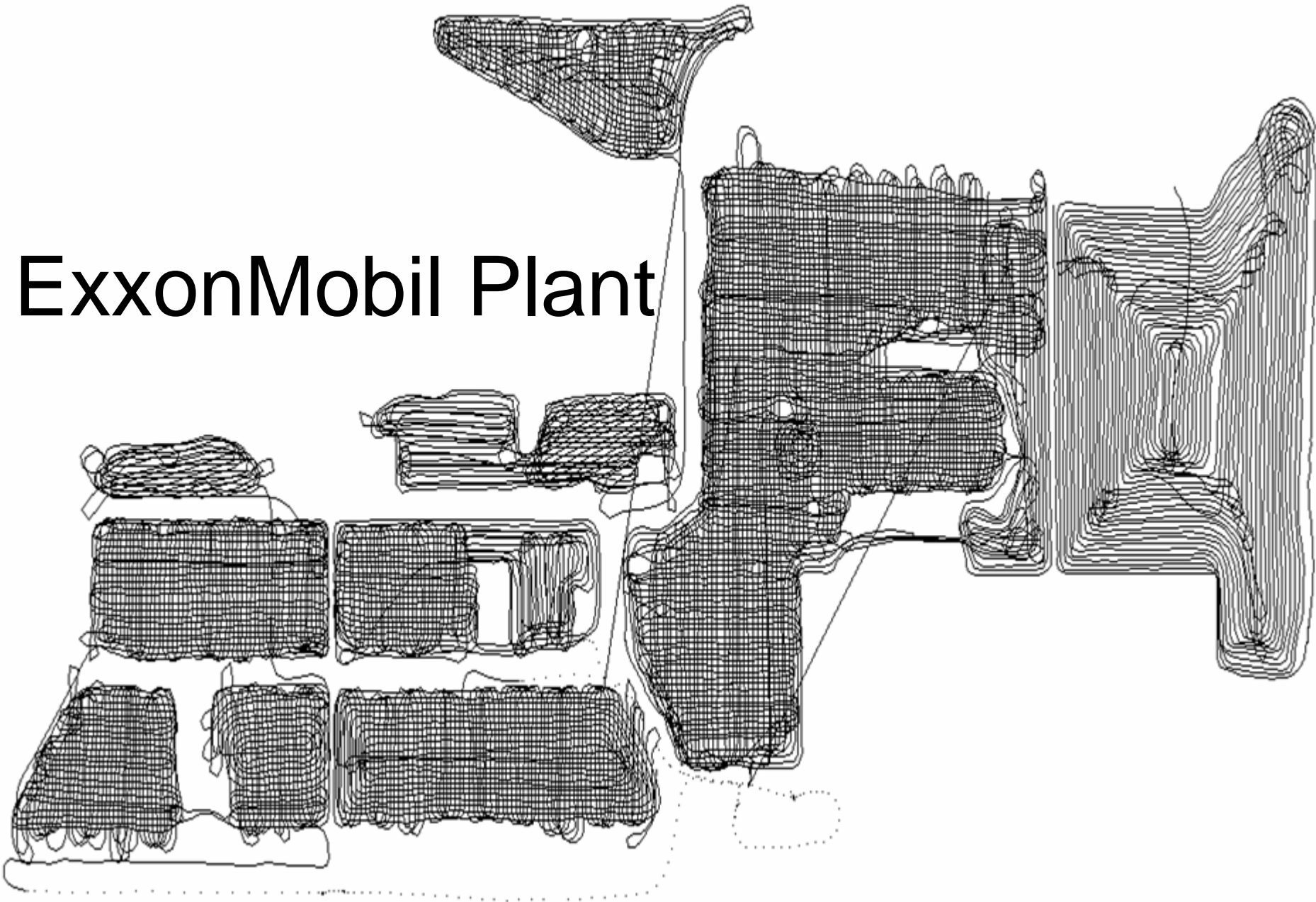
# Seeding

- Keeping track of areas seeded
- Quality control
- Photos with GPS
- Hidden information



HINDSITE

# ExxonMobil Plant





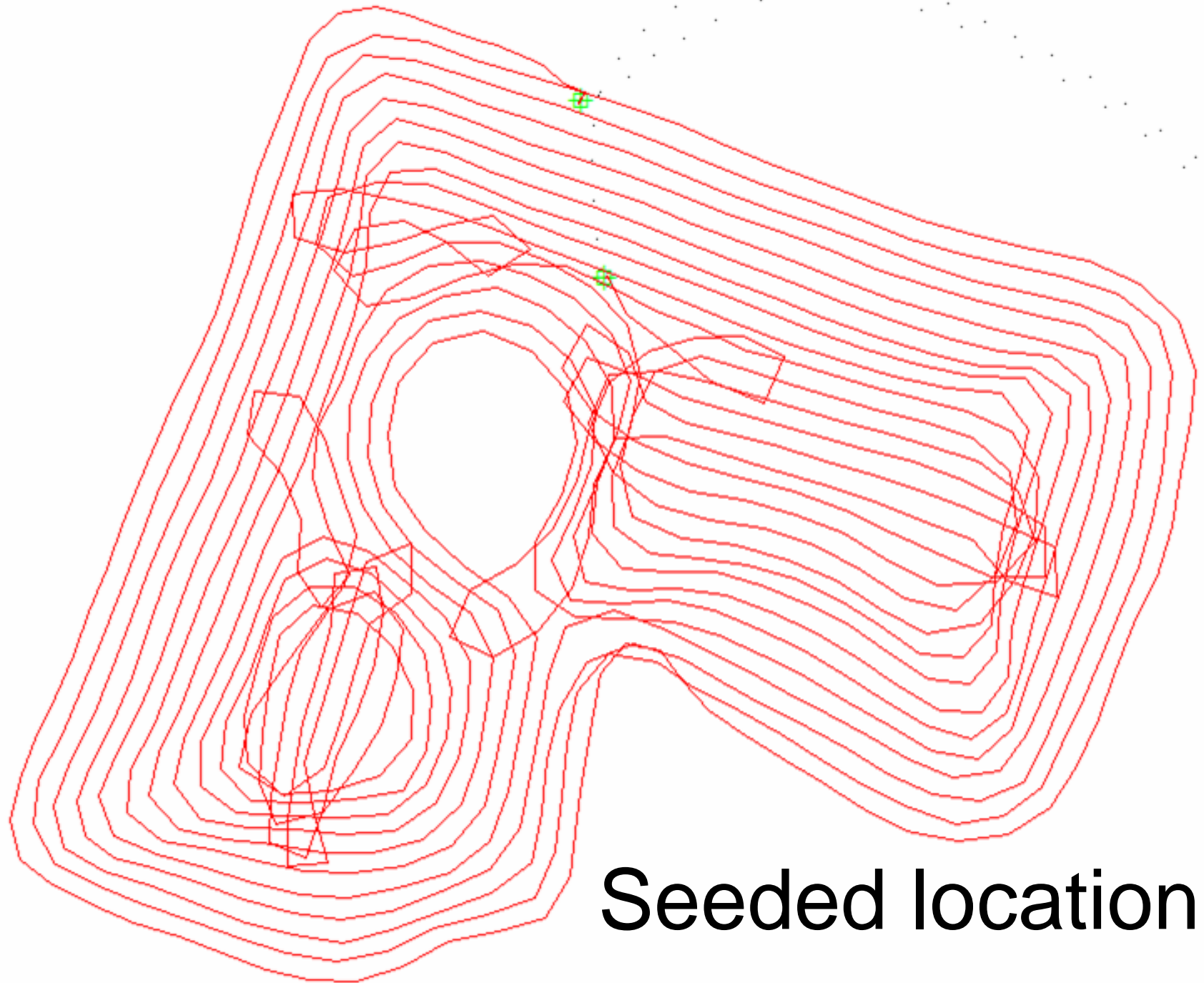
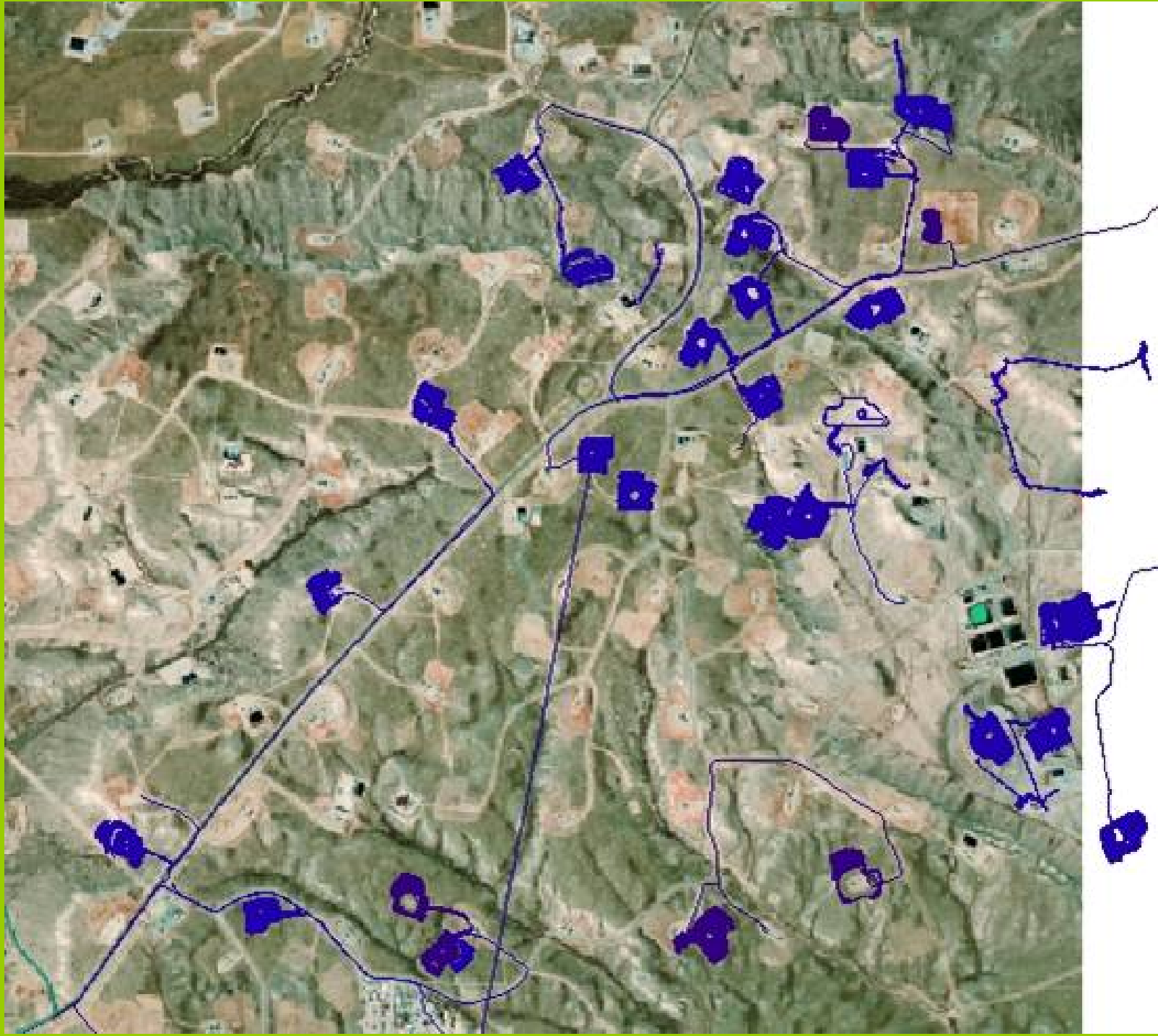


