Helis St Tammany Energy Project
About Helis Oil & Gas

- New Orleans–based; privately owned
- Founded in 1934
- Approximately 50 employees including Northshore residents
Helis Oil & Gas

- Drilled and operated more than 65 wells in 2 states
- Current operations in TX, LA, ND, WY
- Outstanding safety and environmental record
- By design a quiet company
- Helis Foundation
The Helis Environmental Record

- Commendations for outstanding performance and cooperation
  - Coast Guard
  - Federal regulators ("SAFE" award)
- Voluntary SEMS for offshore and onshore
- First company to privately restore a barrier island, Stone Island
- Recognized for performance beyond legal requirements in that project (LDEQ website)
Well Activity in St. Tammany

- More than 18,000 water wells
- Approximately 50 conventional oil wells
- Phase 1 of our project: same as water wells with 3 differences:
  - Better equipment: steel piping instead of PVC
  - Better technology
  - Better permitting, regulation and accountability
About This Project

- Conventional TMS project
- Same aquifer that 4850+ wells have been drilled over 60+ years, including 43+ fractured TMS wells
- Located on a 960 acre lease in a non-residential tree farm
About This Project

- 1.2 miles from Lakeshore High and more than 2 miles from any residential area
Permits and Agency Oversight

- USACoE
- EPA
- OSHA
- DNR
- DEQ
- LDOT
The Project

- Two phases – longer and more expensive
- Phase 1: conventional vertical drill to 13,000 feet, 9000 feet below the lowest freshwater aquifer
- Stop, pull back, remove rig and analyze results
- Cement and plug well if not commercially viable
The Project

- Phase 2: return rig, drill horizontally, hydraulically fracture
- Phase 1 & Phase 2: approximately 30 days each
Drilling Facts

- Fracturing will take place at 12,600 feet
- Aquifer only extends to 3300 feet
- Fracturing at 1.8 miles below the aquifer
- Fractures will only extend +/− 250 feet
- Impossible for fractures to penetrate over 1.8 miles of rock to reach aquifer
- Average fracture .2 inches in width
Environmental Responsibility

- Pre-drilling air and water quality testing
- Pre-drilling benchmarking of noise levels
- No use of aquifer water
- No storage of waste water on site
- All waste water to be disposed of out of the parish
Hydraulic fracturing is safe and that regulations are appropriate

- State of Maryland Public Health Study
- Cornell / Journal of Hydrology
- Groundwater Protection Council reaffirmed their 2009 study that the “states are doing a good job” in protecting groundwater
Ohio State – Duke
Declining water issues
- Marcellus (7)
- Barnett (1)
Noble gases as tracers
ID causes of methane
Findings: annulus cement leaks (4), production casing (3), UG well failure (1)
“Noble gas data appear to rule out gas contamination by upward migration from depth through overlying geological strata triggered by horizontal drilling or hydraulic fracturing.”
Greene County, PA over 18 months
During and after hydraulic fracturing
Used chemical tracers and microseismic
Max height of fractures
Migration of gas or fluids
Findings: no evidence of migration
Helis “Above & Beyond” Commitments

- 3 strings of casing and cement instead of required 2
- 2.5 feet high protective berm
- Use of sound baffles to contain any noise
- No truck traffic during school entrance and exit times
- Traffic will be controlled during movements of heavy equipment
Helis “Above & Beyond” Commitments

- 24-hour security provided by experienced law enforcement personnel
- Fulltime presence of 2 safety supervisors
- Professional training of parish first responders (at Helis’ expense)
- Voluntary implementation of SEMS
Sweeping Economic Benefits

- IHS CERA: $283B added to GDP (2012), +$1,200/ household ($3500+ by 2025)
- US oil production 9.5 MMB/D by 2015
- Imports down from 61% to below 40%
- 1.5B in LA taxes and fees in 2013 (14.6%), $2.9B including indirect impacts
- Supported $74B in sales to local firms in 2011
- $410 million in LA property taxes in 2013, +37.5% since 2009
- Tangi School District: $1.06M bonus
The Helis Promise

- Be respectful guests in your community
- Have a special responsibility since many Helis employees and their families live and go to school in St. Tammany
- Set a very high bar of performance for any other operator in St. Tammany
- Listen and accommodate wherever possible