

FILE NOTATIONS

Entered in NID File _____

Entered On S R Sheet _____

Location Map Filled _____

Card Indexed _____

IWR for State or Fee Land _____

Checked by Chief _____

Copy NID to Field Office _____

Approval Letter _____

Disapproval Letter _____

COMPLETION DATA:

Date Well Completed _____

Location Inspected _____

OW _____ WW _____ TA _____

Bad released _____

GW _____ OE _____ PA _____

State of Fee Land _____

LOGS FILED

Driller's Log _____

Electric Logs (No.) _____

E _____ I _____ BE _____ GR _____ GRN _____ Micro _____

Lat _____ MSL _____ Sonic _____ Other _____

DAVIS OIL COMPANY

410 - 17TH STREET, SUITE 1400
DENVER, COLORADO 80202
TELEPHONE: 303-623-1000

NEW YORK
NEW ORLEANS
HOUSTON
TULSA



May 13, 1980

Mr. Ed W. Gynn
United States Geological Survey
1745 W. 1700 S.
Salt Lake City, Utah 84104

Re: #1 Susan Grace Federal
SE-SE Sec. 34 T6S R24E
Uintah County, Utah

Dear Mr. Gynn:

Enclosed please find for your approval, an original and three copies of the Application for Permit to Drill, together with four copies of the Staking Plat covering the drilling of the captioned proposed test.

By carbon copy of this letter to the Utah State Oil & Gas Commission, we are furnishing them with a copy of our application and staking plats.

Your early attention to the approval of said application will be appreciated.

Very truly yours,

DAVIS OIL COMPANY

A handwritten signature in cursive script that reads "David F. Banko".

David F. Banko
Permit Supervisor

DFB:jw

Enclosures

cc: Utah State Oil & Gas Commission

RECEIVED
MAY 15 1980

DIVISION OF
OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER

SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 DAVIS OIL COMPANY

3. ADDRESS OF OPERATOR
 410 Seventeenth St., Suite 1400, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface SE SE Sec. 34-T6S-R24E
 At proposed prod. zone 652' FSL & 500' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 25 miles Northwest to Vernal, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660' FSL

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL 640

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NONE

19. PROPOSED DEPTH 5600' *Watch*

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5500' GR est & 5512' KB est

22. APPROX. DATE WORK WILL START*
 Upon approval

5. LEASE DESIGNATION AND SERIAL NO.
 U-12399

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Susan Grace Federal

9. WELL NO.
 #1

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 34-T6S-R24E

12. COUNTY OR PARISH 13. STATE
 Uintah Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#, K55,	STC, New	0 to 350' 300 sxs. est. <i>Case to</i>
7 7/8"	5 1/2"	15.5#, K55,	LTC, New	0 to 5600' 250 sxs. est. <i>surface</i>

(SEE TEN POINT PROGRAM)

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
 DATE: 5-20-80
 BY: M.J. Minner

RECEIVED
 MAY 15 1980

DIVISION OF OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Ed Lafave TITLE Chief Geologist DATE 4-22-80

(This space for Federal or State office use)

PERMIT NO. 43-047-30701 APPROVAL DATE 5/20/80

APPROVED BY _____ TITLE _____ DATE _____

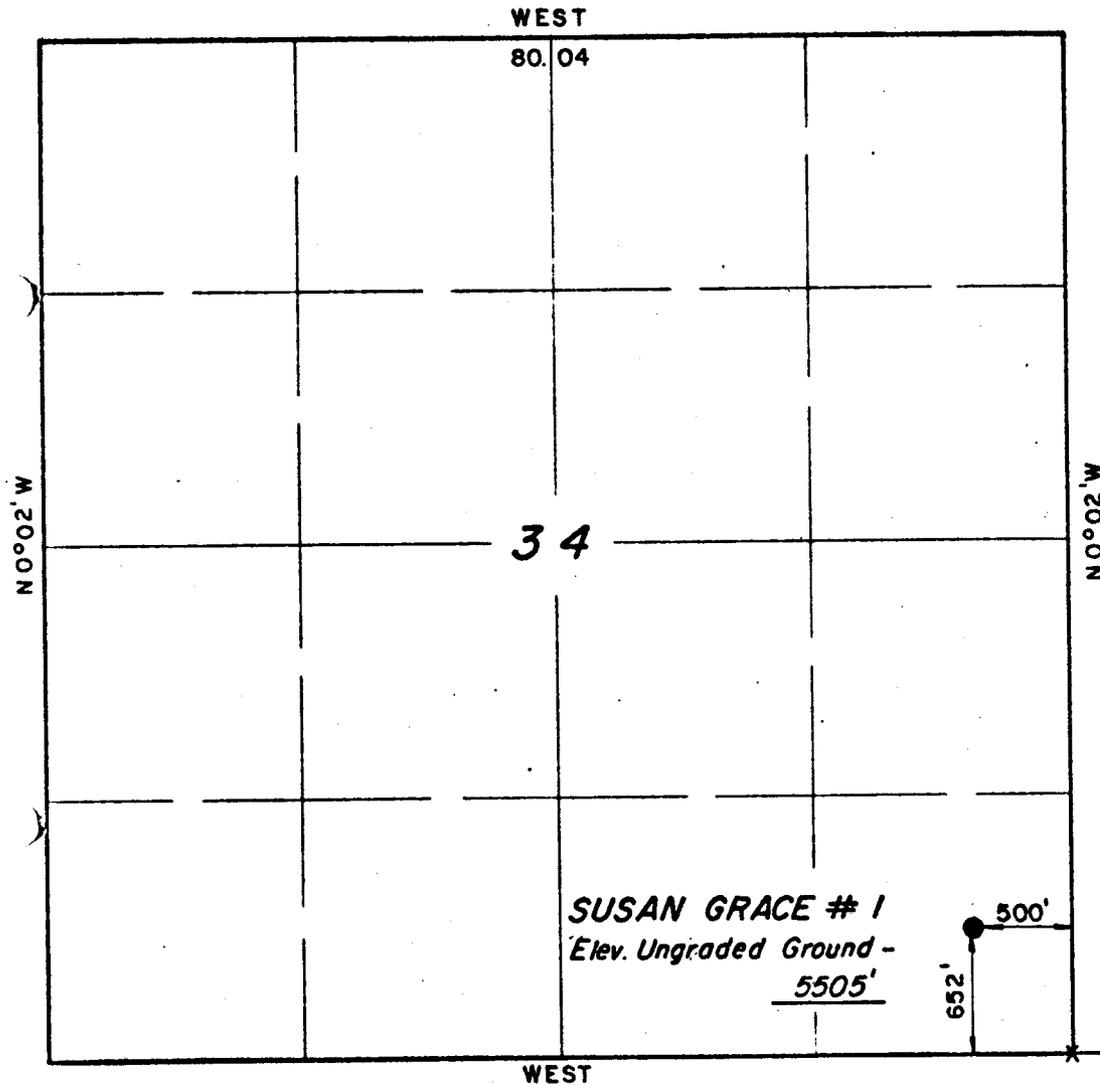
CONDITIONS OF APPROVAL, IF ANY:

T 6 S , R 2 4 E , S.L.B.&M.

PROJECT

DAVIS OIL COMPANY

Well location, *SUSAN GRACE #1*,
located as shown in the SE 1/4
SE 1/4 Section 34, T6S, R24E,
S.L.B. & M. Uintah County, Utah.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF.

Lawrence L. Kay

REGISTERED LAND SURVEYOR
REGISTRATION NO 3137
STATE OF UTAH

South 1/4 Corner Sec. 35,
T6S, R24E, S.L.B.&M.

X = Section Corners Located

UINTAH ENGINEERING & LAND SURVEYING
P.O. BOX Q - 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	4/4/80
PARTY	RK DB RP	REFERENCES	GLO Plat
WEATHER	Fair	FILE	DAVIS OIL CO.

TEN POINT PROGRAM

- 1) SURFACE FORMATION: Uintah
- 2 & 3) ESTIMATED TOPS: (Water, Oil, Gas or Mineral bearing formations)

Uintah	Surface	Water sand & poss. gas sands
Green River	2682'	Heavy oil sand & salt water were porous
Parachute Creek	2887'	Heavy oil sand & salt water were porous
Garden Gulch	4272'	Possible gas productive
Douglas Creek	4917'	Possible gas productive
Wasatch	5267'	Possible gas productive
Total Depth	5600'	
- 4) CASING PROGRAM: 8 5/8", 24#, K55, STC, New, 0 to 350' 300 sxs. est.
5 1/2", 15.5#, K55, LTC, New, 0 to 5600' 250 sxs. est.
- 5) PRESSURE CONTROL EQUIPMENT: (See attached schematic diagram) BOP's and choke manifold will be installed and pressure tested before drilling out under surface casing and then will be checked daily as to mechanical operating condition. Ram type preventors and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly or to 70% of the minimum internal yield pressure of the casing. Annular type preventor will be tested to 50% of their rated working pressure. BOP's will be pressure tested at least once every 30 days.
- 6) MUD PROGRAM: 0 to 350' Spud Mud.
350 to 2700' Treated Water.
2700 to 5600' LSND 8.5 - 10.5 ppg. (Mud wt. as required to control Formation Pressure) 28 - 45 vis., 15 W.L., pH 9 - 11.

Sufficient mud materials to maintain mud properties, control lost circulation and to contain blowout will be available at wellsite.
- 7) AUXILLIARY EQUIPMENT:
 - 1) Kelly Cock.
 - 2) Drill Pipe Float (Except for lost circulation drilling conditions)
 - 3) Monitoring of Mud System will be visual unless otherwise specified.
 - 4) A sub on the floor with a full opening valve to be stabbed into drill pipe when Kelly is not in the string.
- 8) LOGGING: Dual Induction - SFL - base of surface casing to total depth.
BHC Sonic Log - base of surface casing to total depth.
Simultaneous Compensated Neutron - Formation Density: zones of interest.

CORING: None.

TESTING: Zones of interest.

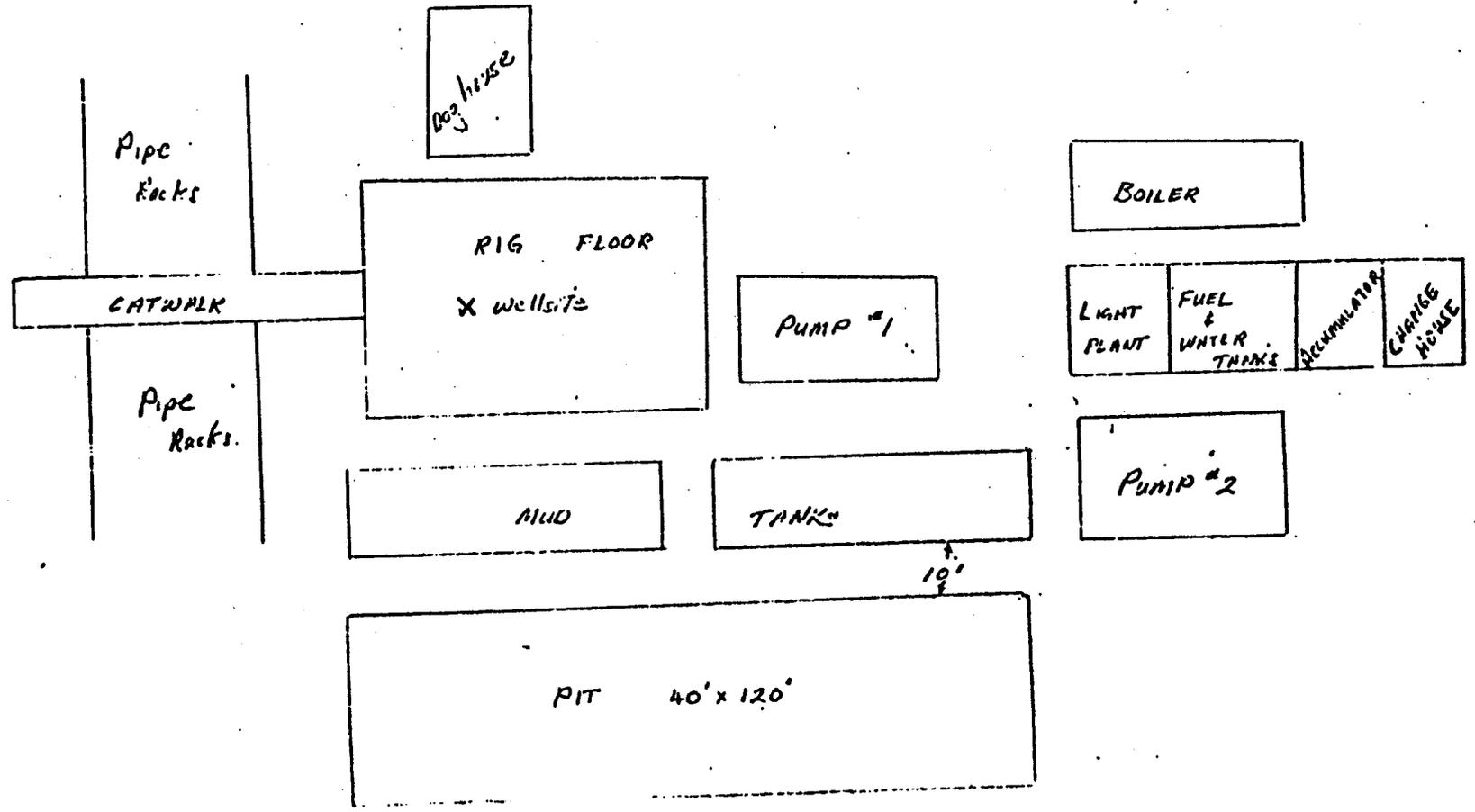
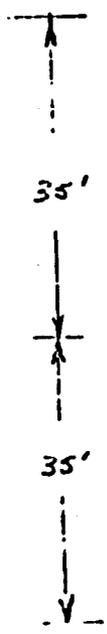
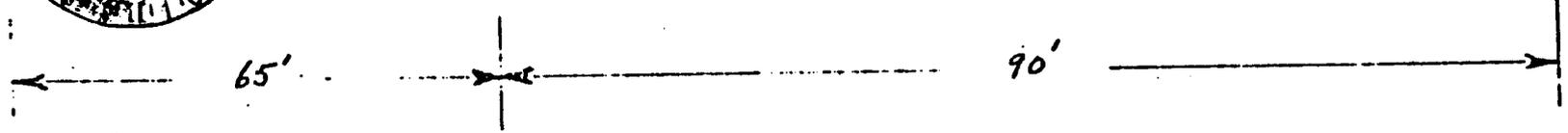
STIMULATION: Wasatch Formation: Frac. w/ 100,000 gallons gelled water & 200,000 lbs. sand. Actual volume of treatment will be dependent upon thickness of pay and evaluation of zone of interest.
- 9) ABNORMAL PRESSURE: This firm does not anticipate any abnormal pressure or temperatures of any other hazards. This is based on previous geological data from nearby wells.