Photo  
of  
work  
area

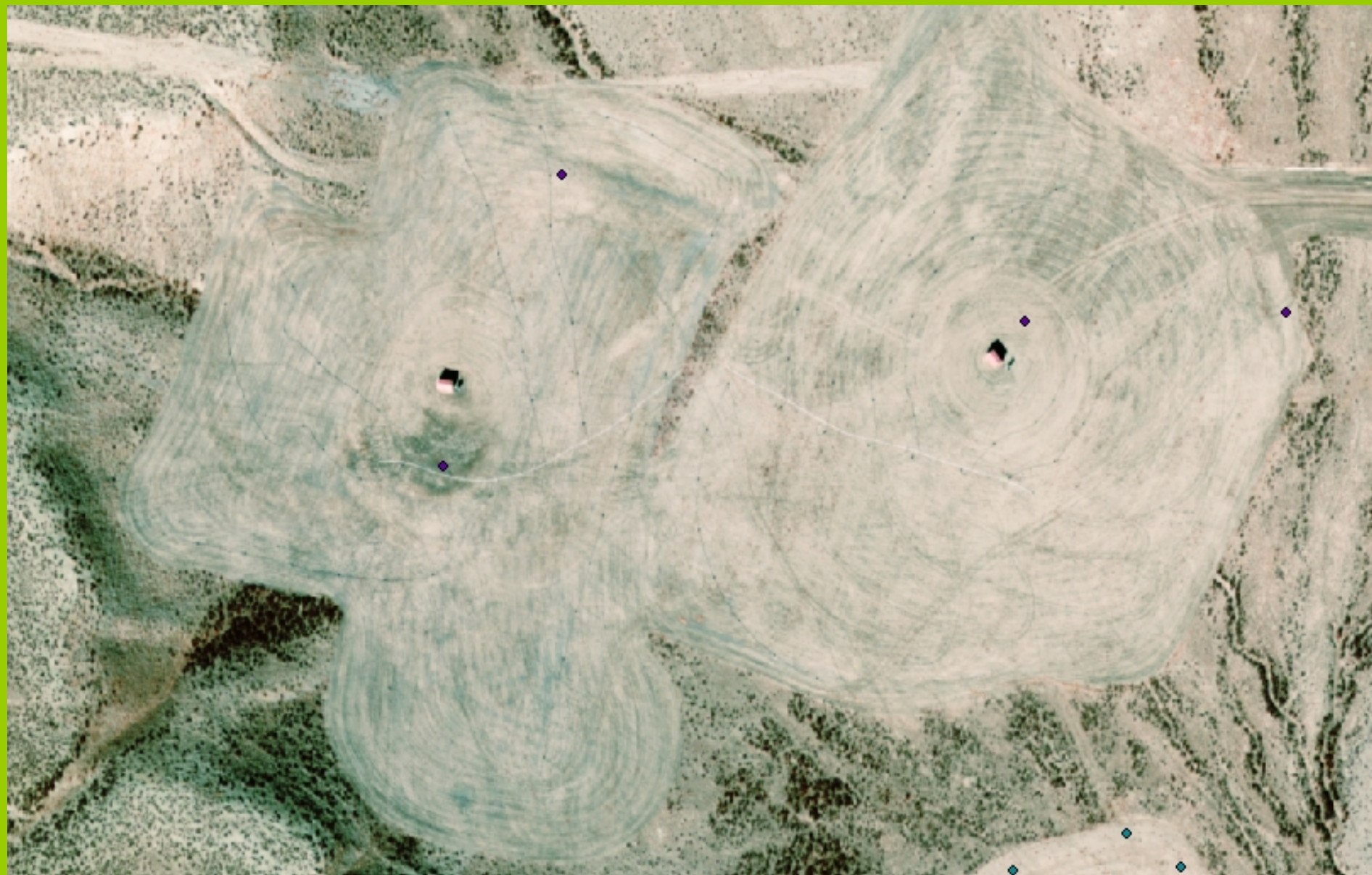


GPS  
overlay  
2008



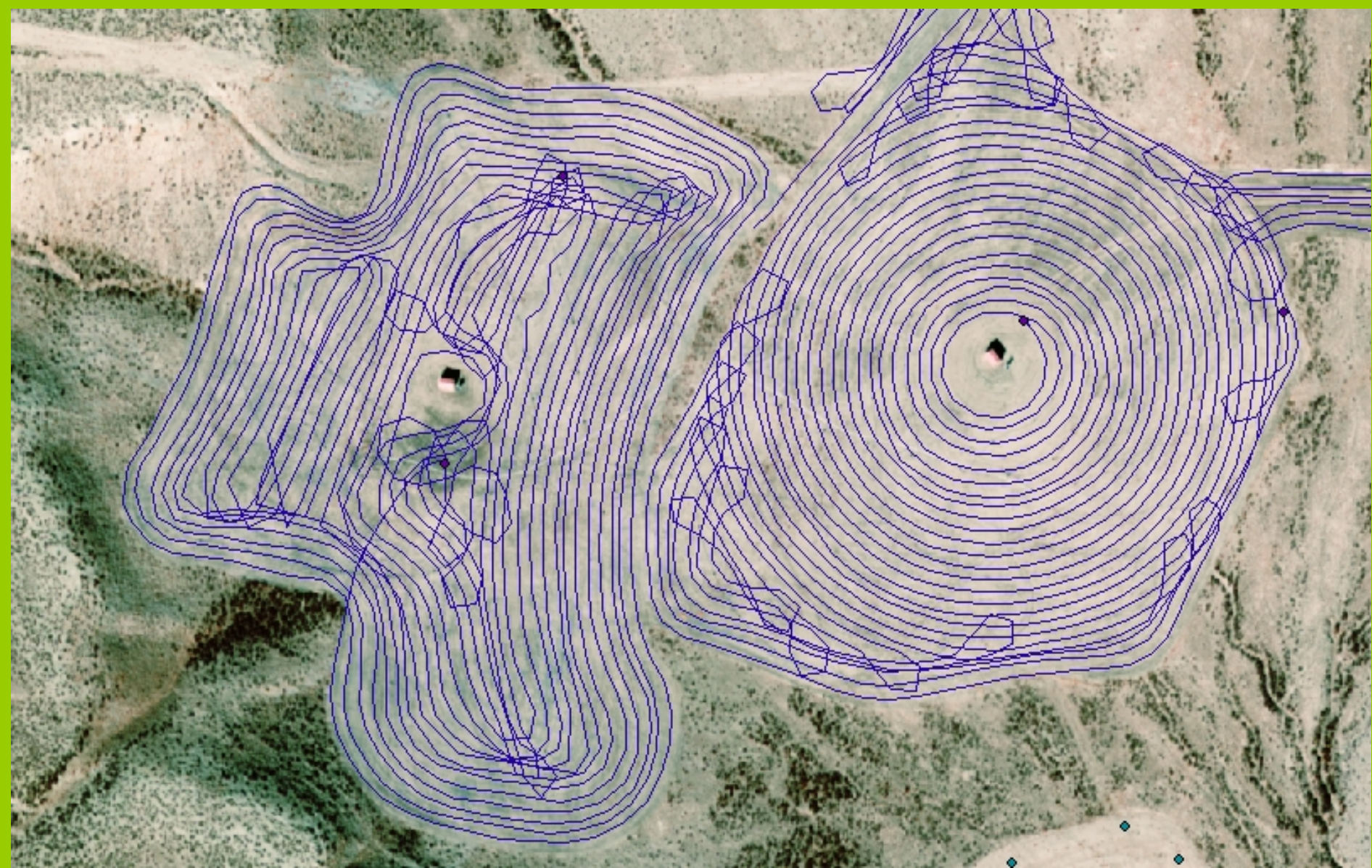


# Two Gas Locations

