

CONTENTS

HIGHLIGHTS	A-1
-------------------	-----

I. GENERAL

GOVERNMENT

Phase II Small Business Awards Announced	1-1
Federal Energy Subsidies Favor Oil	1-1
DOE Makes Small Business Grants	1-4

ENERGY POLICY AND FORECASTS

World Bank Sees Explosive Energy Growth in Developing World for Next 30 Years	1-7
IEA Projects World Oil Consumption at 92.5 Million BPD by 2010	1-9
Flat Future Oil Prices Projected by MIT Paper	1-12
A Comeback for Oil in the Electric Utility Market Foreseen	1-14

ENVIRONMENT

IEA Reports Progress in CO ₂ Capture Technology	1-16
--	------

COMING EVENTS

1-18

II. OIL SHALE

PROJECT ACTIVITIES

New Paraho Tripled Planned Production for 1993 Asphalt Test Program	2-1
---	-----

CORPORATIONS

Southern Pacific Petroleum Optimistic About Financing Stuart Project	2-2
LLNL Highlights Oil Shale Work	2-4
Ameralia Inc. Plans New Nahcolite Mine in Piceance Basin	2-5
Proposed Roan Creek Project Draws Opposition	2-5

TECHNOLOGY

Cracking of Model Compounds on Spent Shale Particles Studied	2-7
--	-----

INTERNATIONAL

Estonia Tenders Oil Shale Related Enterprises for Privatization	2-9
---	-----

ENVIRONMENT

Oil Shale Industry Defined as Major Pollution Source in Estonia	2-10
---	------

RESOURCE

BLM Issues Requirements for Mining Claim Rental Fees	2-12
--	------

STATUS OF OIL SHALE PROJECTS

2-13

INDEX OF COMPANY INTERESTS

2-28

III. OIL SANDS

PROJECT ACTIVITIES

Four-Year Progress of Co-Op Upgrader Described	3-1
Oil Sands Production Figures Updated	3-3
Development of Syncrude Auxiliary Mine Described	3-4
Syncrude's Cash Operating Costs Reduced by 65 Percent Since Startup	3-8
Bodo Steam Pilot Enters New Phase	3-8

CORPORATIONS

Amoco and Alberta Energy Company Exchange Oil Sands Assets	3-10
Suncor Reports Improved Oil Sands Results in First Quarter and Sales of Stock	3-10
Expansion Sought for Joint AOSTRA/ARC CANMET/Industry Research	3-11
Oil Sands Research Network Proposed	3-12
Task Force Considering 5,000 Barrel Per Day Demonstration of Taciuk Process	3-12
EOR Inc. Encounters Difficulty in Pilot Projects	3-13

GOVERNMENT

ERCB Reviews Year in Oil Sands	3-15
Oil Sands Orders and Approvals Listed	3-16

ECONOMICS

Bitumen-Based Ethylene and Propylene Production Foreseen	3-19
Horizontal Wells are Profitable in Heavy Oil Areas	3-20

TECHNOLOGY

New Technology Developed for Treating Oil Sands Froth	3-22
Cyclofeeder Tests Demonstrate Successful Slurry Transport at Syncrude	3-25
Fine Tails From Hot Water Extraction Found to Form Gel Structures	3-28
Canadian Oxy Testing Hydrocyclone to Reject Oil Sands/Solids at Mine Site	3-29
Horizontal Wells Improve Suffield Heavy Oil Recovery	3-31
Differences in Tailings at Syncrude and Suncor Described	3-33

ENVIRONMENT

Bison to Test Oil Sands Reclamation	3-37
-------------------------------------	------

RESOURCE

U.S. Heavy Oil Potential Estimated at 11 Billion Barrels for \$20 Oil	3-38
---	------

STATUS OF OIL SANDS PROJECTS

3-40

INDEX OF COMPANY INTERESTS

3-66

IV. COAL

PROJECT ACTIVITIES

Public Ceremony Initiates Wabash River Project	4-1
Tom's Creek Project Updated	4-2
Encoal Plant Sets New Operating Records	4-4
Rosebud Syncoal Project Advances	4-5
Great Plains to Test Tires as Supplemental Feedstock	4-6
Detailed Engineering Under Way for Polk Power Station IGCC Project	4-6

CORPORATIONS

Texaco Signs Up Gasification Project Number 10 in China	4-10
IEA Coal Research Outlines 1993-94 Program	4-10
Shell Coal Gasification Projects Updated	4-12
ERC Wins Coal-Gas Polishing Contract	4-14

GOVERNMENT

DOE Funds New University Research Grants	4-15
GAO Recommends Ways to Control CCT Project Costs	4-16
U.S. Promoted as "One-Stop Shopping" Center for Clean Coal Technology	4-18
CCT Round V Winning Projects Described	4-19

ENERGY POLICY AND FORECASTS

IEA Projects 9 Percent Increase in Coal Demand by 2000	4-23
--	------

ECONOMICS

Commercialization Strategies for Coal Derived Fuels Outlined	4-25
Changes in Cresylics Market Affect Great Plains Byproducts	4-27
Once-Through F-T Process Combined With IGCC Looks Attractive	4-28

TECHNOLOGY

Liquid Yields From Mild Gasification Summarized	4-32
Preconversion Soaking Improves Coal Liquefaction	4-35
Air Drying Feed Coal Improves Solvent Liquefaction Yield	4-36
Carbon Molecular Sieve Tested for High Temperature Direct Separation of Hydrogen	4-38
Slurry-Phase Reactor Technology Advances	4-39
HYDROCARB Process Said Capable of Eliminating U.S. Imports	4-42

INTERNATIONAL

China Shoots for 1.5 Billion Tons of Coal Per Year by 2000	4-44
Chinese Coal and Oils Promising for Coprocessing	4-44
Clean Coal Technology Has Good Prospects in Indonesia	4-46

ENVIRONMENT

Monetization of Externalities Improves Competitive Position of IGCC	4-49
Environmental Considerations of Wabash River Project Outlined	4-50

STATUS OF COAL PROJECTS

4-54

INDEX OF COMPANY INTERESTS

4-102

V. NATURAL GAS

PROJECT ACTIVITIES

Methanol From Landfill Gas Due Onstream	5-1
Fire Shuts Down Malaysian Gas-To-Liquids Plant	5-1

CORPORATIONS

Rentech Lines Up Gas Conversion Projects	5-2
--	-----

TECHNOLOGY

Mitsubishi Electric Operates 30 KW Molten Carbonate Fuel Cell on Natural Gas	5-3
Sasol Slurry Bed Process for Natural Gas Conversion Updated	5-4
Biomimetic Conversion of Gas to Liquids Studied	5-5

RESOURCE

Siberian Gas Potential Noted	5-6
------------------------------	-----

STATUS OF NATURAL GAS PROJECTS

5-7