

Love the Seismic but where am I

**"Positioning and Metadata (or Lack Thereof) in
Seismic Acquisition -- What cost the loss of
positioning data?"**

Facts and Figures (ANWR -Mr Cooper)

Arctic National Wildlife Refuge

Typical Costs of 3D Seismic					
Play	Offset	Fold	Line	Bin	Cost
Type	(depth)	%	Spacing	Size	(per sq km)
High Res	500	20	100	5	\$700,000
Shallow	700	10	200	15	\$40,000
Paleo U/C	1000	14	240	20	\$24,000
D-3	1400	18	290	25	\$18,000
Deep	2000	20	400	30	\$12,000
Foothills	4000	10	1120	40 x 100	\$8,000

Cost = Millions of Dollars

- Brief overview of Upstream
 - Look at Politics, Geography and Infrastructure
 - Identify Area of Interest
 - Acquire Available Data
 - Analyse Data
 - Bid on License
 - Acquire Seismic
 - Interpret Seismic
 - Drill
 - Produce Oil and/or Gas



LOST?

- Webster's Definitions

- Confused as to time or place
- Unable to be found or recovered
- Incapable of being recovered or regained
- No longer known; irretrievable; "a forgotten art"
- No longer in your possession or control
- Perplexed by many conflicting situations or statements; filled with bewilderment



Where's Waldo



Find

- Come upon, as if by accident
- Discover or determine the existence, presence, or fact of
- Come upon after searching; find the location of something that was missed or lost
- Make a discovery
- Succeed in reaching; arrive at

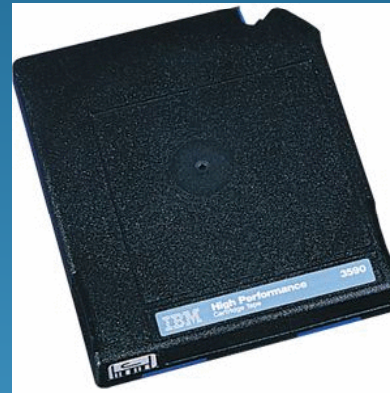


How to Find

- Media Recovery, obsolete or damaged
- Format Recovery, forgotten art
- Look further – disk, encapsulated, wrong name
- Onus of Responsibility, who should pay
- Obtain from third party, contractor, partner
- Reverse Engineer – e.g from post stack

Revisit Old Data

- Reprocessing
- New Technology
- 4D
- Enhanced Recovery
- Farm-In
- Sell Interests
- Data Room
- Legal Obligations



Quote from IBM web-site
“Effective September 29,
2006, IBM will withdraw
from marketing the 3590
Enterprise Tape Drive.”

Do Not Loose In First Place

- Formats
 - SEG and OGP
 - Voluntary

• NO COST

- Is this part of the problem

Straw Poll



Straw Poll

- Who knows about SEG D 2.1?
 - Do you use it?
- Who knows about SEG D 3.0
 - Oil Companies - Will it be in your contracts next year?
 - Contractors are you ready?
- Who is custodians for P1/90, P2/90 and SEGP
 - SEG (Society of Exploration Geophysicists)?
 - UKOOA (United Kingdom Offshore Operations Assoc)?
 - OGP (International Oil and Gas Producers Assoc)?
 - Mixture?

What Is First Number

0 or 1

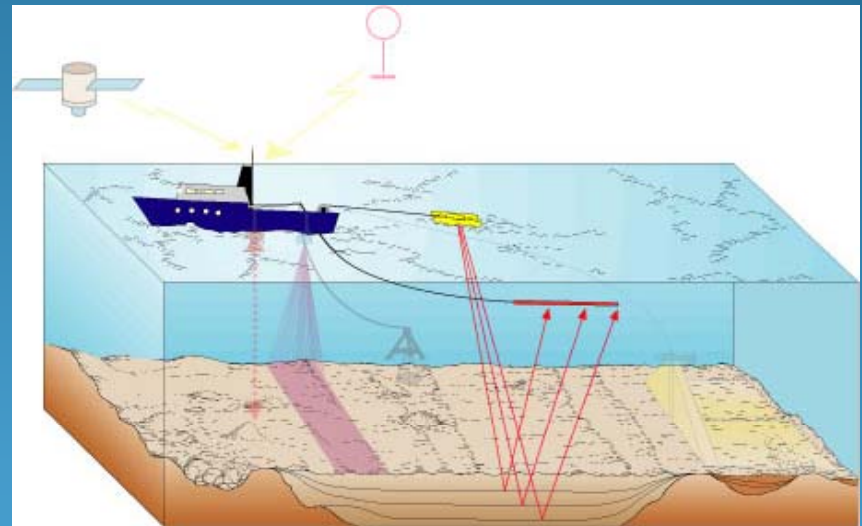
Contracts

- What do They Say?
 - SEG Compliant
 - SEG D
 - Nothing
- Cut and Paste
- Needle in Haystack
 - How do you organize 600 Gbytes of data
- 4 Hrs to 20 Hrs



Chair Technical Standards

- Who U Gonna Call?
- Recently Sold Software due to poor advise
- Cost Bird Dog
- Client
- Positioning Expert
Format Checker??????



Help Is At Hand

- OGP
 - Surveying and Positioning Committee
- SEG
 - Technical Standards Committee
- “Standards Within Standards”
 - Positioning
 - Measurements Tables
 - Manufacturers Codes

Rationalize – Historic Data

- Structure and run according to rational or scientific principles in order to achieve desired results and reduce wastage.
- "We rationalized the factory's production and raised profits".
- Exploration Industry is Geographic
- Why Is Data Management box 1 -xxxx

SEGD 3.0

- The Future – Why “cos your data’s worth it”
 - Improved Handshake to QC and Processing
 - Increased Flexibility
 - Complex Source Configuration
 - Table of Contents
 - Survey Information
 - Co-ordinate Reference System
 - EPSG Compliant
 - Time Stamp GPS Epoch
 - Trailer

In Conclusion

- Use Standards and Good Practices
- Properly specify what you want
- Free advise from professional body
- From TODAY Improve things

Historic Data – 10 year cycle of proactive
data management

Thank You

- Jill Lewis, Managing Director
 - Troika International
- Chair, Technical Standards Committee, SEG
- Liaison SEG/OGP
- Co-Chair Global Affairs Committee
 - Europe and FSU
- Support Jon Stigant – GAC Luncheon
Wednesday SEG - Positioning