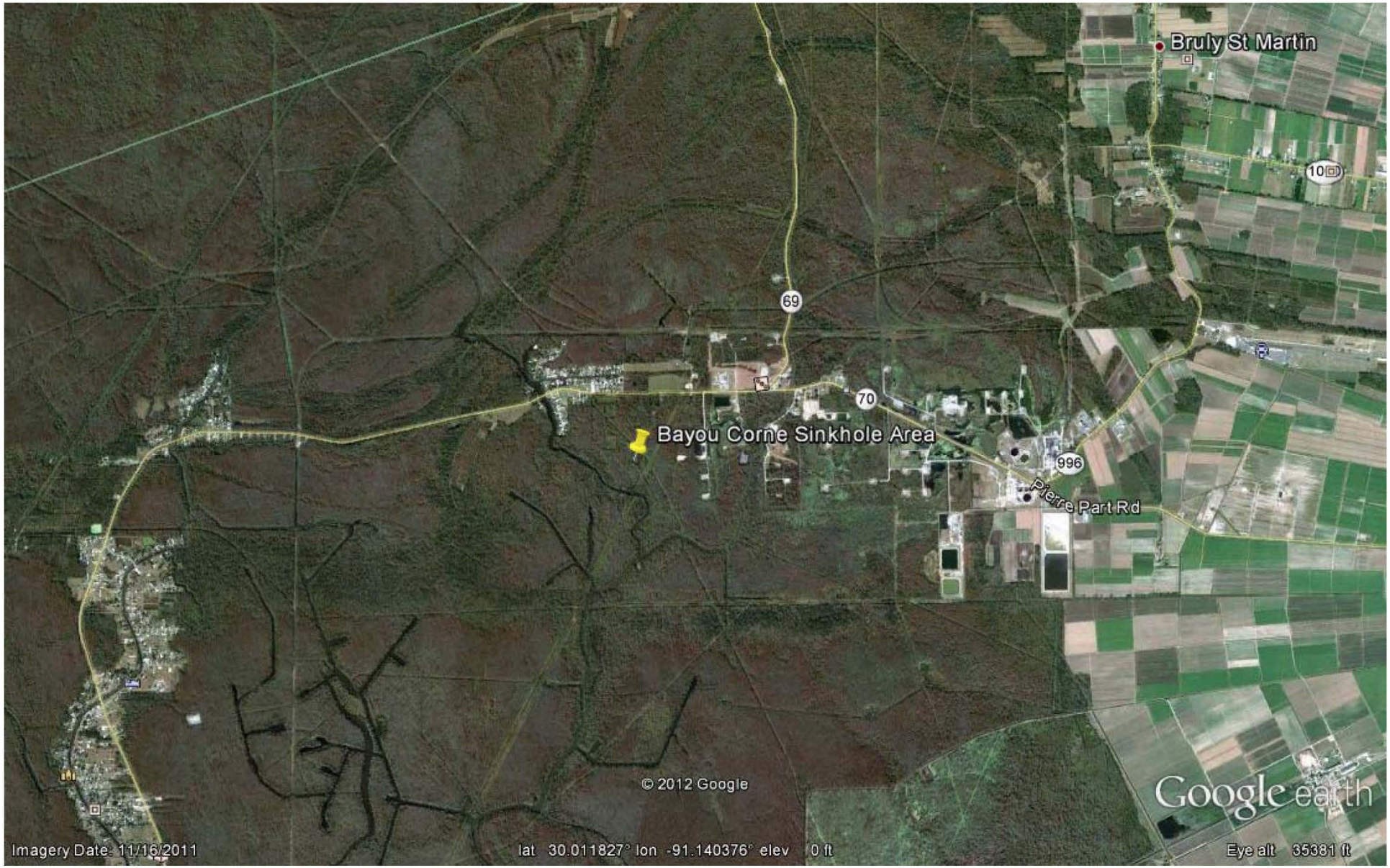
Aerials and monitoring locations
Bayou Corne Sinkhole