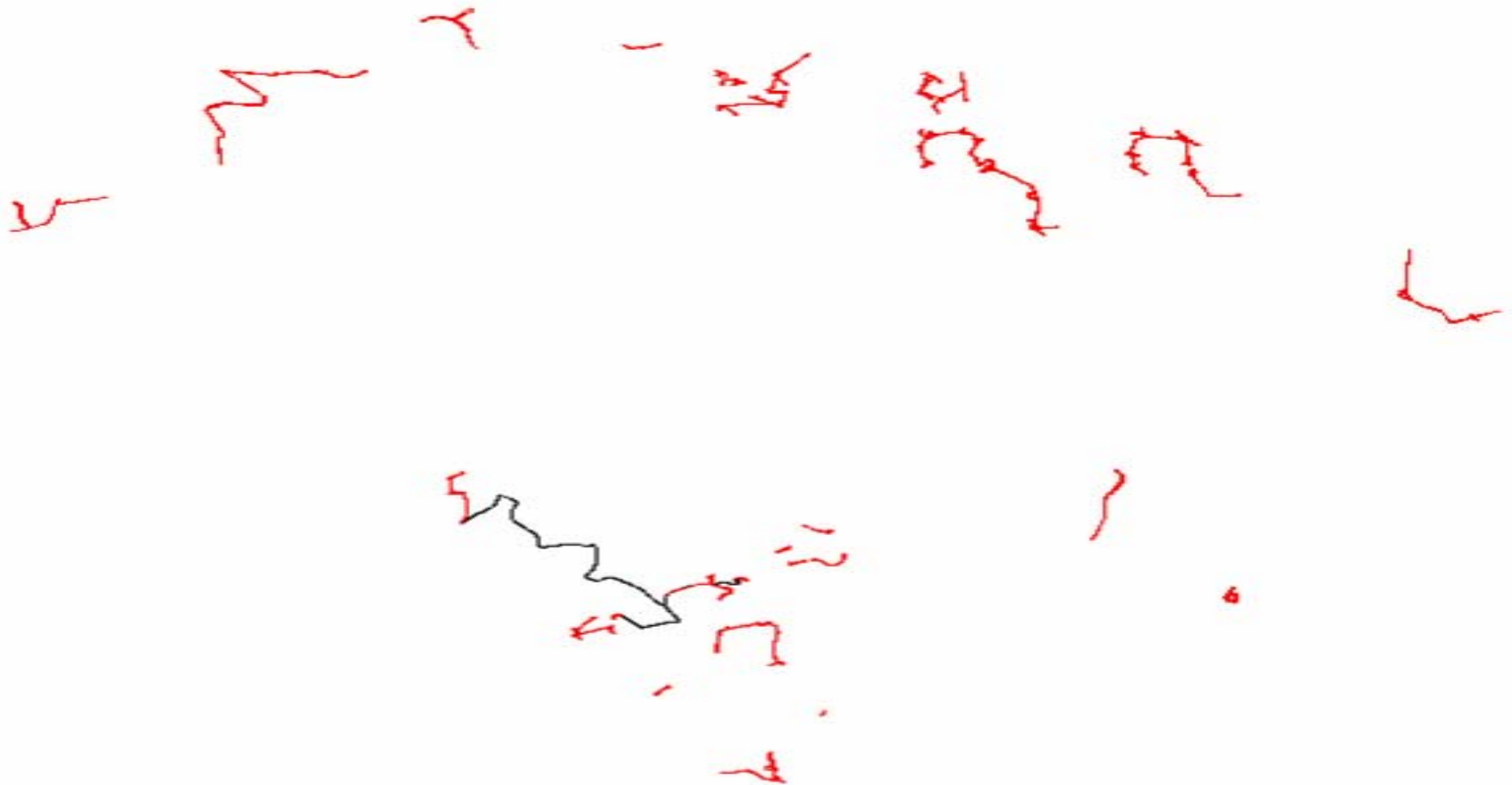




# Seeded



# Pipelines









# Quality Control

- What was actually seeded
- Was it seeded correctly
- Is there any follow up that is required