ESTIMATED BOTTOMHOLE PRESSURE: 3000 psi.
- 10) ANTICIPATED STARTING DATE: Within 30 to 45 days from Government approval.

DURATION OF OPERATION: 20 - 30 days.

ATCO Rig # 20

BURN
FIT 12' x 15'



303-623-1000

** FILE NOTATIONS **

DATE: May 15, 1980
OPERATOR: Davis Oil Company
WELL NO: Susan Grace Federal #1
Location: Sec. 34 T. 6S R. 24E County: Wintak

File Prepared:
Card Indexed:

Entered on N.I.D:
Completion Sheet:

API Number 43-147-30701

CHECKED BY:

Petroleum Engineer: M.J. Minder 5-20-80

Director: _____

Administrative Aide: Rule C-3: OK on gas spacing

APPROVAL LETTER:

Bond Required: Survey Plat Required:

Order No. _____ O.K. Rule C-3

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site

Lease Designation

Plotted on Map

Approval Letter Written

Hot Line

P.I.

#1

May 22, 1980

Davis Oil Company
410 17th Street, Suite 1400
Denver, Colorado 80202

Re: Well No. Susan Grace Federal #1
Sec. 34, T. 6S, R. 24E.,
Uintah County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer
Office: 533-5771
Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-047-30701.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Petroleum Engineer

/b:tm

cc: USGS



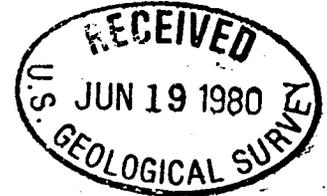
United States Department of the Interior

IN REPLY REFER TO

T & R
(U-802)

BUREAU OF LAND MANAGEMENT
VERNAL DISTRICT OFFICE
170 South 500 East
Vernal, Utah 84078

June 18, 1980



Ed Guynn, District Engineer
USGS, Conservation Division
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

Re: Davis Oil Company
Susan Grace Federal, Well #1
Lease U-12399
Sec. 34, T6S, R24E
Uintah County, Utah

Dear Sir:

A joint field examination was made on June 17, 1980 of the above referenced well site location and proposed access road. We feel that the surface use and operating plans are adequate with the following stipulations:

1. Construction and maintenance of roads, rehabilitation of disturbed areas, and construction of pipeline routes, shall be in accordance with surface use standards as set forth in the brochure, "Surface Operating Standards for Oil and Gas Exploration and Development".
2. Topsoil will be stockpiled as addressed in the applicant's 13 Point Plan. The BLM recommends that the top six (6) to eight (8) inches of soil materials be stockpiled at the site.
3. The BLM must be contacted at least 24 hours prior to any rehabilitation activities. The operator may be informed of any additional needed seeding and restoration requirements.
4. The BLM must be contacted at least 24 hours prior to any construction activities.
5. A burn pit will not be constructed. There will be no burning or burying of trash or garbage at the well site. Refuse must be contained and hauled to an approved disposal site.



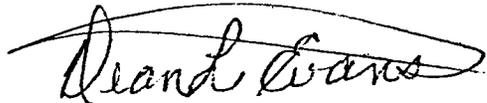
6. A wire mesh sheep fence topped with 2 strands of barbed wire will be used around the reserve pits.
7. It was agreed to by all parties present that the applied-for pad dimensions are adequate to handle all drilling and fracturing operations. In the event that a field camp will have to be established, an additional 50' x 50' area may be leveled between stakes 2 and 3 for this purpose.
8. The topsoil stockpile will be located between stakes 3 and 4.

An archaeological clearance has been received by this office for the proposed well sites and access roads. No cultural resources were discovered.

The proposed activities do not jeopardize listed, threatened, or endangered flora, fauna or their habitats.

The BLM representative will be Ron Rogers (789-1362).

Sincerely,



Dean L. Evans
Area Manager
Bookcliffs Resource Area

cc: USGS, Vernal

Grey

FROM: DISTRICT GEOLOGIST, U.S.G.S., SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-12399

OPERATOR: DAVIS OIL CO. WELL NO. #1

LOCATION: SE 1/4 SE 1/4 SE 1/4 sec. 34, T. 6 S, R. 24 E, SLM
UINTAH County, UTAH

- 1. Stratigraphy:
 - UINTAH FM 0
 - GREEN RIVER FM 2682'
 - PARACHUTE CREEK MEM 2887'
 - GARDEN GULCH MEM 4272'
 - DOUGLAS CREEK MEM 4917'
 - WASATCH FM 5267'
 - TD 5600'
- 2. Fresh Water:

POSSIBLY ENCOUNTERED IN THE UINTAH FM, 0-2682'

- 3. Leasable Minerals:
 - OIL SHALE FROM PARACHUTE CREEK MEMBER AT APPROX 3100'
 - GAS FROM GARDEN GULCH MEM (4272'), DOUGLAS CREEK MEM (4917') OR WASATCH FM (5267').
 - POSSIBLE OIL FROM GREEN RIVER FM (UPPER) (2682') OR PARACHUTE CREEK MEM (2887')
- 4. Additional Logs Needed:

LOGGING PROGRAM SUFFICIENT

- 5. Potential Geologic Hazards:
 - NONE ANTICIPATED

- 6. References and Remarks:
 - PI FILES; STRUCTURE MAP, MAHOGANY
 - OIL SH BED (UNPUBLISHED);

Signature: Kenneth J. Salt Date: 03-JUN-1980

Norris Oil Co
34-65-24E

Memorandum

Grey

To: District Oil and Gas Engineer, Mr. Edward Guynn

From: Mining, Supervisor, Mr. Jackson W. Moffitt

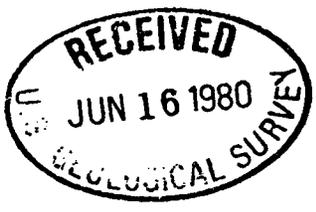
Subject: Application for Permit to Drill (form 9-331c) Federal oil and gas lease No. U-12399 Well No. 1

1. The location appears potentially valuable for:

- strip mining*
- underground mining** *oil shale*
- has no known potential.

2. The proposed area is

- under a Federal lease for _____ under the jurisdiction of this office.
- not under a Federal lease under the jurisdiction of this office.
- Please request the operator to furnish resistivity, density, Gamma-Ray, or other appropriate electric logs covering all formations containing potentially valuable minerals subject to the Mineral Leasing Act of 1920.



*If location has strip mining potential:

Surface casing should be set to at least 50 feet below the lowest strip minable zone at _____ and cemented to surface. Upon abandonment, a 300-foot cement plug should be set immediately below the base of the minable zone.

**If location has underground mining potential:

The minable zones should be isolated with cement from a point 100 feet below the formation to 100 feet above the formation. Water-bearing horizons should be cemented in like manner. Except for salines or water-bearing horizons with potential for mixing aquifers, a depth of 4,000 feet has been deemed the lowest limit for cementing.

Signed *Allen J. Vause*

USO 3110-4
(8/69)

Serial No. U- 12300

STIPULATIONS FOR LANDS IN OIL SHALE WITHDRAWAL,
EXECUTIVE ORDER 5327 OF APRIL 15, 1930

The lessee under the above oil and gas lease hereby agrees that the following agreement and stipulations are by this reference incorporated as terms and conditions of said lease as to the following lands:

All lands in the lease

The lessee agrees that:

1. No wells will be drilled for oil or gas except upon approval of the Regional Oil and Gas Supervisor of the Geological Survey, it being understood that drilling will be permitted only in the event that it is established to the satisfaction of the Supervisor that such drilling will not interfere with the mining and recovery of oil shale deposits or the extraction of shale oil by in situ methods or that the interest of the United States would best be served thereby.
2. No wells will be drilled for oil or gas at a location which, in the opinion of the Regional Oil and Gas Supervisor of the Geological Survey, would result in undue waste of oil shale deposits or constitute a hazard to or unduly interfere with mining or other operations being conducted for the mining and recovery of oil shale deposits or the extraction of shale oil by in situ methods.
3. When it is determined by the Regional Oil and Gas Supervisor of the Geological Survey that unitization is necessary for orderly oil and gas development and proper protection of oil shale deposits, no well shall be drilled for oil or gas except pursuant to an approved unit plan.
4. The drilling or the abandonment of any well on this lease shall be done in accordance with applicable oil and gas operating regulations including such requirements as the Regional Oil and Gas Supervisor of the Geological Survey may prescribe as necessary to prevent the infiltration of oil, gas or water into formations containing oil shale deposits or into mines or workings being utilized in the extraction of such deposits.

(Signature)

USO 3110-1
1/70

3110
U- 12399

STIPULATION

As to lands administered by the Bureau of Land Management under the above oil and gas lease, the lessee hereby agrees that the following stipulations are by this reference incorporated as terms and conditions of said lease:

Before undertaking any exploratory operations involving use of bulldozers, earth-moving, or similar mobile equipment which may result in scarring of public lands, damaging surface resources, or inducing erosion thereon, he or his designee shall submit in writing to the Bureau of Land Management District Manager in the District in which the land is located, advance notice of such operation. Said operations include but are not limited to exploratory drilling, construction of access roads or airstrips, and the conduct of seismic operations.

Lessee



United States Department of the Interior

GEOLOGICAL SURVEY
Conservation Division
8440 Federal Building
Salt Lake City, Utah 84138

Well # 1
34-65-24E
Davis Oil Co.
Uintah County
E & # 434-80

RECEIVED

MAY 30 1980
OFFICE OF
AREA OIL SHALE SUPERVISC.
U.S. G.S.

Mr. Peter Rutledge
Area Oil Shale Supervisor
Area Oil Shale Office
131 North Sixth, Suite 300
Grand Junction, Colorado 81501

Dear Mr. Rutledge,

The Office of Oil and Gas Operations, Conservation Division, received the attached Application for Permit to Drill, Deepen, or Plug Back (Form 9-331C).

Please review this proposal for any conflict with any of the resources in the oil shale tracts and withdrawal areas. If needed, set forth the stipulations you determine necessary for adequate protection. Please use the following space for your response (if there is none, so state), together with date and initials of person responsible and return to the Office of Oil and Gas Operations.

U.S. Geological Survey
8440 Federal Building
125 South State Street
Salt Lake City, Utah 84138

Davis Oil #1

June 2, 1980

Proposed casing and cementing program adequately protects base of the Green River oil shale section. Top of the Green River Formation is not covered by a cement interval; but, this does not appear necessary since oil shales, if present, in this extreme northern area of the Uinta basin are thin and of very low grade. This office does not have groundwater information for the upper Green River section for this specific location.