9542913



Bayou Corne Sinkhole area

Bayou Choupique
Texas Brine
© 2012 Google
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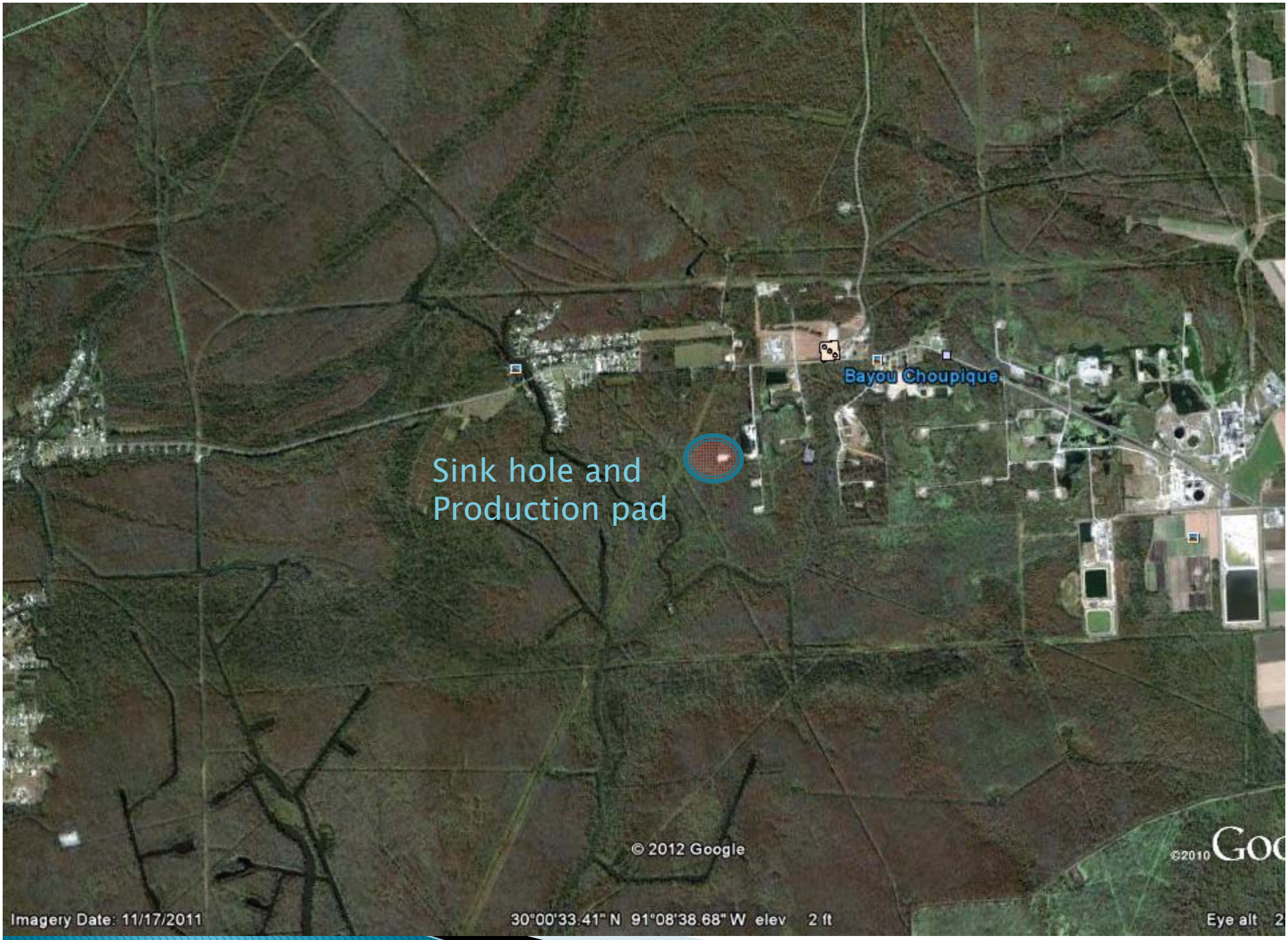
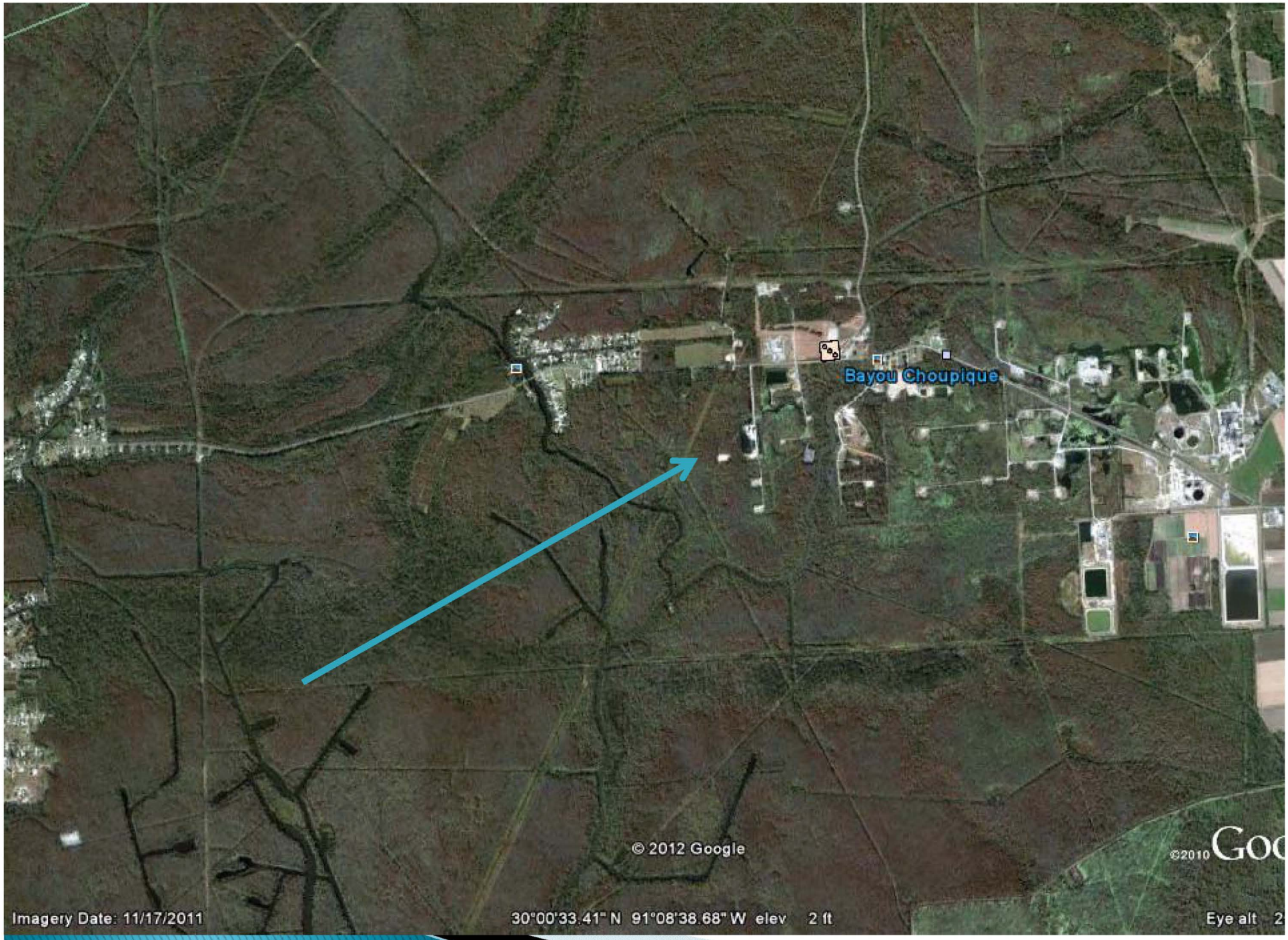
Imagery Date: 11/17/2011
30°00'33.41" N 91°08'38.68" W elev 2 ft
Eye alt 2