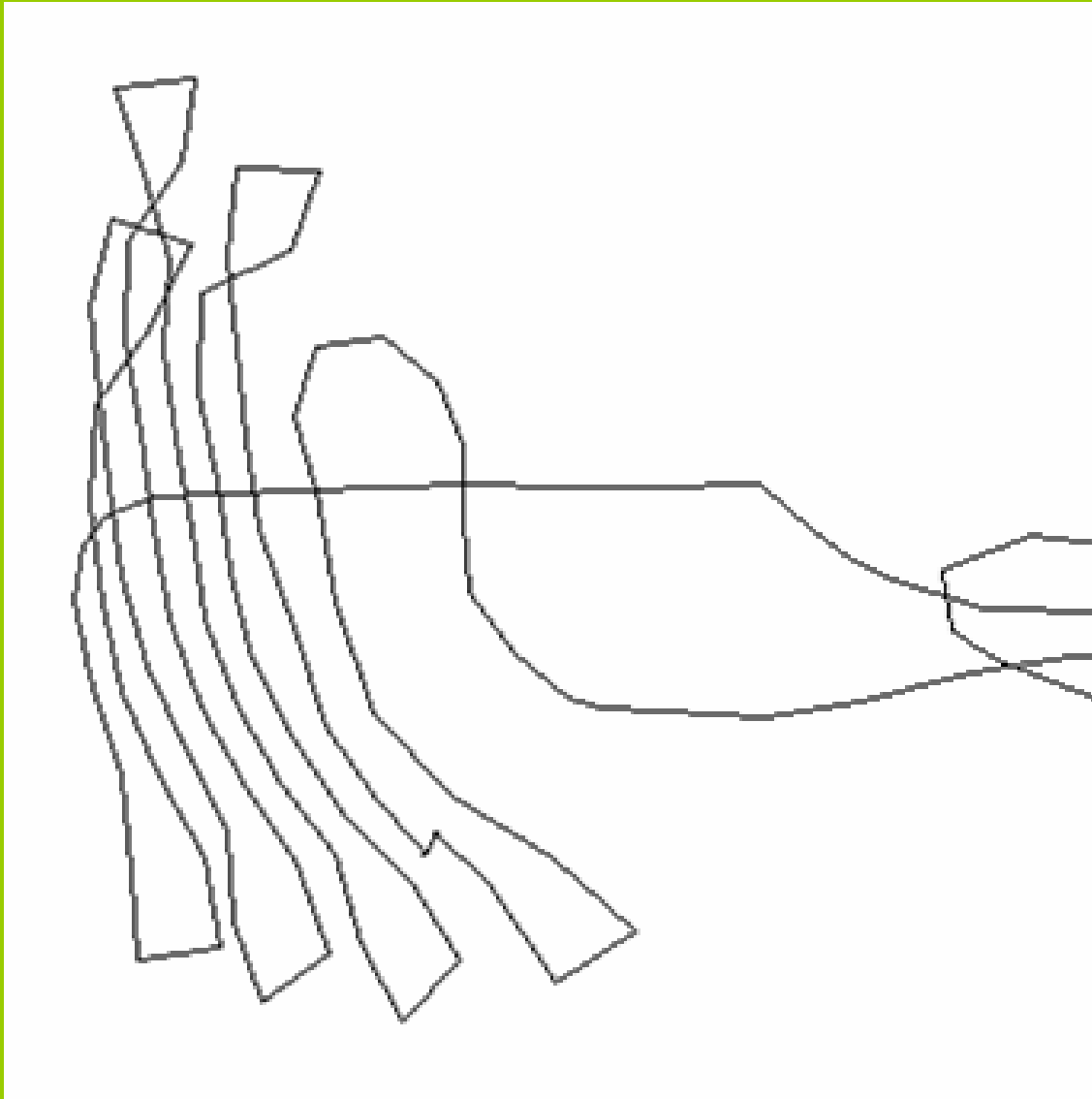


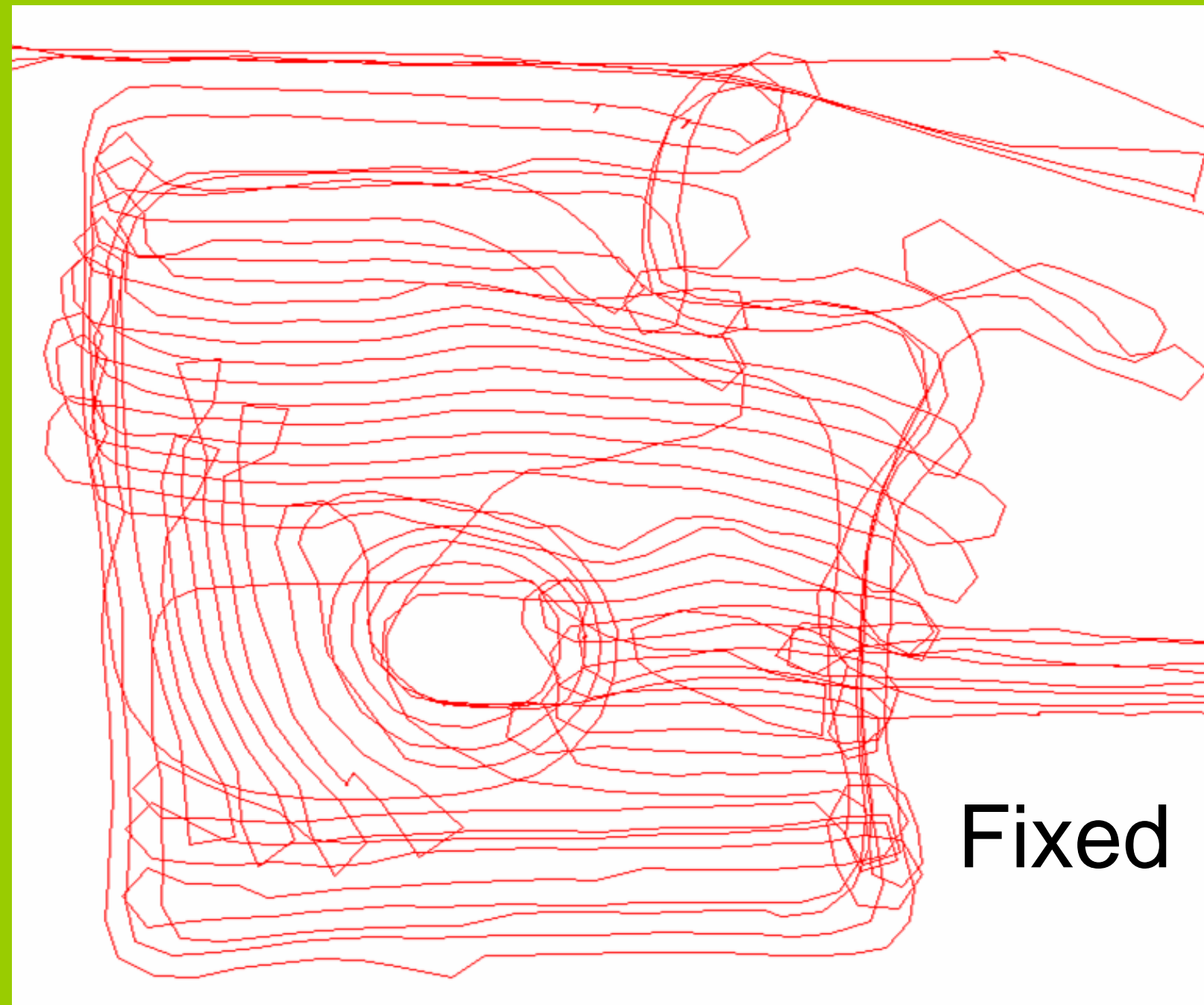
# There may be a problem





# The fix









# Photos

- How do we keep track of them?
- What do we keep track of?
- How do we make them available?
- What I have tried to do
  - Location name
  - Seed tag
  - Pictures of location