Ray A. Brady
Geologist

Oil and Gas Drilling

EA # 434-80

United States Department of the Interior
Geological Survey
2000 Administration Bldg.
1745 West 1700 South
Salt Lake City, Utah 84104

Usual Environmental Analysis

Date: June 20, 1980

Operator: Davis Oil Company Project or Well Name and No.: Susan Grace #1
Location: 652' FSL & 500' FEL Sec.: 34 T.: 6S R.: 24E
County: Uintah State: Utah Field/Unit: Wildcat
Lease No.: U-12399 Permit No.:

Joint Field Inspection Date: June 17, 1980

Prepared By: Greg Darlington

Field Inspection Participants, Titles and Organizations:

Greg Darlington	USGS, Vernal
Ron Rogers	BLM, Vernal
David Banko	Davis Oil Company
Keith Dana	Davis Oil Company
George Searle	Searle Brothers Construction

Related Environmental Analyses and References:

- (1) Unit Resource Analysis
- (2) Bonanza Planning Unit (08-05), .
- (3) BLM, Vernal

*Admin Camp
Pad 140 x 260'
Pad 110 x 140'
7/10 mi x 30' new access
29/10 ac
Add 50 x 50' area W of pad
Pad decision file
Fresh water 7000' file
Cond 9 Report Pg 2
1-3 Pg 6*

7-11-80 kr

1. A drill pad 140' wide x 260' long and a reserve pit 110' x 110' would be constructed. Approximately .7 miles of new access road, averaging 20' driving surface, would be constructed from a maintained road. 2.9 acres of disturbed surface would be associated with the project. Maximum disturbed width of access road would be limited to 30'. An additional 50'x 50' area may be leveled on the West side of the pad near corner 2 for a field camp in the event that Davis uses a Rock Springs crew for its drilling activities at the wellsite.
2. Drilling would be to a proposed depth of 5600 feet.
3. Waste disposal
4. Traffic
5. Water requirements
6. Completion
7. Production
8. Transportation of hydrocarbons
9. Other

Details of the proposed action are described in the Application for Permit to Drill.

The location was approved as staked. On the layout diagram East was indicated as North and the staking is actually 90° different from the layout diagram.

Environmental Considerations of the Proposed Action:

Regional Setting/Topography: The location is on the gradually sloping hillside of a small hill. Rocky outcroppings are located near the Southwest side of the pad.

PARAMETER

A. Geology

1. Other Local Mineral Resources to be Protected: Oil shale is expected in the Parachute Creek Member at approximately 3100 feet. The lease has oil shale stipulations in it.

Information Source: Mineral Evaluation Report and lease stipulations.

2. Hazards:

a. Land Stability: Adequate for the proposed project.

Information Source: Field observation.

- b. Subsidence. not likely to be a significant problem.

Information Source: Field observation.

- c. Seismicity: The location is in an area of moderate seismic risk.

Information Source: Geologic Atlas of the Rocky Mountain Region, 1972, "Earthquakes of Record and Interpreted Seismicity 1852-1969", Rocky Mountain Association of Geologists.

- d. High Pressure Zones/Blowout Prevention: No abnormal pressure of temperatures are anticipated. BOP equipment is described in the APD.

Information Source: APD

B. Soils:

1. Soil Character: The soil is a sandy clay with sandstone and shale gravels.

Information Source: Field observation.

2. Erosion/Sedimentation: Due to limited rainfall in the area the nonperennial drainages on and adjacent to the pad are unlikely to be severely affected by erosion. Sedimentation impacts are unlikely.

Information Source: Field observation.

- C. Air Quality: The air quality would be temporarily impacted during drilling and construction activities.

Information Source: Field observation.

- D. Noise Levels: The noise levels associated with this project would be elevated during construction and drilling activities.

Information Source: Field observation.

E. Water Resources

1. Hydrologic Character

- a. Surface Waters: The nonperennial drainages at the location flow west to Cliff Creek then this proceeds to the Green River. Cow Wash Reservoir is about one mile from the location.

Information Source: Application for Permit to Drill.

- b. Ground Waters: Fresh water may be encountered in the Uintah formation from the surface to about 2680 feet.

Information Source: Mineral Evaluation Report.

2. Water Quality

a. Surface Waters: Due to the nonperennial nature of the nearby drainages and generally stable soil conditions no significant impacts to surface water quality are likely. The reserve pit will be built in soil cut material to further minimize any potential water quality impacts.

Information Source: Field observation.

b. Ground Waters: 350 feet of surface casing will be installed and sufficient mud materials to maintain mud properties, control lost circulation, and contain blowout will be available at well wellsite.

Information Source. Application for Permit to Drill.

F. Flora and Fauna

1. Endangered and Threatened Species Determination

Based on the BLM comments received from Vernal District, BLM on June 19, 1980, we determine that there would be no effect on endangered and threatened species and/or their critical habitat.

2. Flora: Utah Juniper, sagebrush, shad scale, wildflowers and native grasses.

Information Source. Field observation, Application for Permit to Drill.

3. Fauna: Deer, rabbits, coyotes, antelope, small mammals, domestic grazing animals, and various birds.

Information Source. Application for Permit to Drill.

G. Land Uses

1. General: Grazing prairie dog habitat, and oil and gas development in nearby Red Wash are the major land uses.

Information Source Field observation.

2. Affected Floodplains and/or Wetlands None.

Information Source Field observation.

3. Roadless/Wilderness Area. Not applicable.

Information Source. BLM, Utah Wilderness Area Inventory Map August, 1979.

H. Aesthetics. Some visual impacts would occur. This location is at least one half mile from any major road and the area is seldom frequented by recreationists.

Information Source: Field observation.

I. Socioeconomics The effect of one well is unlikely to have a significant socioeconomic impact. If successful cumulative impacts would be further encouragement of oil and gas development nearby and in areas surrounding the Red Wash field.

Information Source Greg Darlington, Environmental Scientist, USGS.

J. Cultural Resources Determination Based on the BLM comments received from Vernal District BLM on June 19, 1980 we determine that there would be no effect on cultural resources subject to their statement that an archaeological clearance has been received for this location.

Information Source. BLM stipulations letter.

K. Other.

Information Source

L. Adequacy of Restoration Plans. Adequate in the APD and at the onsite. The BLM will be properly contacted at least 24 hours prior to any rehabilitation activities.

Information Source. BLM stipulations letter.

Alternatives to the Proposed Action.

1. Disapproving the proposed action or no action - If the proposed action is denied, no action would occur, the existing environment would remain in its present state the lessee/operator would not realize any return on investments and the public would be denied a potential energy source.
2. Approving the project with the recommended stipulations - Under federal oil and gas leasing provisions, the Geological Survey has a responsibility to approve mineral development if the environmental consequences are not too severe or irreversible. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and Surface Management Agency supervision. Environmental impacts would be significantly mitigated.
3. Other -

Adverse Environmental Effects:

1. If approved as proposed:
 - a. About 2.9 acres of vegetation would be removed, increasing and accelerating erosion potential.
 - b. Pollution of groundwater systems could occur with the introduction of drilling fluids into the aquifer(s). The potential for interaquifer leakage and lost circulation is ever-present, depending on the casing program.

- c. Minor air pollution would be induced on a temporary basis due to exhaust emissions from rig engines and support traffic.
- d. The potential for fires, leaks, spills of gas and oil or water exists.
- e. During construction and drilling phases of the operation, noise and dust levels would increase.
- f. Distractions from aesthetics during the lifetime of the project would exist.
- g. Erosion from the site would eventually be carried as sediment in the Green River. The potential for pollution to Green River would exist through leaks and spills.
- h. If hydrocarbons would be discovered and produced, further development of the area could be expected to occur, which would result in the extraction of irreplaceable resource, and further negative environmental impacts. These impacts include the cumulative loss of wildlife habitat due to the areas necessary for roads, pipelines, drillsites, and transmission lines. These actions may disrupt wildlife social behavior and force habitat relocation over an extended period of time. In addition, the cumulative effects of non-point erosion become substantial in a developing field, primarily those located near perennial streams where siltation and sedimentation are critical to aquatic life cycles.
- i. Other:

2. Conditional Approval:

- a. All adverse impacts described in section one above would occur.

Recommended Approval Conditions

Drilling should be allowed, provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator.

- 1. See attached Lease Stipulations.
- 2. See attached BLM Stipulations.
- 3. The Area Mining Supervisor requests resistivity, density, Gamma-ray or other appropriate electric logs covering all formations containing potentially valuable minerals subject to the Mineral Leasing Act of 1920.

Controversial Issues and Conservation Division Response:

None Present.

We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

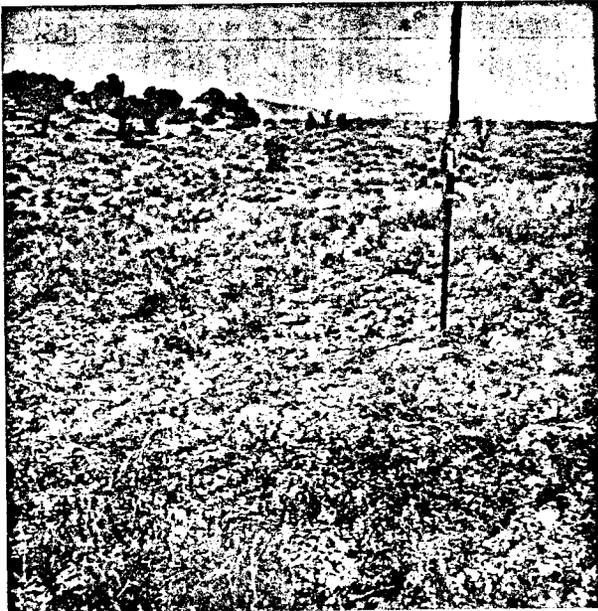
Determination:

I determine that the proposed action (as modified by the recommended approval conditions) does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, Section 102 (2)(C).

E. W. Luyman
Signature & Title of Approving Official

DISTRICT ENGINEER

JUL 15 1980
Date



Northeast View of Pad
Top soil stockpile at edge of the
Cedars. Davis-Susan Grace 1
6-17



Northwest Toward Stake 3
From stake 7
Davis Susan Grace #1
6-17

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 DAVIS OIL COMPANY

3. ADDRESS OF OPERATOR
 410 Seventeenth St., Suite 1400, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface SE SE Sec. 34-T6S-R24E

At proposed prod. zone 652' FSL & 500' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 25 miles Northwest to Vernal, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 660' FSL

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 NONE

16. NO. OF ACRES IN LEASE

19. PROPOSED DEPTH
 5600'

17. NO. OF ACRES ASSIGNED TO THIS WELL

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5500' GR est & 5512' KB est

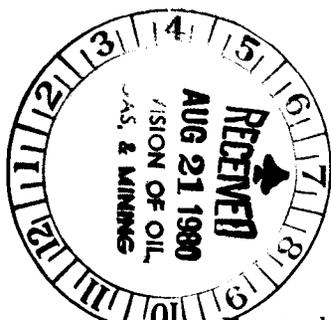
22. APPROX. DATE WORK WILL START*
 Upon approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#, K55,	STC, New	0 to 350' 300 sxs. est.
7 7/8"	5 1/2"	15.5#, K55,	LTC, New	0 to 5600' 250 sxs. est.