70
Grand Bayou Rd
© 2012 Google
Google earth

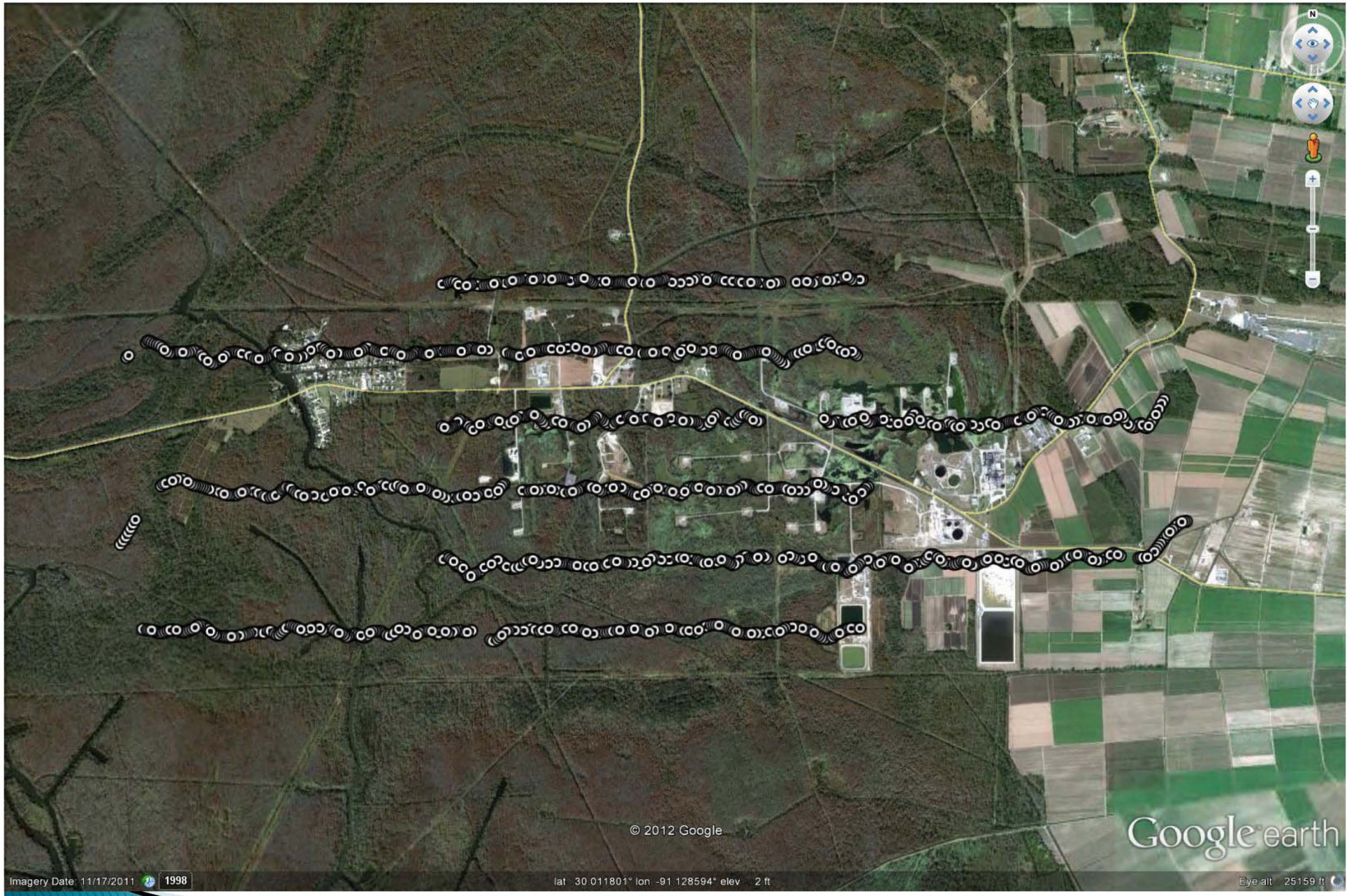

Bayou Choupique
Sink hole and
Production pad
© 2012 Google
©2010 Goo
Imagery Date: 11/17/2011
30°00'33.41" N 91°08'38.68" W elev 2 ft
Eye alt 2

Sink hole and
Production pad


Bayou Choupique
© 2012 Google
©2010 Goo
Imagery Date: 11/17/2011
30°00'33.41" N 91°08'38.68" W elev 2 ft
Eye alt 2