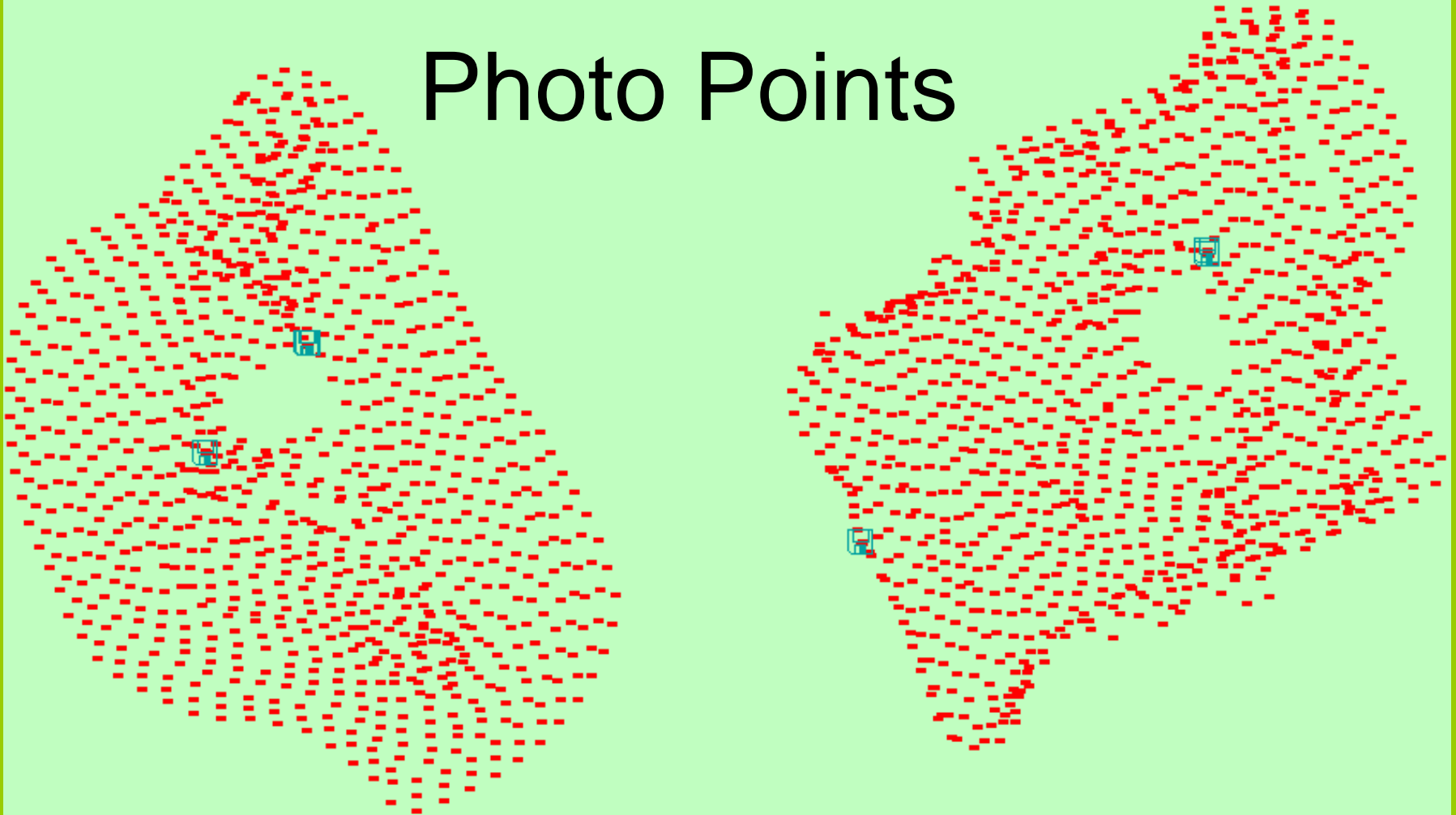
EnCana Seeding

Photo sites



EnCana Seeding

# Photo Points





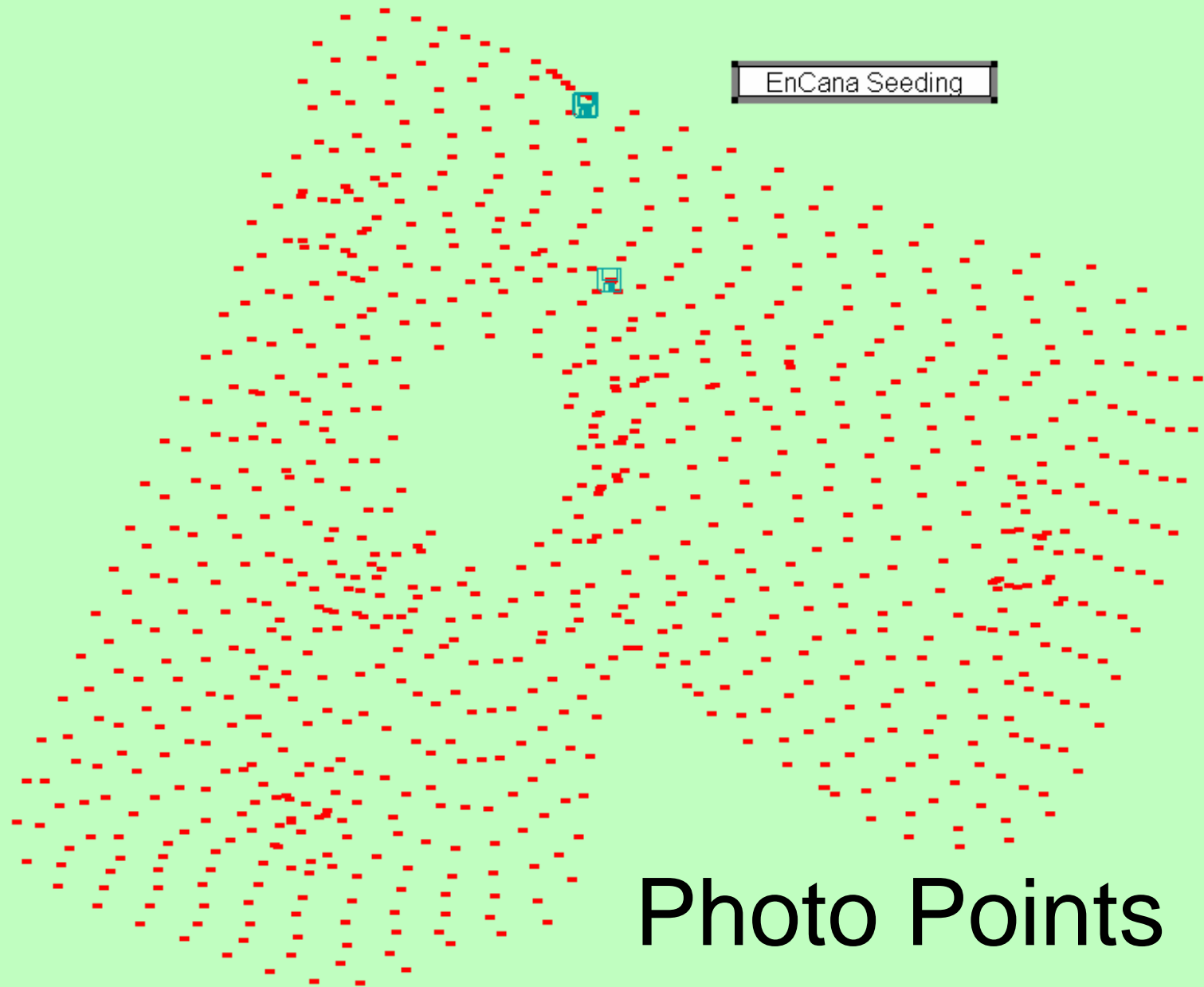


Photo Points

# Location Photo

**EnCana Oil  
&  
Gas (USA) Inc**  
**Stud Horse Butte 75-26**  
**LEASE # WYW-127749**  
**(S)SESW,(Lot 14), 477' FSL, 1576' FWL**  
**(BH)SESW,(Lot 14), 200' FSL, 1576' FWL**  
**SEC 26, T29N, R108W**  
**SEC 26, T29N, R108W**  
**SUBLETTE COUNTY, WY**

**IN CASE OF EMERGENCY  
CALL 24-HOUR TOLL FREE  
1-877-386-2200**

# Seed Mix

3075 Lane 51 1/2  
Manderson, WY 82432  
(307) 568-3351

RANGE  
CO:  
ELE:

Order Number: 2006  
Project Number:  
Project Name: 2006 EnCana Juvab  
Blend Name: Mix A Shrub Forb  
Date Tested: 05/12/07

Sold To: EnCana Oil & Gas

Species & Variety	Pure Seed %	Total Viable	Origin
Shadscale	20.16	44	UT
Winterfat	1.54	43	WY
Greenleafed Salicornia	2.84	32	WY
Globeamallow Scarlet	1.42	52	UT
Buckwheat, Wyeth, E. heracleoides, bracts	1.28	33	UT
Big Sagebrush, Wyoming	8.55	89	UT
Penstemon palmeri, Palmer	0.85	91	UT
Aster, Blueleaf, Eurybia glauca	0.40	93	WY
Evening Primrose, White	0.65	91	CA
Gardner Saltbush, trident	5.11	72	MT
Yarrow, White native	0.75	98	NZ
Beeplant Rocky Mountain	0.22	24	UT
Aster Prairie	0.92	80	

Noxious Weeds: None Found  
Restricted: None Found

Weed Seed: 0.01  
Other Crop: 0.06  
Inert Matter: 47.92  
Total: 100

Hard Seed: 0.00  
Dormant: 0.00  
Lot #: 20632-1

Bulk Lbs: 50.00  
PLS lbs: 12.04

FROM:  
Granite Seed Company 1697 W. 2100 N.  
Lehi, UT 84043

MIX #: 64635 184511

GRASS MIX 2006 A

% PURE		DORM OR	ORIGIN
29.33	SLENDER WHEATGRASS	PRYOR 93.00 + 0.00 -	ND
18.07	GREAT BASIN WILDRYE	TRAILHEAD 90.00 + 0.00 -	MT
15.78	NEEDLE & THREAD GRASS	VNS 69.00 + 0.00 -	TZ CO
14.05	BLUEBUNCH WHEATGRASS	GOLDAR 93.00 + 0.00 -	WA
13.61	STREAMBANK WHEATGRASS	SODAR 96.00 + 0.00 -	TZ WA
4.08	SQUIBELTAIL	VNS 89.00 + 0.00 -	TZ WA
0.00	Other Crop	Date Tested: 11/26/2007	
47.70	Inert Matter	Restricted Seed: None	
0.00	Hard Seed	% Hard Seed: 0.00	

NET WEIGHT: 50.00 LBS. BULK  
42.97 LBS. PLS

**GUARANTEE:** Granite Seed guarantees its seed to be of proven quality and true to name as specified. Should seed prove to be other than labeled, liability shall be limited to replacement or refund of purchase price.