(SEE TEN POINT PROGRAM)

State of Utah, Department of Natural Resources
 Division of Oil, Gas, and Mining
 1588 West North Temple
 Salt Lake City, Utah 84116



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM. If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Ed Lafaye TITLE Chief Geologist DATE 4-22-80

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
 APPROVED BY [Signature] TITLE _____ DATE AUG 20 1980
 CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

NOTICE OF APPROVAL

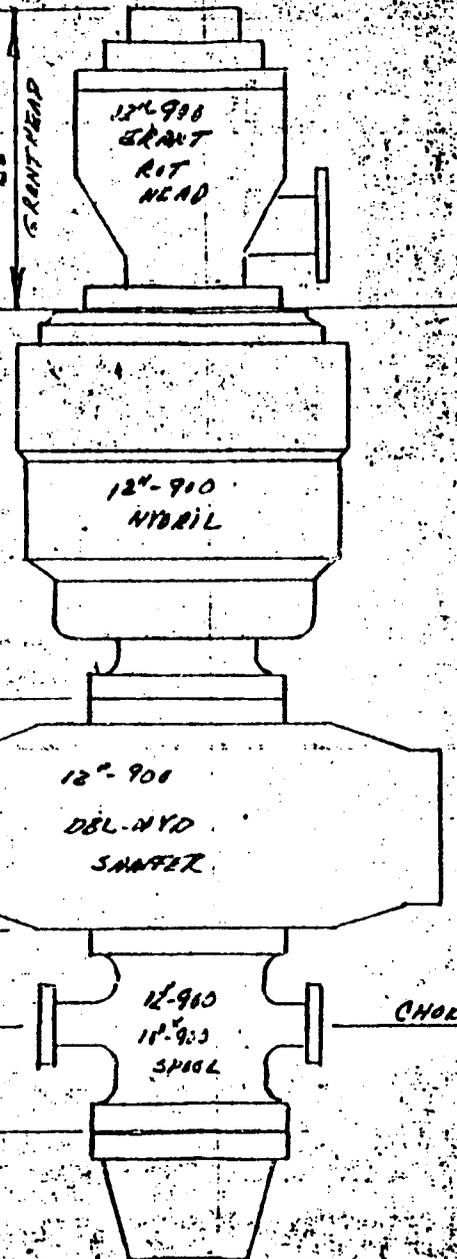
FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

Ut. State O & G

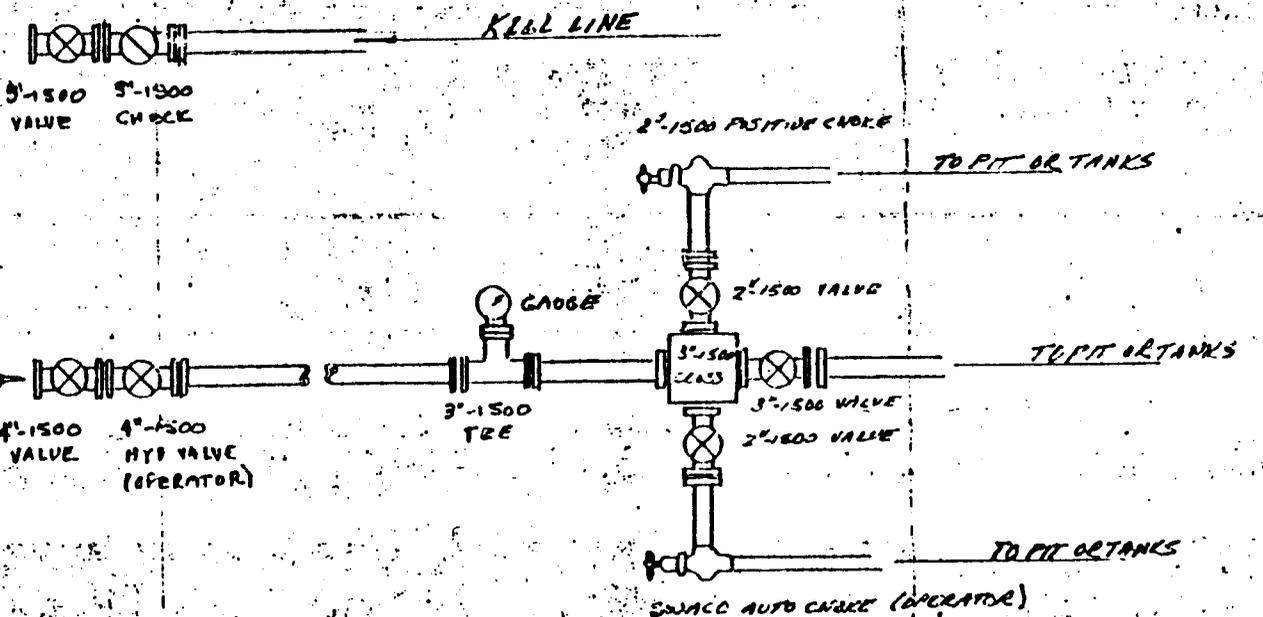
DUPLICATE COPY

BOTTOM ROTARY TABLE

B.O.P. STACK & CHOKE MANIFOLD
 SCALE 1/2" = 1'-0"
 6-4-75 R.C.T.



DUE TO SUB HEIGHT
 50" SPACED SPOOL
 REQUIRED



ATCO
 DRILLING
 RIG 20

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: Davis Oil Company

WELL NAME: Susan Grace Federal #1

SECTION 34 SE SE TOWNSHIP 6S RANGE 24E COUNTY Uintah

DRILLING CONTRACTOR _____

RIG # _____

SPUDDED: DATE 8/28/80

TIME 2:35 p.m.

How dry hole spudder

DRILLING WILL COMMENCE ASAP

REPORTED BY Dave Banko

TELEPHONE # 307-382-2862

DATE August 29, 1980

SIGNED *M. J. M.*

cc: USGS

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other

2. NAME OF OPERATOR
DAVIS OIL COMPANY

3. ADDRESS OF OPERATOR
410 17th St. Suite 1400 Denver, Colo. 80202

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) 652' FSL & 500' FEL
AT SURFACE: SE-SE Sec. 34 T6S R24E
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>
(other) Spud <input type="checkbox"/>	<input type="checkbox"/>

5. LEASE U-12399
6. IF INDIAN, ALLOTTEE OR TRIBE NAME -----
7. UNIT AGREEMENT NAME -----
8. FARM OR LEASE NAME Susan Grace Federal
9. WELL NO. #1
10. FIELD OR WILDCAT NAME Wildcat
11. SEC., T., R., M. OR BLK. AND SURVEY OR AREA Sec. 34 T6S R24E
12. COUNTY OR PARISH Uintah
13. STATE Utah
14. API NO.
15. ELEVATIONS (SHOW DF, KDB, AND WD) 5505' GR

(NOTE: Report results of multiple completions or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilling operations commenced per verbal instructions and approval of Martins
U.S.G.S., Salt Lake City District.

Well spudded 8-28-80; 2:35 P.M. M.D.T.

Drilled 40' depth 24" diameter hole
Cased with 40' 21" diameter conductor pipe.
Cemented to surface with 4 yards of 8 sack-per-yard concrete grout
Dryhole rig moved off 8-28-80.

Rotary rig will be moved on and drilling operations continued as soon as rotary rig becomes available.

Subsurface Safety Valve: Manu. and Type _____

18. I hereby certify that the foregoing is true and correct

SIGNED B. B. Porter TITLE Superintendent DATE 8-28-80
District

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other

2. NAME OF OPERATOR
Davis Oil Company

3. ADDRESS OF OPERATOR
410 17th Street Suite 1400, Denver, Col. 80202

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) SESE SEC. 34 T65 R24 E
AT SURFACE: 652 FSL & 500 FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U 12399

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Susan Grace Federal

9. WELL NO.
#1

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M. OR BLK. AND SURVEY OR AREA
Section 34 T65 R24 E

12. COUNTY OR PARISH, 13. STATE
Utah Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5500' Gr est. @ 5510' KDB est.

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other)	<input checked="" type="checkbox"/>	<u>Enlarge reserve Pit</u>	

(NOTE: Report results of multiple completions in one zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface location, and measured and true vertical depths for all markers and zones pertinent to this work.)*

Enlarge reserve pit by 20' x 60' x 5' on the east end.

Subsurface Safety Valve: Manu. and Type _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED B.R. Porter TITLE Dist. Supt. DATE 11/1/80

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

A F F I D A V I T

STATE OF WYOMING)

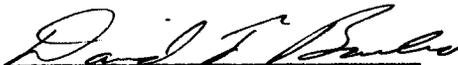
COUNTY OF SWEETWATER)

I, David F. Banko, Permit Supervisor of DAVIS OIL COMPANY, being duly sworn deposes and says:

RE: The Susan Grace Federal #1 well located in SE-SE Section 34 Township 6S, Range 24E, Uintah County, Utah, Federal Lease No. U-12399.

Drilling operations were commenced at 2:35 P.M. (M.D.T.) August 28, 1980. A 24" diameter hole 40' diameter depth was drilled and 40' of 21" diameter conductor pipe was set and cemented to surface with 4 yards of 8 sack-per-yard, ready-mix grout.

DAVIS OIL COMPANY



David F. Banko
Permit Supervisor

Subscribe and sworn to before me this 29th day of August, 1980.


Notary Public

My commission expires May 5, 1984.

DFB:jw

DAVIS OIL COMPANY

-3-

STATUS OF DRILLING AND COMPLETING WELLS
SEPTEMBER 29, 1980 6:00 A.M.

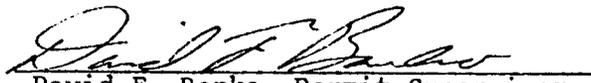
SALT LAKE CITY DISTRICT - U.S.G.S.

Matthew Federal #1 - Fed. Lse #U-44014
SE-SE Sec. 4 T26S R20E
Grand Co., Utah
Present Operation - Waiting on government approval.

Susan Grace Federal #1 - Fed. Lse #U-12399
SE-SE Sec. 34 T6S R24E
Uintah Co., Utah
Total Depth: 40' Set 40' 21" conductor pipe 8-28-80.
Present Operation - Waiting on rotary rig - Brinkerhoff Rig #12

THERMOPOLIS DISTRICT - U.S.G.S.

Okaloosa Federal #1 - Fed. Lse #W-41324
SW-SE Sec. 10 T47N R93W
Washakie Co., Wyoming
Present Operation - Rigging up rotary tools - Republic Rig #5.


David F. Banko, Permit Supervisor

DFB:jw

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

5. LEASE DESIGNATION AND SERIAL NO.
Fed

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Susan Grace

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
34 T6S R24E

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other Dry

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR
Davis Oil Company

3. ADDRESS OF OPERATOR

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface SE SE 34 T6S R24E
At top prod. interval reported below 652 FSL & 500' FEL
At total depth 6004

14. PERMIT NO. U 12399
DATE ISSUED 5-20-80

12. COUNTY OR PARISH Uintah
13. STATE Utah

15. DATE SPUDDED 8-28-80
16. DATE T.D. REACHED 11-14-80
17. DATE COMPL. (Ready to prod.) 11-18-80
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 55006R
19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD
21. PLUG, BACK T.D., MD & TVD
22. IF MULTIPLE COMPL., HOW MANY*
23. INTERVALS DRILLED BY 6004
ROTARY TOOLS
CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN
talked with michelle 1-9-80, she will send logs immed.
27. WAS WELL CORRED

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8	36	368	12 1/4	205 class H	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
		P & A

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED BR Porter TITLE Dist Supt DATE 11/19/80

(See Instructions and Spaces for Additional Data on Reverse Side)

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other Dry

2. NAME OF OPERATOR
Davis Oil Company

3. ADDRESS OF OPERATOR
410 Seventeenth Street Suite 1400 Denver

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: SE SE 34 T6S R24E
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH: 652' FSL & 500' FEL

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input checked="" type="checkbox"/>		<input type="checkbox"/>
(other)			

5. LEASE Fed

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Susan Grace Fed.

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 34 T6S R24E

12. COUNTY OR PARISH | 13. STATE
Uintah | Utah

14. API NO.
U - 12399

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5506R

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Total Depth 6004 P.A.

1st plug 5500 80sks
2nd plug 4500 60sks
3rd plug 2750 80sks
4th plug 400 60sks
5th plug surface 10sks
10:00 P.M. 11-18-80

**APPROVED BY THE DIVISION
OF OIL, GAS, AND MINING**

DATE: 12/11/80

BY: *CB Feigher*

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED *BRG Potter* TITLE *Dist Supt* DATE *11/19/80*

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

DAVIS OIL COMPANY
Susan Grace Federal #1
Section 34, T6S, R24E
Uintah County, Utah

Eric C. Sandin, Geologist
GS Consultants

TABLE OF CONTENTS

	<u>PAGE</u>
Resume	1
Summary and Conclusions.	3
Formation Tops	5
Daily Chronology	6
Bit Record	8
Mud Record	9
Sidewall Cores	10
Drill Stem Tests	12
Schlumberger Log Strips.	14
Lithology.	18

RESUME

OPERATOR: DAVIS OIL COMPANY
WELL NAME & NUMBER: Susan Grace Federal #1
LOCATION: Section 34, T6S, R24E
COUNTY: Uintah
STATE: Utah
SPUD DATE: October 24, 1980
COMPLETION DATE (TD): November 9, 1980
ELEVATIONS: 5,500' GL 5,512' KB
TOTAL DEPTH: 6,006' Logger 6,006' Driller
CONTRACTOR: Brinkerhoff Signal
RIG: #12
PUMPS: 8 x 5-1/2 Triple
16 x 5 Double
GEOLOGIST: Eric C. Sandin
ENGINEER: Reed Boyles, Pete Heddleson
TOOL PUSHER: Bob Blanchard
TYPE DRILLING MUD: Low solids, non-dispersed
MUD COMPANY: Magco-bar
MUD ENGINEER: Mark Chryson
HOLE SIZES: 12-1/4" sfc - 369'
8-3/4" 369 - 6,000'
CASING: 9-5/8" sfc-369' on October 26, 1980
MUD LOGGING BY: Xpert Logging
TYPE UNIT: 1-man conventional
CORE INTERVALS: Sidewall cores (See Page 10)

RESUME (Cont.)