70
Grand Bayou Rd
Sink hole
Drill rig
Flare
Monitoring locations
© 2012 Google
Google earth

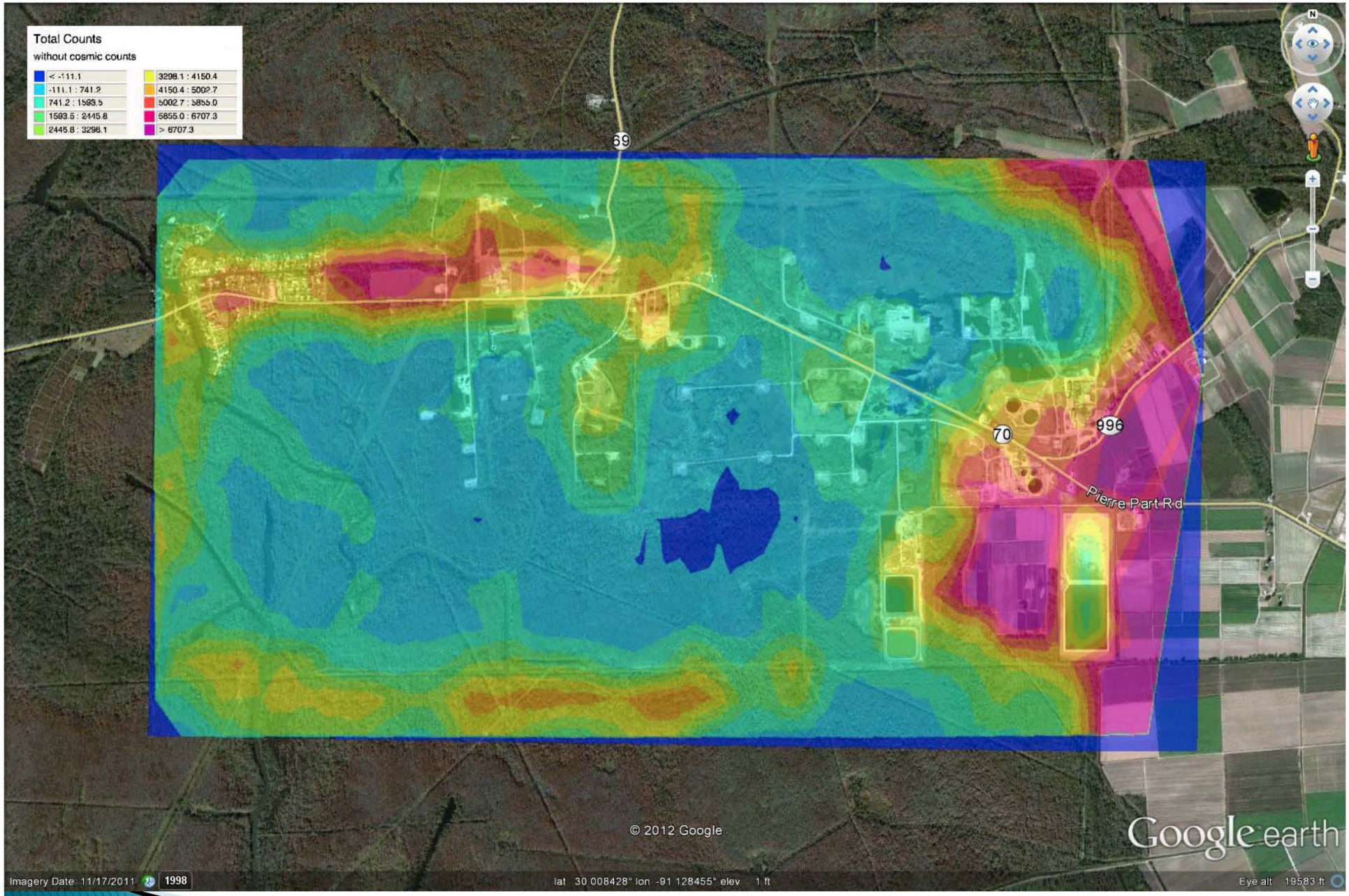