SHIP TO: ENCANA  
RALPH SWIFT  
HIGHWAY 191 MILE POST 67 WEST  
9 MILES JONAH FIELD OFFICE  
BOULDER, WY 82923



# Seeded





# Seeded





# Close Up











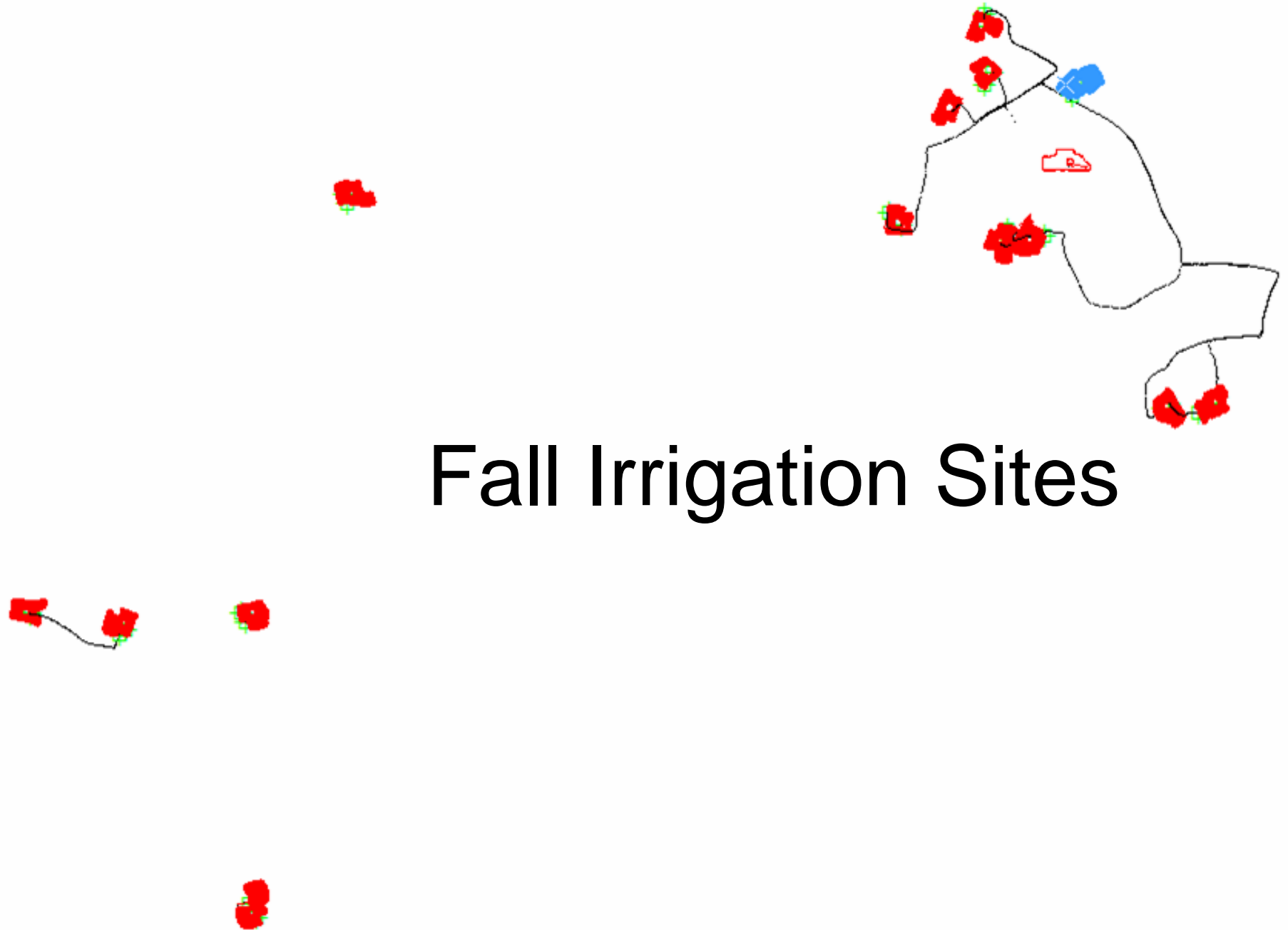


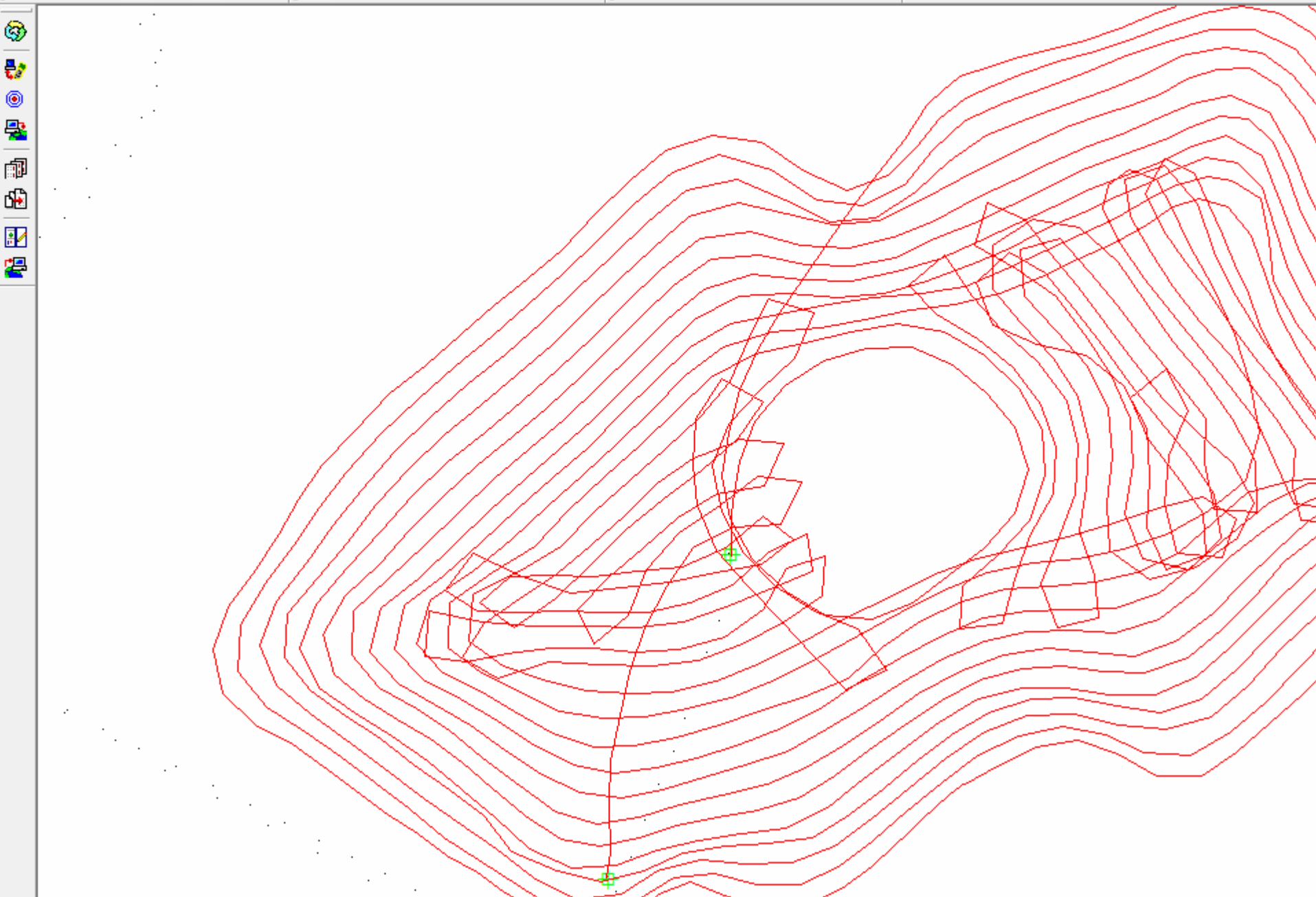


# Other information gleaned from our GPS records

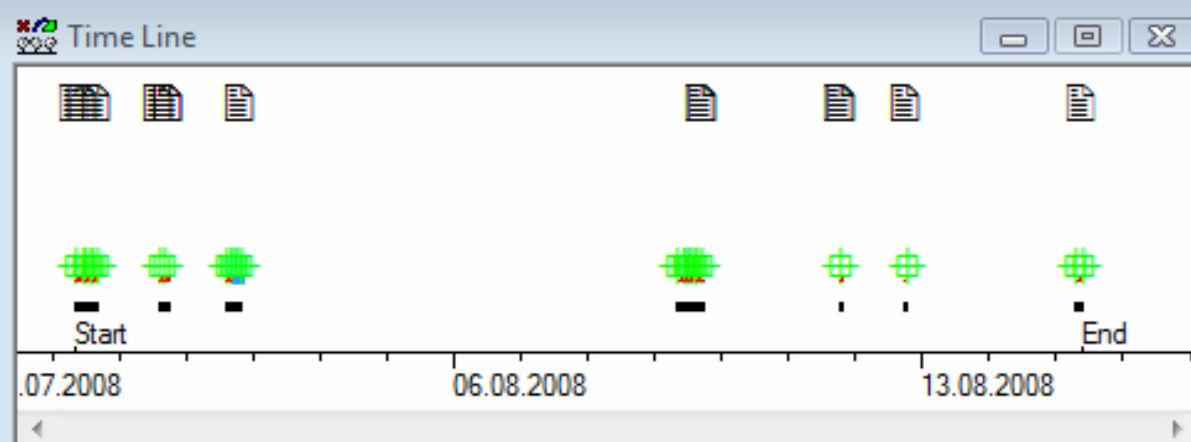
- Position
- Information entered in the field
- Date
- Time

# Fall Irrigation Sites









Position Properties

First << < > >> Last Delete

North: 651306.386 USft  
East: 609230.659 USft  
Altitude (MSL): 7250.642 ft

Summary 68% Precisions DOPs

Date: 8/02/2008  
Time: 6:39:11.000 pm  
Vertex:  
Position: 555 of 1117  
Horiz.Precision: 6.2 m  
Status: 3D Uncorrected

Filename: Fall Irrigation.ssf

Feature Properties

First < > Last Delete

Line feature: Seeding

Attribute Name	Value
Equipment	Rough Rider 1