DST DEPTHS: DST #1 - 5,590' - 5,629' misrun
DST #2 - 5,584' - 6,004'

DST COMPANY: Johnston - Schlumberger

ELECTRIC LOGS BY: Schlumberger

TYPE LOGS RUN: DIL-GR 369' - 5,575'
(With Depths) FDC-CNL-GR 4,250' - 5,575'
BHC-GR 369' - 5,575'
DIPMETER 369' - 5,575'
DIL-GR 5,442' - 6,006'
FDC-CNL-GR 5,442' - 6,006'

LOGGING ENGINEER: Steve White

BOTTOM FORMATION: Wasatch

WELL STATUS: Plugged and abandoned.

SUMMARY AND CONCLUSIONS

The Susan Grace Federal #1 was spudded on October 24, 1980. A 12-1/4" hole was drilled to 369' on October 25th. Casing was set and an 8-3/4" hole was drilled to 6,000' on November 13th.

The primary objective was the Douglas Creek Member of the Green River Formation. After running electric logs at the contracted Total Depth of 5,600', it was apparent that extensive thickening of the Green River section had occurred and the hole was completed to 6,000'.

GREEN RIVER FORMATION

The Green River Formation was penetrated at a depth of 2,666'. Shortly after, from 2,688' - 2,691' and 2,700' - 2,720', a tar sand was drilled. The sand was expected and does not produce in the area. A sand was penetrated from 4,270' - 4,280'. This yielded a trace of oil stain in the samples. Sidewall cores taken at 4,274' and 4,280' yielded very fine grained sandstone with excellent porosity, but no trace of hydrocarbons.

A large sandy section was drilled from 4,540' to 4,670'. A 2' drill break at 4,550' produced a 15 unit total gas increase and an excellent show in the samples. The sands below did not yield any added gas or hydrocarbons. Sidewall cores were taken at: 4,554', 4,562', 4,563', 4,566', 4,570', 4,574', 4,580', 4,582', 4,591', and 4,593'. All had no trace of hydrocarbons.

The Garden Gulch Member came in at 4,830' which was a thickening of 576' over the same Green River interval in the Prince #3.

A sandstone bed was drilled from 5,606' to 5,626'. No gas or oil was observed during drilling and sidewall cores (5,589', 5,610', 5,614', 5,621'), had no trace of hydrocarbons. It was decided to test the zone after electric logs showed excellent porosity (18%) and anonymously high resistivities (>3.0).

An attempt to straddle test the zone did not succeed as the hole was too large below it to seat the bottom packer. A test was run off bottom from 5,584' to 6,004'. This yielded 4,890' of slightly mud cut water with a resistivity of 3.25 in the M.F.E. sampler. No trace of oil or gas was observed.

WASATCH FORMATION

The Wasatch Formation was penetrated at a depth of 5,866'. Gross lithological difference was not found between the Wasatch and the Green River, although a gradual increase in red colored siltstones and shales was observed. The top pick is based on the

SUMMARY AND CONCLUSIONS (Cont.)

expected interval between the Garden Gulch Mbr. and the Wasatch as interpreted from the Prince #3 and after comparison of the electric logs.

SUMMARY

No producible zones were found either during drilling or through sidewall coring and drill stem testing. The decision was made on November 16, 1980 to plug and abandon the well.

FORMATION TOPS

All formation tops are from E-logs.

Prince Government #3	GL 5,548'	KB 5,560'
Susan Grace Federal #1	GL 5,500'	KB 5,512'

<u>FORMATION</u>	<u>PRINCE</u>		<u>SUSAN GRACE</u>	
	<u>TOP</u>	<u>SUBSEA</u>	<u>TOP</u>	<u>SUBSEA</u>
Uintah	Surface		Surface	
Green River	2,804	(2,756)	2,666	(2,846)
Garden Gulch Mbr.	4,392	(1,168)	4,830	(682)
Wasatch	5,394	(166)	5,866	(- 354)
Total Depth	5,548	(- 12)	6,006	(- 488)

DAILY CHRONOLOGY

<u>1980 DATE</u>	<u>DEPTH @ 12:01AM</u>	<u>OPERATION</u>	<u>REMARKS</u>
10/21			Rig arrives Vernal, Utah.
10/22			Rig up.
10/23			Rig up.
10/24			Rig up. Spud at 1950 hrs.
10/25	130	Drilling	Run casing 1300-1445 hrs at 369'.
10/26	369	Wait on Cement	Nipple up, test BOP's, drill cement.
10/27	369	Drilling Cement	0100 hrs resume drlg w/Bit #2, trip 2145 to 2359 hrs for Bit #3.
10/28	1,305	Drilling	Trip 1245 to 1830 hrs for Bit #4.
10/29	2,086	Drilling	Trip 0045 to 0300 hrs for Bit #5, trip 1300 to 1500 for hole in pipe.
10/30	2,579	Drilling	Trip 1030 to 1430 for Bit #6.
10/31	2,866	Drilling	
11/1	3,205	Drilling	Trip 2250-0245 11-2 for Bit #7.
11/2	3,520	Tripping	Resume drilling 0245 hrs.
11/3	3,916	Drilling	1200-1345 repair survey line
11/4	4,273	Drilling	Trip 0830-1330 hole in pipe, trip 1330-1830 hole in drill collar, resume drilling 1830 with Bit #8.
11/5	4,407	Drilling	
11/6	4,641	Drilling	
11/7	4,910	Drilling	Trip 1800-2300 for Bit #9.
11/8	5,095	Drilling	

DAILY CHRONOLOGY (Cont.)

<u>1980 DATE</u>	<u>DEPTH @ 12:01AM</u>	<u>OPERATION</u>	<u>REMARKS</u>
11/9	5,461	Drilling	TD 5,600' @ 1220 hrs, run wireline logs at 2200 hrs.
11/10	5,600	Logging	Trip in hole 1200-2400, circulate and wait on orders.
11/11	5,600	W.O.O.	Trip 1330-2230 for bit R.R.#9.
11/12	5,619	Drilling	
11/13	5,827	Drilling	TD 6,000' @ 2130 hrs.
11/14	6,000	Tripping	Trip for E-logs, logging from 0630 to 1300 hrs.
11/15	6,000	W.O. Testers	Test (misrun) 0130-1300, 1300-1830 trip in w/bit, circ. & cond. hole, trip out 1830 hrs.
11/16	6,000	Rig up 2nd test	Test to 2100 hrs, wait on orders.

BIT RECORD

<u>BIT #</u>	<u>SIZE</u>	<u>MAKE</u>	<u>TYPE</u>	<u>DEPTH OUT</u>	<u>FOOTAGE</u>	<u>HOURS</u>
1	12-1/4	STC	DSJ	369	329	12-1/2
2	8-3/4	STC	DSJ	1,305	936	16-1/2
3	8-3/4	HTC	DSC-3A	1,841	536	10-1/2
4	8-3/4	SEC	54T	2,105	264	7-1/2
5	8-3/4	HTC	J11	2,703	598	26-1/2
6	8-3/4	SEC	2-84F	3,520	817	49-3/4
7	8-3/4	REED	H551-J	4,366	846	46-1/4
8	8-3/4	REED	H551	5,090	724	64-1/2
9	8-3/4	STC	F-2	5,600	510	34-3/4

MUD RECORD

MUDDER UP AT 6:30 A.M ON 10-25-80

DATE	DEPTH	WT.	F.VIS.	P.VIS.	YIELD	GEL STRNT	PH	FILTR	CK.	ALKA.	SALT	CHLO	CALCIUM	GYP / SAND	SOLID / % WTR.	CUM. COST
10/25	358	8.9	44	15	20	12/25	10.1	n/c	n/c	1.4	X	500	20	1/2	4 1/4 / 95	1085
10/26	369				clear	water		no check								
10/27	838	8.8	26	-	-	-	10	n/c	n/c	0.8	X	600	100	trace	3 / 97	2295
10/28	1690	8.7	27	-	-	-	9.5	n/c	n/c	0.5	X	600	40	1/2	2 1/4 / 97 3/4	2500
10/29	2272	8.9	29	-	-	-	9.0	n/c	n/c	1.0	X	400	trace	1/2	4 1/4 / 95	2880
10/30	2680	8.8+	31	1	4	0%	10.0	32	2	0.9	X	400	tr	1/2	4 1/4 / 95	4265
10/31	2970	8.7	35	5	5	0%	9.0	15	2	0.5	X	400	tr	1/2	2 3/4 / 97	5005
11/1	3350	8.8	35	6	12	0/5	10.0	13	2	1.0	X	400	tr	1/2	3 1/2 / 96	6550
11/2	3661	8.7	39	10	20	2/1	10.5	10.0	2	1.2	X	500	tr	3/4	3 / 97	8420
11/3	4120	9.0	38	17	5	2/8	10.0	8.4	2	1.3	X	400	tr	1/2	4 / 95	9715
11/4	4366	9.1	43	12	17	2/17	10.0	9.0	2	1.5	X	400	tr	1/4	6 / 94 1/4	10,830
11/5	4480	9.1+	43	13	26	3/18	10.5	9.0	2	1.6	X	400	tr	1/2	5 3/4 / 94 1/4	11,515
11/6	4711	9.1+	42	10	25	3/10	10.5	8.0	2	1.2	X	400	tr	1/2	5 3/4 / 94 1/4	13,095
11/7	5010	9.1+	52	15	30	2/7	10.0	8.4	2	1.0	X	400	tr	1/2	5 3/4 / 94 1/4	15,125
11/8	5255	9.1+	43	15	20	2/7	9.5	7.2	2	1.2	X	400	tr	1/2	5 3/4 / 94 1/4	16,300
11/9	5590	9.2	58	20	30	2/19	10.5	7.5	2	1.0	X	400	tr	1/4	6 1/2 / 93 1/2	17,560
11/10	5600					no check					X					17,195
11/11	5600	9.2	40	16	3	2/5	8.5	10.4	2/32	0.5	X	400	80	1/4	6 1/2 / 93 1/2	17,560
11/12	5741	9.2	52	25	10	3/6	9.0	8.4	2/32	1.0	X	700	80	1/4	6 1/2 / 93 1/2	17,799
11/13	6000					no check										
11/14	6000					no check										
11/15	6000	9.1	46	21	4	2/6	9.5	8.4	2/32	1.5	X	700	80	n/c	5.6 / 94.4	21,157

SIDEWALL CORES

<u>DEPTH</u>	<u>DESCRIPTION (Hand Specimen & Microscope Description)</u>
5,621.5	HS: light gray, soft, no oil stain or odor. MICRO: SANDSTONE - white to slightly salt & pepper, very fine to medium grained, soft, subang-subround, poor sorting, no cementing, excellent porosity, no oil stain, cut or fluorescence.
5,614.1	HS: light gray, firm, no stain or odor. MICRO: SANDSTONE - white to light gray, soft, very fine to fine grained, silty, slightly calcareous, excellent porosity, no oil stain.
5,610.2	HS: light gray, firm, clay texture, no stain. MICRO: SILTSTONE - white to light gray, bordering on very fine sandstone, tight, no to poor visual porosity, good sorting.
5,589	HS: light gray, firm, clay texture, no stain. MICRO: SANDSTONE - white to light gray, salt & pepper, very silty and shaly, dense, poor sorting, no visible porosity, very slightly calcareous.
4,593.3	HS: light to medium gray, firm, crumbly, no stain. MICRO: SANDSTONE - white to light gray, very fine grained, grading to siltstone, firm, no to poor porosity, very calcareous.
4,591	HS: medium gray, soft, no stain or oil odor. MICRO: SANDSTONE - light gray, very fine grained, soft, good sorting, good porosity, subang-subround, no cementation, moderately calcareous.
4,582.9	HS: medium gray, soft, clayey. MICRO: SANDSTONE - light gray to slightly salt and pepper, soft, very shaley, no to poor porosity.
4,580.2	HS: light graybrown, soft, crumbly. MICRO: SANDSTONE - light graybrown, soft, very fine grained, grading to siltstone, fair to good porosity, good sorting, no cementing, subang to subround, no stain or oil fluorescence.
4,574.3	HS: light gray, firm, crumbly, no oil stain or odor. MICRO: SANDSTONE - white to light gray, very fine to fine, subang to subround, non argillaceous, good to excellent porosity, slightly calcareous, no oil presence.
4,570.7	HS: medium gray, firm, crumbly to clayey. MICRO: SANDSTONE - white to gray, salt & pepper, bordering on siltstone size, shaley, silty, no to poor visible porosity.

SIDEWALL CORES (Cont.)

