US DOE OIL SHALE TASK FORCE

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ORIGINATION OF TASK FORCE

- MAY 1978- GOVERNOR LAMM ASKS DOE SECRETARY SCHLESINGER FOR ASSISTANCE IN ANALYSIS OF OIL SHALE IMPACTS. PARTICULARLY FOR MIS PROCESSES

- DOE OFFICE OF ENVIRONMENT CREATES TASK FORCE TO PLAN, IMPEMENT AND COORDINAT COMPREHENSIVE, INTEGRATED RESEARCH PROGRAMS

TASK FORCE MEMBERSHIP

- WILLARD CHAPPELL, CHAIRMAN, UNIVERSITY OF COLORADO
- REPRESENTATIVES FROM:
- PACIFIC NORTHWEST LABORATORY
- LAWRENCE LIVERMORE NATIONAL LABORATORY
- LOS ALAMOS NATIONAL LABORATORY
- LARAMIE ENERGY TECHNOLOGY CENTER
- COLORADO DEPARTMENT OF NATURAL RESOURCES

ADVISORY GROUP

- REPRESENTATIVES FROM:
- COLORADO DEPARTMENT OF HEALTH
- TOSCO
- GRAND JUNCTION COMMUNITY
- US PUBLIC HEALTH SERVICES
- USGS
- OIL, CHEMICAL AND ATOMIC WORKERS UNION
- ENVIRONMENTAL DEFENSE
- OCCIDENTAL RESEARCH CORPORATION
- COLORADO MOUNTAIN CLUB
- ENVIRONMENTAL DEVELOPMENT CONSULTANTS
- CERI

US DOE MANAGEMENT

- INITAILLY OFFICE OF ENVIRONMENT (EV) BUT THEN JOINED BY OFFICE OF FOSSIL ENERGY (FE)
- PROJECT OFFICERS: DR. RALPH FRANKLIN (EV), DR. ARTHUR HARTSTEIN (FE).
- FUNDING FROM OFFICES OF ENERGY RESEARCH, FOSSIL ENERGY AND ENVIRONMENTAL PROTECTION SAFETY AND EMERGENCY PREPAREDESS

PROGRAM AREAS

- SOURCE CHARACTERIZATION
- HEALTH EFFECTS
- ENVIRONMENTAL FATE AND EFFECTS
- ENVIRONMENTAL CONTROL TECHNOLOGY
- INTEGRATED ASSESMENT

SOURCE CHARACTERIZATION

- EXTENSIVE SAMPLING O F GASEOUS, LIQUID AND SOLID PRODUCTS AND WASTES INCLUDING:
- VENT GAS, MINE AIR, RETORT WATERS, RAW SHALE, RETORTED SHALE, BLOW DOWN AND AMBIENT PRODUCTS FOR:
- INORGANIC AND ORGANIC COMPOUNDS

HEALTH EFFECTS

- SAMPLING AND CHARACTERIZATION
- BIOLOGICAL TESTING
- HUMAN STUDIES

ENVIRONMENTAL FATE AND EFFECTS

- AIR QUALITY
- WATER QUALITY
- LAND DISTURBANCE
- ECOLOGICAL EFFECTS

ENVIRONMENTAL CONTROL TECHNOLOGY

- CHARACTERIZATION OF EFFLUENTS
- TESTING OF VARIOUS CONTROL STRATEGIES

INTEGRATED ASSESMENT

- SCENARIOS THAT INCLUDE BOTH ABOVE GROUND, MIS AND IN SITU PROCESSES LOOKING AT OVERALL IMPACT ON COMMUNITY, WORKERS AND ENVIRONMENT.

- RISK ASSESSMENT FOR A FULL SCALE OIL SHALE INDUSTRY INCLUDING BOTH HUMAN AND ENVIRONMENTAL RISKS

RESEARCH LOCATIONS

- LOGAN WASH-RETORT 6
- TRACT C-a-RETORT 0
- GEOKINETICS-RETORT 24

LOGAN WASH SAMPLING

- JOINT EFFORT BY PNL, LBNL, ORNL, AND LANL INVOLVING COLLECTING SAMPLES FOR CHEMICAL AND BILOGICAL ANALYSES AND:

- TRAINING OXY PERSONNEL IN COLLECTION TECHNIQUES TO CONTINUE SAMPLING DURING THE BURN

LOGAN WASH SAMPLING POINTS

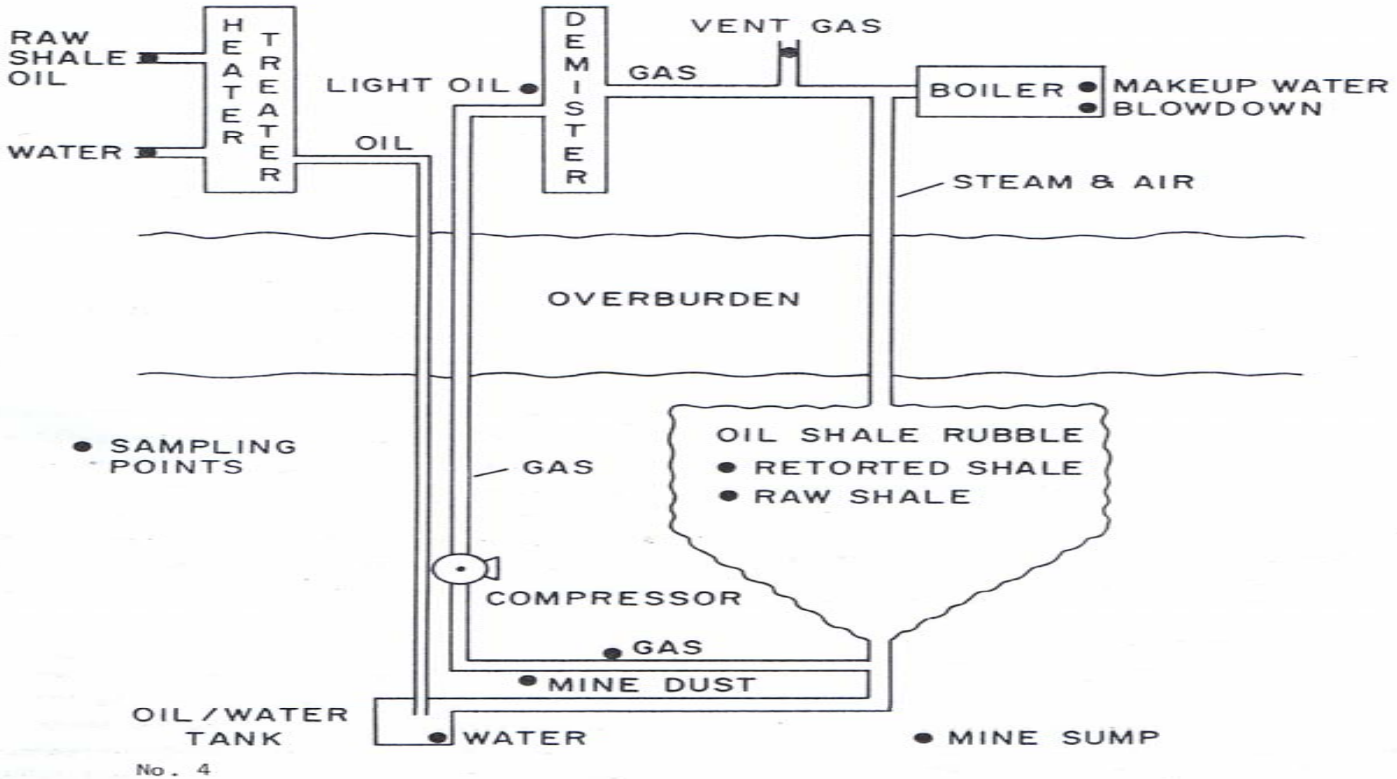

FIGURE 1: Simplified flow diagram and sampling points for Oxy Retort 6 (not to scale).

LOGAN WASH SAMPLES

- CRUDE OIL, LIGHT OIL, PRODUCT WATER
- BOILER BLOWDOWN, MAKEUP WATER, MINE SUMP WATER
- GROUND WATER, WATER FROM OLD RETORTS, RETORT GAS
- MINE AIR MINE DUST, SPENT SHALE CORE

RECOMMENDATIONS

- **TASK FORCE**
- **ARCHIVES**

- **ARCHIVES**: GATHER PREVIOUS PAPERS AND REPORTS FROM ALL SOURCES (LIBRARIES, RESEARCHERS, UNIVERSITIES, NATIONAL LABS, ETC.)

- **TASK FORCE**: DEVELOP A COLLABORATIVE RELATIONSHIP BETWEEN RESEARCHER (ACADEMIC AND OTHER), STATE AND FEDERAL GOVERNMENT AND INDUSTRY TO COORDINATE AND FACILITATE RESEARCH ON ENVIRONMENTAL IMPACTS.