ASPECT



Chemical scan results

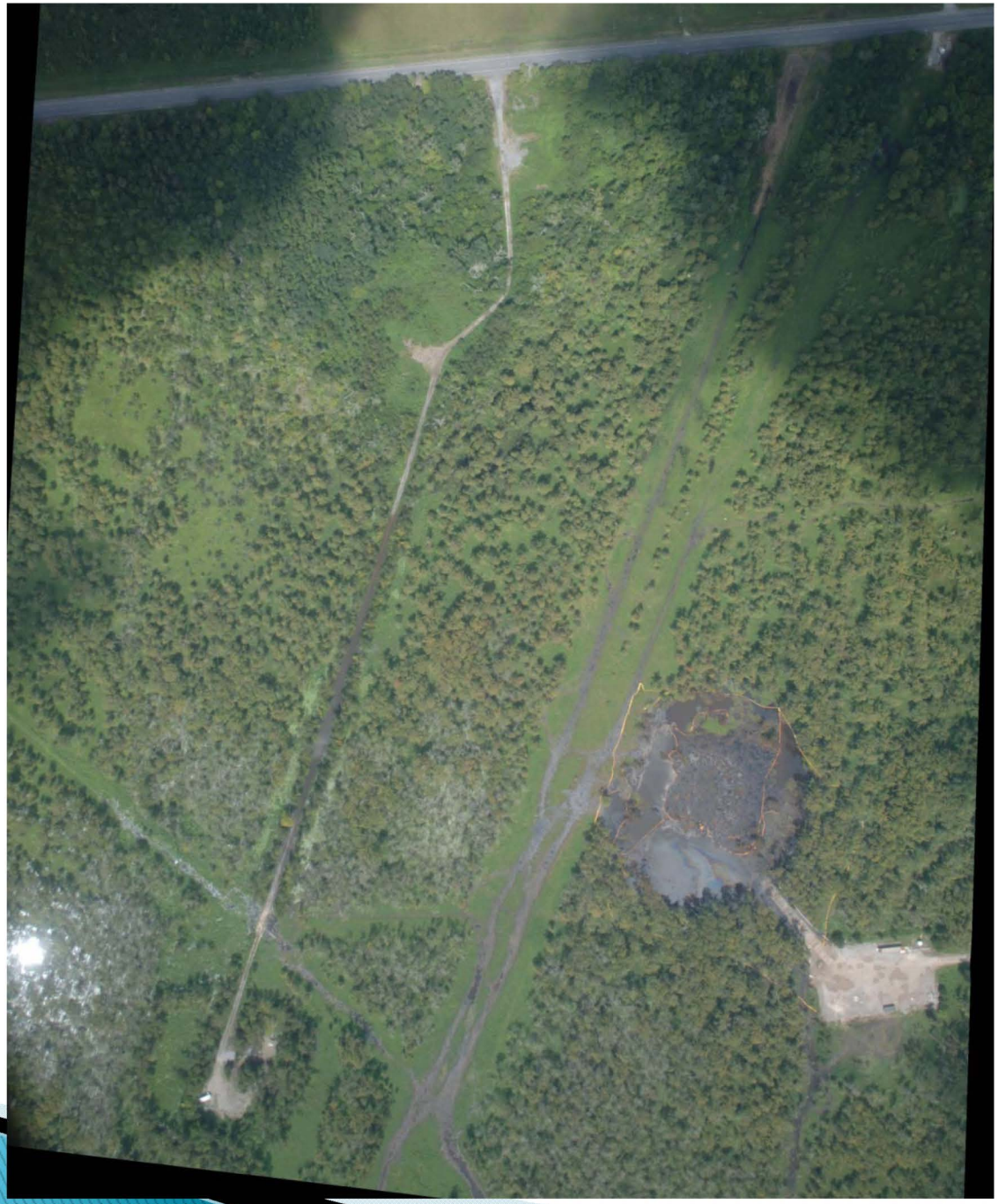
72 Chemicals built into the ASPECT automated detection algorithms