<u>DEPTH</u>	<u>DESCRIPTION (Hand Specimen & Microscope Description)</u>
4,566.2	HS: Gray brown, firm, crumbly to clayey. MICRO: SANDSTONE - light gray brown to mottled gray, very fine grained, silty, good porosity, no oil presence.
4,563.4	HS: medium gray, firm, crumbly to clayey, no oil stain. MICRO: SANDSTONE - mottled white to gray to brown, soft, very fine, excellent porosity, silty, slightly calcareous, no oil presence.
4,562.5	HS: light gray, soft, blocky. MICRO: SANDSTONE - white, very fine, soft, good sorting, excellent porosity, slightly calcareous, grading to siltstone, no oil presence.
4,554.8	HS: light gray, crumbly. MICRO: SANDSTONE - white, firm, very fine grained, good sorting, excellent porosity, no oil stain, cut or fluorescence.
4,280	HS: light gray, firm, clayey to crumbly texture. MICRO: SANDSTONE - white to light gray, very fine, good sorting, slightly calcareous, excellent porosity, possible patchy black tar in sand, no fluorescence, no cut.
4,273.9	HS: light gray, firm, blocky to clayey texture. MICRO: SANDSTONE - light gray to patchy brown, soft, very fine grained, good sorting, slightly calcareous, excellent porosity, trace patchy red brown stain (iron oxide), no fluorescence or cut.

DRILL STEM TEST #1

Formation: Green River
Interval: 5,590' to 5,629'
Reason for Test: Sand with excellent porosity and high resistivity shown on electric logs.
Type Test: Inflate - Straddle
Testing Company: Johnston - Schlumberger
Tester: Eugene Torgenson
Water Cushion: None
Remarks: Test was a misrun, could not seat bottom packer.

DRILL STEM TEST #2

Formation: Green River - Wasatch
Interval: 5,584' to 6,004'
Reason for Test: Anonymously high resistivity shown on electric logs.
Type Test: Inflate - Off Bottom
Testing Company: Johnston - Schlumberger
Tester: Eugene Torgenson
Water Cushion: None
IF 5 Minutes: Opened with 24" blow, increased to 36".
ISI 60 Minutes: Blow died quickly.
FF 120 Minutes: Opened with 17" blow, increased to 40" blow after 5 minutes. Stayed constant for 20 minutes then gradually decreased to final blow reading of 14".
FSI 240 Minutes: Blow died quickly.

DRILL STEM TEST #2 (Cont.)

Recovery: 4,890' of water slightly cut with mud.

Bottom Hole Sampler: Pressure: Failed Recovery: 2,475 cc water

Resistivity Data: Drill pipe recovery:

Top: 4.5 @ 52°F 250 PPM Cl
Middle: 3.5 @ 62°F 450 PPM Cl
Bottom: 3.2 @ 62°F 500 PPM Cl
Sampler: 3.25 @ 62°F 450 PPM Cl
Mud Pit: 2.55 @ 62°F

	<u>Top Chart</u>	<u>Bottom Chart</u>
Pressures:	IH: 2,672	IH: 2,708
	IF: 2,040	IF: 3,346
	ISI: 476	ISI: 559
	FF: 2,343	FF: 2,341
	FSI: 599	FSI: 632
	FH: 2,701	FH: 2,689

Top Choke: 1/4" Bottom Choke: None

Bottom Hole Temperature: 102°F

AMMA
RAY

SP

DUAL INDUCTION
SFL-E

SFLA

RELD

Amp SFLA

CILD

4500

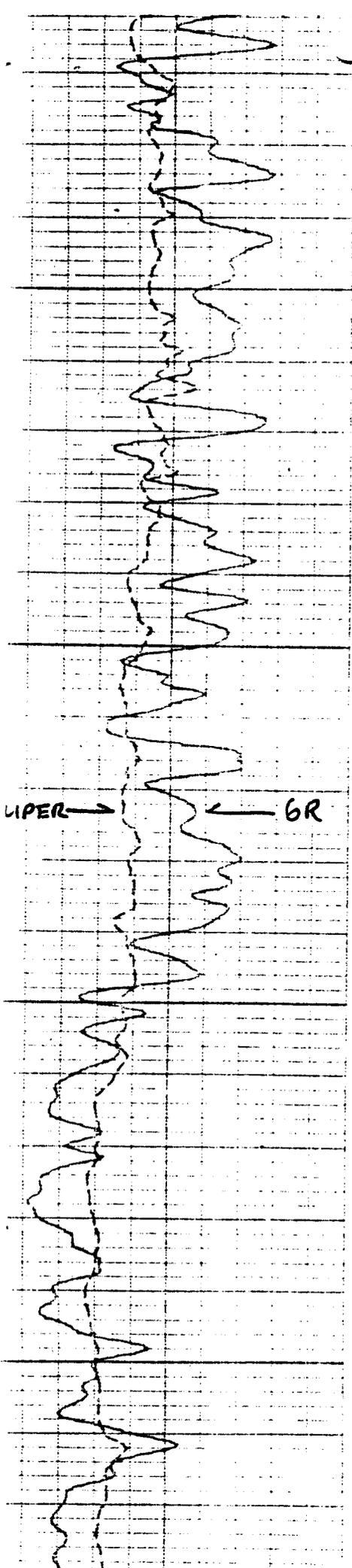
4600

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DOUGLAS
BEEK
1/9/52



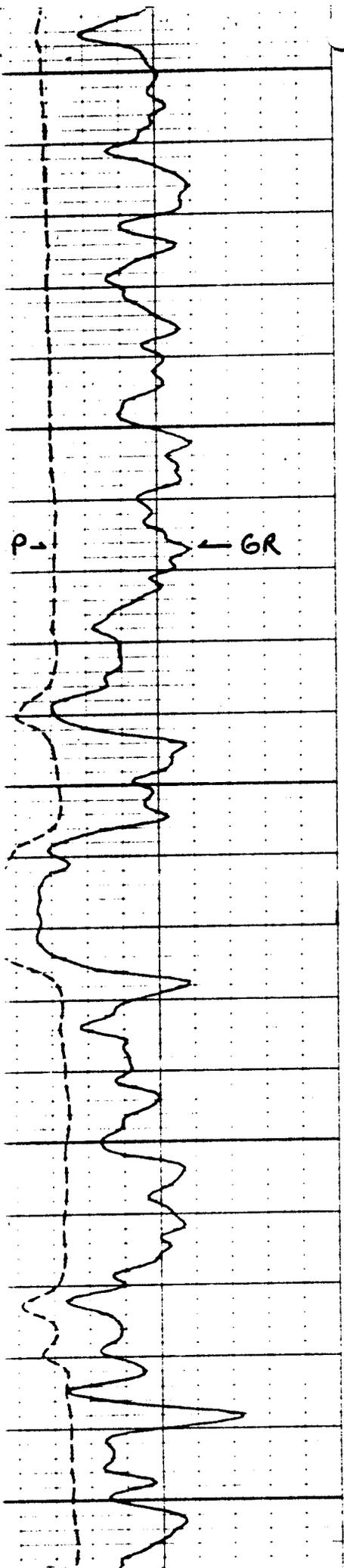
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COMPENSATED NEUTRON-
FORMATION DENSITY

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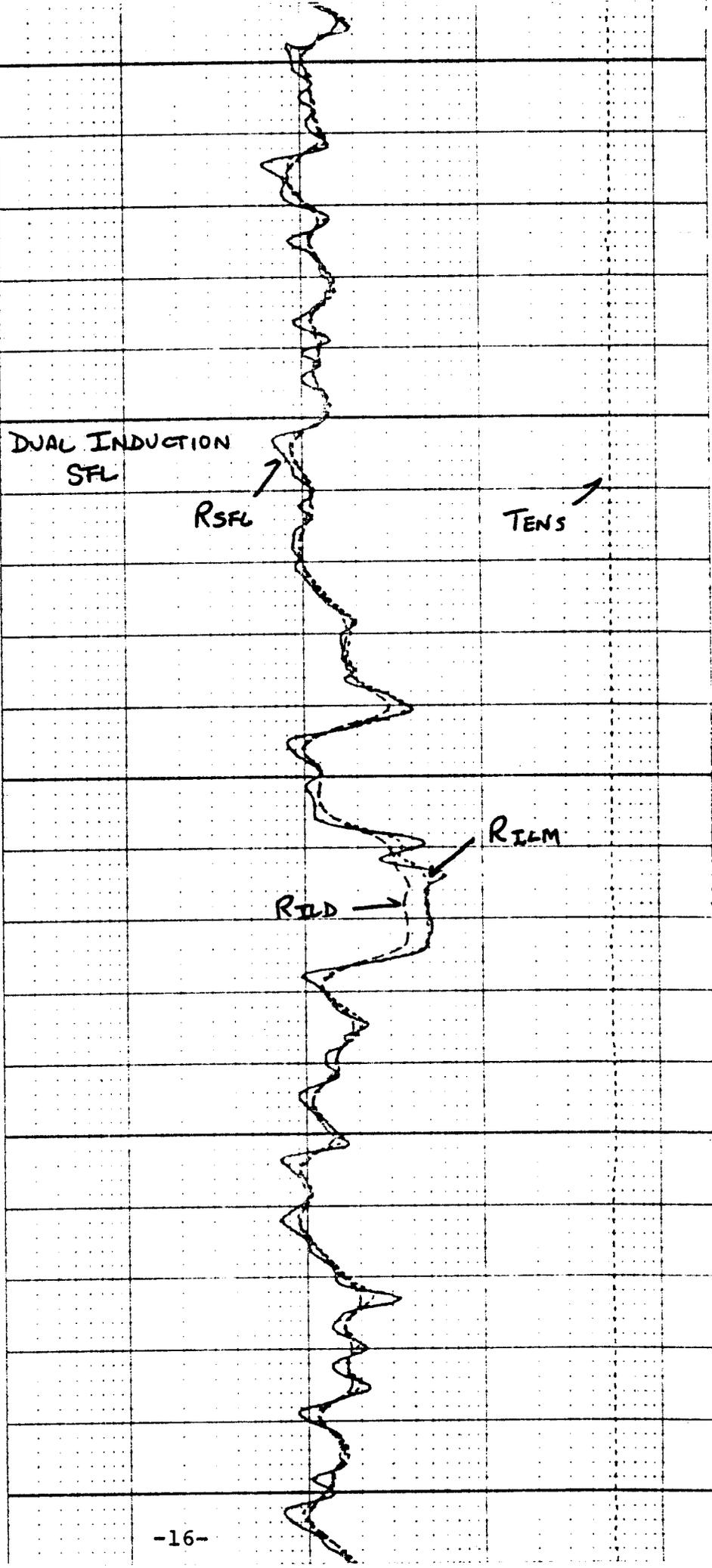