Date	8/2/2008
Time	6:52:39 pm

Summary Attributes 68% Precisions

Line Length (2D): 7.456 km  
Line Length (3D): 7.469 km

Filename: Fall Irrigation.ssf

Status... New

Offset... <None>

# Hidden Information

- Location Name SHB 47-26
- Comments Rocky
- Seed Mix Seed mix A
- Soil type Rocky
- Soil Condition Dry
- Equipment Rough Rider
- Date 8-2-2008
- Time 6:52:32
- All of the GPS Information

# Something extra

- What are we sowing
  - Wheat?
  - Or
  - Tares?
- 
- Lets take a look

# Wheat Grasses

- Western
- Thickspike
- Slender
- Streambank
- Bluebunch
- Downy



# 0.05 Weed Seed

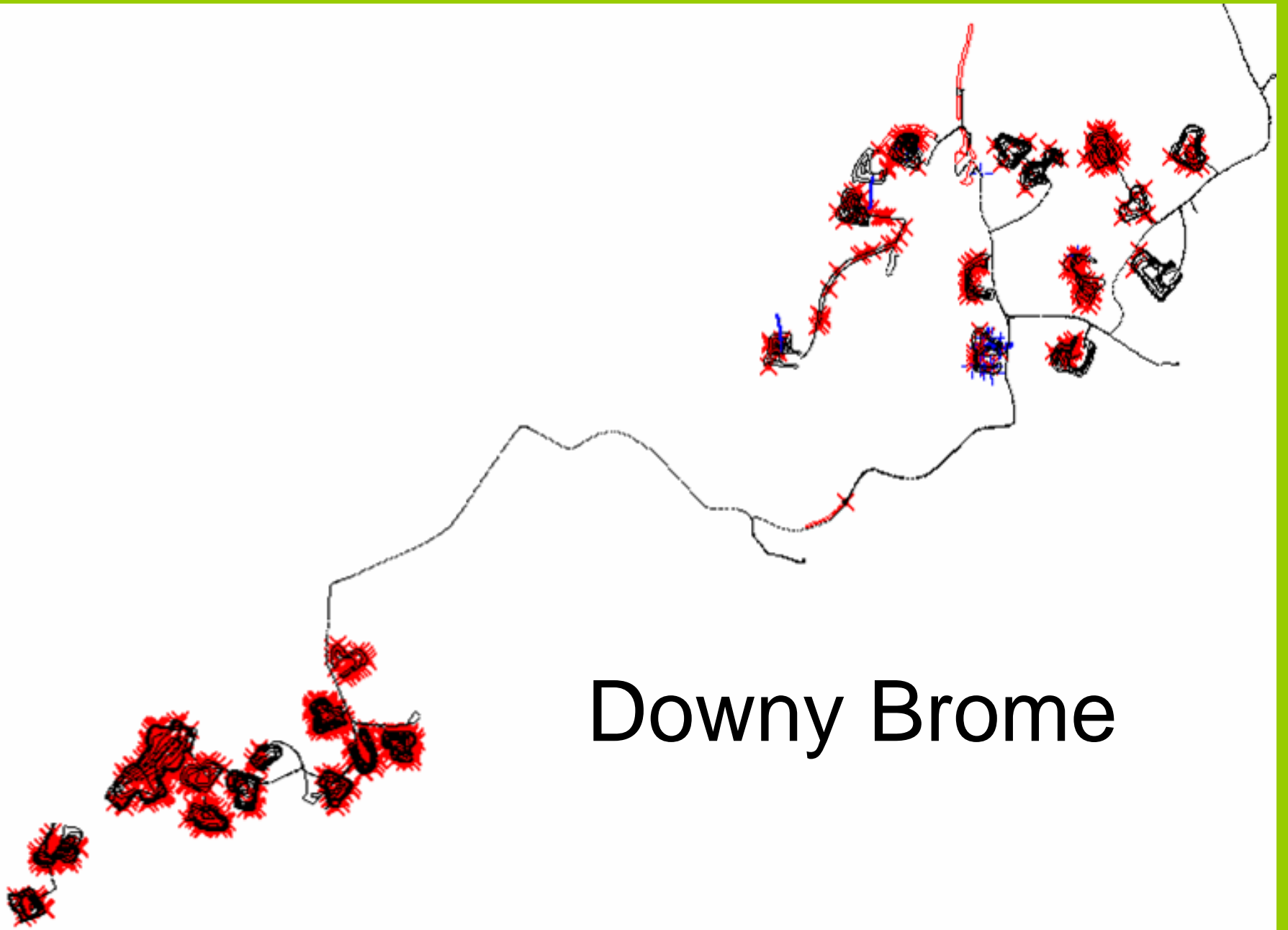
0.00	Small Prelim	VNS	89.00 + 0.00 - 12	WA
0.33	Other Crop	Date Tested:	11/26/2007	
42.78	Inert Matter	Restricted Weed:	None	
0.05	Weed Seed	% Hard Seed:	0.00	
NET WEIGHT: 50.00 LBS. 2.24				
42.97 LBS. 14.3				

