Discovery Thinking Has Led to 70 Years of Continued Exploration and Development at Stella Salt Dome, Plaquemines Parish, LA*

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Selected References


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Topo Map of Stella Dome Area
Infrared Aerial Photo of Stella Dome Area
Detail Topo Map of Naval Air Station
70 Years Ago
1940 - Stella Drilling and Proration Units

Discovery well, completed in 8/1940
California Co. Delta Minerals #5-1
50 Years Ago
Big hum Subsurface Map - 1965

Oil & Gas Fields Of SE Louisiana
Schematic Cross Section – Middle Miocene

Genetic Cycle

North

South

Big.2-Cib.carst
Uvig.3
Glob.1
Text.W
Big.hum.
Cris.I
Cycl.
Plan.D
Cib.16
Cib.op.
Plan.harang.
Siph.C
Amph.B-Rob.L

MAP
MAP
MAP
MAP
MAP
MAP
MAP
Siphogenerina C Paleogeographic Map
Planulina harangensis Paleogeographic Map
Cibicides 16 Paleogeographic Map
Planulina D Paleogeographic Map
Cristellaria I Paleogeographic Map
Bigenerina humblei Paleogeographic Map
Textularia W Paleogeographic Map
40 Years Ago
7000’ Oil Sand
20 - 30 Years Ago
Cris I Unitization Map - 1991
SL 13772 #1 (sidetrack)
IP: 5784 MCFD + 123 BCPD
FTP 3440 psi  completed 11/1990
Cris I - Subsurface Structure Map
Top Salt - 3D Time Map
Original Processing – Post Stack Migration
Reprocessing – Pre Stack Time Migration
Cris I - 1st Generation 3D Seismic Time Map
Cib op -1st Generation 3D Seismic Time Map
10 Years Ago
Cris I - 2nd Generation 3D Seismic Time Map
Cib op -2nd Generation 3D Seismic Time Map
Bigenerina Humblei Channel
8750’ Sand
Teresa Meyer et al #1 January 2003
5300 MCFD + 70 BCPD
Teamwork leads to Success!!
Cris I Sand
SL 17265 #1 April 2003
9100 MCFD + 201 BCPD
FTP 3863 psi  BPH 5310 psi
Hero #4 Cris I – Amplitude Map
Cris I Sand
Hero #4       June 2004
FARO 7282 MCFD + 167 BCPD
FTP 3860 psi
Cris I Sand
K.F. Stewart #1 March 2004
Upper Sand: 9243 MCFD + 307 BCPD
FTP 3562 psi
Lower Sand: 427 BOPD + 877 MCFD
FTP 2624 psi
Cris I Sand
K.F. Stewart #2      November 2004
7000 MCFD + 207 BCPD
FTP 2500 psi
Present Day
Paleogeographic Map Showing Genetic Cycle 3

Stella Dome

Present Day Shoreline

Combellas-Bigott & Galloway
AAPG Bulletin March 2006
Discovery Thinking – What Worked

• Creative thinking
  - Technology transfer - Applied offshore technology to onshore properties

• All of the tools in the Tool Box
  - Paleo Environmental
  - Gravity
  - 2-D and 3-D Seismic
  - All types of Well Information
  - Team Work – the best people

• Patience
• Perseverance, Perseverance, Perseverance
• Problem Solving
• Flexible Management
• Determination
Results to Date:

15,500,000 Barrels of Oil
+ 106.5 BCF gas

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