Acetic Acid	Cumene	Isoprene	Propylene
Acetone	Diborane	Isopropanol	Propylene Oxide
Acrolein	1,1-Dichloroethene	Isopropyl Acetate	Silicon Tetrafluouride
Acrylonitrile	Dichloromethane	MAPP	Sulfur Dioxide
Acrylic Acid	Dichlorodifluoromethane	Methyl Acetate	Sulfur Hexafluoride
Allyl Alcohol	Difluoroethane	Methyl Ethyl Ketone	Sulfur Mustard
Ammonia	Difluoromethane	Methanol	Nitrogen Mustard
Arsine	Ethanol	Methylbromide	Phosgene
Bis-Chloroethyl Ether	Ethyl Acetate	Methylene Chloride	Phosphine
Boron Tribromide	Ethyl Formate	Methyl Methacrylate	Tetrachloroethylene
Boron Trifluoride	Ethylene	MTEB	1,1,1-Trichloroethane
1,3-Butadiene	Formic Acid	Napthalene	Trichloroethylene
1-Butene	Freon 134a	n-Butyl Acetate	Trichloromethane
2-Butene	GA (Tabun)	n-Butyl Alcohol	Triethylamine
Carbon Tetrachloride	GB (Sarin)	Nitric Acid	Triethylphosphate
Carbonyl Chloride	Germane	Nitrogen Trifluoride	Trimethylamine
Carbon Tetrafluoride	Hexafluoroacetone	Phosphorus Oxychloride	Trimethyl Phosphite
Chlorodifluoromethane	Isobutylene	Propyl Acetate	Vinyl Acetate



Total Gamma Count

An Infrared Image



6.0 Conclusions

ASPECT was dispatched to conduct a chemical, radiological and photographic survey over and surrounding the Corne Bayou sinkhole and arrived on scene at 1350 on August 25, 2012. A total of 16 FTIR data collection passes were conducted over the area with none showing detectable concentrations of natural gas (methane) or other compounds contained in the ASPECT library.

A 17 line radiological survey was likewise conducted over the same region and was analyzed for both total gamma count and excess uranium due to possible TENORM disposal in the salt dome caverns. Results of the total count analysis showed slightly elevated levels on the north and east side of the survey area but well within normal sedimentary rock levels. An excess uranium analysis showed isolated elevated sigma values on the eastern portion of the survey due most likely to fertilizer usage. Total count and excess levels over and near the sinkhole were within in normal levels.

16 infrared images were collected over the survey area and did not show any chemical signatures or plumes being emitted from the sinkhole. It was noted that the infrared character of the water surface over the sinkhole is different than the surrounding water in the swamp suggesting that a petroleum film is present on top of the water in the sinkhole.

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