# Weed Seed In Mix

Noxious Weeds: None Found  
Restricted: None Found

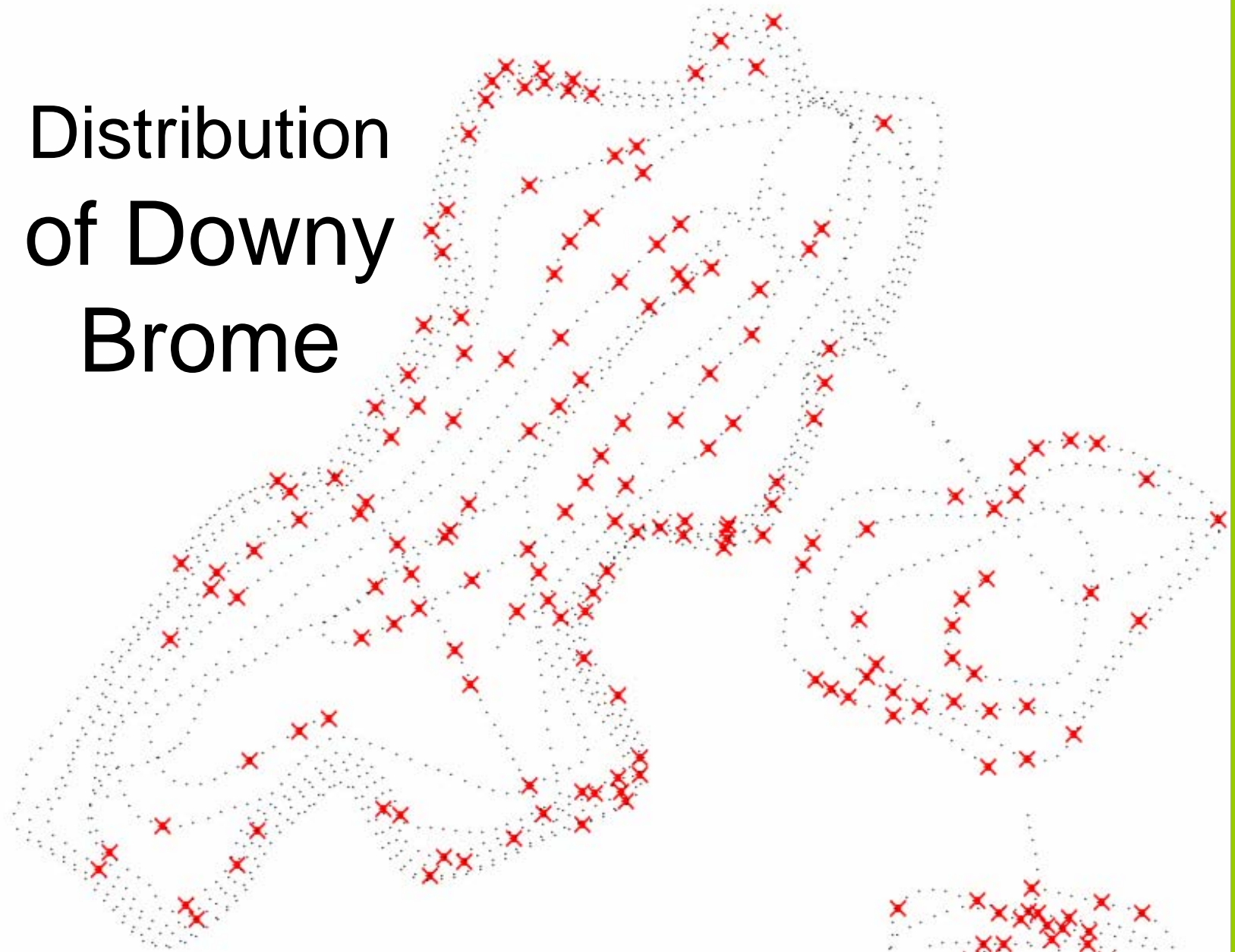
Weed Seed: 0.01  
Other Crop: 0.06  
Inert Matter: 47.92  
Total: 100

Hard Seed: 0.00  
Dormant: 0.00  
Lot #: 20632-1  
Bulk Lbs: 50.00  
PLS lbs: 12.04



Downy Brome

# Distribution of Downy Brome

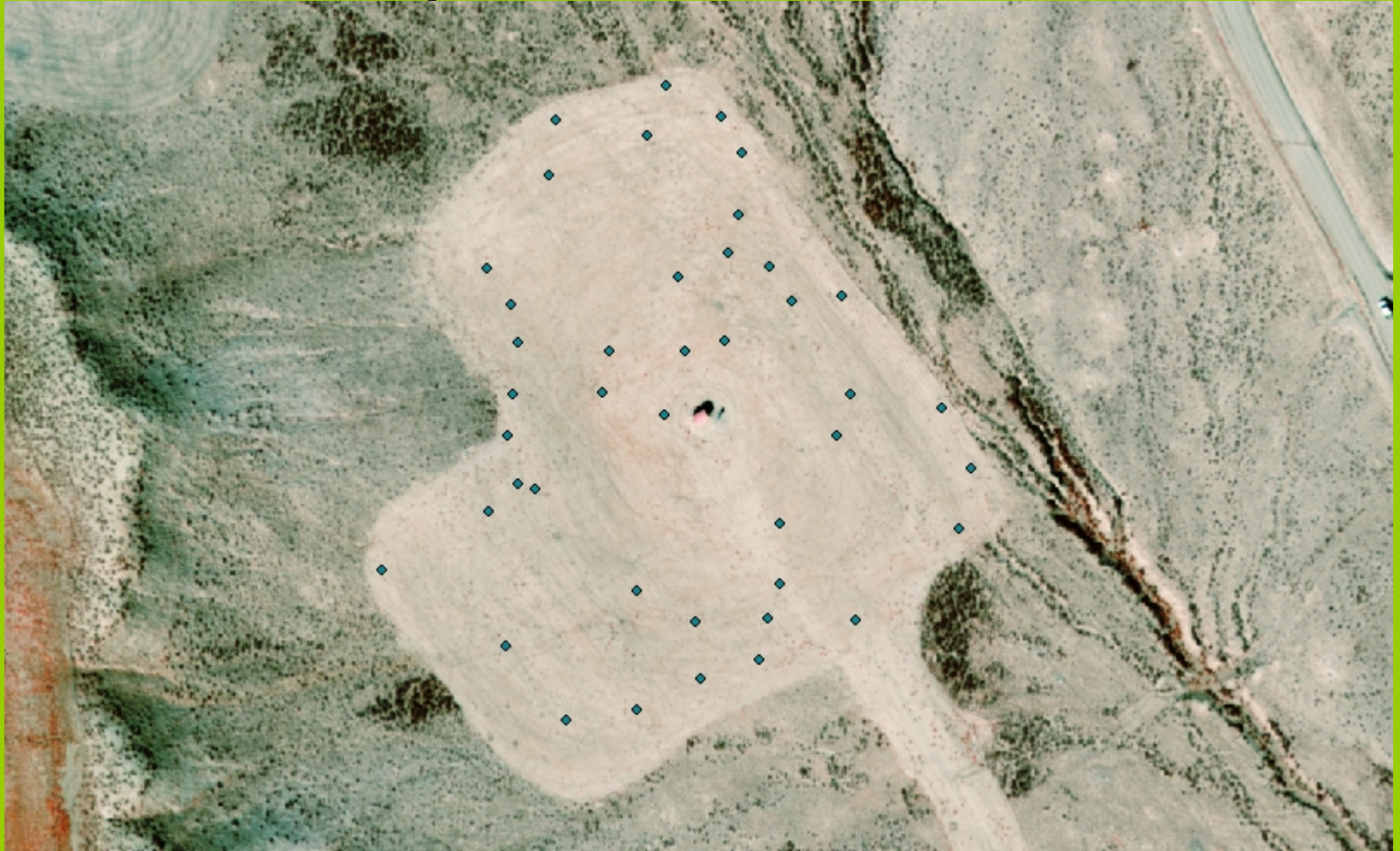


# Planted In 2007





# Downy Brome Year One



# Disadvantages of GPS

- Cost
- Training
- The mindset that it is essential
- My GPS system has never planted a seed
- My GPS system has never repaired a planter
- Neat technology
- Just one tool

This is what its all about

THE HELP



# The Help



# The equipment

• The equipment is a 1000W microwave oven

• The equipment is a 1000W microwave oven

• The equipment is a 1000W microwave oven

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• The equipment is a 1000W microwave oven



# Rough Rider with imprinter



# Rough Rider





# Laird Drill



# Dick, Glade, Jim, Don











# Russo Drill