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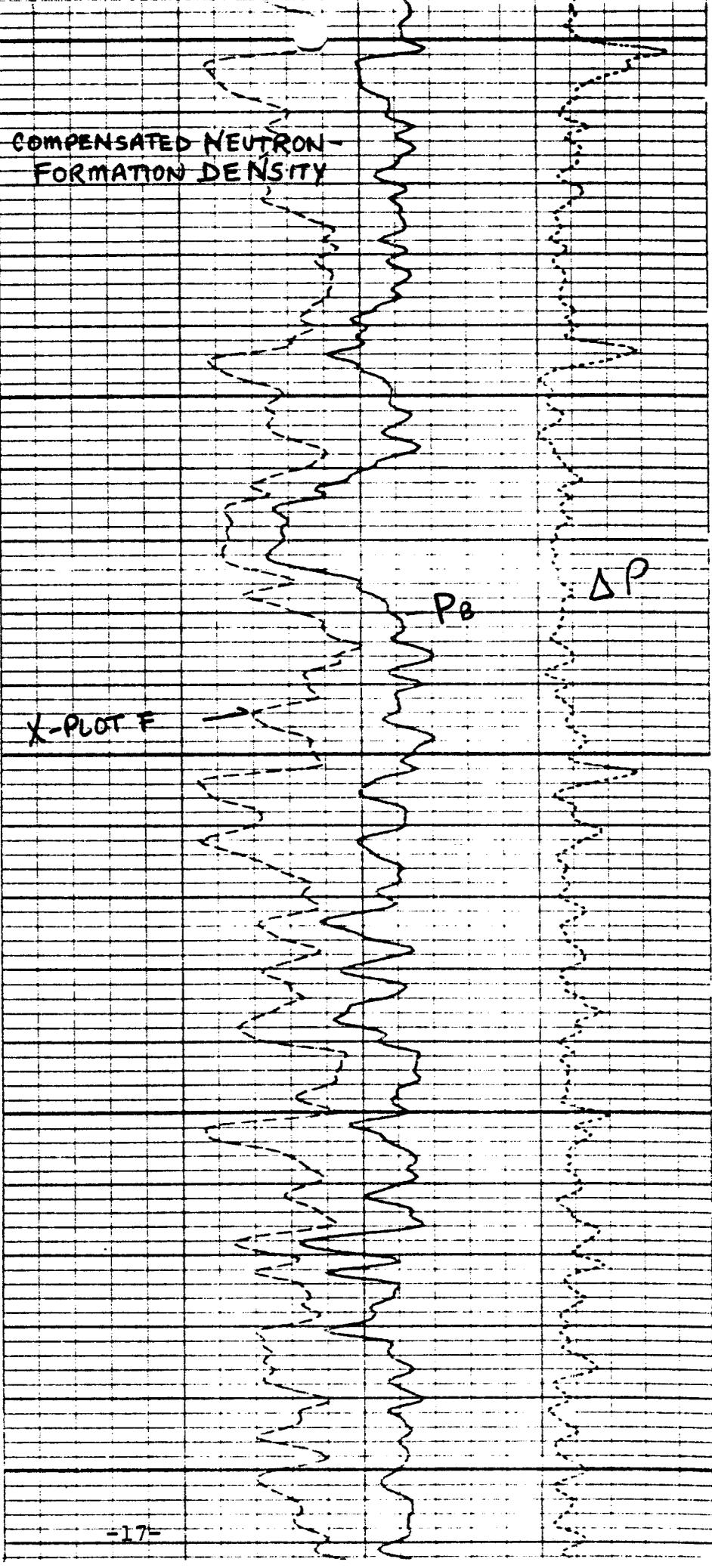
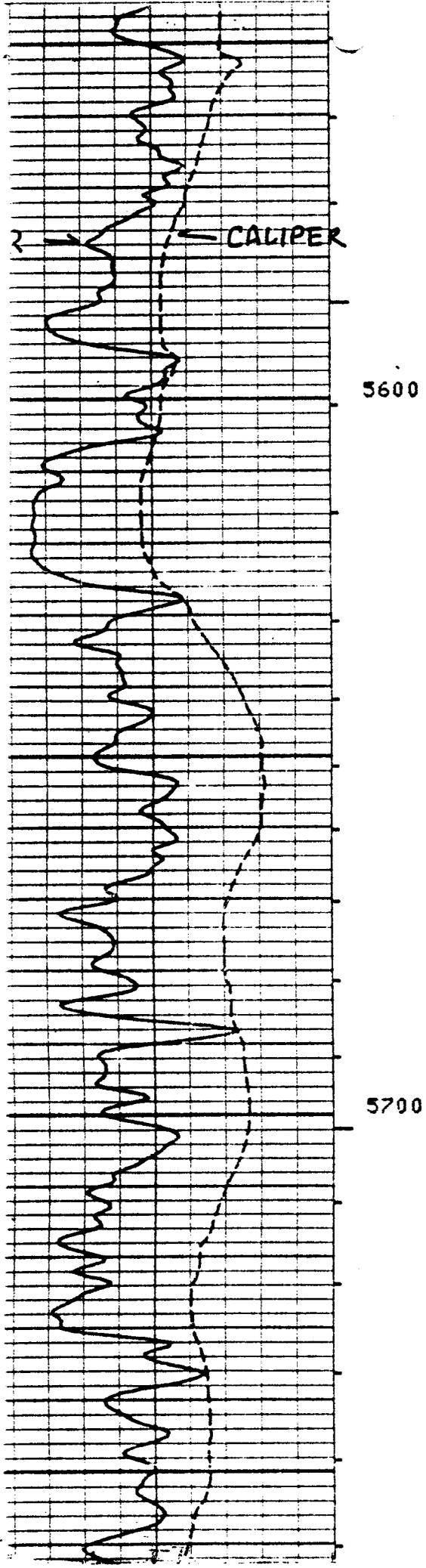
DUAL INDUCTION
SFL

RSFL

TENS

RILM

RFD



LITHOLOGY

- 369 - 410 SHALE - mot tan - lt yelbrn - lt redbrn, sft, blk, com w/scat vf qtz grns.
SANDSTONE - lt gy, sft, vf, sbang-sbrd, v arg matrix, v calc, n Ø.
SILTSTONE - tan, lt yelbrn, lt redbrn, grdng to SH -a/a.
- 410 - 530 SANDSTONE - trace, lse, rd, m-sce grns, also lt yel-clr, m grns, w rd, p srted.
SHALE - redbrn, sft, blk, calc, n fis, n-sl slty.
SILTSTONE - mot yel-redbrn, sft, blk, calc.
- 530 - 620 SANDSTONE - wh, sft, f gr, ang-sbrd, p cmt, calc arg matrix, trace lse, cse, rd, occ fros.
SHALE - lt yel, lt org, lav, blk, calc, grdng to SLTST.
SILTSTONE - lt yel, lt gy, lt org, sft, blk, v calc, arg, scat vf qtz grns, occ cse rd qtz grns or shale fragments as inclusions. Trace lignite.
- 620 - 710 SILTSTONE - lt org-lt yel brn, gen a/a.
SHALE - v col a/a, also wh, sft, calc, blk.
- 710 - 830 LIMESTONE - lt gybrn, sft, crpxln, arg, n Ø, w/carbonaceous material, marly appearance.
SILTSTONE - redbrn, v sft, calc, w/f rd col qtz grns.
SANDSTONE - lt gy-wh, f-m gr, sft, v fri, sb rd, calc.
SHALE - redbrn, yelbrn, sft, blk, calc, grdng to SLTST.
DOLOMITE - trace, wh, hd, crpxln, n calc, fnt yel min flor.
- 830 - 1,225 SHALE - mot red-yel-gy-lav, sft, blk to sbwxy, calc, occ slty or sdy.
SILTSTONE - orgrd-rdbrn, sft, blk, shaly, v calc.
SANDSTONE - trace, lt gy, vf, sbrd, v p srted, calc, arg; also lse, cse, sbrd-rd, occ fros.
- 1,225 - 1,350 SHALE - v col, sft, blk, calc, a/a, slty in pt.
SANDSTONE at 1,250', lse, cse, sbrd-rd, cl-yel.
- 1,350 - 1,450 SHALE - dk rdbrn, mot pastels, sft, blk, calc.
SILTSTONE - lt gy, qtzs, sft, v p cmted, calc.
SAND - trace, lse, cse, fros.
- 1,450 - 1,650 SHALE - mot yel-org-rdbrn, gy, sft, blk, calc, occ slty.
- 1,650 - 2,020 SHALE - mot v col a/a, sft-sl frm, blk, calc, occ slty or w/m, rd, sand grains.
SILTSTONE - lt yel-lt rdbrn, gy, qtzs, blk, v calc.
- 2,020 - 2,080 SILTSTONE - lt gy, wh, lt red, lt yel, sl frm, p srted, w/vf-f scat, qtz grns, calc.
SHALE - v col, gen a/a, slty.

LITHOLOGY (Cont.)

- 2,080 - 2,200 SANDSTONE - clr-wh, vf-m, p srted, sbang-sbrd, sl calc matrix, g \emptyset , no stn, cut, or flor.
SILTSTONE - v col, dom orgrd, blk, qtzs, mod calc.
SHALE - v col, sft, sbwxy, calc.
- 2,200 - 2,300 SANDSTONE - vf-cse, dom lse grns, ang-w rd, occ sl wh calc matrix, v p cmtd, p srted, clean, abnt dism-mas pyrite associated w/lt gy-gygn
SHALE, v calc.
SHALE - mot red-yel, lt gy, blk-sbwxy, calc.
- 2,300 - 2,330 SILTSTONE - v col pastels, frm, calc, p srtng, grdng to SH, occ w/sd grns.
SHALE - v col, sft, sbwxy, mod calc.
- 2,330 - 2,385 SANDSTONE - lse, vf-cse, ang-w rd.
- 2,385 - 2,510 SHALE - lt brn, rd, yel, occ gy-gngy, blk-sbwxy, mod-v calc, occ grdng to SLTST.
SILTSTONE - gy, frm-sl hd, mod w cmtd, g srtng, arg, shaly, mod calc, n vis \emptyset , occ v carb.
- 2,510 - 2,560 SANDSTONE - lse, vf-m gr, ang rd; also wh-lt gy, vf-f, v frm, slty, ang-mod rd, p-f srtng, v calc, v tt, n \emptyset , grdng to lt gy, SLTST, trace dism pyrite in sandstone.
- 2,560 - 2,666 SHALE - v col reds, gy, sl-v qtzs, blk, calc.
SILTSTONE - v col reds, gy, blk, calc, trace sandstone, wh-vf, frm, slty, calc.
- GREEN RIVER FORMATION 2,666'
- 2,666 - 2,705 SHALE - v col, gy, gngy, red, pink, sft-blk, sbwxy, calc tr tar globs on SH, n flor, g strng cut.
- 2,705 - 2,735 SANDSTONE - cl-wh, lse, vf-m gr, sbang-w rd, abnt lge, blk, tar droplets, brn-blk stn, v fnt patchy yelgn flor, exc flash cut.
- 2,735 - 2,755 SHALE - gy, gngy, pastels, frm, sbwxy, sl calc.
SILTSTONE - lt gy-gybrn, v frm, sl calc.
- 2,755 - 2,810 SANDSTONE - gen a/a, decr % stn, vf-occ m grn; also s&p, vf, sbang, p cmtd, calc, g srtng, f-g \emptyset , n stn, n flor.
- 2,810 - 2,915 SILTSTONE - wh-brn-gy, v frm, calc, arg.
SHALE - gy-gngy, blk-sbwxy, calc.
SANDSTONE - wh-crl, vf-cse, many lse gr, sbang-w rd, n arg, grdng to Siltstone - wh, v frm, calc.
- 2,915 - 2,990 SHALE - lt gy-gygn, blgn, blk-sbwxy, n-sl calc, also brown, laminated sl calc; interbedded with SANDSTONE - lse, vf-cse, cl-sl col, also vf, frm, fri, arg.

LITHOLOGY (Cont.)

- 2,990 - 3,120 SHALE - blgn, gn, blk, calc; interbedded with SANDSTONE - s&p, vf, sft frm, fri, sbang-rd, p srted, p cmted, calc, g Ø.
- 3,120 - 3,175 SANDSTONE - wh-s&p, vf-m gr, frm, fri, p srted, f-vg Ø, occ w/lt brn o stn, slo strmg cut, n flor.
SHALE - gn, gy, v col, blk-sbwxy, mod calc.
- 3,175 - 3,205 SHALE - gy, gngy, blk-sbwxy, calc.
- 3,205 - 3,210 SANDSTONE - gy, vf, frm, arg, calc, mod srtng, n stn.
- 3,210 - 3,265 SHALE - gy, gngy, blk, calc.
SILTSTONE - light gy, v frm, qtzs, v calc, grdng to SLTST.
- 3,265 - 3,285 SANDSTONE - wh-gy, frm, vf, mod srtng, calc, n stn.
- 3,285 - 3,450 SHALE - wh, gy, gngy, blk-sbwxy, calc.
SILTSTONE - wh, lt gy, lt blue, frm, w srted, calc, bordering on vf sandstone.
LIMESTONE - trace at 3,350', v lt gybrn, lt gy, frm, crpxln, slightly arg, no Ø.
- 3,450 - 3,500 SILTSTONE - buff, lt gy, wh, frm, blk, v calc, no Ø, arg-shaly.
- 3,500 - 3,550 NO SAMPLE.
- 3,550 - 3,595 SHALE - gngy, v col, frm, sbwxy, calc.
- 3,595 - 3,660 SANDSTONE - wh-cl, vf-f gr, sbang, fri, p cmted, p srted, g Ø, n stn, cut, or oil flor.
SHALE - lt gngy-gy, frm, sbwxy-blk, slty or sdy in pt.
- 3,660 - 3,700 SANDSTONE - gen a/a, w/tr dull yel flor, strmg yel cut, p Ø.
SHALE - gngy, frm, sbwxy, calc.
- 3,700 - 3,750 SANDSTONE - s&p, vf gr-m gr, p srted, p-mod cmt, calc, n vis Ø, n stn, cur or flor; interbedded with SHALE - gy-gngy, a/a.
- 3,750 - 3,800 SILTSTONE - wh, lt gy, frm, calc, grdng to SS.
SHALE - gy-gngy, blk-plk, n-sl calc.
- 3,800 - 3,820 SANDSTONE - s&p, vf-f gr, fri, frm, v calc, mod srtng, n-sl matrix mat, n-exc Ø, n stn or flor.
- 3,820 - 3,860 SHALE - brngy-gy, v frm, blk, slty, calc, grdng to SLTST.
- 3,860 - 3,875 SANDSTONE - vf-m gr, frm, p-g srtng, mod cmt, sb ang-rd, n-g Ø, calc, no show.

LITHOLOGY (Cont.)

