

Seismic Survey Project

A Signal Hill Petroleum Project

January 17, 2006

Purpose for Seismic Survey

- **Develops 3D image of subsurface geology**
- **Greatly improves the ability to locate oil and natural gas deposits**
- **Provides new information about area earthquake faults**

Project of Signal Hill Petroleum

- ✦ **Local private petroleum company**
- ✦ **Contracted with Dawson Geophysical and with Ameridian Technologies to conduct survey**
- ✦ **Through large section of Long Beach, as well as in Signal Hill and Lakewood**

City of Long Beach's Involvement

- ✦ **To conduct survey, SHP leased 1,100 acres from the City for which the City owns the mineral rights**
- ✦ **City receives \$15,000 per year for 5 years**
- ✦ **If oil production results, City receives standard 1/6 royalty of gross revenues**
- ✦ **City issued Special Events Permit to SHP**

Project Details

(as presented to the City)

- **Four vibrator trucks at each location for 10 minutes, one hour in a neighborhood**
- **Sound waves sent into earth (similar to “ultra-sound used to create pictures of unborn babies in their mother’s womb”)**
- **Results in “a very minor surface vibration” in immediate area of trucks, no more than a 1.0 earthquake**

Project Details

(as presented to the City)

- **Sound wave data collected using sensors and cabling, staying in place up to 4 weeks**
- **Extensive advance outreach will be made to notify area residents and businesses**
- **Contractor offers free inspection, both pre- and post-survey, to verify that survey has not damaged any houses or businesses**

Actual Survey

- ✦ Survey began Friday, January 6th
- ✦ On Monday, January 9th, City began receiving numerous complaints from from Wrigley area residents
- ✦ City staff immediately responded and witnessed the survey vibration

Issues with Actual Survey

- ✦ Excessive vibration
 - Far above the “very minor” level
- ✦ Test duration
 - Due to technical problems, trucks at locations for several hours
- ✦ Noise
 - 4 loud diesel trucks running non-stop

Issues with Actual Survey

↻ Hours of Testing

- 7AM to 7PM, seven days a week

↻ Truck Weight

- Four trucks, weighing 60,000 pounds each, vibrating on residential streets

↻ Cabling

- Miles and miles of cable duct taped along major streets throughout Long Beach

Issues with Actual Survey

↻ Notification

- Some residents said they did not receive advance notification
- Information on fliers was inadequate
- Area of notification was too limited

↻ Phone Center

- Insufficient manning of phone to properly respond to complaints

Permit Revoked

- ✦ On Jan 9th, SHP and City mutually agreed that project should be halted
- ✦ Based upon resident complaints and staff observation of issues described, Special Events Permit revoked by City
- ✦ SHP may file appeal to City Council

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