- 3,875 - 4,070 SHALE - brn, gngy-dk gy, frm, calc, blkly-sbwxy.
SILTSTONE - lt gy-gy brn, s&p, arg, calc, occ grdng to s&p, vf sandstone, n Ø.
- 4,070 - 4,205 SHALE - gen a/a, also lt brn to brn gy mot, chalky, v calc to marly, slty in pt.
SILTSTONE - gy-brn, frm, calc, v arg.
SANDSTONE at 4,160', wh-lt gy, s&p, vf, sbang-sbrd, n-sl arg, g srtng, calc, grdng to SLTST, no stn or flor.
- 4,205 - 4,272 SILTSTONE - gy to gybrn, frm, calc, arg, shaly in pt.
SHALE - gngy, gybrn, frm, sbwxy, calc, occ slty.
LIMESTONE - trace at 4,230' and 4,250', wh, lt-dk brn, mcr-crpnl, v arg, n Ø.
- 4,272 - 4,280 SANDSTONE - wh, vf, frm, fri, sbang, tr patchy lt brn o stn, gn flor, gn strmg cut, g Ø.
- 4,280 - 4,320 SHALE - gy, gybrn, frm, blkly, calc, w/thin SS interbeds.
SANDSTONE - clr-wh, vf-m lse, sbang-w rounded, no stain.
- 4,320 - 4,358 SHALE - gy-gybrn, gygn, frm, sbwxy, v sl-mod calc, slty in pt.
- 4,358 - 4,370 SANDSTONE - vf, frm, mod srted, slty, n-p Ø, n stn or flor.
- 4,370 - 4,408 SHALE - gen a/a, also gybrn, blkly, slty.
SILTSTONE - white-lt gy, frm, calc qtzs, v arg.
- 4,408 - 4,464 SHALE - gy, gygn, gybrn, frm, blkly-sbwxy, mod calc.
SANDSTONE - cl, vf, lse-v poorly cemented, sme w/calc matrix, mod sorting, no stn, cut, or flor.
- 4,464 - 4,480 SHALE - gen a/a, grdng to SLTST.
SANDSTONE - tr, wh-s&p, vf, g srtng, calc, p Ø, one piece w/lt brn stn, gnyel flor, strmg cut.
- 4,480 - 4,520 SHALE - gy, gybrn-brn, frm, blkly, calc, occ slty.
SANDSTONE - at 4,486', wh-sl s&p, vf, g srtng, g Ø, gn flor, n vis stn, quick strmg cut.
- 4,520 - 4,548 SHALE - gen a/a, interbedded w/
SANDSTONE - wh-crm, vf, frm, sbang, g srtng, g cmt, tt, n vis Ø, no stn, cut, or flor.
SILTSTONE - lt gy, s&p, v frm, w cmted, bordering of vf SS.
- 4,548 - 4,552 SANDSTONE - cl-wh, vf-f gr, sl frm, g srtng, v fri, p-exc Ø, 60% w/exc to patchy lt brn o stn, yel-gnyel flor, flash strmg cut.
- 4,552 - 4,582 SHALE - gy-gybrn, frm, blkly, calc, slty.
SANDSTONE - a/a, incr tt, decr o stn, grdng to SLTST.

LITHOLOGY (Cont.)

- 4,582 - 4,600 SANDSTONE - wh-cl, vf-m gr, sbang-rd, mod cmt, p-mod srtng, calc, n-p \emptyset , no stn or flor.
- 4,600 - 4,625 SHALE - lt-m gy, gybrn, frm, calc, blk, sme slty.
SANDSTONE - wh-s&p, frm, vf, arg, calc, n \emptyset .
- 4,625 - 4,670 POOR SAMPLES (100% cavings)
SANDSTONE - at 4,668', vf, lse, dk brn-blk tar stn, n flor, exc strmg cut.
- 4,670 - 4,782 SHALE - gy-gygn-gybrn, frm, blk-sbwxy, calc, sme slty.
SANDSTONE - wh-lt gy, s&p, vf gr, g srtng, frm, calc, f-vg \emptyset , no stn, cut, or flor.
- 4,782 - 4,864 SANDSTONE - wh-v lt gy, frm, sb ang, g srtng, calc, f-exc \emptyset , no stn, cut, or flor.
- 4,864 - 4,870 SANDSTONE - trace, s&p, vf-f, sbang-sbrd, exc \emptyset w/ patchy brn stn, gn flor, g strmg cut.
- 4,870 - 4,900 LIMESTONE - wh, gy mot, frm, frag, w/ostracod shell mat, crpxln, n \emptyset , occ w/sand grains.
SILTSTONE - wh-lt gy, bordering on SS, frm, calc, n-p \emptyset , occ w/rd sd grns, n stn or flor.
- 4,900 - 4,940 SHALE - gybrn-wh, gygn, frm, calc, blk-sbwxy, grng to Siltstone.
- 4,940 - 5,010 SHALE - gy-gygn, purple, frm, sbwxy to splintery, calc.
SANDSTONE - wh, vf, frm, g srtng, sbang-sbrd, calc, n-p \emptyset .
- 5,010 - 5,084 SHALE - gy-gngy-purple, frm, blk-sbwxy, sl calc, slty in pt.
SILTSTONE - purple, frm, blk, v qtz, calc.
- 5,084 - 5,090 SANDSTONE - trace, wh, vf, g srtng, sbang-sbrd, no show.
- 5,090 - 5,122 SILTSTONE - purple-gn-gy, com w/dism sd grns and grng to vf sandstone.
SHALE - mot gn-purple-yel, sft, blk-gummy, calc.
- 5,122 - 5,130 SANDSTONE - wh, vf, bordering on SLTST, g srtng, calc, n-p \emptyset , arg matrix, no show.
- 5,130 - 5,230 SHALE - mot gy, purple-yel-gn, frm, blk-sbfis, calc, slty.
SANDSTONE - v lt gy-wh, vf, frm, g srtng, calc, n-p \emptyset , bordering on SILT SIZE, no show.
- 5,230 - 5,316 SHALE - gn-purple-brn, wh, sft-frm, blk-gummy, calc, slty in pt.
SANDSTONE - wh, vf, frm, g srtng, calc, f \emptyset , no show.
SILTSTONE - purple-gn, grng from SH to SS a/a.

LITHOLOGY (Cont.)

- 5,316 - 5,346 SANDSTONE - wh, vf, frm, g srtng, sbang, calc, n-p \emptyset , arg.
SHALE - gn-gy-purple, frm, calc, blk, slty.
- 5,346 - 5,400 SHALE - v col, a/a, grdng to SILTSTONE.
SILTSTONE - purple-gy-gn, frm, sl sdy, calc, n \emptyset .
LIMESTONE - trace, wh-lt gy, frm, crpxln, n-v chalky, n \emptyset , no show.
- 5,400 - 5,472 SHALE - gn-gy-gybrn, purple, sft-frm, blk, calc, grdng to siltstone.
SILTSTONE - purple-v col, gen a/a, also wh-lt gy, frm, calc, grading to vf SS.
- 5,472 - 5,488 SANDSTONE - wh, vf, frm, calc, g srtng, no stn, no flor.
SILTSTONE - purple, frm, calc, sdy, one piece w/ streak of dead oil stn on surface.
- 5,488 - 5,540 SHALE - wh, lt-dk gy, frm, blk, calc, also v col a/a.
SILTSTONE - v col, sft-frm, calc, a/a.
- 5,540 - 5,600 SHALE - purple-gy-gn, sft-frm, sl calc, slty in pt.
SILTSTONE - gy-purple, frm, v qtzs, sl calc, n \emptyset .
- 5,600 - 5,620 SANDSTONE - wh-lt gy, vf-m gr, sbang-rd, p srted, n-sl calc, n vis \emptyset , n show.
- 5,620 - 5,660 SHALE - v col, sft-frm, slty, a/a.
SILTSTONE - purple-yel-gn-gy mot, sft-sl frm, n-sl calc, shaly to sandy, tr SS wh, vf, sft, n-p \emptyset ; tr
LIMESTONE - wh, frm, crpxln, chlky, n \emptyset .
- 5,660 - 5,700 SANDSTONE - cl-lt gy, f gr, frm, sbang, tt, arg, calc, g srtng, n vis \emptyset .
LIMESTONE - crm-lt gy, hd, crpxln, n \emptyset , yel min flor.
SILTSTONE - purple-orgbrn, sft, calc, shaly.
- 5,700 - 5,768 SHALE - mot gy-gn-purple-yel, frm, n-sl calc, slty.
SILTSTONE - v col, frm, sl calc, a/a, sme sdy.
SANDSTONE - lt gy-slightly colored, sbang-rd, p srtng, g \emptyset , no oil stain, cut or fluorescence.
- 5,768 - 5,810 SANDSTONE - vf-f, lse-v p cmted, sbang-w rded, no show.
SILTSTONE - purple-redgray mot, frm, n-sl calc, com w/ abnt rd f sand grains.
- 5,810 - 5,860 SHALE - gy, gngy, yelgy, mot, sft-frm, gen a/a.
SILTSTONE - v col mot, a/a, shaly to sandy.
SANDSTONE - wh, vf-f, frm, calc, arg, n-f \emptyset , n stn or flor.
- 5,860 - 5,886 SILTSTONE - red-yel, frm, n-v sl calc, v sdy-shaly, n \emptyset .
SANDSTONE - wh-sl colored, vf-m, sme lse, v fri, g \emptyset , p srtng, arg, no stn, cut, or flor.

LITHOLOGY (Cont.)

- 5,886 - 5,930 SANDSTONE - wh, vf-f, frm, p srtng, sbang-sbrd, sl calc,
n vis Ø, n stn or flor.
SILTSTONE - purple-red, frm, sl calc, v sdy.
- 5,930 - 6,000 SHALE - purple-yel-red mot, frm, blk, n-sl calc,
slty-sdy.
SILTSTONE - v col, purp-red, occ gy, shaly to sandy, n-
mod calc, n Ø.
SANDSTONE - wh, m gr, ang, n-p Ø; also wh, vf, frm, dns,
n vis Ø, calc matrix, no oil stain, cut or fluorescence.

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

5. LEASE DESIGNATION AND SERIAL NO.

U-12399

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

SUSAN GRACE FEDERAL

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

WILDCAT

11. SEC., T., R., N., OR BLOCK AND SURVEY OR AREA

Sec. 34-T6S-R24E

12. COUNTY OR PARISH

UINTAH

13. STATE

UTAH

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR
DAVIS OIL COMPANY

3. ADDRESS OF OPERATOR
410 17th St., Suite 1400, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface SE SE Sec. 34-T6S-R24E
At top prod. interval reported below
At total depth 652' FSL & 500' FEL

14. PERMIT NO. 43-047-30701 DATE ISSUED 5-20-80

15. DATE SPUNDED 10-24-80 16. DATE T.D. REACHED 11-9-80 17. DATE COMPL. (Ready to prod.)
18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 5500' GR 5512' KB 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 6006' DRL 21. PLUG, BACK T.D., MD & TVD
22. IF MULTIPLE COMPL., HOW MANY*
23. INTERVALS DRILLED BY → SURFACE TO TD ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN
DIL-GR; FDC-CNL-GR; BHC-GR; Dipmeter; DIL-GR; FDC-CNL-GR
27. WAS WELL CORED
Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36#	368'	12 1/4"	205 Class H	

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
-----		P & A'd					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Ed Lafave TITLE Chief Geologist DATE 12-22-80

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
DST #1: 5590-5629' Green River Formation bottom packer			Test was a misrun, could not seat
DST #2: 5584-6004' Green River Wasatch			
IF 5 min opened with 24" blow, increased to 36"; ISI 60 min blow died quickly			
FF 120 min opened with 17" blow, increased to 40" blow after 5 min, Stayed constant for 20 min then gradually decreased to final blow reading of 14";			
FSI 240 min, Blow died quickly.			
Recovery: 4890' of water slightly cut with mud			
Pressures: IH 2672---2708; IF 2040---3346; ISI 476---559; FF 2343---2341;			
FSI 599---632; FH 2701---2689;			

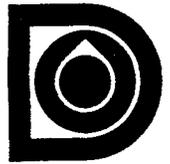
CORES: All were sidewall--please see geological report.

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Uintah	Surface	
Green River	2666'	
Garden Bulch Mbr	4830'	
Wasatch	5866'	
Total depth	5548'	

DAVIS OIL COMPAN

410 - 17TH STREET, SUITE 1400
DENVER, COLORADO 80202
TELEPHONE: 303-623-1000



NEW YORK
NEW ORLEANS
HOUSTON
TULSA

RECEIVED

DEC 20 1980

DIVISION OF
OIL, GAS & MINING

RECEIVED

DEC 20 1980

DIVISION OF
OIL, GAS & MINING

December 22, 1980

U.S.G.S.
2000 Administration Bldg
1745 West 1700 South
Salt Lake City, Utah 84104

RE: #1 Susan Grace Federal
SE SE Sec. 34-T6S-R24E
Uintah County, Utah

Gentlemen:

Enclosed please find for your files, an original and one copy of the revised Well Completion Report showing formation tops and two copies of the Geological Report for the above captioned well.

Yours very truly,

DAVIS OIL COMPANY

Sue Hentschel
Geological Secretary

/sgh
Enclosures

cc: Cleon B. Freight--Department of Natural Resources Utah